




## COMMITTEE TRANSMITTAL

**August 13, 2018**

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

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

**Subject:** Measure M2 Comprehensive Transportation Funding Programs – 2019 Annual Call for Projects

### Regional Planning and Highways Committee Meeting of August 6, 2018

**Present:** Directors Bartlett, Delgleize, M. Murphy, Pulido, and Steel  
**Absent:** Directors Nelson and Spitzer

### **Committee Vote**

This item was passed by the Members present.

Director Pulido was not present to vote on this item.


### **Committee Recommendations**

- A. Approve proposed revisions to the Comprehensive Transportation Funding Programs Guidelines.
- B. Authorize staff to issue the 2019 annual call for projects for the Regional Capacity Program, providing \$32 million for potential projects.
- C. Authorize staff to issue the 2019 annual call for projects for the Regional Traffic Signal Synchronization Program, providing \$8 million for potential projects.



**August 6, 2018**

**To:** Regional Planning and Highways Committee

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

**Subject:** Measure M2 Comprehensive Transportation Funding Programs – 2019 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 2019 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 2019 annual call for projects for the Regional Capacity Program, providing \$32 million for potential projects.
- C. Authorize staff to issue the 2019 annual call for projects for the Regional Traffic Signal Synchronization Program, providing \$8 million for potential projects.

### **Background**

Measure M2 (M2) includes a number of competitive grant programs that provide funding for regional streets and roads projects. The Regional Capacity Program (RCP), also known as Project O, provides funding for improvements to the Orange County Master Plan of Arterial Highways (MPAH). 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), also known as Project P, provides funding for multi-agency, corridor-based, signal synchronization projects throughout Orange County.

These programs allocate funds annually through a competitive call for projects (call) process and target projects that improve traffic flow by considering factors such as degree of congestion relief, cost-effectiveness, and project readiness. To date, these programs have provided \$386 million for 385 project phases.

The Comprehensive Transportation Funding Programs (CTFP) document serves as the mechanism and framework with which the Orange County Transportation Authority (OCTA) administers the RCP and RTSSP call, as well as other M2 competitive programs for transit (projects S, T, and V) and environmental cleanup programs (Project X).

The CTFP Guidelines (Guidelines) identify procedures and requirements that local agencies are required to follow to apply for funding and, following the award of funds, to seek reimbursement. The Guidelines were first approved by the OCTA Board of Directors (Board) on March 22, 2010, and were most recently updated and approved in August of 2018.

### ***Discussion***

Updates to the Guidelines have been prepared in anticipation of the Board's authorization of the upcoming 2019 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 both better consistency and streamlining throughout the document.

A summary of substantive proposed changes is provided below. These changes essentially fall into three categories which include updates, technical changes, and general clarifications. A more detailed overview of the proposed changes is provided (Attachment A), and a marked-up excerpt of the Guidelines in track changes format is also provided (Attachment B).

Summary of proposed substantive changes:

Updates include the following changes:

- Schedule and call due date changes;
- A limited expansion of RTSSP objectives to now include routes based on traffic patterns, in addition to straight-line corridors; and
- Updated project funding signage specifications.

Technical changes include:

- Removal of the RCP's outdated MPAH assessment project scoring category; and
- Updates to two RTSSP project scoring categories to better reflect existing project applications and incentives for non-capital signal timing projects.

General clarifications that:

- Note that for projects seeking to use the Fast Track approach, the local agency must have received environmental clearance and demonstrate that all necessary easements and titles are in place;
- Specify that freeway interchange agreements with the California Department of Transportation should be in place at the time of application submission;
- Required resolutions must include specific OCTA eligibility and match commitment language; and
- Specify that for RTSSP projects, excess communication system capacity is non-participating from an M2 perspective.

These proposed changes were recommended for Board approval by the OCTA TSC and TAC in June and are now being submitted for consideration and approval.

**Next Steps:**

If the Board approves these recommendations and authorizes the 2019 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 18, 2018, and based upon project selection criteria as specified in the Guidelines, projects will be prioritized for Board, TAC, and TSC consideration in spring 2019. Project funds, if awarded, would become available to local agencies starting July 1, 2019, and may be programmed as late as fiscal year 2021-22.

