



# **AGENDA**

## ***Regional Planning and Highways Committee Meeting***

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### **Committee Members**

Mark A. Murphy, Chairman  
Barbara Delgleize, Vice Chair  
Lisa A. Bartlett  
Doug Chaffee  
Joe Muller  
Richard Murphy  
Miguel Pulido

Orange County Transportation Authority  
Headquarters  
550 South Main Street  
Board Room – Conf. Room 07  
Orange, California  
**Monday, August 5, 2019 at 10:30 a.m.**

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 (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

All documents relative to the items referenced in this agenda are available for public inspection at [www.octa.net](http://www.octa.net) or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

### **Call to Order**

### **Pledge of Allegiance**

Director Chaffee

### **1. Public Comments**

### **Special Calendar**

There are no Special Calendar matters.

### **Consent Calendar (Items 2 through 7)**

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.



**2. Approval of Minutes**

Approval of the minutes of the Regional Planning and Highways Committee meeting of July 1, 2019.

**3. 2020 State Transportation Improvement Program Overview**

Ben Ku/Kia Mortazavi

**Overview**

The State Transportation Improvement Program is a biennial five-year plan of projects adopted by the California Transportation Commission for future allocations of state transportation funds. Every two years, the Orange County Transportation Authority updates the program of projects to be funded through this program. An overview of the 2020 State Transportation Improvement Program process is presented for information purposes.

**Recommendation**

Receive and file as an information item.

**4. Measure M2 Environmental Mitigation Program Update and Annual Report**

Lesley Hill/Kia Mortazavi

**Overview**

Measure M2 includes a program to deliver comprehensive mitigation for the environmental impacts of 13 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 as part of the Natural Community Conservation Plan/Habitat Conservation Plan. On a parallel path, a similar approach was developed to obtain state and federal clean water permits to facilitate the implementation of the Measure M2 freeway projects. A summary of the first Annual Report for the Orange County Transportation Authority M2 Natural Community Conservation Plan/Habitat Conservation Plan covering all activities up to December 31, 2018, is provided. Additional Environmental Mitigation Program activities post 2018 are also provided in this report.

**Recommendation**

Receive and file as an information item.



**5. Measure M2 Comprehensive Transportation Funding Programs – 2020 Annual Call for Projects**

Alfonso Hernandez/Kia Mortazavi

**Overview**

The Comprehensive Transportation Funding Programs Guidelines provide the mechanism for administration of the annual competitive call for projects for Measure M2 programs, including the countywide Regional Capacity Program (Project O) and the Regional Traffic Signal Synchronization Program (Project P). The 2020 Regional Capacity Program and Regional Traffic Signal Synchronization Program call for projects is presented for review and approval.

**Recommendations**

- A. Approve proposed revisions to the Comprehensive Transportation Funding Programs Guidelines.
- B. Authorize staff to issue the 2020 annual call for projects for the Regional Capacity Program.
- C. Authorize staff to issue the 2020 annual call for projects for the Regional Traffic Signal Synchronization Program.

**6. Cooperative Agreements for Regional Traffic Signal Synchronization Program Projects**

Anup Kulkarni/Kia Mortazavi

**Overview**

On June 10, 2019, the Orange County Transportation Authority Board of Directors approved programming of funds for projects as part of the 2019 call for projects for the Measure M2 Regional Traffic Signal Synchronization Program. As part of the application process, the Orange County Transportation Authority was requested to be the lead agency on three of the six projects: Aliso Creek Road, Lake Forest Drive, and Red Hill Avenue. Separate cooperative agreements with local agencies are necessary for each of these projects to specify the amount of required local matching funds.

**Recommendations**

- A. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1419 between the Orange County Transportation Authority and the cities of Aliso Viejo and Laguna Niguel for the Aliso Creek Road Regional Traffic Signal Synchronization Project, with required local matching funds of \$285,994.



**6. (Continued)**

- B. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1420 between the Orange County Transportation Authority and the cities of Irvine, Laguna Hills, and Lake Forest for the Lake Forest Drive Regional Traffic Signal Synchronization Project, with required local matching funds of \$360,411.
- C. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1421 between the Orange County Transportation Authority and the cities of Costa Mesa, Irvine, and Tustin for the Red Hill Avenue Regional Traffic Signal Synchronization Project, with required local matching funds of \$419,018.

**7. Consultant Selection for South Orange County Multimodal Transportation Study**

Warren Whiteaker/Kia Mortazavi

**Overview**

Pursuant to the 2019 Orange County Transportation Authority Board of Directors Strategic Initiatives, consultant services are needed to conduct a multimodal transportation study to identify solutions for south Orange County's current and future mobility needs. Proposals were received in accordance with the Orange County Transportation Authority's procurement procedures for professional and technical services. Board of Directors' approval is requested to select a firm to conduct the South Orange County Multimodal Transportation Study.

**Recommendations**

- A. Approve the selection of HDR Engineering, Inc., as the firm to conduct the South Orange County Multimodal Transportation Study.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1121 between the Orange County Transportation Authority and HDR Engineering, Inc., in the amount of \$749,969, to conduct the South Orange County Multimodal Transportation Study for a two-year term.





## **Regular Calendar**

8. **Capital Programs Division - Fourth Quarter Fiscal Year 2018-19 and Planned Fiscal Year 2019-20 Capital Action Plan Performance Metrics**  
James G. Beil

### **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.

## **Discussion Items**

9. **Chief Executive Officer's Report**
10. **Committee Members' Reports**
11. **Closed Session**

There are no Closed Session items scheduled.

12. **Adjournment**

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on Thursday, September 5, 2019**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.



# MINUTES

## *Regional Planning and Highways Committee Meeting*

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### **Committee Members Present**

Mark A. Murphy, Chairman  
Barbara Delgleize, Vice Chair  
Lisa A. Bartlett  
Richard Murphy

### **Staff Present**

Ken Phipps, Deputy Chief Executive Officer  
Laurena Weinert, Clerk of the Board  
Cassie Trapesonian, Assistant General Counsel  
OCTA Staff and Members of the General Public

### **Committee Members Absent**

Doug Chaffee  
Joe Muller  
Miguel Pulido

## **Call to Order**

The July 1, 2019 regular meeting of the Regional Planning and Highways Committee was called to order by Committee Chairman M. Murphy at 10:34 a.m.

## **Pledge of Allegiance**

Director Bartlett led in the Pledge of Allegiance.

### **1. Public Comments**

No public comments were received.

## **Special Calendar**

There were no Special Calendar matters.

## **Consent Calendar (Items 2 through 5)**

### **2. Approval of Minutes**

A motion was made by Director R. Murphy, seconded by Director Bartlett, and declared passed by those present, to approve the minutes of the Regional Planning and Highways Committee meeting of June 3, 2019.



# MINUTES

## *Regional Planning and Highways Committee Meeting*

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### **3. Amendment to Cooperative Agreement with Southern California Regional Rail Authority for the Interstate 5 High-Occupancy Vehicle Improvement Project Between State Route 55 and State Route 57**

A motion was made by Director R. Murphy, seconded by Director Bartlett, and declared passed by those present, to:

- A. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Cooperative Agreement No. C-6-1574 between the Orange County Transportation Authority and Southern California Regional Rail Authority, in the amount of \$40,425, for additional railroad flagging and inspection services. This will increase the maximum obligation of the cooperative agreement to a total contract value of \$89,925.
- B. Authorize the use of \$40,425 in OC Go funds for construction inspection, which will increase Cooperative Agreement No. C-6-1574 from \$49,500 to \$89,925, for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57.

### **4. Measure M2 Eligibility Review Recommendations for Fiscal Year 2017-18 Expenditure Reports**

A motion was made by Director R. Murphy, seconded by Director Bartlett, and declared passed by those present, to find all conditionally eligible local agencies (excluding the cities of Santa Ana and Stanton) eligible to receive net Measure M2 revenues for fiscal year 2018-19.

### **5. Grant Acceptance for the Safe Travels Education Program and the Freeway Bus Rapid Transit Concept Study**

A motion was made by Director R. Murphy, seconded by Director Bartlett, and declared passed by those present, to:

- A. Authorize the Chief Executive Officer, or designee, to accept the Active Transportation Program grant award and execute grant-related agreements and documents with the California Department of Transportation and the Southern California Association of Governments.
- B. Adopt Orange County Transportation Authority Resolution No. 2019-059 authorizing the Chief Executive Officer, or designee, to accept the Sustainable Transportation Planning Grant award and execute grant-related agreements and documents with the California Department of Transportation and the Southern California Association of Governments.



### 5. (Continued)

- C. Authorize the Chief Executive Officer, or designee, to amend the Federal Transportation Improvement Program and process all necessary amendments to facilitate the recommendation above.

### Regular Calendar

### 6. Draft 2019 State Route 91 Implementation Plan

Kurt Brotcke, Director of Strategic Planning, provided a PowerPoint presentation on this item as follows:

- State Route (SR) 91 Implementation Plan;
- Culmination of Efforts:
  - Eight Projects Completed
  - \$1.9 Billion Invested
  - 66.5 Lane Miles Added
  - 15 Percent Increase in Throughput
  - Benefits of Coordinated Efforts;
- Guiding Principles;
- Orange County Projects;
- Riverside County Projects;
- Bi-County Projects;
- SR-91 Corridor Operations Projects;
- SR-241/91 Express Lanes Connector; and
- Project Implementation.

A public comment was heard from Don Fuller, City of Corona resident, stated that he addressed these issues under public comments at the June 7, 2019 SR-91 Advisory Committee and the June 10, 2019 Orange County Transportation Authority (OCTA) Board of Directors meetings, as well as with the Riverside County Transportation Commission, City of Corona City Council, the San Bernardino County Transportation Authority, the California Department of Transportation Authority (Caltrans), and numerous law enforcement agencies.

Mr. Fuller referenced the map handout provided to the Committee Members at the dais and commented on the SR-91 eastbound/westbound channelizers that divide the 91 Express Lanes from the general-purpose lanes, specifically the area where the toll plaza is, between Weir Canyon Road and the Orange and Riverside county lines.



### **6. (Continued)**

Mr. Fuller stated that there is a continued issue with vehicles cutting across from the general-purpose lanes into the 91 Express Lanes. He stated there have been numerous serious accidents, predominately in the afternoon, and provided examples of vehicle accidents due to cutting through the delineators.

Mr. Fuller highlighted his expertise as an automotive expert witness and suggested an immovable K-rail barrier be placed from, at least, Weir Canyon Road to where the lanes merge to prevent cutting across the lanes, as well as provided other comments.

No action was taken on this receive and file information item.

## **Discussion Items**

### **7. Chief Executive Officer's Report**

Ken Phipps, Deputy Chief Executive Officer, reported the following:

Angels Express:

- The Angels Express was in service three days last week.
- On Friday, nearly 1,900 boardings were recorded, which is the Orange County Transportation Authority's (OCTA) second highest number of boardings for the season; however, ridership is still trailing from last year.
- OCTA has launched its Kids Ride Free marketing campaign to promote the service which allows kids 18 and under to ride the Angels Express for free during July and August.

OC Fair Express:

- The Orange County Fair starts next Friday, July 12th.
- OCTA is hosting a kick-off event for the OC Fair Express at the Anaheim Regional Transportation Intermodal Center Station on Saturday, July 13th, from 9:30 a.m. to 11:00 a.m.
- The OC Fair Express will be in service from nine locations on Saturdays and Sundays from July 13th through August 11th.

Independence Day:

- The OCTA administrative office will be closed on Thursday and Friday in observance of the holiday.
- Wished everyone a safe and happy Independence Day.



# MINUTES

## *Regional Planning and Highways Committee Meeting*

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### **8. Committee Members' Reports**

Committee Chairman M. Murphy wished everyone a happy holiday with family and friends. He added that if anyone had a chance to see a veteran they did not know, to go up and thank him or her for their service.

### **9. Closed Session**

There were no Closed Session items scheduled.

### **10. Adjournment**

The meeting adjourned at 10:52 a.m.

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Monday, August 5, 2019**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

ATTEST

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Mark A. Murphy  
Committee Chairman

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Olga Prado  
Assistant Clerk of the Board



**August 5, 2019**

**To:** Regional Planning and Highways Committee  
**From:** Darrell E. Johnson, Chief Executive Officer   
**Subject:** 2020 State Transportation Improvement Program Overview

### **Overview**

The State Transportation Improvement Program is a biennial five-year plan of projects adopted by the California Transportation Commission for future allocations of state transportation funds. Every two years, the Orange County Transportation Authority updates the program of projects to be funded through this program. An overview of the 2020 State Transportation Improvement Program process is presented for information purposes.

### **Recommendation**

Receive and file as an information item.

### **Background**

The State Transportation Improvement Program (STIP) is a five-year state funding program that is adopted by the California Transportation Commission (CTC) for transportation projects. The STIP is divided into two major funding categories: the Regional Improvement Program (RIP) and the Interregional Improvement Program (IIP). Seventy-five percent of the program is allocated to the RIP, which is then provided to counties by formula. The remaining 25 percent is provided to the California Department of Transportation (Caltrans) for projects of interregional significance and intercity rail projects through the IIP.

Projects eligible for the STIP must adhere to the STIP Guidelines and the Orange County Transportation Authority (OCTA) Capital Programming Policies (CPP) that were adopted by the Board of Directors (Board) on February 11, 2019 (Attachment A). OCTA is responsible for the development and programming of Orange County's share of the RIP portion of STIP revenues, which is submitted to CTC for approval. OCTA and Caltrans coordinate the development of projects that are considered for inclusion in the RIP and the IIP.

Every two years, the STIP fund estimate (FE) revenues are forecasted and programmed for the following five-year period. The revenue that supports the STIP derives from the price-based excise tax and Federal Highway Trust Fund. Historically, Orange County's share has been 6.45 percent of the total statewide RIP.

The previous 2018 STIP was approved on March 21, 2018, by the CTC. OCTA originally submitted for \$267.873 million in STIP funding for seven Measure M2 projects and OCTA planning activities. Orange County's approved 2018 STIP contained eight projects for Orange County and totaled \$260.501 million (Attachment B). Additionally, the 2018 IIP contained \$3 million for a passing siding project in the City of Laguna Niguel.

### ***Discussion***

Based on the draft FE, the 2020 STIP provides \$569.389 million statewide in new STIP capacity as compared to the final 2018 STIP, which included \$2.259 billion of new capacity. New capacity funding is traditionally for the last two years (fiscal year {FY} 2023-24 and FY 2024-25) and does not include carryover funding from the first three years (FY 2020-21, FY 2021-22, and FY 2022-23). For Orange County, the draft 2020 FE provides a target of \$6.960 million in new capacity. Over the past four STIP cycles, Orange County has averaged approximately \$62.6 million per cycle in new capacity. This \$6.960 million in new capacity, plus the existing \$176.285 million in 2018 STIP carryover projects, equals approximately \$183.245 million for the 2020 STIP. The final FE is subject to change prior to the adoption by the CTC in mid-August.

The 2020 STIP FE is significantly lower than the 2018 STIP, and the CTC has provided three reasons for the decrease.

- Consumption of gasoline and diesel fuels are projected to decrease, which directly affect the STIP revenues.
- The 2018 STIP FE included an assumption, which increased the price-based excise tax (PBET) from 11.7 cents per gallon to 14.1 cents per gallon. The California State Board of Equalization ultimately did not increase the PBET to 14.1 cents per gallon. This left a significant shortfall in revenue in the 2018 STIP, which now must be reconciled in the 2020 STIP.
- Several projects programmed in the prior STIP were advanced to align with SB 1 (Chapter 5, Statutes of 2017), the Road Repair and Accountability Act of 2017) funding. These advancements drew upon funds from the current 2020 STIP FE.



CTC staff indicated that the diminished 2020 FE would not have an adverse impact on currently programmed projects, but would not allow for funding advancements of existing projects, nor would they be able to accommodate cost increases in the STIP.

Staff will return to the Board in September 2019 with the proposed program of projects that is consistent with the Board-approved CPP. The updated program of projects may include modifications to existing projects, new projects, and requests to use local dollars to advance existing STIP projects.

OCTA will need to consider the updated 2020 STIP Guidelines in selecting projects for nomination. The 2020 STIP Guidelines include a minor change regarding uncommitted funds. Previously, the 2018 STIP Guidelines provided an exemption for projects seeking competitive SB 1 funds which were not fully funded. These projects would no longer be considered for STIP funding. The CTC may program a project component only if it finds that the component itself is fully funded, either from STIP funds or other committed funds.

Staff has communicated with key stakeholders, such as Caltrans, to solicit input (Attachment C). The meeting with Caltrans is also an opportunity for OCTA to discuss Caltrans' submittal of the IIP and the State Highway Operation and Protection Program. Staff expects to return to the Board next month with specific programming recommendations that are due by September 2019 to the Southern California Association of Governments for modeling purposes and to the CTC by December 15, 2019.

### ***Summary***

OCTA is responsible for the development and programming of the STIP projects for Orange County. With the upcoming 2020 STIP cycle, OCTA staff has started the process to consider priority projects for recommendation to the Board for the Regional Transportation Improvement Program submittal to the CTC.

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**Attachments**

- A. Existing Capital Programming Policies by Fund Source, February 2019
- B. 2018 STIP CTC-Approved Projects
- C. 2020 State Transportation Improvement Program Development Schedule

**Prepared by:**



Ben Ku  
Section Manager,  
Formula Funding Programs  
(714) 560-5473

**Approved by:**



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

**Existing Capital Programming Policies by Fund Source  
February 2019**

Funding Source	Measure M2 (M2) Programming Policies
M2 Programs	
Projects A-M (freeway projects on Interstate 5, State Route 22, State Route 55, State Route 57, State Route 91, Interstate 405, and Interstate 605)	Use projects A-M M2 funding consistent with the M2 Transportation Investment Plan, the M2020 Plan, and subsequent Board of Directors (Board)-approved plans and updates to the M2 Program. Program funds to projects through formal programming actions.
Freeway Environmental Mitigation Program (Tied to projects A-M)	Utilize five percent net revenues derived from M2 funding for projects A-M consistent with the M2 Transportation Investment Plan, with the M2020 Plan, and subsequent Board-approved plans and updates to the M2 Program. Program funds to projects through Board approval actions for needed environmental mitigation projects.
Project N (Freeway Service Patrol)	Use Project N funds for the Freeway Service Patrol Program. Funds are programmed through the annual budget process.
Project O (Regional Capacity Program) and Project P (Regional Traffic Signal Synchronization Program)	Use Project O and Project P M2 funding consistent with the M2 Transportation Investment Plan, and consistent with the Comprehensive Transportation Funding Programs (CTFP) Guidelines. Program funds to projects through the cyclical CTFP call for projects (call) programming recommendations.
Project Q (Local Fair Share Program)	Use Project Q M2 funds consistent with the M2 Transportation Investment Plan. Funds are programmed through the annual budget, but actual disbursements may be adjusted based on the formula distribution of funds.
Project R (High-Frequency Metrolink Service)	Use Project R M2 funding consistent with the M2 Transportation Investment Plan, with the latest Next 10 Plan, with the Comprehensive Business Plan, and subsequent Board-approved plans and updates to the M2 Program. Program funds to projects through formal programming actions.
Project S (Transit Extensions to Metrolink) and Project T (Metrolink Gateways)	Use Project S and Project T M2 funding consistent with the M2 Transportation Investment Plan, and consistent with CTFP Guidelines. Program funds to projects through a call.
Project U (Expand Mobility Choices for Seniors and Persons with Disabilities)	Use Project U M2 funds, consistent with the M2 Transportation Investment Plan, the Comprehensive Business Plan, and subsequent Board-approved plans and updates to the M2 Program. Funds are programmed through the annual budget process.
Project V (Community-Based Transit Circulators) and Project W (Safe Transit Stops)	Use Project V and Project W M2 funding consistent with the M2 Transportation Investment Plan, and consistent with CTFP Guidelines. Program funds to projects through a call.

**Existing Capital Programming Policies by Fund Source  
February 2019**

Funding Source	Measure M2 (M2) Programming Policies
Project X (Environmental Cleanup)	<p>Use Project X M2 funding consistent with the M2 Transportation Investment Plan and consistent with CTFP Guidelines. Program funds to projects through the CTFP call.</p> <p>The Environmental Cleanup Program consists of two programs. The Tier 1 Grant Program is designed to mitigate the more visible forms of pollution. Tier 1 consists of funding for equipment purchases and upgrades to existing catch basins and related devices such as screens, filters, and inserts. The Tier 2 Grant Program consists of funding regional, multi-jurisdictional, and capital-intensive projects, such as constructed wetlands, detention/infiltration basins, and bioswales.</p>
Funding Source/Agency	State and Federal Programming Policies
All State and Federal Fund Sources	<p>First priority of all funding sources is to fulfill commitments to the latest Next 10 Plan, specifically M2 projects and to maintain existing the Orange County Transportation Authority's assets in a state of good repair. Consideration will also be given to use state and federal funds for projects that are complementary to M2 projects and that share the program goals to reduce congestion, strengthen the economy, and improve the quality of life. All fund sources must be programmed through formal programming actions.</p>
State	
Active Transportation Program (ATP) – Southern California Association of Governments (SCAG) Regional Selection (Formula)/California Transportation Commission (CTC)/SCAG	Bicycle and pedestrian projects up to a ten percent set-aside and contingent on ready-to-go projects as submitted through competitive calls.
Cap-and-Trade (Competitive) – Affordable Housing and Sustainable Communities Program (AHSC)/Strategic Growth Council	<p>Use AHSC for fixed-guideway and transit corridor projects that serve disadvantaged communities and reduce greenhouse gas (GHG) emissions.</p> <p>*Note – In the guidelines, a transit project must be paired with an affordable housing project for Transit Oriented Development Program funds.</p>
Cap-and-Trade (Formula) – Low Carbon Transit Operations Program (LCTOP)/California Department of Transportation (Caltrans)	<p>Use LCTOP for transit operations or capital for expansion of bus transit service, fare reduction programs, and other bus and commuter rail transit efforts that increase ridership and reduce GHG emissions, where 50 percent of the funds provide benefit for passengers in disadvantaged communities. Funds generated from commuter rail service in Orange County may be used in Orange County for the expansion of commuter rail service, fare reduction programs for commuter rail, and other eligible commuter rail efforts that increase ridership and reduce GHG emissions.</p>
Cap-and-Trade (Competitive) – Transit and Intercity Rail Capital Program (TIRCP)/California State Transportation Agency	Use TIRCP for capital projects that expand bus and rail service to increase ridership and for projects that improve the integration between bus and rail systems. Projects must also reduce GHG emissions.