***Summary***

M2 provides funds for intersection and arterial improvements through the RCP, and signal synchronization through the RTSSP, to enhance street operations and reduce congestion. The CTFP serves as the mechanism that OCTA uses to administer competitive RCP and RTSSP funds. Proposed changes to the CTFP were presented and approved by the TAC on June 27, 2018, and staff is now seeking approval of proposed modifications to the Guidelines and authorization to release the 2019 annual call.

***Attachments***


- A. Summary of Proposed 2019 RCP and RTSSP Call Updates
- B. Comprehensive Transportation Funding Programs, Guidelines Excerpt, Proposed Revisions

**Prepared by:**



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**Approved by:**



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

**Summary of Proposed 2019 RCP and RTSSP Call Updates**

- The 2019 call schedule and funding have been updated to reflect the amount available for programming, if ultimately, authorized by the Board. These amounts include \$32 million for the RCP and \$8 million for the RTSSP.
- Page xi, Definition 25: Removed reference to [www.sustainableinfrastructure.org](http://www.sustainableinfrastructure.org) “recycled resources,” in order to be more reflective of actual project applications and activities.
- Page xv, Precept 21: Updated language for signage requirements to simplify and direct local agencies to visit website(s) for more up to date project-specific information (<http://www.octa.net/Projects-and-Programs/Plans-and-Studies/Funding-Programs/Call-for-Projects/Overview/>).
- Page 2-4, Sequential Programming RCP Process: Noted that if an agency is seeking an engineering allocation under the Fast Track approach, they must have received environmental clearance and demonstrate that all necessary easements and titles are in place.
- Page 7-2, RCP Programming Approach: Clarified that projects scoring 50 points or above can potentially be funded via Tier II, once the Tier I process has been completed.
- Page 7-3, RCP Program Approach Table: Removed reference to less than 50 points on the Tier II description.
- Page 7-8, Exhibit 7-3 FAST Comprehensive Transportation Funding Programs Application Checklist under Construction: Noted that as part of a FAST project application, appropriate agreements between the California Department of Transportation and the project lead agency need to be in draft form and/or in place.
- Pages 7-9 and 7-13, “Sample Resolution for Candidate Orange County Comprehensive Transportation Program Projects” Form: Noted that local agencies, at a minimum, must include items a-h on their city council resolution submittals.
- Chapter 7: Removed all references to MPAH Needs Assessment Category. Assessment is nearly ten years old.
- Chapter 7: Removed MPAH needs assessment scoring from all tables and reallocated points to the Transportation Significance Category.
- Page 8-2, Objectives: Modified the objectives for the signal synchronization program to allow for routes in addition to straight-line corridors.
- Page 8-3, 2019 Call, Page 8-5, Application Process, and Page 8-11, Project Definition: Provided clarification on how multiple corridors will be assessed and evaluated.
- Page 8-5, Application Process: Required original photos to be submitted with an electronic copy of applications.
- Page 8-5, Application Process: If the Orange County Transportation Authority is requested to be the lead agency, applicants are required to submit current city specifications with project applications.

- Page 8-12, Eligible Activities New or Upgraded Communication Systems: Noted that systems should be sized for the needed capacity of the Intelligent Transportation System network and that excess capacity would be considered non-participating.
- Page 8-17, Table 8-1, RTSSP Scoring Criteria: Adjusted project scoring points in the project characteristics and current project readiness categories to reflect current program dynamics.
  - Project Characteristics: Reallocated points to incentivize signal timing (non-capital improvements).
  - Current Project Readiness: Reallocated points for preliminary engineering Complete category to Re-timing of prior RTSSP category.
- Consolidated Chapter 9 into other chapters to remove redundancies.
- General updates and cleanup throughout the document for consistency.

#### Acronyms

Board – Board of Directors

Call – Call for Projects

FAST – Freeway Arterial/Street Transition

MPAH – Master Plan of Arterial Highways

RCP – Regional Capacity Program

RTSSP – Regional Traffic Signal Synchronization Program

# **Comprehensive Transportation Funding Programs Guidelines Excerpt**

## **Proposed Revisions**



engineering phase or for the right-of-way phase, and all liens/claims have been settled for the construction phase. 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.

23. The term “reasonable” in reference to project phase costs shall refer to a cost that, in its nature and amount, does not exceed that which would normally be incurred under the circumstances prevailing at the time the decision was made to incur the cost. Factors that influence the reasonableness of costs: whether the cost is of a type generally recognized as ordinary and necessary for the completion of the work effort and market prices for comparable goods or services.
24. The term “savings” or “project savings” in reference to projects awarded through the CTFP are any grant funds remaining on a particular project phase after all eligible items within the approved project scope have been reimbursed.
25. “Sustainability”, as it applies to capacity enhancing infrastructure projects, refers to project elements that support environmental benefits such as use of renewable or recycled resources as recognized through the Envision Process ([www.sustainableinfrastructure.org](http://www.sustainableinfrastructure.org)).
26. The term “Work Force Labor Rates (WFLR)” include direct salaries plus direct fringe benefits.

18. An administrative time extension may be granted for expiring M2 funds for a project that is clearly engaged in the procurement process (advertised but not yet awarded).
19. Funds that have been encumbered shall be used in a timely fashion. For project phases, excluding right-of-way, funds will expire after 36 months from encumbrance. For the right-of-way phase, funds will expire after 36 months from the date of the first offer letter and/or, if contract services are required, 36 months from the contract Notice to Proceed (NTP). Extensions up to 24 months may be granted through the Semi-Annual Review (SAR) process. Extension requests must be received no less than 90 days prior to the encumbrance deadline.
20. Preliminary Engineering allocations can be programmed in two different fiscal years depending on the project schedule and when certain engineering costs will need to occur during the project development and implementation phases. Local agencies can issue a separate NTP on a single contract to ensure compliance with the timely use of funds requirement. Local agencies may also issue separate contracts for the funds programmed in different fiscal years. Local agencies are required to obligate the funds within the same fiscal year of the programming or request a delay at least 90 days prior to the obligation deadline.
21. For all construction projects awarded CTFP funds in excess of \$500,000 and/or exceeding a 90-day construction period schedule, the local agency shall install and remove signage in accordance with OCTA specifications during the construction period. The implementing agency ~~may~~ shall request OCTA furnished signage. OCTA signage specifications can be found on the Call for Projects website (<http://www.octa.net/Projects-and-Programs/Funding-Programs/Call-for-Projects/Overview/>). ~~or it may choose to provide agency furnished signage so long as said signage conforms to OCTA specifications as follows: Signage shall include an M2 logo that is a minimum of 12" tall, an OCTA logo that is a minimum of 3" tall (image files provided by OCTA upon request), verbiage stating "Street Improvements Funded by Measure M" in Myriad Pro, bold condensed font at 256 pt. and "Your dollars at Work" in Myriad Pro, bold condensed font at 180 pt.~~ Agencies will be required to certify that these signage requirements have been met as part of the initial payment process (see chapter 9).
22. OCTA shall reprogram funds derived from savings or project cancellation based upon final project status. An implementing agency may request to transfer 100 percent of savings of M2 funds between the phases within a project with approval from the TAC and Board. Funds can only be transferred to a phase that has already been awarded competitive funds. Such requests must be made prior to the acceptance of a final report and submitted as part of a semi-annual review. State-Local Partnership Program (SLPP) funds are not eligible for the transfer of savings. Agencies may only

hardship or could jeopardize the overall project delivery and milestones. The agency will waive the opportunity to request a project delay under this approach. The Fast Track approach is permitted only for projects that do not have right of way acquisition needs. If seeking engineering funds, the local agency must have received environmental clearance and demonstrate that all necessary easements and titles are in place for local agency use~~not anticipate any ROW acquisitions.~~ In no circumstances will the Fast Track option be considered for local agency convenience as this could delay implementation of other projects that are shelf ready.

Each call for projects will cover a three-year period that overlaps subsequent future cycles. Funding targets for each cycle are based upon prior funding commitments, anticipated revenues, reprogramming of unused grants (cancellations and savings), and a set aside for future funding cycles.

As part of each call for projects, OCTA will determine an appropriate balance between grants made for the planning and implementation phases.