**Existing Capital Programming Policies by Fund Source  
February 2019**

Funding Source/Agency	State and Federal Programming Policies
Proposition 1A/CTC	All funds are programmed.
Proposition 1B – Competitive Programs Funding/CTC	Maximize the Orange County allocations consistent with each program and ensure the receipt of allocated funds.
Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA)/Caltrans	Use PTMISEA funds for commuter rail improvements and to fund existing State Transportation Improvement Program (STIP) - Public Transit Administration projects (approximately \$60 million) currently programmed in the 2010 STIP and for eligible OC Bridges projects.
Proposition 1B – Transit System Safety, Security and Disaster Response Account (TSSSDRA)/California Governor's Office of Emergency Services	Use TSSSDRA to support capital projects that enhance the safety, security, and emergency response capabilities of transit.
Proposition 116 (CTC)	Use cost savings for commuter or intercity rail capital improvement projects along the Metrolink corridor (between the cities of Buena Park and San Clemente) that are funded with Measure M1 and M2 funds on a first-come, first-served basis.
SB 1 - Local Partnership Program (LPP) – Formula/CTC	Use LPP for ready-to-deliver M2 projects which are compatible with state goals and seek to balance funds between freeways, streets and roads, transit capital and eligible environmental clean-up and based on the timing for the request for project nominations.
SB 1 - State of Good Repair (SGR)/Caltrans	Use funds for bus transit capital projects and for maintenance, rehabilitation, and replacement of existing Orange County Transportation Authority (OCTA) transit assets
SB 1 - Trade Corridors Enhancement Program (TCEP)/CTC	Use TCEP first for eligible M2 Program projects that meet the requirements and goals of the program, then fund other eligible Orange County projects
STIP/CTC	Use of STIP funds for M2 freeway, commuter rail, fixed-guideway projects, planning/programming and complementary activities, which seek an equitable balance between freeways and transit capital and are consistent with state goals.

## Existing Capital Programming Policies by Fund Source February 2019

Funding Source/Agency	State and Federal Programming Policies
Federal	
Congestion Mitigation and Air Quality (CMAQ)/Caltrans for Federal Highways Administration (FHWA)	<p>Use CMAQ funding for:</p> <ul style="list-style-type: none"> <li>• M2 fixed-guideway and/or M2 high-occupancy vehicle or high-occupancy toll operational improvements,</li> <li>• as match to leverage funding for OC Bridges grade separation projects,</li> <li>• vanpool program and rideshare services,</li> <li>• other rail and bus transit capital projects,</li> <li>• traffic light synchronization projects, and</li> <li>• new or expanded bus transit operations (three years of CMAQ funding may be used for the first five years).</li> </ul> <p>Set-asides: Bicycle and pedestrian projects up to a ten percent set-aside and contingent on ready-to-go projects as submitted through competitive calls.</p>
Federal Transit Administration (FTA) Section 5307 Formula/FTA	<p>Use funds to support ongoing transit operations and SGR through (not in priority order):</p> <ul style="list-style-type: none"> <li>• preventive maintenance,</li> <li>• capital cost of contracting, and</li> <li>• bus replacement.</li> </ul> <p>Lower priority but eligible if funding available:</p> <ul style="list-style-type: none"> <li>• other priority capital projects that are consistent with the comprehensive business plan.</li> </ul> <p>Set-Asides: Up to 20 percent for paratransit operating assistance, one percent for transit security (unless funded using local, state, or other federal funds), and percent of funds generated by rail operations to be used for rail operations and capital projects.</p>
FTA Section 5309 Fixed-Guideway Capital Investment Grants ("New Starts")/FTA	<p>Prioritize M2 fixed-guideway projects that are following project development requirements consistent with the "New Starts" and/or "Small Starts" process.</p>
FTA Section 5310 Formula Funds/FTA	<p>Use funds for eligible enhancements to paratransit capital and operations.</p>
FTA Section 5337 Formula Funds/FTA	<p>Use funds for commuter rail rehabilitation and/or renovation projects, for capital projects that maintain and/or replace equipment and facilities to keep the commuter rail system in a state of good repair and for preventive maintenance. Use funds generated by bus transit for bus transit capital maintenance.</p>

**Existing Capital Programming Policies by Fund Source  
February 2019**

Funding Source/Agency	State and Federal Programming Policies
FTA Section 5339 Formula Funds/FTA	<p>Use funds for:</p> <ul style="list-style-type: none"> <li>• capital maintenance,</li> <li>• capital cost of contracting,</li> <li>• bus replacement, and</li> <li>• other bus capital projects as identified in the transit asset management plan.</li> </ul>
Highway Infrastructure Program/Caltrans for Federal Highway Administration (FHWA)	Use funds for M2 Freeway Program (consistent with the latest Next 10 Plan).
National Highway Freight Program/CTC for FHWA	Currently these funds are administered by the state through the TCEP (see TCEP above).
Surface Transportation Block Grant (STBG) Program - Formerly the Regional Surface Transportation Program/Caltrans for FHWA	Use funds for M2 Freeway Program (consistent with the latest Next 10 Plan) and local streets and roads. Funds may also be used for countywide planning activities up to five percent annually
Transportation Alternatives Program (TAP) – CTC/SCAG through ATP	Use 100 percent of annual TAP apportionment for bicycle and pedestrian projects through a competitive call to local agencies. Currently these funds are administered by the state through the ATP. See ATP above.

## 2018 STIP CTC-Approved Projects

2018 STIP-Approved (In Thousands)	STIP Funding					Other Funding					Total Project Cost
	2018-19	2019-20	2020-21	2021-22	2022-23	Total STIP	STBG/CMAQ	Pending Approval	M2	Other¹	
I-5 Improvements from SR-73 to Oso Parkway (Segment 1)	73,735					73,735	28,167		68,372	18,242	188,516
I-5 Improvements from Alicia Parkway to El Toro Road (Segment 3)					69,911	69,911	49,897		44,715		164,523
I-5 Improvements from SR-73 to El Toro Road (replacement planting/landscaping)					6,000	6,000			1,900		7,900
SR-55 Orange County Central Corridor Improvement from I-405 to I-5				80,000		80,000	103,805		110,327	116,800	410,932
SR-57 Truck Climbing Lane Phase I - Lambert Road Interchange Improvements	9,000					9,000			6,856	84,144	100,000
PPM	1,481			1,848	1,848	5,177					5,177
STIP Subtotal	84,216	-	-	81,848	77,759	243,823	181,869	-	232,170	219,186	877,048
APDE											
I-5 Improvements from I-405 to SR-55					12,628	12,628	8,000	7,372	5,000		33,000
APDE											
SR-57 Truck Climbing Lane Phase II - Lambert Road to County Line			4,050			4,050			250		4,300
Totals	84,216		4,050	81,848	90,387	260,501	189,869	7,372	237,420	219,186	914,348

1. Other funds include \$18,242 million in Local Partnership Program, \$46.8 million in State Highway Operations and Protection Program, \$70 million in Solutions for Congested Corridors Program, \$0.924 million in demonstration funds, \$10,720 in local city funds, \$65,705 million in Trade Corridors Enhancement Program, and \$6,795 million in Infrastructure for Rebuilding America funds.

### Acronyms

- STIP - State Transportation Improvement Program
- CTC - California Transportation Commission
- STBG - Surface Transportation Block Grant Program
- CMAQ - Congestion Mitigation and Air Quality
- M2 - Measure M2
- I-5 - Interstate 5
- SR-73 - State Route 73
- SR-55 - State Route 55
- I-405 - Interstate 405
- SR-57 - State Route 57
- PPM - Planning, programming, and monitoring
- APDE - Advance Project Development Element




**2020 State Transportation Improvement Program Development Schedule**

- August 14-15, 2019 - California Transportation Commission (CTC) adopts State Transportation Improvement Program (STIP) fund estimate.
- September 5, 2019 - Present to the Orange County Transportation Authority (OCTA) Regional Planning and Highway Committee the STIP/Regional Transportation Improvement Program (RTIP).
- September 9, 2019 - Present to OCTA Board of Directors the STIP/Regional Transportation Improvement Program (RTIP) item for approval.
- September 30, 2019 - OCTA STIP/RTIP projects submitted to the Southern California Association of Governments for regional modeling analysis.
- By October 1, 2019 - The California Department of Transportation (Caltrans) submits the final draft Interregional Transportation Improvement Program (ITIP).
- By October 10, 2019 - CTC ITIP hearing – North.
- By October 16, 2019 - CTC ITIP hearing – South.
- By December 15, 2019 - STIP/RTIP submittal due to CTC.
- By December 15, 2019 - Caltrans ITIP submittal due to CTC.
- January 30, 2020 - CTC STIP hearing – South.
- February 6, 2020 - CTC STIP hearing – North.
- February 28, 2020 - CTC publishes staff recommendations.
- March 25-26, 2020 - CTC adopts STIP.



**August 5, 2019**

**To:** Regional Highways and Planning Committee

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

**Subject:** Measure M2 Environmental Mitigation Program Update and Annual Report

### **Overview**

Measure M2 includes a program to deliver comprehensive mitigation for the environmental impacts of 13 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 as part of the Natural Community Conservation Plan/Habitat Conservation Plan. On a parallel path, a similar approach was developed to obtain state and federal clean water permits to facilitate the implementation of the Measure M2 freeway projects. A summary of the first Annual Report for the Orange County Transportation Authority M2 Natural Community Conservation Plan/Habitat Conservation Plan covering all activities up to December 31, 2018, is provided. Additional Environmental Mitigation Program activities post 2018 are also provided in this report.

### **Recommendation**

Receive and file as an information item.

### **Background**

Measure M2 (M2) includes an innovative Environmental Mitigation Program (EMP) to address certain impacts, as well as streamline the M2 freeway projects. This was achieved through a Natural Community Conservation Plan/Habitat Conservation Plan (Conservation Plan), approved by the California Department of Fish and Wildlife and the United States Fish and Wildlife Service (Wildlife Agencies). An endowment was also established for the long-term management of the conservation properties (Preserves).

In a parallel process, the United States Army Corps of Engineers (Corps) and the State Water Resources Control Board (SWRCB) have also established a framework to expedite the regulatory permitting process. The EMP delivers more effective mitigation while supporting faster delivery of M2 freeway improvements.

The acquisition of seven conservation properties, as well as the funding of 12 habitat restoration projects, have largely met the mitigation needs for the M2 freeway projects. These Preserves and projects are depicted in Attachment A. Through the Conservation Plan, the Orange County Transportation Authority (OCTA) is well underway to satisfying these obligations. Many of the restoration projects are close to or have obtained approvals from the Wildlife Agencies. As a commitment of the Conservation Plan, OCTA is required to prepare an annual report on the implementation processes. The executive summary for the First Annual Report is included as Attachment B. The complete report is available on the OCTA website at [http://www.octa.net/Projects-and-Programs/OC-Go/OC-Go-\(2011-2041\)/Freeway-Mitigation/Conservation-Plan/](http://www.octa.net/Projects-and-Programs/OC-Go/OC-Go-(2011-2041)/Freeway-Mitigation/Conservation-Plan/).

### ***Discussion***

#### **Conservation Plan Update**

The Conservation Plan permit was issued by the Wildlife Agencies in mid-2017. As a result, the M2 environmental process has been streamlined, allowing OCTA to expedite the M2 freeway projects. The Conservation Plan approval by the Wildlife Agencies requires the establishment of a \$34.5 million endowment to fund the long-term management of the Preserves. The first endowment deposit was made in early 2017. The most recent deposit was made in August 2018. The next deposit is scheduled for July 2019. Quarterly investment reports are provided to the Board of Directors (Board), with the most recent one given in June 2019. As of March 31, 2019, the endowment balance is \$9,263,521.79. Staff will continue to oversee and provide regular endowment updates to the Finance and Administration Committee and the Environmental Oversight Committee (EOC).

In compliance with the Conservation Plan, resource management plans (RMPs) have been developed for each Preserve. The RMPs provide guidelines for the management and monitoring of each Preserve in accordance with the goals and objectives outlined in the Conservation Plan. Key components of the RMPs include guidance for ongoing protection, preservation, and adaptive management of the natural resources found within each Preserve. The seven Preserve RMPs were released for a 90-day public review and comment period, with the final RMPs completed in September 2018.

In consultation with the local fire authority, OCTA began developing fire management plans (Plans) for the Preserves in September 2018. The Plans will provide guidelines for decision-making at all stages, including fire prevention, pre-fire vegetation management, suppression activities, and post-fire responses that are compatible with conservation and stewardship responsibilities. These Plans are a requirement of the Conservation Plan and must be approved by the Wildlife Agencies. An overview of the proposed content Fire Management Plan development process was provided to the EOC in February and July 2019.

#### Conservation Plan First Annual Report

The executive summary for the First Annual Report is included as Attachment B. This includes the tracking of impacts associated with covered freeway improvement projects, other management and monitoring activities on Preserves, status and activities, progress of the restoration projects, plan administration, and public outreach activities. In summary, the First Annual Report documents that OCTA's activities through 2018 are in compliance and on target with the Conservation Plan commitments. OCTA will continue with its efforts to complete the required objectives in a timely manner. This First Annual Report has been reviewed and approved by the Wildlife Agencies. In addition, it has been presented to the OCTA EOC and will be available for a public review.

#### Restoration Project Updates

The North Coal Canyon and Chino Hills State Park (CHSP) restoration projects were approved by the EOC and OCTA Board as part of the EMP's second round of restoration funding in 2012 and were incorporated into the OCTA Conservation Plan. Due to limitations on the California Department of Parks and Recreation contracting process, CHSP was unable to implement these two restoration projects. At the direction of the EOC, staff utilized the Board-approved procurement procedures to solicit qualified entity(ies) to implement these projects. These projects were awarded to RECON Environmental, Inc., and Habitat Restoration Services, Inc., in early 2019. Both contractors have taken the necessary steps to begin the implementation of these projects.

#### Clean Water Act Permits Update

The M2 freeway projects are anticipated to impact jurisdictional waters, which will require mitigation. Before construction activities can occur, OCTA must obtain Sections 401 and 404 Clean Water Act permits from the Corps and SWRCB (regulatory agencies). To maximize the benefits of OCTAs' investments,

Conservation Plan mitigation was able to be utilized to help obtain programmatic 401 and 404 permits. These permits were issued in late 2017 and early 2018, and have streamlined the project-level permitting processes. These efforts are the result of years of collaboration between OCTA and the regulatory agencies, and constitute another groundbreaking milestone for the M2 EMP.

#### **Freeway Projects Update**

The following projects are either in or near construction and were able to benefit from the EMP:

- Project C (Interstate 5 Improvement Project from State Route 73 [SR-73] to El Toro Road);
- Project K (Interstate 405 Improvement Project from SR-73 to the Los Angeles County line); and
- Project M (Interstate 605 and Katella Avenue Interchange Project).

The California Department of Fish and Wildlife (CDFW) streambed alteration agreement (permit) for Project C (Segment 3) is pending. Based on recent coordination, it is anticipated that a path forward will be determined that will allow permit issuance by CDFW which will avoid project delays.

Without the EMP's established process, these projects could have incurred mitigation-related requirements and cost, resulting in project schedule risks. A strong partnership has been forged through collaboration with the environmental community as exemplified by their participation on the EOC. Furthermore, there has been substantial reduction in risk from the threat of potential lawsuits because of these partnerships.

#### **Summary**

M2 includes an EMP that provides funding for programmatic mitigation to off-set impacts of the 13 individual freeway projects. To expedite the delivery of the freeway projects, this program was initiated to implement early project mitigation through preservation and habitat restoration. This program is administered through a Conservation Plan, which was approved by the Wildlife Agencies in mid-2017. To maximize the benefits of the investments, OCTA has utilized some of that same mitigation to obtain Clean Water Act permits.

***Attachments***

- A. OCTA Preserves and Funded Restoration Projects
- B. M2 Natural Community Conservation Plan/Habitat Conservation Plan - First Annual Report 2019

**Prepared by:**



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Project Manager  
(714) 560-5759

**Approved by:**



Kia Mortazavi  
Executive Director, Planning  
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# M2 Natural Community Conservation Plan/Habitat Conservation Plan– First Annual Report

2019

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



With support from  
**ICF**  
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# Executive Summary

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This is the first Annual Report for the Orange County Transportation Authority (OCTA) M2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP or Plan), covering all activities up to December 31, 2018. This report summarizes the tracking of impacts associated with covered freeway improvement projects and other management and monitoring activities on Preserves (Covered Activities), status and activities on the OCTA Preserves, progress on the implementation of OCTA-funded restoration projects, and additional Plan administration and public outreach activities. This Annual Report has been reviewed and approved by the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS), collectively referred to as the Wildlife Agencies. In addition, this Annual Report is presented to the OCTA Environmental Oversight Committee (EOC) and is available for a public review.

## Tracking Impacts from Covered Activities

OCTA keeps an accounting of the Plan-to-date impacts on habitat types from all covered freeway improvement projects to ensure impacts stay within the caps established within the Plan. To date, a total of **7.5 acres of habitat impacts have been authorized relative to a cap of 141.0 acres**. In addition, OCTA uses a consistency determination checklist to evaluate how and when avoidance and minimization measures are implemented on covered freeway improvement projects. Four projects (C1, B1, L1, M1) had consistency determinations drafted, modified, or completed within the timeframe of this Annual Report. Other tracking requirements include:

- *Tracking for Covered Plant Species Policy* – OCTA tracks the credits for covered plant species protection (on Preserves) and restoration/enhancement (restoration projects) relative to allowable impacts. The Plan-to-date balance for each plant species is net positive (intermediate mariposa lily [+963], many-stemmed dudleya [+60], southern tarplant [+1,513]).
- *Tracking Impacts on Habitat Types Resulting from Covered Activities within Preserves* – The Plan establishes a cap that no more than 13 acres (approximately 1%) of the natural habitat within the OCTA Preserves will be impacted by Preserve management activities. To date, no measurable permanent impacts have been recorded on the Preserves.
- *Maintaining Rough Proportionality* – The Plan requires implementation of conservation measures roughly proportional in time and extent to impacts on natural communities and Covered Species. To date, two restoration projects, Big Bend and City Parcel, have received sign-off from the Wildlife Agencies as meeting their success criteria and have achieved conservation credits that keeps the Plan ahead of allowable impacts.

## OCTA Preserves

OCTA acquired seven properties resulting in the protection of 1,236<sup>1</sup> acres of natural habitat (see Figure 1). In all instances, the seven Preserves are located within priority conservation areas 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. OCTA has completed Resource Management Plans (RMPs) for each Preserve that includes Preserve-specific goals and objectives and define an appropriate level of public access and trail use consistent with protection of biological resources. It is anticipated that Conservation Easements will be completed and recorded in the near future. Currently each Preserve is being managed by OCTA, with the exception of the Eagle Ridge Preserve, which is being managed by Chino Hills State Park (CHSP) under an interim land management agreement. OCTA is working to identify and transition to long-term Preserve Managers in the near future. OCTA has contracted with the following consulting firms to support Preserve management: (1) Glenn Lukos Associates to provide biological monitoring, prepare invasive species management plans, and assist with public outreach events, (2) RECON Environmental to support general Preserve stewardship including maintenance of access roads, tree trimming, and control of public access, (3) Wildland Res Mgt to complete Fire Management Plans (FMPs), and (4) ICF to assist with completion of RMPs and preparation of the Annual Report. OCTA has hosted numerous Preserve-specific outreach events to educate the public about property value and access and plans to continue this process in the near term as part of a managed access approach. To date, a 1.5-acre fire occurred on the Eagle Ridge Preserve. The fire was extinguished quickly by Brea County Fire, and the burn area has been recovering with no additional management actions. No other fires or major events have occurred on the Preserves, although a level of trespassing and vandalism continues to occur requiring ongoing monitoring and enforcement.

## OCTA-Funded Restoration Projects

OCTA has approved funding for 11 restoration projects and a check dam removal project that will result in over 350 acres of restored habitats and improvement to habitat functions for Covered Species. The restoration projects occur throughout the Plan Area in core habitat areas and within key habitat linkages and riparian corridors (see Figure 1). The restoration projects are on lands that are currently managed and will enhance habitat for Covered Species. OCTA is working with the restoration project sponsors to complete implementation and monitoring of the restoration activities and achieve sign-off from the Wildlife Agencies that the restoration projects meet their success criteria. Each restoration project is at different stages of the process. To date, 2 of the 11 restoration projects have obtained sign-off.

## Additional Conditions for Coverage

As part of the Conservation Analysis (Chapter 6) in the Plan, there were two Covered Species, arroyo chub and many-stemmed dudleya, noted for additional conditions for coverage above and beyond

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<sup>1</sup> The acreage of natural habitat preserved is based on best available information using during the preparation of RMPs and may be slightly different from acreages reported in the M2 NCCP/HCP.



Figure 1-1

**OCTA M2 NCCP/HCP Preserves and Restoration Projects**  
**M2 NCCP/HCP Annual Report**

the acquisition of the OCTA Preserves and funding of restoration projects. In 2017, the EOC and Wildlife Agencies approved OCTA to fund the United States Forest Service Dam Removal restoration project that, when complete, will satisfy the conditions for coverage of arroyo chub. OCTA is currently taking steps to protect and enhance an existing population of many-stemmed dudleya on the Pacific Horizon Preserve with the hope that it will expand to help meet or will meet the criteria needed to achieve coverage for many-stemmed dudleya.

## Public Outreach

OCTA has been committed to transparency in how the M2 funds have been and are being used to implement the Plan and the broader Environmental Mitigation Program (EMP). OCTA has conducted a variety of public outreach activities aimed at informing and engaging the public on the overall EMP as well as Preserve-specific issues and events. These have included public meetings during the preparation of the Preserve RMPs, maintaining a website with information and documents related to the program, and engaging in various outreach efforts and encouraging volunteer programs. Between 2009 and 2018, OCTA participated in 67 EMP public outreach events and meetings and 39 Preserve-specific public outreach events.

## Plan Funding

The primary source of funding for the Plan will derive 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, at least 5% of the revenues from the freeway program will be set aside for the M2 EMP revenues. There are sufficient funds available through the M2 EMP to cover the development and implementation of the Plan. OCTA is currently in a 10–12 year process to accumulate and establish an endowment that will provide a long-term funding source to cover ongoing Preserve management and monitoring, adaptive management, and responses to changed circumstances, in perpetuity. In the short-term, the current M2 EMP revenue stream is used to cover Plan implementation and administration.

## Plan Administration

OCTA is responsible for implementing the Plan and staffing an NCCP/HCP Administrator position. OCTA has designated Lesley Hill as the NCCP/HCP Administrator. Her role includes overseeing Preserve management and monitoring, coordinating with restoration project sponsors, serving as the primary point of contact with the Wildlife Agencies, ensuring avoidance and minimization measures are implemented pursuant to the Plan, tracking impacts and conservation, assisting with public outreach, and preparing this Annual Report.


The Plan outlines how modifications, Minor Amendments, and Major Amendments can be made to the Plan. This Annual Report summarizes Plan modifications that have been made in collaboration with the Wildlife Agencies that address revisions to restoration project design plans and sponsors, minor Preserve boundary adjustments, and approval of a new restoration project since Plan approval. No Minor or Major Amendments are proposed.





**August 5, 2019**

**To:** Regional Planning and Highways Committee

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

**Subject:** Measure M2 Comprehensive Transportation Funding Programs - 2020 Annual Call for Projects

### **Overview**

The Comprehensive Transportation Funding Programs Guidelines provide the mechanism for administration of the annual competitive call for projects for Measure M2 programs, including the countywide Regional Capacity Program (Project O) and the Regional Traffic Signal Synchronization Program (Project P). The 2020 Regional Capacity Program and Regional Traffic Signal Synchronization Program call for projects is presented for review and approval.

### **Recommendations**

- A. Approve proposed revisions to the Comprehensive Transportation Funding Programs Guidelines.
- B. Authorize staff to issue the 2020 annual call for projects for the Regional Capacity Program.
- C. Authorize staff to issue the 2020 annual call for projects for the Regional Traffic Signal Synchronization Program.

### **Background**

The Regional Capacity Program (RCP) provides Measure M2 (M2) Project O funding for improvements to the Orange County Master Plan of Arterial Highways. The program also provides for intersection improvements and other projects to help improve street operations and reduce congestion.

The Regional Traffic Signal Synchronization Program (RTSSP) provides M2 Project P funding for multi-agency, corridor-based signal synchronization throughout Orange County.

These programs allocate funds through a competitive call for projects (call) process and target projects that improve traffic by considering factors, such as degree of congestion relief, cost-effectiveness, and project readiness.

The Comprehensive Transportation Funding Programs (CTFP) document serves as the mechanism with which the Orange County Transportation Authority (OCTA) staff administer the RCP and RTSSP call, as well as other competitive transit (projects S, T, and V) and environmental cleanup programs (Project X).

The CTFP Guidelines (Guidelines) identify procedures and requirements that local agencies must follow in order to apply for M2 funding (and following award of funds) in order to seek reimbursement. These Guidelines were first approved by the OCTA Board of Directors (Board) on March 22, 2010, and were most recently updated and approved in August 2019.

### ***Discussion***

Updates to the Guidelines have been prepared in anticipation of the Board's authorization of the upcoming 2020 annual call for the RCP and RTSSP. OCTA worked closely with the Technical Steering Committee (TSC) and Technical Advisory Committee (TAC) to determine areas of the Guidelines that needed to be adjusted and/or updated. Issues and lessons learned from previous calls were also reviewed and considered. The Guidelines were reviewed and updated, as appropriate, to provide for better consistency and streamlining throughout the document.

The most significant proposed changes include the following:

- Project O
  - Revised the point spread for economic effectiveness in the scoring criteria.
  - Clarified ineligibility of gateway treatments.
- Project P
  - Noted that OCTA-led projects are not available for this call.
  - Revised total number of corridors per project from two to three.
  - Revised description of eligible activities so that the activities are clearer to applicants.
  - Clarified the maximum amount of fiber capacity that is required to support a M2 Project P traffic signal synchronization project.
  - Included three new eligible project features for project characteristics.

A more detailed summary of proposed changes is included in Attachment A, which provides a table of proposed changes, as well as Attachment B, which provides a marked-up version of the Guidelines. Proposed changes that were deemed to be non-substantive (i.e. wording/grammatical, streamlining, and clarifications) are generally not identified.

These proposed changes were recommended for Board approval by the OCTA TSC and TAC in July and are now being submitted for Board final consideration and approval. For this call, staff is proposing to set a target of \$32 million for Project O, and \$8 million for Project P. This is consistent with previous call amounts.

#### **Next Steps**

If the Board approves these recommendations and authorizes the 2020 call for the RCP and RTSSP, staff will send out letters and e-blast announcements notifying local agencies of the call's initiation and any other pertinent information. Applications would be due to OCTA by October 24, 2019, and based upon project selection criteria as specified in the Guidelines, projects will be prioritized for Board, TAC, and TSC consideration in spring 2020. Project funds, if awarded, would become available to local agencies starting July 1, 2020, and may be programmed as late as fiscal year 2022-23.

#### **Summary**

M2 provides funds for intersection and arterial improvements through the RCP and signal synchronization through the RTSSP to enhance both street operations and reduce congestion. The Guidelines serve as the mechanism that OCTA uses to administer competitive RCP and RTSSP funds. Proposed changes to the Guidelines were presented and approved by the TAC on July 24, 2019, and staff is now seeking approval of proposed modifications to the Guidelines and authorization to release the 2020 annual call.

***Attachments***

- A. 2020 CTFP Guidelines (Projects O and P) – Proposed Changes List
- B. Comprehensive Transportation Funding Programs, Guidelines Excerpt,  
Proposed Revisions

**Prepared by:**

A handwritten signature in black ink, appearing to read 'Alfonso Hernandez', with a stylized, somewhat abstract script.

Alfonso Hernandez  
Senior Transportation Funding Analyst  
(714) 560-5363

**Approved by:**

A handwritten signature in black ink, appearing to read 'Kia Mortazavi', with a more fluid and cursive script than the one on the left.

Kia Mortazavi  
Executive Director, Planning  
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## 2020 CTFP Guidelines (Projects O and P) – Proposed Changes List

No.	Section/Chapter	Subsection	Page No.	Proposed Change
1	III. Definitions	8. Excess Right-of-Way and Surplus Right-of-Way	ix	Definition revised
2	III. Definitions	20. O&M Technical Memorandum	x	Added definition for new term
3	IV. Acronyms	N/A	xii - xiv	Adding new section for acronyms
4	V. Precepts	4	xvi	Clarified that a separate cooperative funding agreement will be issued for Project V funded projects and any OCTA-led Project P (RTSSP)-funded projects
5	V. Precepts	32	xix	Revise “shall” to “intent is to”
6	V. Precepts	35	xx	Revised to coincide with language from Chapter 9
7	Chapter 7	Programming Approach	7-2	Revised language to read as “Typically, OCTA has made approximately \$32 million available for each RCP (Project O) programming cycle”
8	Chapter 7	2020 Call for Projects	7-3	Revised language to read as “Contingent on OCTA’s Board approval, the 2020 Call for Projects (call) for RCP (Project O) – under M2 is anticipated to provide approximately \$32 million for...”
9	Chapter 7	Applications	7-4	Contact information and due updated
10	Chapter 7	Application Review Process	7-13	Dates and years have been updated for 2020 call for projects (call)
11	Chapter 7	Ineligible Expenditures	7-17	Added “gateway treatments”
12	Chapter 7	Operational Attributes/Sustainability Elements	7-23	To clarify section related to the scoring criteria, added “Points are awarded at construction phase only”
13	Chapter 7	Table 7-2 – Street Widening Point Breakdown	7-29	Due to majority of past applicants scoring in the top ranges (9 & 10), recommended reducing the ranges to make category more competitive
14	Chapter 7	Potentially Eligible Items	7-42	Revised “should not” to “shall not”
15	Chapter 7	Ineligible Projects	7-43	Added “gateway treatments”
16	Chapter 8	Objectives	8-2	Added “intersecting crossing arterial”
17	Chapter 8	2020 Call for Projects	8-2	Revised language to read as “Contingent on OCTA’s Board approval, the 2020 call for RTSSP (Project P)– under M2 is anticipated to provide approximately \$8 million...”
18	Chapter 8	2020 Call for Projects – 2	8-2	Revised total number of corridors per project from “two (2)” to “three (3)”. Other sections with same language in Chapter were also changed
19	Chapter 8	2020 Call for Projects – 5(a)	8-2	Added “A Project Report is required at the conclusion of this phase to document work completed during the PI phase. This PI Project Report shall be submitted according to the payment process”

## 2020 CTFP Guidelines (Projects O and P) – Proposed Changes List

No.	Section/Chapter	Subsection	Page No.	Proposed Change
20	Chapter 8	2020 Call for Projects – 5(b)	8-2	Revised “project final report” to O&M Technical Memorandum”
21	Chapter 8	2020 Call for Projects – 6	8-3	Added “as part of the PI Project Report”
22	Chapter 8	Applications	8-3	Removed “CD” and added “thumb drive, memory stick, or via electronic file upload and/or email”
23	Chapter 8	Applications	8-3 – 8-4	Contact information updated
24	Chapter 8	Application Process	8-4 – 8-6	The 2020 Call will not include OCTA-led projects. Given this, language referring to OCTA-led projects has been removed
25	Chapter 8	Application Review and Program Adoption	8-8	Dates and years have been updated for the 2020 Call, including in other applicable sections throughout Chapter 8
26	Chapter 8	Sample Resolution Form	8-8	In order to clarify ordinances needed for local agencies’ resolutions, added “Local agencies, at a minimum, must include items a-h from the sample resolution”
27	Chapter 8	Project Definition	8-9	Added “This includes construction or modifications of an Intelligent Transportation Systems communications link between intersections or to the Agency’s Traffic Management Center. This link may be off of the main line but is necessary for a Regional Traffic Signal Synchronization Corridor project”
28	Chapter 8	Project Definition	8-9	Change from “Two linked corridors” to “Linked corridors”
29	Chapter 8	Eligible Activities/New or Upgraded Communication Systems	8-10	Added “not to exceed 120 strands” in order to clarify the maximum amount of fiber capacity required to support a M2 Project P Traffic Signal Synchronization project
30	Chapter 8	Eligible Activities/CCTV	8-11	Added “Intelligent cameras that include analytics, such as automated continuous counts and other metrics. If implemented, these items will require a data sharing agreement with OCTA”
31	Chapter 8	Eligible Activities/ADA Compliant Pedestrian Signal	8-11	Revised language to “ADA compliant Pedestrian Signals including, but not limited to, tactile and audible buttons in countdown signal heads”
32	Chapter 8	Eligible Activities/Caltrans labor	8-12	Clarified section to reflect eligible items under Caltrans labor activities
33	Chapter 8	Eligible Activities/Active Transportation/Pedestrian Safety Related Elements	8-12	Added three-line items under Active Transportation/Pedestrian Safety related elements

## 2020 CTFP Guidelines (Projects O and P) – Proposed Changes List

No.	Section/Chapter	Subsection	Page No.	Proposed Change
34	Chapter 8	Ineligible Expenditures	8-12	Added “Rewiring of complete intersection because of age or isolated mitigation”
35	Chapter 8	Selection Criteria/Transportation Significance	8-13	Revised language
36	Chapter 8	Table 8-1 Point Breakdown	8-15	Added three eligible project features for project characteristics
37	Chapter 8	Matching Funds	8-17	Added “in-kind match” as eligible for Caltrans fees and expenses
38	Chapter 8	Matching Funds	8-17	Added” Please note, overmatch is subject to the same audit and requirements as in-kind match”
39	Chapter 8	Matching Funds	8-17	Added “In-kind match services are subject to audit”
40	Chapter 8	Matching Funds	8-18	Removed OCTA-led language
41	Chapter 8	Exhibit 8-1 Project P Regional Traffic Signalization Checklist	8-20 & 8-21	Revised/updated application checklist

### Acronyms

CTFP – Comprehensive Transportation Funding Program

O&M – Operations & Maintenance

N/A – Not applicable

OCTA – Orange County Transportation Authority

RTSSP – Regional Transportation Signal Synchronization Program

RCP – Regional Capacity Program

Board – Board of Directors

M2 – Measure M2

PI – Primary Implementation

CCTV -Closed Circuit Television

ADA – Americans with Disabilities Act

Caltrans – California Department of Transportation

# **Comprehensive Transportation Funding Programs**

## **Guidelines Excerpt Proposed Revisions**

## III. Definitions

1. The term "agency," "agencies," "local agency" or any form thereof shall be described in Precept 2.
2. "Competitive funds" refers to funding grants received through the Comprehensive Transportation Funding Programs (CTFP).
3. The term "complete project" is inclusive of acquiring environmental documents, preliminary engineering, Right-of-Way (ROW) acquisition, construction, and construction engineering.
4. The term "cost overrun" in reference to projects awarded through the CTFP shall refer to any and all costs beyond the original estimate that are necessary to complete the approved project scope.
5. The term "encumbrance" or any variation thereof shall mean the execution of a contract or other action (e.g. city council award of a primary contract or issuance of a purchase order and Notice to Proceed (NTP)) to be funded by Net Revenues.
6. The term "escalation" or "escalate" is the inflationary adjustment, as determined by the Engineering News Record (ENR) Construction Cost Index (CCI) 20-city average, added to the application funding request (current year basis) for ROW and construction phases (see Precept 13).
7. The term "environmental mitigation" is referred to as environmental clean-up/preservation measures made as part of that projects environmental clearance.
8. For the purpose of these guidelines, the terms "excess right-of-way" and "surplus right-of-way" shall interchangeably refer to ROW acquired for a specific transportation purpose that is not needed for that purpose. ROW designation shall be acknowledged by applicant to OCTA within sixty calendar days of designation. Furthermore, surplus property plan must also be provided to OCTA at time of designation. The term "excess right-of-way" is ROW acquired for projects and deemed excess to the proposed transportation use. Excess ROW designation shall be acknowledged by applicant during the grant application process.
- 8.9. The term "Fast Track" shall refer to projects that apply for both planning and implementation phase funding in a single competitive application/call for projects.
- 9.10. The term "Fully Burdened Labor Rates" include Work Force Labor Rate (WFLR) plus overhead (see Chapter 9).
- 10.11. The term "funding grant," "grant," "project funding," "competitive funds," "project programming" shall refer to the total amount of funds approved by the Board through the CTFP competitive process.

- 11.12.** The term “Gap Closure” shall refer to the construction of a roadway to its full MPAH build-out for the purpose of connecting two existing ends of that roadway by filling in a missing segment or for completing the terminus of an MPAH roadway. This applies to increased roadway capacity only as it relates to vehicular traffic.
- 12.13.** The term “implementing agency” is the agency responsible for managing the scope, cost and schedule of the proposed project as defined in the grant application.
- 13.14.** The term “lead agency” shall refer to the agency responsible for the submission of the grant application.
- 14.15.** The term “Master Funding Agreements” or any form thereof shall refer to cooperative funding agreements described in Precept 4.
- 15.16.** The term “match rate”, “local match”, “local matching funds”, or any variation thereof, refers to the match funding that an agency is pledging through the competitive process and disposed of through procedures in Chapter 9.
- 16.17.** A “micro-purchase” is any purchase that does not exceed \$2,500. For the purposes of proof of payment, only an invoice is required.
- 17.18.** The term “obligate” or any variation thereof shall refer to the process of encumbering funds.
- 18.19.** “OCFundtracker” refers to the online grant application and payment system used by OCTA to administer the competitive programs awarded through the CTFP. Refer to <https://ocfundtracker.octa.net/>.
- 20.** “Operations and Maintenance (O&M) Technical Memorandum” refers to the report required at the conclusion of O&M phase. It is a technical report that documents the work completed during O&M.
- 19.21.** The term “project phase” or any form thereof shall refer to the three distinct project phases (engineering, right-of-way, and construction) OCTA funds through the CTFP. Additionally, the “engineering phase” shall include the preparation of environmental documents, preliminary engineering, and ROW engineering. The “ROW phase” shall include ROW acquisition, utility relocation and adjustment to private property as contained in the ROW agreements, private improvements taken, Temporary Construction Easements (TCE), severance damages, relocation costs that are the legal obligation of the agency, as well as loss of good will, fixtures and equipment including legal cost. The “construction phase” shall include construction and construction engineering. A fourth phase defined as “Operations & Maintenance” applies to select programs and is described more fully in the applicable program chapter.

## **IV. Acronyms**

AADT – Average Annual Daily Traffic

ACE – Arterial Capacity Enhancements

ADA – Americans with Disabilities Act of 1990

ADT – Average Daily Trips

A/E – Architectural/Engineering

APIRI – Applications Programming Interface with Referenced Implementations

ATC – Advanced Transportation Controller

ATMS – Advanced Transportation Management System

BMP – Best Management Practices

B/RVH – Boardings Divided by the Revenue Vehicle Hours

C2C – Center-to-Center Communication

CASQA – California Stormwater Quality Association

CAPPM – Cost Accounting Policies and Procedures Manual

CCI – Construction Cost Index

CCTV – Closed Circuit Television

CDS – Continuous Deflection Separator

CFS – Climate Forecast System

CE – Categorical Exclusion

CEQA – California Environmental Quality Act

CIP – Capital Improvement Plan

CPI – Catchment Prioritization Index

CSPI – Corridor System Performance Index

CTC – California Transportation Commission

CTFP – Comprehensive Transportation Funding Programs

ECAC – Environmental Cleanup Allocation Committee

ECP – Environmental Cleanup Program

EIR – Environmental Impact Report

ENR – Engineering News Record

EVP – Emergency Vehicle Preempt  
FAST – Freeway Arterial/Streets Transition  
FTA – Federal Transit Administration  
FY – Fiscal Year  
GIS – Geographic Information System  
GSRD – Gross Solid Removal Device  
HAWK – High-Intensity Activated Crosswalk Signaling Systems  
ICE – Intersection Capacity Enhancements  
ICU – Intersection Capacity Utilization  
ID – Identification  
IRWMP – Integrated Regional Water Management Plan  
ITS – Intelligent Transportation System  
LFS – Local Fair Share  
LID – Low-Impact Development  
LOS – Level of Service  
M2 – Measure M2  
MG/yr – Megagrams per Year  
MPAH – Master Plan of Arterial Highways  
MUTCD – Manual on Uniform Traffic Control Devices  
ND – Negative Declaration  
NDS – National Data & Surveying Services  
NEPA – National Environmental Policy Act  
NTP – Notice to Proceed  
O&M – O&M  
OCTA – Orange County Transportation Authority  
OCTAM – Orange County Transportation Analysis Model  
PA/ED – Project Approvals/Environmental Documentation  
PCI – Pavement Condition Index  
PI – Primary Implementation



PSR – Project Study Report

PS&E – Plan, Specification and Estimate

PUC – Public Utilities Commission

RCP – Regional Capacity Program

RGSP – Regional Grade Separation Program

RTSSP – Regional Traffic Signal Synchronization Program

ROADS – Roadway Operations and Analysis Database System

ROW – ROW

RVH – Revenue Vehicle Hours

SAR – Semi-Annual Review

SBPAT – Structural BMP Prioritization Analysis Tool

SLPP – State-Local Partnership Program

TAC – Technical Advisory Committee

TCE – Temporary Construction Easement

TCIF – Trade Corridors Improvement Funds

TDA – Transportation Development Act

TMC – Traffic Management Center

TOC – Traffic Operations Center

TPC – Total Project Cost

TPI – Transportation Priority Index

TSC – Technical Steering Committee

TSP – Transit Signal Priority

UPS – Uninterruptible Power Supply

UTDF – Universal Traffic Data Format

v/c – Volume/Capacity

VMT – Vehicle Miles Traveled

WFLR – Work Force Labor Rates

WQLRI – Water Quality Load Reduction Index

## **IV.V. Precepts**

The OCTA Board of Directors (Board) approved these guidelines on March 22, 2010. The guidelines subsequently have been amended and approved by the Board as needed. The purpose is to provide procedures that assist in the administration of the CTFP under M2 where other superseding documents lack specificity. OCTA, or an agent acting on the authority's behalf, shall enforce these guidelines.