## **Tiered Funding**

Project funding for Project O (Regional Capacity Program or RCP) will follow a tiered funding process that differentiates between large and small projects. The tiered process is described in detail in Chapter 7.

## **Funding Projections – Call for Projects**

Revenue estimates for M2 are updated annually. Programming decisions are based upon conservative economic assumptions provided by Southern California academic institutions. In the future, OCTA will add project cancellations and realized savings from completed projects to anticipated revenues for redistribution in the first year of each funding cycle.

## **Project Cost Escalation**

OCTA will escalate approved right-of-way and construction projects in years two and three. The match rate percentage identified by implementing agencies in the project grant application shall remain constant throughout the project. This includes projects where the programming has been escalated for future years. OCTA will base escalation rates for future years on Engineering News Record (ENR) Construction Cost Index 20 City Average (CCI) escalation rates.

## Chapter 7 - Regional Capacity Program (Project O)

### Overview

The Regional Capacity Program (RCP) is a competitive program that will provide more than \$1 billion over a thirty-year period. The RCP replaces the Measure M local and regional streets and roads competitive programs (1991-2011).

Although each improvement category described in this chapter has specific eligible activities, the use of RCP funding is restricted to and must be consistent with the provisions outlined in Article XIX. The California State Controllers Guidelines Relating to Gas Tax Expenditures, which implements Article XIX, will provide additional clarification.

The MPAH serves as the backbone of Orange County's arterial street network. Improvements to the network are required to meet existing needs and address future demand. The RCP is made up of three (3) individual program categories which provide improvements to the network:

- The ACE improvement category complements freeway improvement initiatives underway and supplements development mitigation opportunities on arterials throughout the MPAH.
- The ICE improvement category provides funding for operational and capacity improvements at intersecting MPAH roadways.
- The FAST focuses upon street to freeway interchanges and includes added emphasis upon arterial transitions to interchanges.

Projects in the arterial, intersection, and interchange improvement categories are selected on a competitive basis. All projects must meet specific criteria in order to compete for funding through this program.

Also included under the RCP is the Rail Grade Separation Program (RGSP), which is meant to address vehicle delays and safety issues related to at-grade rail crossings. Seven rail crossing projects along the MPAH network were identified by the CTC to receive TCIF. TCIF allocations required an additional local funding commitment. The RGSP captures these prior funding commitments. Future calls for projects for grade separations are not anticipated.

## 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, right of way, 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.

An estimated \$32 million will be available for Project O programming during the 2019 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 ~~projects scoring below 50 points~~ all projects after first satisfying the Tier I ranking. Within Tier 1, two categories would be established with 60 percent (Category 1) of the M2 funds available for smaller projects (requesting \$5 million or less), and 40 percent (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 right of way and/or construction request must be for the same project scope).

	Category 1 (60%)	Category 2 (40%)
Tier I >=50 points	<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 < 50 points	<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>	

If a project is partially funded under Tier I, additional funding will not be considered under Tier II.

## 2019 Call for Projects

The 2019 Call for Projects (call) for Project O – the Regional Capacity Program (RCP) – under M2 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 2019 call for projects by **5:00 p.m. on ~~Friday~~Thursday, October 18~~9~~, 2018. 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 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. 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

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



## Exhibit 7-1

### Arterial Capacity Enhancement (ACE)

#### CTFP Application Checklist Guide

##### **Planning – Environmental & Engineering**

- CTFP Online Application – submitted through OCFundtracker
- Project Description, Scope of Work and Project Limits
- Cost Estimate for Complete Project - ALL PHASES
- General Application Sample Resolution
- ADT Counts and LOS Calculations
- Aerial Photo w/ Proposed Improvements Shown

##### **Right-of-Way**

- CTFP Online Application – submitted through OCFundtracker
- Project Description Detail (include plat maps and legal descriptions for proposed acquisitions)
- Detailed right-of-way Acquisition/Disposal Plan using the OCTA provided right-of-way acquisition/disposal plan form available for download at <https://ocfundtracker.octa.net>.
- Cost Estimate for Complete Project - ALL PHASES
  - Estimated right-of-way Cost by Parcel (Land, Improvements Taken, Severance, Goodwill, Incidental Expenses)\*
- General Application Sample Resolution
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Aerial Strip Map w/ Existing and Proposed Improvements Shown
  - Include right-of-way Improvements and Parcels to be Acquired
- Preliminary Construction Layout Plans\*
- ADT and LOS Calculations