1. All eligible Orange County cities and the County of Orange may participate in the M2 competitive programs and federal funding programs included in the CTFP. Other agencies (e.g. Department of Transportation or local jurisdiction) may participate on a project, however, one local agency shall be designated as the implementing agency, shall be responsible for all funding requirements associated with the project, and shall be the recipient of funds through the program.
2. To participate in the CTFP, OCTA must declare that an agency is eligible to receive M2 Net Revenues which include LFS distributions. Failure to meet minimum eligibility requirements after programming of funds will result in deferral or cancellation of funding.
3. The lead agency must execute a Master Funding Agreement with the OCTA. OCTA and lead agencies will periodically amend the agreement via letter to reflect funding changes through competitive calls for projects.
4. A separate cooperative funding agreement will be issued for Project V funded projects and any OCTA-led Project P (RTSSP) ~~-(Project P)-projectsfunded projects~~.
5. An agency must have a fully executed letter agreement prior to the obligation of funds. Local agencies may be granted pre-award authority for M2 funded projects. Local agencies, at their own risk, may use this pre-award authority to obligate funds for an M2 funded project prior to the programmed year. Expenditures prior to the Board approved programmed year will not be eligible for reimbursement (see Chapter 9).
6. For transit programs not covered by the letter agreement process (e.g. Projects S, V and W), pre-award authority is granted upon Board approval of the funding grant. See Precept 5 above for pre-award authority provisions.
7. Local agencies shall scope projects, prepare estimates, and conduct design in cooperation with and in accordance with the standards and procedures required by the local agencies involved with the project (e.g., Caltrans, County, state/federal resource agencies).
8. Local agencies should select consultants based upon established contract management and applicable public contracting practices, with qualification-based selection for architectural/engineering (A/E) services, and competitive bidding

Intersection Capacity Utilization (ICU) calculations shall use 1,700 vehicles per hour per lane with a .05 clearance interval.

25. OCTA shall consider matching fund credit(s) for an implementing agency's proposed projects current and applicable environmental clearance expenditures. OCTA will review and consider these expenditures on a case-by-case basis at the time of funding approval.
26. An approved CTFP project may be determined ineligible for funding at any time if it is found that M2 funding has replaced all or a portion of funds or commitments that were to be provided by other sources such as: development conditions of approval, development deposits, fee programs, redevelopment programs or other dedicated local funding sources (i.e., assessment districts, community facilities districts, bonds, certificates of participation, etc.). Appeals may be made in accordance with Precept 39.
27. OCTA may fund environmental mitigation, up to 25 percent (25%) of the total eligible project cost by phase, as required for the proposed project contained in the environmental document. Participating environmental mitigation expenditures are eligible for funding under certain programs, but not all.
28. Construction Engineering, Construction Management, Materials Testing, Engineering Support and/or Project Management shall not exceed 15 percent (15%) of the total eligible project cost based upon the engineers' estimate. The cap is applied to the sum of eligible expenses, contract change orders (within the scope of work), equipment and materials (e.g. eligible traffic signal equipment).
29. Contract change orders are only eligible for reimbursement of work due to unforeseen changed conditions within the original scope of work and not exceeding 10 percent (10%) contingency provided in the application cost estimate.
30. OCTA shall evaluate "whole" projects during the initial review process. Subsequent phase application reviews shall not include prior phases in the evaluation unless locally funded and pledged as a match and are subject to OCTA verification. The criteria for ranking project applications is included in these guidelines as part of each program component chapter.
31. Projects that receive competitive CTFP funds shall not use other M2 competitive funds as a local match source. Lead agencies may request project consolidation. The TAC and Board must approve consolidation requests. OCTA shall use the weighted average match rate of the consolidated project's individual segments.
32. OCTA shall conduct a SAR of all active CTFP projects. All agencies shall participate in these sessions through a process established by OCTA. Currently, OCTA administers the SAR through OCFundtracker. OCTA's intent is to shall: 1) verify project schedule, 2) confirm project's continued viability, 3) discuss project changes

to ensure successful and timely implementation, 4) request sufficient information from agencies to administer the CTFP, and 5) address any potential issues with external fund sources committed as match against the competitive funds.

33. For any project experiencing cost increases exceeding 10 percent (10%) of the originally contracted amount, a revised cost estimate must be submitted to OCTA as part of the SAR process. This is applicable even if the increase is within the overall grant amount.
34. Agencies shall submit payment requests to OCTA in a timely fashion. Agencies may request an initial payment for M2 (generally up to 75 percent (75%) of programmed amount or eligible expenditures, see Chapter 9) once the funds have been encumbered. The final 25 percent (25%) of the available programmed balance will be released upon the submission of an approved final report.
35. For situations where a grant amount exceeds \$2,000,000, the amount withheld pending the submittal of an approved final report shall be capped at \$500,000 per project phase but shall in no case be less than 10 percent (10%) of the grant or the contract amount, whichever is less. Should the 75 percent/25 percent (75%/25%) payment distribution ratio result in a final payment retention that exceeds \$500,000, the payment percentages will be adjusted to meet the \$500,000 cap until the 10 percent (10%) threshold is reached. At no time will the final payment retention be less than 10 percent (10%).
36. When a project phase is complete, an agency shall notify OCTA in writing within thirty (30) calendar days of completion. The date of project phase completion will begin the 180-day requirement for the submission of a project final report as required by the M2 Ordinance, Attachment B, Section III.A.9.
37. An agency shall provide final accounting in an approved final report format (see Chapter 9) within 180 calendar days of project phase completion. The process for untimely final reports is described in Chapter 9. Failure to provide a final accounting shall result in repayment of applicable M2 funds received for the project phase in a manner consistent with the Master Funding Agreement. Projects funded with M2 funding require a project final report within 180 calendar days of project phase completion as part of eligibility compliance. Failure to meet eligibility requirements, including submittal of final reports within 180 calendar days of project phase completion may result in suspension of all net revenues including fair share funds.
38. The payment distribution ratio referenced in Precept 35 may be modified to a reimbursement process, at the discretion of the Board, in the event that financing, or bonding is required to meet OCTA's cash flow needs.
39. Agencies may appeal to the TAC on issues that the agency and OCTA staff cannot resolve. An agency may file an appeal by submitting a brief written statement of the

## Funding Estimates

Funding will be provided on a pay-as-you go basis. The RCP will make an estimated \$1.1 billion (in 2005 dollars) available during the 30-year M2 program. Programming estimates are developed in conjunction with periodic calls for projects. Funding is shared with intersection, interchange and grade separation improvement categories. No predetermined funding has been set aside or established for street widening.

## Programming Approach

Programming decisions are based upon project prioritization ranking, feasibility and readiness. Each round of funding has resulted in a diverse range of activities, cost and competitive score. Funding applications may seek financial assistance for planning, engineering, ROW, construction or a combination of these activities. Effective grant programs include a combination of project development as well as implementation projects. In order to ensure continued distribution of funding opportunities between small and large-scale projects, a tiered funding approach will be used.

~~Typically, OCTA has made approximately \$32 million will be available for each RCP (Project O) programming cycled during the 2020 Call for Projects.~~ Category 1 projects are limited to those projects requesting \$5 million or less. Category 2 projects are defined as those requesting more than \$5 million in Measure M2 funds.

**Tiered Funding Approach:** The two-tiered funding (Tier 1 and Tier 2) approach will only be applicable to the RCP. This approach is proposed to prioritize high scoring projects while providing a balanced program with funding availability for small and large projects. The first tier is for projects scoring 50 points or higher, and the second tier is for all projects after first satisfying the Tier I ranking. Within Tier 1, two categories would be established with 60 percent (60%) (Category 1) of the M2 funds available for smaller projects (requesting \$5 million or less), and 40 percent (40%) (Category 2) of the M2 funds available for larger projects (requesting \$5 million or more). This approach is intended to broaden the distribution of M2 funds to higher scoring/lower cost projects and retain the ability to fund larger projects without placing formal funding caps on allocations. Any M2 funds not programmed in Tier I will be designated for Tier 2 allocation. A funding split between small and large projects is not recommended for Tier 2.

Applications may be for any project phase provided it represents a meaningful, logical terminus and is consistent with scoping from a previously funded project if applicable (i.e., if engineering was previously funded, the ROW and/or construction request must be for the same project scope).

	Category 1 (60%)	Category 2 (40%)
Tier I >=50	<ul style="list-style-type: none"> <li>• \$0 - \$5 million</li> <li>• Score at least 50 points</li> <li>• Logical, standalone project</li> <li>• Unallocated balance shifts to Tier II for programming</li> </ul>	<ul style="list-style-type: none"> <li>• \$5+ million request</li> <li>• Score at least 50 points</li> <li>• Logical, standalone project</li> <li>• Unallocated balance shifts to Tier II for programming</li> </ul>
Tier II	<ul style="list-style-type: none"> <li>• Balance of unallocated funds from Tier I prioritization</li> <li>• Request can be of any dollar value to compete in Tier II</li> <li>• Multiple segments of the same project cannot be submitted under both categories.</li> </ul>	

## 2020 Call for Projects

Contingent on OCTA's Board approval, the 2020 Call for Projects (call) for RCP (Project O) – under M2 is anticipated to will provide approximately **\$32 million** for streets and roads improvements across Orange County.

Funding will be provided for the three RCP funding programs: ACE, ICE, and FAST. Chapter 7 details the specific program's intent, eligible project expenditures, ineligible project expenditures, and additional information that may be needed when applying for funds. Each section should be read thoroughly before applying for funding. Application should be prepared for the program that best fits the proposed project.

For this call, OCTA shall program projects for a three-year period (FY 19/20 – 21/22), based upon the current estimate of available funds. For specifics on the funding policies that apply to this call, refer to the Program Precepts as found in Section IV of these guidelines.

## Applications

In order for OCTA to consider a project for funding, applications will be prepared by the lead agency. A separate application package must be completed for each individual project. Multiple variations of the same project (i.e. with different local match rates) will not be considered. If funding is requested under multiple program components for a single project (i.e. arterials and intersections) a separate application must be prepared

for each request. OCTA shall require agencies to submit both online and hardcopy applications for the 2020 call for projects by **5:00 p.m. on ~~Thursday~~Friday, October 24~~18~~, 2019~~8~~**. **Late and/or incomplete submittals will not be accepted.**

Since each funding program has slightly different application requirements, an "Internal Application Checklist Guide" has been provided for the three programs under the RCP (Exhibits 7-1, 7-2, and 7-3). The checklist guide identifies the basic forms and documentation required for each of the program components. In addition, items required at the time of project submittal are differentiated from supplemental items due later. The appropriate **checklist must be provided as a cover sheet for each application submitted**. For any items that are required for the candidate project or program that are missing or incomplete, an explanation should be included in a cover letter with the application. In addition to this checklist guide, please review the **Attachments/Additional Information** section of each program component for a description of supplementary documentation which may be required to support your agency's project application in specific cases.

Additionally, **three (3) unbound hardcopies** of the application and any supporting documentation must be submitted to OCTA by the application deadline.

Hardcopy applications should be mailed to:

OCTA

Attention: ~~Joe Alcock~~ **Alfonso Hernandez**

600 S. Main Street

P.O. Box 14184 Orange, CA 92863-1584

Hardcopy applications can be hand delivered to:

600 S. Main Street

Orange, CA 92868



scored, ranked and submitted to the TSC, TAC and Board for consideration and funding approval.

Local agencies awarded funding will be notified as to which projects have been funded and from what sources after the Board takes action. A tentative call schedule is detailed below:

Board authorization to issue call: August 201~~9~~<sup>8</sup>

Application submittal deadline: October ~~24~~<sup>18</sup>, 201~~9~~<sup>8</sup>

TSC/TAC Review: February/March 20~~19~~<sup>19</sup>

Committee/Board approval: May 20~~19~~<sup>19</sup>

## Funding

M2 RCP (Project O) funding will be used for this call.

The CTFP Guidelines include a provision that allows applicants to request ROW and/or construction funding prior to completion of the planning phase (including final design) provided that the phase is underway, substantially complete and the agency will complete the activities within six months of the start of the new phase programmed year. A thorough review of eligible activities is not always possible during the call for projects evaluation period. As a result, it is possible that cost elements contained within an application and included in a funding recommendation may ultimately be deemed ineligible for program participation. The applicant is responsible for ensuring projects are implemented according to eligible activities contained within the program guidelines.



If a relocation is eligible to be reimbursed, and to be performed by the utility owner or by the utility owner's contractor, the work should be included in the ROW phase costs and clearly identified in the project application submittal. For eligible relocations to be performed during the construction phase by the local agency's contractor, the work should be included in the plans and specifications similar to other construction activities. Adjustment of existing utilities to grade (e.g. water valves, manhole frames and covers), due to new roadway cross sections are not eligible in the construction phase subject to the limitations previously described. New or relocated fire hydrants are ineligible.

In all cases, eligible costs shall only include "in-kind" relocation. No reimbursements will be made for betterments above the cost of "in-kind" relocation. Additionally, costs submitted for program reimbursement must include any salvage credits received.

## Ineligible Expenditures

Items that are not eligible under the ACE Program are:

- Grading outside of the roadway ROW not related to a TCE or ROW agreement.
- Rehabilitation (unless performed as component of capacity enhancement project)
- Reconstruction (unless performed as component of capacity enhancement project)
- Grade Separation Projects
- Enhanced landscaping, ~~and~~ aesthetics and gateway treatments (landscaping that exceeds that necessary for normal erosion control and ornamental hardscape)
- ROW acquisition and construction costs for improvements greater than the typical ROW width for the applicable MPAH Roadway Classification. (See standard MPAH cross sections in Exhibit 7-5) Where full parcel acquisitions are necessary to meet typical ROW requirements for the MPAH classification, any excess parcels shall be disposed of in accordance with the provisions of these guidelines, State statutes as outlined in Article XIX and the California State Controllers Guidelines Relating to Gas Tax Expenditures.
- Utility Betterments
- Construction of new utilities

Operational Attributes (within the roadway): This category is additive. Each category, except Active Transit Routes, must be a new feature added as a part of the proposed project.

- Pedestrian Facilities: Placement of a new sidewalk where **none currently exists** along an entire segment of proposed project.
- Meets MPAH configuration: Improvement of roadway to full MPAH standard for the segment classification.
- Active Transit Route(s): Segments served by fixed route public transit service.
- Bus Turnouts: Construction of bus turnouts.
- Bike Lanes: Installation of new bike lanes
- Median (Raised): Installation of a mid-block raised median where none exists today. Can be provided in conjunction with meeting MPAH standards.
- Remove On-street Parking: Elimination of on-street parking in conjunction with roadway widening project. Can be provided in conjunction with meeting MPAH standards and installation of new bike lanes.
- Sustainability Elements: Includes the use of recycled materials during the roadway construction process (recycled aggregate or rubberized asphalt) or the installation of solar lighting within the roadway cross section. Other elements of sustainability may be considered on a case by case basis. Points are awarded at construction phase only.
- Water Conservation: Includes elements that reduce water consumption, compared to current usage within project limits, such as the replacement of existing landscaping with hardscape and/or "California Native" drought tolerant type landscaping; the replacement of existing sprinklers with drip irrigation systems; the installation of new "grey" or recycled water systems where such does not currently exist.
- Safety Improvements: Project features that increase the safety of pedestrians. These elements can include the new installation of: median barriers, curb extensions, residential traffic diverters, pedestrian crossing islands, pedestrian activated signals, crosswalk enhancements, safety signage, and the addition, modification, or improvement of existing pedestrian signals. Other elements of safety may be considered on a case by case basis.
- Other (Golf cart paths in conformance with California Vehicle Code and which are demonstrated to remove vehicle trips from roadway).

Improvement Characteristics: Select one characteristic which best describes the project:

- Gap Closures: the construction of a roadway to its full MPAH build-out for the purpose of connecting two existing ends of that roadway by filling in a missing

## Table 7-2 Street Widening Point Breakdown

### ACE SCORING CRITERIA Point Breakdown for Arterial Capacity Enhancement Projects Maximum Points = 100

Facility Usage <b>Points: 30</b>			Facility Importance <b>Points: 20</b>		
Existing ADT Range		Points	Transportation Significance Range		Points
45+	thousand	10	Principal or CMP Route		10
40 – 44	thousand	8	Major		8
35 – 39	thousand	6	Primary		6
30 – 34	thousand	5	Secondary		4
25 – 29	thousand	4	Collector		2
20 – 24	thousand	3			
15 – 19	thousand	2	Operational Attributes		
10 – 14	thousand	1	(within the roadway)	Max Points: 10	
<10	thousand	0	Pedestrian Facilities (New)		3
			Meets MPAH Configs.		3
			Bike Lanes (New)		3
			Active Transit Route(s)		2
			Bus Turnouts		2
			Median (Raised)		2
			Remove On-Street Parking		2
			Water Conservation Elements		2
			Safety Improvements		2
			Sustainability		2
			Other		2
Existing ADT Range		Points	Benefit <b>Points: 35</b>		
31+	thousand	10	Improve Characteristics		Points
26 – 30	thousand	8	Gap Closure		10
22 – 25	thousand	6	New Facility/Extension		8
18 – 21	thousand	5	Bridge Crossing		8
14 – 17	thousand	4	Adds Capacity		6
11 – 13	thousand	3	Improves Traffic Flow		2
08 – 10	thousand	2			
04 – 07	thousand	1			
<4	thousand	0			
Current Project Readiness		Max Points: 10	LOS Improvement <b>Max Points: 25</b>		
ROW (All Easement and Titles)		5	Existing LOS Starting Point Range		
Final Design (PS&E)		4	(LOS Imp x LOS Starting Pt)	Points	
Environmental Approvals		2	1.01+		5
Preliminary Design (35%)		2	.96 – 1.00		4
ROW (All Offers Issued)		2	.91 – .95		3
			.86 – .90		2
			.81 – .85		1
			<.81		0
			LOS Improvements with Project (exist. Volume)		
			Existing LOS Starting Point Range	Points	
			.20+		5
			.16 – .20		4
			.10 – .15		3
			.05 – .09		2
			.01 – .05		1
			<.01		0
Economic Effectiveness <b>Points: 15</b>					
Cost Benefit (Total \$/ADT)		Points			
Range*		Points			
< 499		10			
<del>50400</del> – 14974		9			
<del>1750</del> – 199		7			
<del>1200</del> – 1249		5			
<del>1250</del> – 1299		4			
<del>2300</del> – 2349		3			
<del>2350</del> – 3299		2			
<del>4300</del> – 349499		1			
<del>350500</del> +		0			
Funding Over-Match (local match/project cost) minus minimum local match requirement.					
Range*		Points			
25+%		10			
20 – 24%		9			
15 – 19%		7			
10 – 14%		5			
05 – 09%		4			
00 – 04%		3			
*Range refers to % points above agency minimum requirement.					

- Storm drains/catch basins/detention basins/bioswales/other pollutant discharge mitigation devices (details below)
- Aesthetic improvements including landscaping within the project ROW (eligible improvements up to 10 percent (10%) of construction costs, provided costs are reasonable for the transportation benefit)
- Rehabilitation and/or resurfacing of existing pavement when necessitated by proposed improvement (such as change in profile and cross section)
- Improvements to private property if part of a ROW settlement agreement
- Utility relocation where the serving utility has prior rights as evidenced by a recorded legal document
- Roadway grading within the ROW ~~shall~~<sup>ould</sup> not ~~to~~ exceed a depth for normal roadway excavation (e.g. structural section) or as required by TCEs, and/or ROW agreement related improvements. Additional grading (e.g. over excavation for poor soil conditions) will be considered on a case by case basis.
- Auxiliary lanes if necessitated by interchange improvements
- Soundwalls (in conjunction with roadway improvement mitigation measures)

Environmental mitigation will be allowed only as required for the proposed roadway improvement, and only as contained in the environmental document. Program participation in environmental mitigation shall not exceed 25 percent (25%) of the total eligible project costs.

Longitudinal storm drains are eligible for program participation when the storm drain is an incidental part (cost is less than 25 percent (25%) of the total eligible improvement cost) of an eligible improvement. Program participation shall not exceed 10 percent (10%) of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in FAST improvement category funding. Storm drains outside standard MPAH ROW widths are not eligible, excluding catch basins within reasonable distance and in general proximity to a project intersection (e.g. within ten feet of the curb return). Catch basins and drainage systems extending into adjacent areas (including public streets) shall not be eligible past the first catch basin.

Soundwalls are eligible only if they are required as part of the environmental mitigation for the proposed project and shall not exceed 25 percent (25%) of the total eligible project cost. Aesthetic enhancements and landscaping in excess of minimum environmental mitigation requirements are eligible at up to 10 percent (10%) of the total eligible construction costs, provided costs are reasonable for the transportation benefit.

The relocation of detention basins/bioswales are potentially eligible dependent on prior rights and will be giving consideration on a case by case basis (see utility relocations below).

Roadway grading is eligible for structural sections if within the standard MPAH cross section for the facility (inclusive of any TCEs). OCTA assumes rough roadway grading is complete prior to project start and is considered an ineligible item.

## Utility Relocations

The expenses associated with the relocation of utilities are eligible for RCP reimbursement only when:

- The relocation is made necessary due to conflict with proposed improvements.
- The facility to be relocated is within the project right-of-way.
- It has been determined that the local agency is legally liable for either a portion of or all of the relocation costs.

Liability can be determined by property rights, franchise rights/agreements, state and local statutes/ordinances, permits, a finding by the local agency's counsel, or other recorded legal document. Documentation providing proof of the local agency's liability for the costs of utility relocation must be submitted with an initial payment request (see Chapter 9). Utilities funded through enterprise funds shall not be eligible for reimbursement.

If a relocation is eligible to be reimbursed, and to be performed by the utility owner or by the utility owner's contractor, the work should be included in the ROW phase costs and clearly identified in the project application submittal. For eligible relocations to be performed during the construction phase by the local agency's contractor, the work should be included in the plans and specifications similar to other construction activities. Adjustment of existing utilities to grade (e.g. water valves, manhole frames and covers), due to new roadway cross sections are generally eligible in the construction phase.

In all cases, eligible costs shall only include "in-kind" relocation. No reimbursements will be made for betterments above the cost of "in-kind" relocation. Additionally, costs submitted for program reimbursement must be reduced by any salvage credits received.

## Ineligible Projects

- Seismic retrofit projects (unless combined with eligible capacity enhancements)
- Enhanced landscaping, ~~and~~ aesthetics and gateway treatments (landscaping that exceeds that necessary for normal erosion control and ornamental hardscape).

## Selection Criteria

Specific selection criteria will be used to evaluate competitive program project applications. Emphasis is placed on existing usage, level of services benefits, local match funding and overall facility importance. Technical categories and point values are shown on Tables 7-5 and 7-6. Data sources and methodology are described below.

## Objectives

- Synchronize traffic signals across jurisdictions
  - Monitor and regularly improve the synchronization.
  - Synchronize signals on a corridor, intersecting crossing arterial and/-or route basis reflecting existing traffic patterns in contiguous zones or road segments that have common operations.

## 2020 Call for Projects

Contingent on OCTA's Board approval, The 2020 Call for Projects (call) for RTSSP (Project P)– under M2 is anticipated to will–provide approximately **\$8 million** for signal coordination across Orange County. The following information provides an overview of the 2020 RTSSP Call for Projects:

1. Projects must result in new, optimized, and field-implemented coordination timing.
2. Project may be a single contiguous corridor or set of contiguous corridors related to each other. Multiple corridors, related systems of corridors, and corridors that form a “grid” may be submitted as a single optimized timing project. However, the total number of corridors per project will be limited to three (3) two (2) and the total number of intersections between these corridors are limited to fifty (50).
3. Projects selected will be programmed after July 1 of the programmed year (July 1 – June 30).
4. Project delays resulting in a time extension request will fall within the process outlined in the CTFP Guidelines.
5. Projects are funded for a grant period of three (3) years and are divided into two phases:
  - a. Primary Implementation (PI) – includes the required implementation of optimized signal timing as well as any signal improvements proposed as part of a project. A Project Report is required at the conclusion of this phase to document work completed during the PI phase. This PI Project Report shall be submitted according to the payment process.
  - b. Ongoing O&M – includes the required monitoring and improving optimized signal timing in addition to any optional communications and/or detection support. O&M will begin after the optimized signal timing is implemented and be required for the remainder of the project (typically 2 Years). An O&M Technical Memorandum project final report is required at the conclusion of this phase to document work completed during the O&M phase.
6. Projects shall include a Before and After Study. This study shall collect morning, mid-day, and evening peak periods using travel times, average speeds, green lights to red lights, stops per mile, and the derived corridor system performance index (CSPI) metric. This information shall be collected both before any signal timing changes have been made and after the PI. The study shall compare the information

collected both before and after the timing changes. Comparisons shall identify the absolute and percent differences for the entire corridor, by segment, direction, and time period. Segments will be defined by major traffic movements as observed during the project (e.g. commuting segments between freeways, pedestrian-friendly segments in a downtown area, etc.). The Before and After study shall also include field inventory, count data, modeling data, and Greenhouse Gas calculations. The Before and After Study shall be submitted after the PI phase is completed as part of the PI Project Report.

7. Any corridor or portion of a corridor funded through this call cannot re-apply for funding until the three-year grant period or commitment to operate signal synchronization beyond the three-year grant period is completed, whichever ends later.
8. This chapter identifies the selection criteria for projects, eligible activities, minimum project requirements, data compatibility required as part of any funded project, and other key information.

Additional details of the specific program's intent, eligible project expenditures, ineligible project expenditures, and additional information that may be needed when applying for funds are included in this chapter. Each section should be read thoroughly before applying for funding. Application should be prepared for the program that best fits the proposed project.

For specifics on the funding policies that apply to this call, refer to the Program Precepts as found in Section IV of these guidelines.

## Applications

In order for OCTA to consider a project for funding, applications will be prepared by the local agency responsible for the project application. OCTA shall require agencies to submit applications for the call for projects by **5:00 p.m. on Thursday, October 24, 2019.** Late and/or incomplete submittals will not be reviewed or considered. The local agency responsible for the project application must submit the application and any supporting documentation via OCFundtracker as outlined below.

A separate application package must be completed for each individual project and uploaded to OCFundtracker. **Three (3) unbound printed copies and one electronic copy on a ~~CD or~~ USB, thumb drive, memory stick, or via electronic file upload and/or email** of each complete application shall also be mailed or delivered to:

Orange County Transportation Authority  
550 South Main Street  
P.O. Box 14184  
Orange, California 92863-1584  
Attn: Alfonso Hernandez



Email: [AHernandez@octa.net](mailto:AHernandez@octa.net)

## Application Process

Project grants are determined through a competitive application process administered by OCTA. Agencies seeking funding must complete an online application, a supplemental application, and provide supporting documentation that will be used to evaluate the project proposal as outlined below. Key information to be provided as part of the application process includes:

- Funding needs by phase and fiscal year
- Percent match rate including funds type, source, and description (minimum 20 percent (20%))
- Lead agency ~~Option 1~~ (default – local agency) ~~or Option 2 (OCTA)~~
- Lead and supporting agencies names
- Supporting technical information
- Project development and implementation schedule
- Environmental clearances and other permits
- Any additional information deemed relevant by the applicant
- Complete photographic field review (including cabinet interiors and communication facilities) for all projects that ~~either~~ exceed one million dollars in capital improvements ~~or request OCTA serve as lead agency regardless of capital improvement budget~~. Original photos shall be uploaded to OCFundtracker or included with electronic copy of application.
- ~~Current City Specifications (including specific equipment specifications, inspection requirements, etc.) if OCTA is requested to be the lead agency. Refer to the 2019 Supplemental Application for additional information. This shall be uploaded to OCFundtracker or included with electronic copy of application.~~

A call for projects for the funding cycle will be issued as determined by the Board. Complete project applications must be submitted by the established due dates to be considered eligible for consideration.

An application should be submitted for a single corridor or route corridor project. Multiple corridors that form a “grid” may be submitted as separate or single project(s). However, the total number of corridors per route corridor project will be limited to three (3) and the total number of intersections between these corridors are limited to fifty (50). A single corridor project not proposed as a connected route or grid project may be submitted and is not subject to the 50-intersection limit. The following instructions should be used in developing project applications.

Applications will be reviewed by OCTA for consistency, accuracy, and concurrence. Once applications have been completed in accordance with the Program requirements, the

projects will be scored, ranked, and submitted to the TSC, TAC, and the Board for consideration and funding approval. OCTA reserves the right to evaluate submitted project costs for reasonableness as part of the review and selection process and suggest potential revisions to make the cost more appropriate. Grants will be subject to funding agreements with OCTA.

## Other Application Materials

Supporting documentation is required to fully consider each project application. A Supplemental Application Template is required to be completed for each project application. Note: There is a new section for all costs, on a line item basis, in excel format for both project phases. The template is distributed with other application materials at the issuance of the Call for Projects. In addition to the funding plan described above, local agencies will be required to submit the following materials:

Lead Agency: Eligible local agency. ~~Lead agency for the project must be identified: local agency or OCTA.~~

Participating Agencies: All participating agencies must be identified and adopted City Council resolutions or Minute Order actions authorizing the participating agency's support of the project under the lead agency must be included. **If a draft copy of these resolutions of support are provided, the local agency must also provide the date the resolution will be finalized by the participating agency's governing body.** A final copy of the City Council approved resolution must be provided at least four (4) weeks **PRIOR** to the consideration of programming recommendations by OCTA's Board of Directors.

Council Approval: A Council Resolution or Minute Order action authorizing request for funding consideration with a commitment of project local match funding must be provided with the project application from all participating agencies. **If a draft copy of the resolution is provided, the local agency must also provide the date the resolution will be finalized by the local agency's governing body.** A final copy of the City Council approved resolution must be provided at least four (4) weeks **PRIOR** to the consideration of programming recommendations by OCTA's Board of Directors.

Project Support: If proposed project has completed initial planning activities (such as PSR or equivalent, EIR, or design), evidence of approval should be included with the application. Satisfactory evidence includes project approval signature page, engineer-stamped site plan, or other summary information to demonstrate completion or planning phases. The applicant will be asked for detailed information only if necessary to adequately evaluate the project application.

## Lead Agency

This Program is administered through a single lead agency: a local eligible city ~~or OCTA.~~

Local Agency Lead: Only the lead agency will receive payments in accordance with the CTFP Guidelines regarding payment for costs related to project for optimized signal timing development, capital improvements, planning, and related design. Payments will be disbursed consistent with Chapter 9. The lead agency is responsible for reimbursing other agencies as part of the effort. Additionally, the lead agency is also responsible for ensuring that all agencies participating in the project provide the local match proposed in the project application.

OCTA Lead: **[NOT AVAILABLE FOR 2020 CALL FOR PROJECTS]** OCTA may, at the request of the involved local agencies, act as the lead agency for RTSSP projects. If the involved local agencies would like OCTA to implement a project on the signal synchronization network, the local agency shall work cooperatively with OCTA to develop the scope of work and cost elements of the project. The lead local agency shall contact OCTA with a **written request at least four weeks prior to deadline for submittal of the project grant application**. Projects nominated for OCTA lead shall be discussed at the Traffic Forum. Applications must include a complete photographic field review (as outlined above) when submitted. The application will be scored using the criteria outlined in the previous sections. Based on local agency interest and OCTA resource availability, a limited number of projects will be developed and implemented by OCTA.

If any projects that are designated as OCTA lead are awarded funding, OCTA will then be responsible for implementation of the project including optimized signal timing development, capital improvements, planning, and related design. OCTA will implement the project based on the cost estimates developed in the application. Project elements may be modified based on final costs with the agreement of all participating agencies. OCTA will be responsible for ensuring that all agencies participating in the project provide the local match as identified in the project application (minimum 20 percent (20%)).

Additionally, for projects designating OCTA as lead agency, a consultant traffic engineering firm may be contracted to provide staff and services to implement the project. Therefore, in-kind match designated as staffing commitment under an OCTA lead agency option shall be limited. The following will be used as a guide for staffing commitment, when the local agency develops the application:

- Primary Implementation (PI) (12 months)
  - Project Administration - Each local agency traffic engineer or equivalent participates in approximately 10-15 hours per month of project administration (meetings, review of reports, minutes, and other administration).
  - Signal Synchronization Timing - Each local agency traffic engineer or equivalent reviews consultant developed draft and final timing plans for intersections within the local agency, approximately 2-4 hours per local agency intersection.

Final programming recommendations will be provided to the TSC and TAC for approval. Recommendations will be presented to the Board, who will approve projects for funding under the CTFP.

OCTA shall distribute copies of the approved program to each participating local jurisdiction with any qualifying conditions stipulated for the jurisdiction's funded project(s). Local agencies awarded funding will be notified as to which projects have been funded and from what sources after the Board takes action. A tentative call schedule is detailed below:

Board authorization to issue call: August 201~~98~~

Application submittal deadline: October ~~2418~~, 201~~98~~

TSC/TAC Review: February/March 20~~2019~~

Committee/Board approval: April 20~~2019~~

## Checklist Guide

The "Project P Regional Traffic Signal Synchronization Program Application Checklist" has been provided for the RTSSP (Exhibit 8-1). The checklist identifies the basic documentation required for the program. In addition to items required at the time of project submittal, additional items that are not specified may be requested later. The checklist should be provided as a cover sheet for **each** application submitted. For any items that are required for the candidate project or program that are missing or incomplete, an explanation should be included in a cover letter with the application.

## Sample Resolution Form

A resolution or minute action must be approved by the local agency's governing body. A sample resolution is included as Exhibit 8-2. Local agencies, at a minimum, must include items a-h from the sample resolution. The mechanism selected shall serve as a formal request for RTSSP funds and states that matching funds will be provided by the agency, if necessary. All project requests (i.e., multiple corridors proposed for RTSSP funds) must be included in this action.

## Project Definition

Local agencies are required to submit complete projects that, at minimum, result in field-implemented coordinated timing. Project tasks that are eligible for funding can consist of design, engineering, construction, and construction management. Partial projects that design improvements, but do not field implement the improvements are ineligible.

Projects must consist of a corridor along the priority corridor network, signal synchronization network, or the MPAH. Projects previously awarded RTSSP funding must

be complete with a final report submitted and approved by OCTA. Projects can be the full length of the corridor or a segment that complies with the project requirements identified later in the chapter. **Communication system improvements that directly benefit signal synchronization along the project corridor limits, but are not physically within the project corridor, are eligible for inclusion in a project.** This includes construction or modifications of an Intelligent Transportation Systems communications link between intersections or to the Agency's Traffic Management Center. This link may be off of the main line but necessary for a Regional Traffic Signal Synchronization Corridor project.

Applicant agency and owning agency must demonstrate through simulation, or actual vehicle counts showing Origin – Destination that proposed linked corridors form a route. Two linked corridors may also combine at the point of intersection to form a single local Master offset Control Point (T<sub>0</sub>) for future Zone operations.

Multimodal consideration of bicyclists and pedestrians along or crossing the intersection or roadway may enhance overall circulation. Therefore, active transportation elements may be included as part of the project.

## Eligible Activities

The primary purpose of the Program is to provide funding for projects that develop and maintain corridor-based, multi-jurisdictional signal synchronization along corridors throughout Orange County. All projects funded by this Program must be corridor-based and have a signal coordination component that includes the following:

- Signal Coordination
  - Developing and implementing new signal synchronization timing parameters based on current travel patterns, and federal and state traffic signal timing mandates and guidance, including but not limited to the Manual on Uniform Traffic Control Devices (MUTCD)
  - Monitor, maintain (minimum quarterly/maximum monthly) and/or regularly improve the newly implemented signal synchronization timing and parameters for the remainder of the project
  - "Before" and "after" studies for the project comparing travel times, average speeds, ratio of green lights passed to red lights stopped (greens per red), average stops per mile, and emissions of greenhouse gases

In addition to developing optimized signal timing, a project may include other improvements as long as they contribute to the goal of multi-agency signal synchronization of corridors throughout Orange County. These improvements are restricted to the signal synchronization project limits but may include traffic signalized intersections on intersecting corridors where new optimized timing has occurred within the past three years; maximum distance for either direction from crossing arterial

intersection in 2,700 feet. Gap closure communications links that are installed from a central location and/or communications hub to the project corridor are eligible. All improvements must be designed to enhance the specific project. The following are a list of potentially eligible items as part of a signal coordination project:

- New or upgraded vehicle, pedestrian, and bicycle detection
  - Upgrade detection along the signal synchronization corridors to ensure necessary conditions for signal synchronization: inductive loops, video detection, radar, sonar, thermal, hybrids thereof, and other types of detection systems.
- New or upgraded communication systems
  - New contemporary communication system improvements (e.g. Ethernet) including all conduits, pull boxes, fiber optic and/or copper cabling (not to exceed 120 strands), network switches and distribution systems. These systems should be sufficiently sized for the need capacity of the Intelligent Transportation System (ITS) network. Excess capacity is deemed non-participating.
  - Replacement fiber optic or copper cabling for network communication
    - Fiber optic is the preferred medium and includes pull boxes, network switches and distribution systems
  - Software and hardware for system traffic control
  - Control and monitoring interconnect conduit (including upgrades or replacement of existing systems)
  - Gap closure systems of conduit, cable, and associated equipment that are outside of project limits but complete a designated communications link to an existing network for the Advanced Transportation Management System (ATMS) for an agency or agencies.
  - Communications Support
    - Monitor, maintain, and repair signal communication systems and infrastructure along synchronized corridors to ensure necessary conditions for signal synchronization including interconnect and Central Systems and Local Systems communications equipment (two years after PI acceptance)
  - Detection Support
    - Monitor, maintain, and repair all detection systems and infrastructure associated with the PI Phase of a specific project along synchronized corridors to ensure necessary conditions for signal synchronization including local intersection and System Sampling Detection equipment (two years after PI acceptance)
- Intersection/field system modernization and replacement



- Traffic signal controller replacement of antiquated units with Advanced Transportation controller (ATC) units. ATC shall comply with version 6.24 or better of ATC standard 5201 and ATC standard 5401 Applications Programming Interface with Referenced Implementations (APIRI)
- Controller cabinet (assemblies) replacements that can be shown to enhance signal synchronization
- Closed Circuit Television (CCTV (also can perform video detection))
- Intelligent cameras that include analytics, such as automated continuous counts and other metrics. If implemented, these items will require a data sharing agreement with OCTA.
- Uninterruptible Power Supply (UPS) for ATMS and intersection field equipment
  - For ATMS, UPS shall solely provide electrical power for ATMS Server(s), one dedicated workstation (console terminal) and related communications devices
    - Limited cost and scale
    - UPS not intended to provide power to entire TMC
    - Approval of request for UPS is at the sole discretion of the AUTHORITY
- Minor signal operational improvements (new)
  - Emergency Vehicle Preempt (EVP) intersection control equipment only
  - Transit Signal Priority (TSP) intersection control equipment only
  - Channelization (signing, striping, raised pavement markers, in lane flashing guidance or warning marking systems, and legends) improvements required for traffic signal phasing.
  - Traffic signal phasing improvements that will improve traffic flow and system performance including protective permissive left turn phasing and shared pedestrian phasing
  - Improvements to comply with new federal or state standards for traffic signal design as related to signal synchronization including pedestrian, bicycle, and vehicular timing intervals, as well as the MUTCD
- ADA compliant Pedestrian Signals countdown heads including, but not limited to, tactile and audible buttons in countdown signal heads.
- Traffic Management Center (TMC)/Traffic Operations Centers (TOC) and motorist information
  - New TMCs or TOCs (any project funded under this category must be planned or built to be center-to-center communication (C2C) "ready" with nearby agencies and/or OCTA
  - Upgrades to existing TMCs or TOCs (any project funded under this category must be planned or built to be C2C "ready" with nearby agencies and/or OCTA



- Motorist information systems (up to 10 percent (10%) of total project costs)
- Video display equipment, including wall monitors, screens, mounting cabinets, and optical engines (up to 10 percent (10%) of total construction costs for PI phase only)
- Automated Traffic Signal Performance Measures (must be connected to OCTA SPM Dashboard)
- Real-time traffic actuated operations and demonstration projects
  - Adaptive traffic signal systems
- Caltrans encroachment permits and agency to Caltrans Cooperative Agreement fees
  - Includes ~~eligible~~ Caltrans labor, such as capital, and permitting fees and expenses for reviewing signal timing plans, providing signal timing parameters, and providing existing timing sheets, etc. Applicant must specify how to handle Caltrans intersections on project.
- Active Transportation/Pedestrian Safety related elements
  - Installation of new and/or improved traffic control devices to improve the accessibility, mobility and safety of the facility for pedestrians and bicyclists
    - ADA compliant Accessible Pedestrian Push Button Systems
    - ~~High-Intensity Activated~~ crosswalk signaling systems (HAWK)
  - Pedestrian detection modules
  - Bicycle detection modules
  - Rectangular Rapid Flashing Beacon Systems (RRFB) including striping, legends, and signage

In addition, expenditures related to the design of systems, permitting, and environmental clearance are eligible for funding.

## Ineligible Expenditures

- Isolated traffic signal improvements
- Traffic hardware (pole, mast arms, lights, electrical, signs, etc.)
- Regular signal operation and maintenance (such as replacement of light bulbs)
- Field display equipment (Traffic signal heads other than pedestrian countdown, or special bicycle, or Transit Vehicle signal heads)
- Feasibility studies
- Relocation of utilities except for electrical service requirements
- Right-of-way
- Rewiring of complete intersection because of age or isolated mitigation

## Funding Estimates

The streets and roads component of M2 is to receive 32 percent (32%) of net revenues, 4 percent (4%) of which are allocated for the RTSSP. The RTSSP will make an estimated \$270 million (2009 dollars) available over the course of the 30-year M2 Program. Programming estimates are developed in conjunction with a call for projects cycle corresponding to concurrent funding agreements with all local agencies.

The RTSSP targets over 2,000 intersections across Orange County for coordinated operations. Because of the limited amount of funds available for the RTSSP, project cap of \$75,000 per signal or \$250,000 per project corridor mile included as part of each project (whichever is higher) has been established for this call for projects.

## Selection Criteria

Specific selection criteria will be used to evaluate competitive program project applications. Emphasis is placed on furthering the overall goal of multi-jurisdictional, corridor-based signal synchronization.

Vehicle Miles Traveled (VMT): Centerline length of segment(s) on the corridor proposed for synchronization multiplied by the existing average daily traffic (ADT) for the proposed segment(s) length. For instance, for a three-mile segment with one-mile interval ADT data at of 200 vehicles, 300 vehicles, and 400 vehicles, the VMT would be calculated as:

$$200 \text{ vehicles} * 1 \text{ mile} + 300 \text{ vehicles} * 1 \text{ mile} + 400 \text{ vehicles} * 1 \text{ mile} = 900 \text{ vehicle miles.}$$

VMT should be calculated by the smallest segmentation on which the city typically collects ADT data. (maximum: 20 points)

ADT must be based upon actual count information taken within the 36 months preceding the application date. Data from the OCTA Traffic Flow Map may not be used.

Cost Benefit: Total project cost divided by Existing VMT. (maximum: 10 points)

Project Characteristics: Points are awarded based on the type and relevance of the proposed project. For instance, points accumulate if a signal synchronization project is combined with improvements as defined in the "Eligible Activities" section above. (maximum: 10 points)

Transportation Significance: Points are earned based on the corridor being on the signal synchronization network. (maximum: 5 points) (Priority signal network corridors are eligible, but will not be ~~a part of the 2020 Call for Projects. No points will be~~ awarded for being on a Priority Corridor.)

Maintenance of Effort: Points are earned for a commitment to operate the project signal synchronization timing for a defined period of time beyond the three-year grant period. (maximum: 5 points)

## Table 8-1 Point Breakdown

### RTSSP SCORING CRITERIA

#### Point Breakdown for Regional Traffic Signal Synchronization Program Projects

Maximum Points = 100

<b>Vehicle Miles Travelled (VMT) Points: 20</b>		<b>Project Scale Points: 10</b>	
VMT Range	Points	Number of Signals Coordinated by Project Range	Points
250+ thousand	20	50+	5
200 - 249 thousand	15	40 - 49	4
150 - 199 thousand	10	30 - 39	3
100 - 149 thousand	6	20 - 29	2
50 - 99 thousand	3	10 - 19	1
0 - 49 thousand	1	< 10	0
<u>Calculation:</u> ADT x segment length (Applies only to coordinated segments of project)		<b>AND</b>	
<b>Economic Effectiveness Points: 10</b>		Percent of Corridor Signals Being Retimed	
Cost Benefit (Total \$/VMT) Range*	Points	Range	Points
< 3	10	90% or above	5
3 - 5	9	80 - 89%	4
6 - 8	8	70 - 79%	3
9 - 11	7	60 - 69%	2
12 - 14	6	50 - 59%	1
15 - 17	5	< 50%	0
18 - 20	4	<u>Calculation:</u> Number of signals in project divided by total signals in full corridor length.	
21 - 23	3	<b>Number of Jurisdictions Points: 20</b>	
24 - 26	2	Total Number of Involved Jurisdictions Range	Points
27+	1	5 or more	20
<b>Project Characteristics Max Points: 10</b>		4	16
Project Feature	Points	3	12
Timing Only, No Capital	10	2	8
Adaptive Traffic & Demonstration Projects	4	1	0
TMC/TOC Connections Between Agencies	4	<b>Current Project Readiness Points: 10</b>	
Automated Traffic Signal Perf. Measures	3	Project Status	Points
Intelligent Cameras	2	Re-timing of prior RTSSP project	5
Bicycle/Pedestrian Detection	2	Implementation within 12 months	5
New/Upgraded Communications Systems	2	<b>Funding Match Points: 5</b>	
Intersection/Field System Modernization	2	Overall Match %	Points
Minor Signal Operational Improvements	2	50+%	5
New Protected/Permissive Signals	2	40 - 49%	4
TMC/TOC and Motorist Information	1	35 - 39%	3
New/Upgraded Detection	1	30 - 34%	2
<b>Transportation Significance Points: 10</b>		25 - 29%	1
Corridor Type	Points	< 25%	0
Priority & Signal Synchronization Corridor	5	<b>Maintenance of Effort Points: 5</b>	
Corridor "Gap Closure"	5	MOE After Grant Period	Points
<b>Maintenance of Effort Points: 5</b>		3 years	5
MOE After Grant Period	Points	2 years	3
3 years	5	1 year	1
2 years	3	None	0
1 year	1		
None	0		

Administrative staff time for documentation of in-kind services is ineligible. Staff time charged to a project is limited to the caps as described in these guidelines. Allowable signal system investment would be improvements that are “eligible activities” per the funding guidelines, which can be shown to improve signal synchronization and would not include any prior investments made by the agency.

The specific matching requirement by project category type is listed below for city led projects:

Project category	Type of matching allowed*
Signal coordination	In-kind match** or cash match
New or upgraded detection	In-kind match** or cash match
New or upgraded communications systems	In-kind match** or cash match
Communications and detection support	In-kind match** or cash match
Intersection/field system modernization and replacement	In-kind match** or cash match
Minor signal operational improvements	In-kind match** or cash match
TMC/TOC and motorist information systems	Cash match
Real-time traffic actuated operations and demonstration projects	Cash match
Caltrans fees and expenses (labor and capital)	<u>In-kind match ** or €cash match</u>

\* Project match beyond 20 percent (20%) is limited to cash match only. Please note, overmatch is subject to the same audit and requirements as in-kind match.

\*\* In-kind match services are subject to audit.

In-kind match must be defined for each local agency as part of the supplemental application. In-kind match must be identified as staffing commitment and/or new signal system investment. The supplemental application template will include a section to input in-kind match type as well as additional data related to the match:

- Staffing commitment
  - Staff position
  - Number of hours

- Hourly (fully burdened) rate
- Total cost
- New signal system investment
  - Cost of any signal system investment
  - Benefit to project

~~Projects submitted as OCTA led require a 20 percent cash match for Primary Implementation activities with a nominal in-kind allowance for local agency oversight.~~

O&M activities will be permitted in-kind match only for local agency oversight functions. Contract activities will require cash match. Local agency contributions identified as cash match in the application cannot be converted into in-kind match.

OCTA staff will review in detail the presented cash and in-kind match by local agency for reasonableness. Additional requirements on in-kind match as part of the upcoming call are provided in this chapter.

## Project Cancellation

If a local agency decides to cancel a project, for whatever reason, the agency shall notify OCTA as soon as possible. Projects deemed infeasible shall bring that phase to a logical conclusion, file a final report, and cancel remaining phases so that remaining funds can be reprogrammed without penalty.

Cancelled projects will be eligible for re-application upon resolution of issues that led to original project termination.

If a lead agency decides to cancel a project before completion of the entire project, for whatever reason, the agency shall notify OCTA as soon as possible. It is the responsibility of the project lead agency to repay OCTA for any funds received.

## Project Extensions

Local agencies are provided 36 months to expend the funds from the date of encumbrance. Agencies can request timely use of funds extensions through the SAR in accordance with the CTFP guidelines. Local agencies should issue a separate NTP while combining contracts for both the PI and O&M phases. NTP requirement should be identified in the initial contract/agreement to avoid obligation of both phases at the same time. If this procedure is followed by the local agency the NTP date will be considered the date of encumbrance for the O&M phase.

## Audits

All M2 payments are subject to audit. Local agencies must follow established accounting requirements and applicable laws regarding the use of public funds. Failure to submit to an audit in a timely manner may result in loss of future funding. Misuse or

## Exhibit 8-1

### Project P – Regional Traffic Signal Synchronization Program Application Checklist

Project P Application Checklist	Page Included
<b>RTSSP Online Application – submitted through OCFundTracker</b> 1. Vehicle Miles Traveled 2. Benefit Cost Ratio 3. Project Characteristics 4. Transportation Significance 5. Maintenance of Effort 6. Project Scale 7. Number of Jurisdictions 8. Current Project Readiness 9. Funding Over-Match	<a href="#">Online</a>
<b>Section 1: Key Technical Information</b> a. Project <del>Corridor Limits</del> limits of the corridor to synchronize b. Designation of the corridor to synchronize: priority corridor, signal synchronization network corridor, or master plan of arterial highways corridor c. Project start date and end date, including any commitment to operate signal synchronization beyond the three-year grant period d. Signalized intersections that are part of the project e. Traffic Forum members	
<b>Section 2: Lead Agency</b>	
<b>Section 3: Resolutions of Support from the Project's Traffic Forum Members</b>	
<b>Section 4: Preliminary Plans for the Proposed Project</b> The plans shall include details about both phases of the project: <u>Primary Implementation (PI)</u> and <u>Ongoing Operations and Maintenance (O&amp;M)</u> . The plan should be organized using the following setup:  <u>Primary Implementation</u> shall include details about the following: <u>Task 1: Project Administration (required)</u> <u>Task 2: Data Collection (required)</u> <u>Task 3: Field Review and Plans Specifications and Estimates (required)</u> <u>Task 4: Corridor "Before" Study (required)</u> <u>Task 5: Signal Timing Optimization and Implementation (required)</u> <u>Task 6: Corridor "After" Study (required)</u> <u>Task 7: Synchronization System Construction (required)</u> <u>Task 8: Project Report (required)</u> <u>Task 9: On-going Operations and Maintenance (required)</u> a. <del>Developing and implementing optimized signal synchronization timing (required)</del> b. <del>Producing a Before and After study for the proposed project (required)</del> c. <del>Proposed signal improvements (optional):</del> i. <del>New or upgraded detection</del> ii. <del>New or upgraded communication systems</del> iii. <del>Intersection/field system modernization and replacement</del> iv. <del>Minor signal operation improvements</del> v. <del>Traffic Management centers</del> vi. <del>Real-time traffic actuated operations and demonstration projects</del>  <u>Ongoing O&amp;M perations and Maintenance</u> will begin after the <u>PIrimary Implementation</u> of the project is completed. It shall include details about the following: a. Monitoring and improving optimized signal timing (required) b. Communications and detection support (optional) b.c. <u>O&amp;M Final Memorandum (required)</u>	

# Comprehensive Transportation Funding Programs



<b>Section 5: Total Proposed Project Cost by Task</b> a. <a href="#">Table I: Summary of Improvements</a> b. <a href="#">Table II: Detailed Improvement Breakdown</a>	
<b>Section 6: Project Schedule <del>for the 3 Year Grant Period</del> by Task <del>for the 3 Year Grant Period</del></b>	
<b>Section 7: Matching Funds</b>	
<b>Section 8: Environmental Clearances and Other Permits</b>	
<b>Section 9: Calculations Used to Develop Selection Criteria Inputs</b>	
<b>Section 10: Any additional Information Deemed Relevant by the Applicant</b>	
<b><u>Appendices</u></b>	





**August 5, 2019**

**To:** Regional Planning and Highways Committee

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

**Subject:** Cooperative Agreements for Regional Traffic Signal Synchronization Program Projects

**Overview**

On June 10, 2019, the Orange County Transportation Authority Board of Directors approved programming of funds for projects as part of the 2019 call for projects for the Measure M2 Regional Traffic Signal Synchronization Program. As part of the application process, the Orange County Transportation Authority was requested to be the lead agency on three of the six projects: Aliso Creek Road, Lake Forest Drive, and Red Hill Avenue. Separate cooperative agreements with local agencies are necessary for each of these projects to specify the amount of required local matching funds.

**Recommendations**

- A. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1419 between the Orange County Transportation Authority and the cities of Aliso Viejo and Laguna Niguel for the Aliso Creek Road Regional Traffic Signal Synchronization Project, with required local matching funds of \$285,994.
- B. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1420 between the Orange County Transportation Authority and the cities of Irvine, Laguna Hills, and Lake Forest for the Lake Forest Drive Regional Traffic Signal Synchronization Project, with required local matching funds of \$360,411.
- C. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1421 between the Orange County Transportation Authority and the cities of Costa Mesa, Irvine, and Tustin for the Red Hill Avenue Regional Traffic Signal Synchronization Project, with required local matching funds of \$419,018.

***Discussion***

The Orange County Transportation Authority (OCTA) is designated by request of the local agencies to be the lead agency on three regional traffic signal synchronization (RTSSP) projects: Aliso Creek Road, Lake Forest Drive, and Red Hill Avenue. As authorized by the Board of Directors (Board), these three projects are planned to begin in fiscal year (FY) 2019-20 with completion in 2023. Each project includes two separate phases of primary implementation, lasting approximately one year, followed by an ongoing operations and maintenance phase of 24 months.

A cooperative agreement is required for each of these projects to outline the roles and designate responsibilities of OCTA, as well as the partnering agencies regarding the implementation of the projects, and to specify the amount and type of each local agency's funding match. A minimum of 20 percent local match is required per the requirements of the RTSSP as specified in the 2019 Comprehensive Transportation Funding Programs Guidelines (Chapter 8, page 5). The following is a summary of each project's limits, number of signalized intersections (signals), traffic data, number of agencies included in the project, and estimated cost:

- Aliso Creek Road (El Toro Road to Moulton Parkway): the corridor is approximately five miles and includes 23 traffic signals. The corridor passes through the cities of Aliso Viejo and Laguna Niguel and carries daily traffic of up to 184,800 vehicles. The project cost is estimated at \$1,429,973, with local agency in-kind services and cash match totaling \$285,994.
- Lake Forest Drive (Portola Parkway to Romano/Hidden Canyon): the corridor is approximately eight miles and includes 27 traffic signals. The corridor passes through the cities of Irvine, Laguna Hills, and Lake Forest and carries daily traffic of up to 182,900 vehicles. The project cost is estimated at \$1,802,054, with local agency in-kind services and cash match totaling \$360,411.
- Red Hill Avenue (Bryan Avenue to Bristol Street): the corridor/route is approximately seven miles and includes 28 traffic signals. The corridor passes through the cities of Costa Mesa, Irvine, and Tustin and carries daily traffic of up to 153,800 vehicles. The project cost is estimated at \$2,095,090, with local agency in-kind services and cash match totaling \$419,018.

**Fiscal Impact**

The total cost of implementing the three RTSSP projects is \$5,327,117. The funding for these three projects will come from Measure M2 Project P allocation of \$4,261,694, included in the FY 2019-20 budget accounts 0017-7519-SPF27-P57, 0017-7519-SPF28-P57, and 0017-7519-SPF29-P57, along with matching funds provided by the local agencies (\$1,065,423).

**Summary**

Staff requests Board approval for the Chief Executive Officer to negotiate and execute three cooperative agreements between OCTA and the respective cities, for the Aliso Creek Road, Lake Forest Drive, and Red Hill Avenue RTSSP projects to define roles, duties, governance, and fiscal responsibilities.

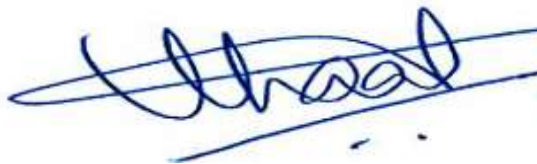
**Attachment**

None.

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**Approved by:**



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**August 5, 2019**

**To:** Regional Planning and Highways Committee

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

**Subject:** Consultant Selection for South Orange County Multimodal Transportation Study

### **Overview**

Pursuant to the 2019 Orange County Transportation Authority Board of Directors Strategic Initiatives, consultant services are needed to conduct a multimodal transportation study to identify solutions for south Orange County's current and future mobility needs. Proposals were received in accordance with the Orange County Transportation Authority's procurement procedures for professional and technical services. Board of Directors' approval is requested to select a firm to conduct the South Orange County Multimodal Transportation Study.

### **Recommendations**

- A. Approve the selection of HDR Engineering, Inc., as the firm to conduct the South Orange County Multimodal Transportation Study.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1121 between the Orange County Transportation Authority and HDR Engineering, Inc., in the amount of \$749,969, to conduct the South Orange County Multimodal Transportation Study for a two-year term.

### **Discussion**

The 2019 Orange County Transportation Authority (OCTA) Board of Directors (Board) Strategic Initiatives call for the initiation of a transportation study to identify recommendations for south Orange County's current and future mobility issues. The South Orange County Multimodal Transportation Study will identify a broad range of recommendations for the area, including multimodal transportation improvements and transportation demand management strategies.

Consideration will be given to strategies that reduce congestion by providing more transportation choices for residents, commuters, and visitors, while preserving the local sense of community.

The South Orange County Multimodal Transportation Study is intended, in part, to update the South Orange County Major Investment Study completed in 2008. While many of the recommendations from the 2008 study continue to be relevant today, much has also changed over the last decade. Such changes include the completion of several projects comprising the Locally Preferred Strategy from the 2008 study, slower socioeconomic growth projections, a decline in transit ridership, the introduction of transportation network companies, an expanding fleet of electric vehicles, widespread use of navigation/traffic apps, and emerging connected and autonomous vehicle technologies.

The transportation planning context has changed significantly, including how transportation impacts are evaluated under the California Environmental Quality Act. This will likely continue to change as new legislation and guidance continue to develop that focus on reducing growth in vehicle miles traveled as an integral strategy for reducing greenhouse gas emissions.

The objective of the South Orange County Multimodal Transportation Study is to define the mobility needs, identify a range of multimodal transportation improvement options, and carry forward a set of preferred improvements and strategies into subsequent project development and selection processes. Stakeholders will be engaged to help evaluate study area transportation system performance, define transportation deficiencies, develop a purpose and need statement, establish goals, objectives and performance measures, and evaluate a set of viable conceptual alternatives for future project development processes.

### ***Procurement Approach***

This procurement was handled in accordance with OCTA's Board-approved procedures for professional and technical services. In addition to cost, many other factors are considered in an award for professional and technical services. Award is recommended to the firm offering the most comprehensive overall proposal considering such factors as staffing and project organization, prior experience with similar projects, work plan, as well as fair and reasonable costs.

On April 2, 2019, Request for Proposals (RFP) 9-1121 was issued electronically on CAMM NET. The project was advertised in a newspaper of general circulation on April 2 and 9, 2019. A pre-proposal conference was held on April 9, 2019,

with attendees representing 13 firms. Three addenda were issued to make available a copy of the pre-proposal conference registration sheet, pre-proposal presentations, respond to questions related to the RFP, and for administrative changes.

On April 30, 2019, two proposals were received, which collectively reflect the combined input from 12 individual firms as illustrated in Attachment A. An evaluation committee consisting of OCTA staff from Contracts Administration and Materials Management, Planning and Analysis, and Government Relations departments, as well as external representatives from the California Department of Transportation and the Southern California Association of Governments (SCAG) met to review both proposals.

The proposals were evaluated based on the following evaluation criteria and weightings:

- |                                     |            |
|-------------------------------------|------------|
| • Work Plan                         | 20 percent |
| • Qualifications of the Firm        | 25 percent |
| • Cost and Price                    | 25 percent |
| • Staffing and Project Organization | 30 percent |

Several factors were considered in developing the evaluation criteria weightings. The work plan was assigned a 20 percent weighting to ensure the firm demonstrated its understanding of the identified tasks, deliverables, and schedules. Qualifications of the firm, as well as cost, were each assigned a 25 percent weighting. Similar knowledge and experience conducting corridor studies, long-range transportation plans, transit, and rail studies illustrate qualifications of the firm.

Staffing and project organization was weighted the highest at 30 percent to emphasize the importance of the proposed project team's qualifications and experience performing similar studies. Also, the project managers experience will be critical in leading the development and delivery of the multimodal transportation study identified in the scope of work.

On May 21, 2019, the evaluation committee reviewed the two proposals received based on the evaluation criteria and conducted interviews with both firms listed below in alphabetical order:

Firm and Location

HDR Engineering, Inc. (HDR)  
Irvine, California

Iteris, Inc. (Iteris)  
Santa Ana, California

The interviews took place on May 28, 2019, and consisted of a presentation to demonstrate the firms' understanding of OCTA's requirements. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. Questions were asked relative to the proposed key personnel's experience on similar projects, experience collecting and analyzing traffic patterns, and current and potential future multimodal challenges and opportunities. Finally, each team was asked specific clarification questions related to their proposal.

After considering the responses to the questions asked during the interviews, the evaluation committee reviewed the preliminary ranking for both firms and made adjustments to individual scores. However, HDR remained the highest ranked firm with the highest cumulative score.

Based on the evaluation of the written proposals, the firms' qualifications, proposed costs, and the information obtained from the interviews, the evaluation committee recommends HDR for consideration of the award. The following is a summary of the proposal evaluation results.

**Qualifications of the Firm**

Both firms demonstrated experience conducting multimodal studies throughout Southern California.

HDR was founded in 1917, with a local office in the City of Irvine. The firm has experience conducting various multimodal studies for the City of Long Beach, Los Angeles County Metropolitan Transportation Authority (LACMTA), Riverside County Transportation Commission (RCTC), San Bernardino County Transportation Authority, and OCTA. HDR conducted the Pacific Coast Highway (PCH) Corridor Study for OCTA, which included a broad range of transportation opportunities and improvements along PCH. Lastly, HDR and its subcontractors demonstrated experience with different aspects of transportation planning projects, including the Orange County foothills and districts 1 and 2 bikeways strategy reports, regional modeling and traffic operation, and the Orange County Transit Vision – Transit Master Plan.



Iteris was founded in 1987, with a local office in the City of Santa Ana. The firm has experience conducting multimodal studies for local agencies and cities including the Long-Range Transportation Plan for RCTC and the US-101 Multimodal Mobility Plan for the County of Ventura. Iteris proposed using a subcontractor with relevant experience in transportation studies, including the Interstate 5 Corridor Sustainability Study for SCAG, the Beach Boulevard Corridor Specific Plan and Environmental Impact Report for the City of Anaheim, and the Master Plan of Arterial Highways Complete Streets Assessment for OCTA.

#### **Staffing and Project Organization**

Both firms proposed project teams with experience and knowledge of multimodal transportation studies. Key project staff proposed by the firms include individuals that have worked with OCTA on previous transportation study related projects.

The project manager for HDR has 39 years of experience in planning transportation systems throughout Southern California and has been with the firm nine years. Specifically, the project manager has led multimodal studies projects within the project area, including the PCH Corridor Highway Study and the Orange County Freeway Study for OCTA. HDR's proposed key personnel have worked in the transportation industry for an average of 20 years and have relevant experience on similar projects in the counties of Los Angeles, Orange, Riverside, and San Bernardino. Other key personnel experience includes multiple bus, pedestrian, freeway, transit corridor studies, road improvement and rail projects, such as the Laguna Canyon Road State Route 133 Project Study Report, Interstate 405 Corridor Major Investment Study, and the Orange County Freeway Study.

The project manager for Iteris has 30 years of experience in planning transportation systems throughout Southern California and ten years with the firm. He has led multimodal studies including the RCTC Long-Range Transportation Plan and the LACMTA State Route 138 Project Approval and Environmental Document. Other key personnel have worked in the transportation industry for an average of 22 years and have relevant experience on similar projects. The key personnel's experience includes the US-101 Multimodal Mobility Plan for the County of Ventura and work as a subconsultant on the Orange County Freeway Study for OCTA. The proposed project organization was unclear as the firm proposed to utilize subcontractors to perform key job functions by individuals not identified as key personnel.

### Work Plan

Both firms proposed similar timelines to meet the project schedule.

HDR presented a work plan that demonstrated its approach to completing the tasks and deliverables identified in the scope of work. The firm's approach to the work plan considered the recommendations and findings of the 2008 South Orange County Major Investment Study, as well as new modes of transportation, such as on-demand rideshare services and mobile travel apps. The firm also included a detailed flow chart of the project development and technical process with all major and minor phases in each task identified. HDR proposed enhancements using big data and Orange County Transportation Analysis Model to understand south Orange County travel patterns. This approach will allow HDR to collect and review data beyond the scope of the project.

Iteris' work plan acknowledged all of the tasks in the scope of work; however, its approach to completing all of the deliverables, specifically the potential alternatives for the study, was not described in its proposal or clarified in the interview.

### Cost and Price

Pricing scores were based on a formula that assigned the higher score to the firm with the lower total firm-fixed price for the tasks to be completed, and scored the other proposal's total firm-fixed price based on its relation to the lower total firm-fixed price. HDR's proposed firm-fixed price is competitive with the lower proposed firm-fixed price.

### Procurement Summary

Based on the evaluation of the written proposals, the firms' qualifications, and the information obtained from the interviews, the evaluation committee recommends the selection of HDR as the top-ranked firm to conduct the South Orange County Multimodal Transportation Study. HDR demonstrated strong relevant experience, competitive pricing, and submitted a thorough and comprehensive proposal that was responsive to all requirements of the RFP.

### Fiscal Impact

The project is included in OCTA's Fiscal Year 2019-20 Budget, Planning and Analysis Division, Account 1531-7519-A4461-0QK, and is funded by Federal Regional Surface Transportation Program funds.

***Summary***

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1121 between OCTA and HDR, in the amount of \$749,969, to conduct the South Orange County Multimodal Transportation Study for a two-year term.

***Attachments***

- A. Review of Proposals, RFP 9-1121 South Orange County Multimodal Study
- B. Proposal Evaluation Criteria Matrix, RFP 9-1121 South Orange County Multimodal Study
- C. Contract History for the Past Two Years, RFP 9-1121 South Orange County Multimodal Study

**Prepared by:**

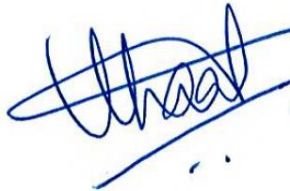


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**Review of Proposals**  
**RFP 9-1121 South Orange County Multimodal Study**

Presented to the Regional Planning and Highways Committee - August 5, 2019

Two proposals were received, two firms were interviewed, one firm is being recommended.

Overall Ranking	Proposal Score	Firm & Location	Sub-Contractors	Evaluation Committee Comments	Firm-Fixed Price
1	87	HDR Engineering, Inc. Irvine, California	Alta Planning + Design Land CM Corporation Nelson/Nygaard Consulting Associates, Inc.  PlaceWorks  System Metrics Group, Inc. UrbanTrans North America VCS Environmental	Experience analyzing and developing multimodal studies. Firm established in 1917. Firm's experience includes the Pacific Coast Highway Corridor study. Recent studies for City of Long Beach, Los Angeles County Metropolitan Transportation Authority, Riverside County Transportation Commission, San Bernardino County Transportation Authority, and OCTA. Proposed subconsultants with extensive experience in local transportation planning. Project team has multimodal project experience. Demonstrated a thorough and concise understanding of OCTA's requirements. Provided a detailed flow chart of the technical process with all major and minor phases identified.  Proposed the use of big data and OCTAM to understand south Orange County travel patterns. Demonstrated during the interview easy to understand technical presentations to non-technical audiences. References provided positive comments and feedback.	\$ 749,969.00
2	79	Iteris, Inc. Santa Ana, California	CHS Consulting Group JMDiaz  Kittelson & Associates  PlaceWorks	Experience analyzing and developing multimodal studies. Firm established in 1987. Recent studies for City of Anaheim, Riverside County Transportation Commission, Los Angeles Metropolitan Transportation Authority, Ventura County, and OCTA. Proposed subconsultants with strong experience in local transportation planning studies. Key personnel have limited experience with collecting data of prior studies and defining mobility challenges. Subconsultants have experience in multimodal transportation studies. Good overall understanding of the scope of work. Identified possible mobility issues in south Orange County. Clarified the approach to provide a multimodal study with many different user groups. References provided positive comments and feedback.	\$ 739,697.00

**Evaluation Panel:**

Internal:

Contracts Administration and Materials Management (1)  
Strategic Planning (2)  
Government Relations (1)

**Proposal Criteria**

Qualifications of the Firm  
Staffing and Project Organization  
Work Plan  
Cost and Price

**Weight Factors**

25%  
30%  
20%  
25%

External:

Southern California Association of Governments (1)  
California Department of Transportation (1)

**Acronyms**

OCTA - Orange County Transportation Authority  
OCTAM - Orange County Transportation Analysis Model  
RFP - Request for Proposals

**PROPOSAL EVALUATION CRITERIA MATRIX**  
**RFP 9-1121 South Orange County Multimodal Study**

<b>HDR Engineering, Inc.</b>							<b>Weights</b>	<b>Overall Score</b>
<b>Evaluator Number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		
Qualifications of Firm	4.0	4.0	4.0	4.0	4.5	4.0	5	20.4
Staffing/Project Organization	4.5	4.5	4.0	4.0	4.0	4.0	6	25.0
Work Plan	4.0	4.5	4.5	4.5	4.5	4.0	4	17.3
Cost and Price	4.9	4.9	4.9	4.9	4.9	4.9	5	24.5
<b>Overall Score</b>	<b>87.5</b>	<b>89.5</b>	<b>86.5</b>	<b>86.5</b>	<b>89.0</b>	<b>84.5</b>		<b>87</b>
<b>Iteris, Inc.</b>							<b>Weights</b>	<b>Overall Score</b>
<b>Evaluator Number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		
Qualifications of Firm	4.0	4.0	4.0	4.0	4.0	4.0	5	20.0
Staffing/Project Organization	3.5	3.5	3.5	3.5	3.0	3.0	6	20.0
Work Plan	3.5	4.0	3.5	3.5	3.5	3.5	4	14.3
Cost and Price	5.0	5.0	5.0	5.0	5.0	5.0	5	25.0
<b>Overall Score</b>	<b>80.0</b>	<b>82.0</b>	<b>80.0</b>	<b>80.0</b>	<b>77.0</b>	<b>77.0</b>		<b>79</b>

Acronyms

RFP - Request for Proposals

**CONTRACT HISTORY FOR THE PAST TWO YEARS**  
**RFP 9-1121 SOUTH ORANGE COUNTY MULTIMODAL STUDY**

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
<b>HDR Engineering, Inc.</b>						
Contract Type: Firm-Fixed Price Subconsultants: None	C-8-2075	Traffic Operations Analysis Services	April 1, 2019	March 31, 2021		\$ 49,800
Contract Type: Time and Expense Subconsultants:	C-8-1512	Management Consultant Services for Regional Rail Programs	March 28, 2019	March 31, 2024		\$ 7,500,000
AP Engineering & Testing						
BA, Inc.						
Civil Works Engineers, Inc.						
Cogstone Resource Management, Inc.						
DB Engineering & Consulting USA, Inc.						
Meadows Consulting						
Mott MacDonald, LLC						
PreScience Corporation						
Project Design Consultants						
Tri-County Drilling						
VSCE Inc.						
Contract Type: Time-and-Expense Subconsultants:	C-8-1418	CM Services - I-5 Widening Project - OSO Parkway	March 27, 2019	February 29, 2024		\$ 49,800
Coast Surveying						
Ghirardelli Associates						
Jacobs Project Management						
S2 Engineering						
Contract Type: Time and Expense Subconsultants: None	C-8-1840	GIS Technical Support Consultant	November 15, 2018	September 30, 2019		\$ 50,000
Contract Type: Firm-Fixed Price Subconsultants: None	C-7-1613	Traffic Operations Analysis Services	May 10, 2017	May 31, 2018		\$ 15,100
Contract Type: Firm-Fixed Price Subconsultants: None	C-6-1514	GIS Toolkit to Plan Bus Route SVC Change	January 11, 2017	December 31, 2017		\$ 60,000
Contract Type: Firm-Fixed Price Subconsultants:	C-6-1003	Consultant Services for Freeway Study	April 27, 2016	June 30, 2018		\$ 99,998
Fehr & Peers					\$ 819.00	

**CONTRACT HISTORY FOR THE PAST TWO YEARS**  
**RFP 9-1121 SOUTH ORANGE COUNTY MULTIMODAL STUDY**

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Contract Type: Time-and-Expense	C-4-1854	Project Management Consultant Services for the Santa Ana - Garden Grove Streetcar Project	September 4, 2015	May 30, 2020		\$ 20,962,005
Subconsultants:						
<i>Arellano Associates</i>						
<i>Boothe Transit Consulting, LLC</i>						
<i>Civilsource</i>						
<i>HDR MDG</i>						
<i>IBI Group</i>						
<i>Intueor Consulting, Inc.</i>						
<i>MOTT MacDonald, LLC</i>						
<i>Nossman, LLP</i>						
<i>Shiels Oblatz Johnsen</i>						
<i>SNC-Lavalin Constructors</i>						
<i>Sperry Capital, Inc.</i>						
Contract Type: Time and Expense	C-4-1786	On-Call Right of Way Property Management Services	March 1, 2015	February 29, 2020		\$ 10,000,000
Subconsultants:						
<i>APA Engineering, Inc.</i>						
<i>Cal Pacific Land Services, inc.</i>						
<i>Coast Surveying, Inc.</i>						
<i>Commonwealth Land Title Company</i>						
<i>Desmond, Marcello &amp; Amster</i>						
<i>Donna Desmond Associates</i>						
<i>Environmental Resources Management</i>						
<i>Hennessey &amp; Hennessey LLC</i>						
<i>Hodges Lacey &amp; Associates, LLC</i>						
<i>Kiley Company</i>						
<i>VSCE Inc.</i>						
<i>Pacific Environmental Company</i>						
<i>Pacific Real Estate Consulting</i>						
<i>Real Estate Consulting &amp; Services</i>						
<i>The Bernard Johnson Group, Inc.</i>						
<i>Title365</i>						
<i>VA Consulting, Inc.</i>						
<i>Wiggans &amp; Willett, Inc.</i>						
Contract Type: Firm-Fixed Price	C-0-1587	Environmental Document & Project Report for the SR-55 between I-405 and I-5	March 21, 2011	December 31, 2019		\$ 6,508,026
Subconsultants:						
<i>Fehr &amp; Peers</i>					\$ 682,343	
<i>Guida Surveying, Inc.</i>					\$ 507,106	
<i>Leighton Consulting, Inc.</i>					\$ 348,974	
<i>LESA Associates</i>					\$ 1,169,372	
<i>MTS Engineers</i>					\$ 402,443	
<i>Transystems RMC, Inc.</i>					\$ 275,356	



**CONTRACT HISTORY FOR THE PAST TWO YEARS**  
**RFP 9-1121 SOUTH ORANGE COUNTY MULTIMODAL STUDY**

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Contract Type: Firm-Fixed Price	C-7-0938	Improvements to SR-57 Northbound Between Katella Avenue and Lincoln Avenue	April 10, 2008	December 31, 2018		\$ 4,658,888
<i>Subconsultants:</i>						
<i>Fehr &amp; Peers</i>					\$ 89,904	
<i>Guida Surveying, Inc.</i>					\$ 258,711	
<i>Leighton Consulting, Inc.</i>					\$ 294,261	
<i>LSA Associates</i>					\$ 357,015	
<i>PMK, Inc.</i>					\$ 140,333	
<i>Tatsumi and Partners, inc.</i>					\$ 225,347	
			<b>Sub Total</b>			<b>\$ 49,953,617</b>
<b>Iteris, Inc.</b>						
Contract Type: Firm-Fixed Price	C-8-1488	Update to the Intelligent Transportation System Development Plan	April 9, 2018	December 31, 2019		\$ 104,950
<i>Subconsultants: None</i>						
Contract Type: Firm-Fixed Price	C-7-1526	Vehicle-to-Infrastructure State of the Practice Review	April 24, 2017	November 30, 2017		\$ 49,000
<i>Subconsultants: None</i>						
Contract Type: Firm-Fixed Price	C-6-1553	Beach Boulevard Transit Signal Implementation	April 10, 2017	February 28, 2019		\$ 99,877
<i>Subconsultants:</i>						
<i>Eiger TechSystems</i>					\$ 15,066	
Contract Type: Time-and-Expense	A32249	Bristol Street Regional Traffic Signal Synchronization Project	June 29, 2015	March 31, 2020		\$ 2,252,469
<i>Subconsultants: None</i>						
Contract Type: Firm-Fixed Price	A35288	Pacific Coast Highway Regional Traffic Signal Synchronization Project	June 23, 2016	June 30, 2019		\$ 2,122,346
<i>Subconsultants: None</i>						
Contract Type: Firm-Fixed Price	A39893	Brookhurst Street Regional Traffic Signal Synchronization Project	June 26, 2018	May 31, 2020		\$ 3,534,110
<i>Subconsultants: None</i>						
Contract Type: Time-and-Expense	A28420	On-Call Traffic Engineering Services	April 8, 2014	April 30, 2019		\$ 319,861
<i>Subconsultants: None</i>						
Contract Type: Firm-Fixed Price	A29152	Newport South Regional Traffic Signal Synchronization Project	June 26, 2014	June 30, 2019		\$ 1,406,267
<i>Subconsultants: None</i>						
			<b>Sub Total</b>			<b>\$ 9,938,680</b>

**Acronyms**

I-405 - Interstate 405  
I-5 - Interstate 5  
RFP - Request for Proposals  
SR-55 - State Route 55  
SR-57 - State Route 57  
CM - Construction Management Services  
GIS - Geographical Information Services



**August 5, 2019**

**To:** Regional Planning and Highways Committee

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

**Subject:** Capital Programs Division - Fourth Quarter Fiscal Year 2018-19 and Planned Fiscal Year 2019-20 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 is a quarterly update on the CAP performance metrics, which are a snapshot of the planned CAP project delivery milestones in the budgeted fiscal year (FY).

***Discussion***

The Capital Programs Division objective is to deliver projects on schedule and within the approved project budget. Key project 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 project groupings; freeway projects, grade separation projects, rail and station projects, and facility projects. Schedule 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 provides transparency and performance measurement of capital project delivery.

The CAP project costs represent the total cost of the project across all phases of project delivery, including support costs, and right-of-way (ROW) and construction capital costs. Baseline costs, if established, are shown in comparison to either the actual or forecast cost. Baseline costs may be shown as to-be-determined (TBD) if project scoping studies and estimates have not been developed or approved, and may be updated as project delivery progresses and milestones are achieved. Projects identified in the Orange County local transportation sales tax Measure M2 (M2) are identified with the corresponding M2 project letter. The CAP status 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 approved milestone dates in comparison to 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. On a monthly basis, actual dates are updated when milestones are achieved, and forecast dates are updated to reflect project delivery status.

CAP milestones achieved in the fourth quarter FY 2018-19 include:

#### Freeway Projects

- Final design was completed on the Interstate 5 (I-5) widening from Alicia Parkway to El Toro Road. This is the northernmost of three segments of I-5 widening between State Route 73 (SR-73) and El Toro Road. Final review and construction contract packaging is being performed by the California Department of Transportation (Caltrans).
- The I-5 widening between SR-73 and Oso Parkway achieved the construction ready milestone. This is the southernmost of three segments of I-5 widening between SR-73 and El Toro Road. Caltrans will advertise the estimated \$121 million contract for construction bids in August 2019.
- Landscape construction was completed on the northbound State Route 57 replacement planting project from Orangethorpe Avenue to Lambert Avenue.

#### **Rail and Station Projects**

- Construction of the Fullerton Transportation Center Elevator Upgrade contract was completed. The City of Fullerton has accepted all work and is working with the contractor on closeout activities.

The following CAP milestones missed the planned delivery through the fourth quarter of FY 2018-19:

The complete environmental milestone for the I-5 widening from Interstate 405 to State Route 55 was not completed in the fourth quarter and is now not anticipated to be completed until February 2020. The environmental approval was delayed approximately four months in order to perform additional surveys to validate existing geometrics and perform studies required to support Caltrans approval of the project Design Standard Decision Document (DSDD). In addition, Caltrans is now requiring OCTA to upgrade and replace the median concrete barrier throughout the approximately nine-mile long project and implement other safety enhancements as directed. This required late change will require additional design effort and may impact the draft DSDD, create additional variations in ROW requirements, and impact overall project cost.

The Anaheim Canyon Metrolink Station expansion project missed two milestones in the fourth quarter (completion design and construction ready). These milestones are now planned in September 2019 and December 2019, respectively. The City of Anaheim was unable to provide suitable protection or relocation of an existing aged city water line in La Palma Avenue crossing through the OCTA railroad ROW and requested additional modifications to adjacent traffic signals on La Palma Avenue. In addition, it was determined access for construction vehicles and machinery into the constrained site will require agreements with adjacent property owners to be negotiated and in place prior to construction.

The Placentia Metrolink Station missed three milestones this FY (construction ready, advertise construction, award contract) which have been re-scheduled into FY 2019-20. This new station will be constructed on a BNSF Railway-owned-and-operated rail line. Metrolink and BNSF Railway are cooperatively working together negotiating an updated Shared Use Agreement (SUA) which will provide the required BNSF approvals for construction of the station. The final SUA is targeted to be ready for Metrolink member agency approval the end of October 2019.

#### Recap of FY 2018-19 Performance Metrics

The performance metrics snapshot provided at the beginning of FY 2018-19 reflects 25 planned major project delivery milestones to be accomplished. The CAP and performance metrics have been updated to reflect both milestones achieved and missed through the fourth quarter of the FY (Attachment B). Nineteen of the 25 (76 percent) planned milestones in the FY were achieved.

#### New FY 2019-20 Performance Metrics

The CAP and performance metrics have been updated with the latest project status, and there are 19 major project delivery milestones planned in FY 2019-20 (Attachment C). Of note, four major freeway projects are scheduled to become environmentally cleared in FY 2019-20.

#### FY 2019-20 Cost and Performance Metrics Risks

Primary FY 2019-20 risks include third party agreements and approvals, and market cost trends impacting both construction costs and professional services contract costs. Construction costs may continue to experience increases in the FY due to continued change in markets for materials and labor. Staff will monitor construction bid pricing and market indicators, and will update project cost estimates as appropriate. Recent architectural and engineering support contract cost negotiations are reflecting increasing rates which will translate into higher contract implementation costs.

Completion of environmental clearance for the I-5 El Toro Interchange project may be delayed if there is lack of concurrence on the selected project preferred alternative from the key stakeholder cities of Laguna Hills, Laguna Woods, and Lake Forest,

Advancing the Placentia Metrolink Station project to construction in the third quarter of FY 2019-20 is dependent on successful negotiation of the Metrolink/BNSF Railway SUA and execution of the SUA by all Metrolink member agencies. In addition, construction cost increases realized during the delay in getting the project approved and advertised are being assessed, and any required programming changes will be brought to the OCTA Board for consideration and approval.

***Summary***

Capital project delivery continues to progress and is reflected in the CAP. The planned FY 2019-20 performance metrics created from forecast project schedules will be used as a general project delivery performance indicator throughout the FY. 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 June 2019
- B. Capital Programs Division, Fiscal Year 2018-19 Performance Metrics Through June 2019
- C. Capital Programs Division, Fiscal Year 2019-20 Performance Metrics Plan

**Prepared by:**

A handwritten signature in blue ink, appearing to read "James G. Beil".
















James G. Beil, P.E.  
Executive Director, Capital Programs  
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# Capital Action Plan

Status Through June 2019
















Updated: July 23, 2019

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
<b>Freeway Projects:</b>									
 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	\$83.5	<b>Jun-09</b>	<b>Oct-11</b>	<b>Jun-11</b>	<b>Oct-13</b>	<b>May-14</b>	<b>Sep-14</b>	<b>Dec-14</b>	<b>Aug-18</b>
 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	\$75.7	<b>Jun-09</b>	<b>Oct-11</b>	<b>Jun-11</b>	<b>May-13</b>	<b>Aug-13</b>	<b>Feb-14</b>	<b>Jun-14</b>	<b>Jul-17</b>
 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 <b>Cost/Schedule Risk</b>	\$75.5	<b>Jun-09</b>	<b>Oct-11</b>	<b>Jun-11</b>	<b>Jan-13</b>	<b>Apr-13</b>	<b>Aug-13</b>	<b>Dec-13</b>	<b>Jul-18</b>
 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	\$78.2	<b>Sep-05</b>	<b>Jun-09</b>	<b>Jan-09</b>	<b>Dec-11</b>	<b>Apr-12</b>	<b>Jun-12</b>	<b>Aug-12</b>	<b>Jan-16</b>
 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	<b>Jan-14</b>	<b>Oct-14</b>	<b>Feb-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Sep-16</b>
 I-5, SR-73 to Oso Parkway	\$151.9	Sep-11	Jun-14	Mar-15	Jan-18	May-18	Aug-18	Dec-18	Jan-24
Project C & D <b>Cost/Schedule Risk</b>	\$196.1	<b>Oct-11</b>	<b>May-14</b>	<b>Mar-15</b>	<b>Aug-18</b>	<b>May-19</b>	<b>Aug-19</b>	<b>Dec-19</b>	<b>Feb-25</b>
 I-5, Oso Parkway to Alicia Parkway	\$196.2	Sep-11	Jun-14	Nov-14	Jun-17	Dec-17	Feb-18	Jun-18	Nov-23
Project C & D	\$203.1	<b>Oct-11</b>	<b>May-14</b>	<b>Nov-14</b>	<b>Dec-17</b>	<b>Jun-18</b>	<b>Nov-18</b>	<b>Mar-19</b>	<b>Nov-23</b>
 I-5, Alicia Parkway to El Toro Road	\$133.6	Sep-11	Jun-14	Mar-15	Jun-18	Dec-18	Jan-19	May-19	Jun-23
Project C <b>Cost/Schedule Risk</b>	\$182.0	<b>Oct-11</b>	<b>May-14</b>	<b>Mar-15</b>	<b>May-19</b>	<b>Nov-19</b>	<b>Mar-20</b>	<b>Jun-20</b>	<b>Jul-24</b>
I-5, SR-73 to El Toro Road (Landscape)	TBD	N/A	N/A	TBD	TBD	TBD	TBD	TBD	TBD
Project C	\$12.4	N/A	N/A	Jan-22	Sep-23	Jan-24	Mar-24	Jun-24	Dec-25
 I-5, I-5/El Toro Road Interchange	TBD	Apr-17	Nov-19	TBD	TBD	TBD	TBD	TBD	TBD
Project D	TBD	<b>Apr-17</b>	<b>Nov-19</b>	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	<b>May-14</b>	<b>Feb-20</b>	TBD	TBD	TBD	TBD	TBD	TBD
 I-5, SR-55 to SR-57	\$38.1	Jul-11	Jun-13	Jun-15	Mar-17	Jul-17	Sep-17	Dec-17	Apr-21
Project A	\$41.5	<b>Jun-11</b>	<b>Apr-15</b>	<b>Jun-15</b>	<b>Jun-17</b>	<b>Dec-17</b>	<b>Mar-18</b>	<b>Nov-18</b>	<b>Apr-21</b>
 SR-55, I-405 to I-5	\$410.9	Feb-11	Nov-13	Sep-17	Apr-20	Dec-20	Apr-21	Jul-21	Aug-25
Project F <b>Cost/Schedule Risk</b>	\$410.9	<b>May-11</b>	<b>Aug-17</b>	<b>Sep-17</b>	<b>Apr-20</b>	<b>Dec-20</b>	<b>Apr-21</b>	<b>Jul-21</b>	<b>Aug-25</b>
 SR-55, I-5 to SR-91	TBD	Dec-16	Jan-20	TBD	TBD	TBD	TBD	TBD	TBD
Project F	TBD	<b>Dec-16</b>	<b>Apr-20</b>	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	<b>Apr-16</b>	<b>Mar-19</b>	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	\$38.0	<b>Apr-08</b>	<b>Nov-09</b>	<b>Aug-08</b>	<b>Dec-10</b>	<b>Apr-11</b>	<b>Jul-11</b>	<b>Oct-11</b>	<b>Apr-15</b>

## Capital Action Plan

Status Through June 2019

Updated: July 23, 2019

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), 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	N/A	N/A	N/A	May-09	Jul-10	Jun-17	Jul-17	Sep-17	Jun-18
	SR-57 (NB), Orangethorpe Avenue to Yorba Linda Boulevard	\$80.2	Aug-05	Dec-07	Feb-08	Dec-09	Apr-10	Jun-10	Oct-10	May-14
	Project G	\$52.3	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	\$79.3	Aug-05	Dec-07	Feb-08	Dec-09	Apr-10	Jun-10	Oct-10	Sep-14
	Project G	\$54.1	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)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Project G	N/A	N/A	N/A	Oct-14	Aug-17	Dec-17	Jan-18	Feb-18	Apr-19
	SR-57 (NB), Lambert Road to Tonner Canyon	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Project G	TBD	Jul-20	Jan-23	TBD	TBD	TBD	TBD	TBD	TBD
	SR-91 Westbound (WB), I-5 to SR-57	\$78.1	Jul-07	Apr-10	Oct-09	Feb-12	Jul-12	Aug-12	Nov-12	Apr-16
	Project H	\$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)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Project H	N/A	N/A	N/A	Nov-14	Aug-16	Dec-16	Feb-17	Mar-17	Nov-17
	SR-91, SR-57 to SR-55	TBD	Jan-15	Oct-18	TBD	TBD	TBD	TBD	TBD	TBD
	Project I	TBD	Jan-15	Apr-20	TBD	TBD	TBD	TBD	TBD	TBD
	SR-91 (WB), Tustin Interchange to SR-55	\$49.9	Jul-08	Jul-11	Jul-11	Mar-13	Jul-13	Aug-13	Oct-13	Jul-16
	Project I	\$42.5	Jul-08	May-11	Jun-11	Feb-13	Apr-13	Jun-13	Oct-13	Jul-16
	SR-91, SR-55 to SR-241	\$128.4	Jul-07	Jul-09	Jun-09	Jan-11	Apr-11	Jun-11	Sep-11	Dec-12
	Project J	\$79.7	Jul-07	Apr-09	Apr-09	Aug-10	Dec-10	Feb-11	May-11	Mar-13
	SR-91, SR-55 to SR-241 (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Project J	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	\$104.5	Mar-05	Dec-07	Jul-07	Dec-08	Mar-09	May-09	Jul-09	Nov-10
	Project J	\$57.8	Mar-05	Dec-07	Jul-07	Dec-08	May-09	Jun-09	Aug-09	Jan-11
	91 Express Lanes to SR-241 Toll Connector	TBD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		TBD	Nov-13	TBD	Dec-16	TBD	TBD	TBD	TBD	TBD
	I-405, I-5 to SR-55	TBD	Dec-14	Jul-18	TBD	TBD	TBD	TBD	TBD	TBD
	Project L	TBD	Dec-14	Aug-18	TBD	TBD	TBD	TBD	TBD	TBD
	I-405, SR-55 to I-605 (Design-Build)	\$1,900.0	Mar-09	Mar-13	Mar-14	Nov-15	Feb-16	Mar-16	Nov-16	May-23
	Project K	\$1,900.0	Mar-09	May-15	Mar-14	Nov-15	Feb-16	Mar-16	Nov-16	May-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
		\$120.9	N/A	N/A	Sep-07	Jun-09	Sep-09	Feb-10	Jun-10	Mar-15

## Capital Action Plan

Status Through June 2019





Updated: July 23, 2019

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
I-405/I-605 HOV Connector	\$260.4	N/A	N/A	Sep-07	Sep-09	Mar-10	May-10	Oct-10	Jan-15
	\$172.6	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	Feb-18
I-605, I-605/Katella Interchange	TBD	Aug-16	Nov-18	TBD	TBD	TBD	TBD	TBD	TBD
Project M	TBD	Aug-16	Oct-18	TBD	TBD	TBD	TBD	TBD	TBD
<b>Grade Separation Projects:</b>									
Sand Canyon Avenue Railroad Grade Separation	\$55.6	N/A	Sep-03	Jan-04	Jul-10	Jul-10	Oct-10	Feb-11	May-14
Project R	\$61.9	N/A	Sep-03	Jan-04	Jul-10	Jul-10	Oct-10	Feb-11	Jan-16
Raymond Avenue Railroad Grade Separation	\$77.2	Feb-09	Nov-09	Mar-10	Aug-12	Nov-12	Feb-13	May-13	Aug-18
Project O	\$125.1	Feb-09	Nov-09	Mar-10	Dec-12	Jul-13	Oct-13	Feb-14	May-18
State College Boulevard Railroad Grade Separation (Fullerton)	\$73.6	Dec-08	Jan-11	Jul-06	Aug-12	Nov-12	Feb-13	May-13	May-18
Project O	\$100.3	Dec-08	Apr-11	Jul-06	Feb-13	May-13	Sep-13	Feb-14	Mar-18
Placentia Avenue Railroad Grade Separation	\$78.2	Jan-01	May-01	Jan-09	Mar-10	May-10	Mar-11	Jun-11	Nov-14
Project O	\$64.5	Jan-01	May-01	Jan-09	Jun-10	Jan-11	Mar-11	Jul-11	Dec-14
Kraemer Boulevard Railroad Grade Separation	\$70.4	Jan-01	Sep-09	Jan-09	Jul-10	Jul-10	Apr-11	Aug-11	Oct-14
Project O	\$63.8	Jan-01	Sep-09	Feb-09	Jul-10	Jan-11	Jun-11	Sep-11	Dec-14
Orangethorpe Avenue Railroad Grade Separation	\$117.4	Jan-01	Sep-09	Feb-09	Dec-11	Dec-11	Feb-12	May-12	Sep-16
Project O	\$108.6	Jan-01	Sep-09	Feb-09	Oct-11	Apr-12	Sep-12	Jan-13	Oct-16
Tustin Avenue/Rose Drive Railroad Grade Separation	\$103.0	Jan-01	Sep-09	Feb-09	Dec-11	Mar-12	May-12	Aug-12	May-16
Project O	\$98.3	Jan-01	Sep-09	Feb-09	Jul-11	Jun-12	Oct-12	Feb-13	Oct-16
Lakeview Avenue Railroad Grade Separation	\$70.2	Jan-01	Sep-09	Feb-09	Oct-11	Oct-12	Feb-13	May-13	Mar-17
Project O	\$110.6	Jan-01	Sep-09	Feb-09	Jan-13	Apr-13	Sep-13	Nov-13	Jun-17
17th Street Railroad Grade Separation	TBD	Oct-14	Jun-16	TBD	TBD	TBD	TBD	TBD	TBD
Project R	TBD	Oct-14	Nov-17	TBD	TBD	TBD	TBD	TBD	TBD
<b>Rail and Station Projects:</b>									
Rail-Highway Grade Crossing Safety Enhancement	\$94.4	Jan-08	Oct-08	Jan-08	Sep-08	Sep-08	Sep-08	Aug-09	Dec-11
Project R	\$90.4	Jan-08	Oct-08	Jan-08	Sep-08	Sep-08	Sep-08	Aug-09	Dec-11
San Clemente Beach Trail Safety Enhancements	\$6.0	Sep-10	Jul-11	Feb-12	Apr-12	Apr-12	Jul-12	Oct-12	Jan-14
Project R	\$5.0	Sep-10	Jul-11	Feb-12	Jun-12	Jun-12	Oct-12	May-13	Mar-14
San Juan Capistrano Passing Siding	\$25.3	Aug-11	Jan-13	Mar-15	May-16	May-16	Aug-16	Dec-16	Feb-21
	\$34.1	Aug-11	Mar-14	Mar-15	Aug-18	Aug-18	Aug-18	Mar-19	Feb-21

## Capital Action Plan

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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
 OC Streetcar	\$424.4	Aug-09	Mar-12	Feb-16	Sep-17	Oct-17	Dec-17	Aug-18	Dec-21
Project S <b>Cost/Schedule Risk</b>	\$424.4	<b>Aug-09</b>	<b>Mar-15</b>	<b>Feb-16</b>	<b>Nov-17</b>	<b>Dec-17</b>	<b>Dec-17</b>	<b>Sep-18</b>	<b>Feb-22</b>
 Placentia Metrolink Station and Parking Structure	\$34.8	Jan-03	May-07	Oct-08	Jan-11	TBD	TBD	TBD	TBD
Project R <b>Cost/Schedule Risk</b>	\$34.8	<b>Jan-03</b>	<b>May-07</b>	<b>Oct-08</b>	<b>Feb-11</b>	Jan-20	Jan-20	May-20	Dec-21
 Orange County Maintenance Facility	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project R	TBD	Dec-19	Feb-22	TBD	TBD	TBD	TBD	TBD	TBD
Anaheim Canyon Station	\$27.9	Jan-16	Dec-16	Mar-19	May-19	May-19	Jul-19	Nov-19	Mar-21
	\$29.9	<b>Jan-16</b>	<b>Jun-17</b>	<b>Mar-18</b>	Sep-19	Dec-19	Dec-19	Apr-20	Aug-21
Orange Station Parking Expansion	\$33.2	Dec-09	Dec-12	Nov-10	Apr-13	Jul-16	Jul-16	Nov-16	Feb-19
	\$32.3	<b>Dec-09</b>	<b>May-16</b>	<b>Nov-10</b>	<b>Apr-16</b>	<b>Jul-16</b>	<b>Jul-16</b>	<b>Jun-17</b>	<b>Feb-19</b>
Fullerton Transportation Center - Elevator Upgrades	\$3.5	N/A	N/A	Jan-12	Dec-13	Dec-13	Jun-14	Sep-14	Mar-17
<b>Cost/Schedule Risk</b>	\$4.6	N/A	N/A	<b>Jan-12</b>	<b>Dec-13</b>	<b>Dec-13</b>	<b>Aug-14</b>	<b>Apr-15</b>	<b>May-19</b>
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
	\$5.0	<b>Jul-13</b>	<b>Feb-14</b>	<b>Jul-13</b>	<b>Jul-15</b>	<b>Jul-15</b>	<b>Jul-15</b>	<b>Oct-15</b>	<b>Sep-17</b>
 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	\$232.2	<b>Apr-09</b>	<b>Feb-12</b>	<b>Jun-09</b>	<b>May-12</b>	<b>May-12</b>	<b>May-12</b>	<b>Sep-12</b>	<b>Dec-14</b>

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

## Capital Programs Division

### Fiscal Year 2018-19 Performance Metrics Through June 2019

#### Begin Environmental

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Begin Environmental" milestones scheduled for FY 2018-19									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

#### Complete Environmental

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-405, I-5 to SR-55	X	✓							
I-605/Katella Interchange			X	✓					
SR-57 (Northbound), Orangewood Avenue to Katella Avenue					X	✓			
I-5, I-405 to SR-55							X		(missed)
Total Forecast/Actual	1	1	1	1	1	1	1	0	4

#### Begin Design

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Begin Design" milestones scheduled for FY 2018-19									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

#### Complete Design

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
San Juan Capistrano Passing Siding	X	✓							
I-5, SR-73 to Oso Parkway	X	✓							
I-5, Alicia Parkway to El Toro Road							X	✓	
Anaheim Canyon Metrolink Station							X		(missed)
Total Forecast/Actual	2	2	0	0	0	0	2	1	4

#### Construction Ready

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
San Juan Capistrano Passing Siding	X	✓							
Placentia Metrolink Station and Parking Structure					X				(missed)
Anaheim Canyon Metrolink Station							X		(missed)
I-5, SR-73 to Oso Parkway							X	✓	
Total Forecast/Actual	1	1	0	0	1	0	2	1	4

#### Advertise Construction

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
San Juan Capistrano Passing Siding	X	✓							
I-5, Oso Parkway to Alicia Parkway			X	✓					
Placentia Metrolink Station and Parking Structure					X				(missed)
Total Forecast/Actual	1	1	1	1	1	0	0	0	3

# Capital Programs Division

## Fiscal Year 2018-19 Performance Metrics Through June 2019

### Award Contract

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
OC Streetcar	X	✓							
I-5, SR-55 to SR-57			X	✓					
I-5, Oso Parkway to Alicia Parkway					X	✓			
San Juan Capistrano Passing Siding					X	✓			
Placentia Metrolink Station and Parking Structure							X		(missed)
Total Forecast/Actual	1	1	1	1	2	2	1	0	5

### Complete Construction

Project Description	FY 19 Qtr 1		FY 19 Qtr 2		FY 19 Qtr 3		FY 19 Qtr 4		FY 19 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5, Pico to Vista Hermosa	X	✓							
I-5, Pacific Coast Highway to San Juan Creek Road	X	✓							
Fullerton Transportation Center Elevator Upgrades			X					✓	
Orange Metrolink Station Parking Structure					X	✓			
SR-57 (Northbound), Orangethorpe Avenue to Lambert Road Landscape							X	✓	
Total Forecast/Actual	2	2	1	0	1	1	1	2	5

Totals	8	8	4	3	6	4	7	4	25
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**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

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SR-57 - Orange Freeway (State Route 57)

I-605 - San Gabriel River Freeway (Interstate 605)

I-405 - San Diego Freeway (Interstate 405)

X = milestone forecast in quarter

✓ = milestone accomplished in quarter

## Capital Programs Division Fiscal Year 2019-20 Performance Metrics Plan

### Begin Environmental

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Orange County Maintenance Facility			X						
Total Forecast/Actual	0	0	1	0	0	0	0	0	1

### Complete Environmental

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5/EI Toro Road Interchange			X						
I-5, I-405 to SR-55					X				
SR-55, I-5 to SR-91							X		
SR-91, SR-57 to SR-55							X		
Total Forecast/Actual	0	0	1	0	1	0	2	0	4

### Begin Design

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-91, SR-55 to Lakeview Avenue					X				
Total Forecast/Actual	0	0	0	0	1	0	0	0	1

### Complete Design

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Anaheim Canyon Metrolink Station	X								
SR-55, I-405 to I-5							X		
Total Forecast/Actual	1	0	0	0	0	0	1	0	2

### Construction Ready

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Anaheim Canyon Metrolink Station			X						
I-5, Alicia Parkway to El Toro Road			X						
Placentia Metrolink Station and Parking Structure					X				
Total Forecast/Actual	0	0	2	0	1	0	0	0	3

### Advertise Construction

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5, SR-73 to Oso Parkway	X								
Anaheim Canyon Metrolink Station			X						
I-5, Alicia Parkway to El Toro Road					X				
Placentia Metrolink Station and Parking Structure					X				
Total Forecast/Actual	1	0	1	0	2	0	0	0	4

# Capital Programs Division

## Fiscal Year 2019-20 Performance Metrics Plan

### Award Contract

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-5, SR-73 to Oso Parkway			X						
Anaheim Canyon Metrolink Station							X		
I-5, Alicia Parkway to El Toro Road							X		
Placentia Metrolink Station and Parking Structure							X		
Total Forecast/Actual	0	0	1	0	0	0	3	0	4

### Complete Construction

Project Description	FY 20 Qtr 1		FY 20 Qtr 2		FY 20 Qtr 3		FY 20 Qtr 4		FY 20 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Complete Construction" milestones scheduled for FY 2019-20									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

Totals	2	0	6	0	5	0	6	0	19
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X = milestone forecast in quarter

✔ = milestone accomplished in quarter