##### **Construction**

- CTFP Online Application – submitted through OCFundtracker
- Project Construction Specifications
- Cost Estimate for Complete Project - ALL PHASES
- General Application Sample Resolution
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Project Development Documents - Project Report or Materials Report \*
- Approved Project Construction Plans\*
- ADT and LOS Calculations

***NOTE: To qualify for the 10 percent local match discount for measurable improvement of PCI, please include documentation from the last two PMP biennial Measure M Eligibility submittals that provide average PCI for Overall System.***

***\*Items are due after first application review. OCTA staff will contact you regarding those projects that will require this additional information.***

## Exhibit 7-2

### Intersection Capacity Enhancement (ICE)

#### CTFP Application Checklist Guide

##### **Planning – Environmental & Engineering**

- CTFP Online Application – submitted through OCFundtracker
- Project Description, Scope of Work and Project Limits
- Cost Estimate for Complete Project - ALL PHASES
- General Application Sample Resolution
- Peak Hour Turning Movement Counts, LOS Calculations, and ADT for each leg of the intersection
- Aerial Photo w/ Proposed Improvements Shown

##### **Right-of-Way**

- CTFP Online Application – submitted through OCFundtracker
- Project Description Detail (include plat maps and legal descriptions for proposed acquisitions)
- Detailed right-of-way Acquisition/Disposal Plan using the OCTA provided right-of-way acquisition/disposal plan form available for download at <https://ocfundtracker.octa.net>.
- Cost Estimate for Complete Project - ALL PHASES
  - Estimated right-of-way Cost by Parcel (Land, Improvements Taken, Severance, Goodwill, Incidental Expenses) \*
- General Application Sample Resolution
- Peak Hour Turning Movement Counts, LOS Calculations, and ADT for each leg of the intersection
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Aerial Strip Map w/ Existing and Proposed Improvements Shown
  - Include right-of-way Improvements and Parcels to be Acquired
- Preliminary Construction Layout Plans\*

##### **Construction**

- CTFP Online Application – submitted through OCFundtracker
- Project Construction Specifications
- Cost Estimate for Complete Project - ALL PHASES
- General Application Sample Resolution
- Peak Hour Turning Movement Counts, LOS Calculations, and ADT for each leg of the intersection
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Project Development Documents - Project Report or Materials Report \*
- Approved Project Construction Plans\*

***NOTE: To qualify for the 10 percent local match discount for measurable improvement of PCI, please include documentation from the last two PMP biennial Measure M Eligibility submittals that provide average PCI for Overall System.***

***\*Items are due after first application review. OCTA staff will contact you regarding those projects that will require this additional information.***

## Exhibit 7-3

### Freeway Arterial/Streets Transition (FAST)

#### CTFP Application Checklist Guide

##### **Planning – Environmental & Engineering**

- CTFP Online Application – submitted through OCFundtracker
- Project Description, Scope of Work and Project Limits
- Cost Estimate for Complete Project - ALL PHASES
- General Application Sample Resolution
- Peak Hour Turning Movement Counts, LOS Calculations, ADT for arterial and ramp exit volumes
- Caltrans Letter of Support
- Aerial Photo w/ Proposed Improvements Shown

##### **Right-of-Way**

- CTFP Online Application – submitted through OCFundtracker
- Project Description Detail (include plat maps and legal descriptions for proposed acquisitions)
- Detailed right-of-way Acquisition/Disposal Plan using the OCTA provided right-of-way acquisition/disposal plan form available for download at <https://ocfundtracker.octa.net>.
- Cost Estimate for Complete Project - ALL PHASES
  - Estimated right-of-way Cost by Parcel (Land, Improvements Taken, Severance, Goodwill, Incidental Expenses) \*
- General Application Sample Resolution
- Peak Hour Turning Movement Counts, LOS Calculations, and ADT for each leg of the intersection
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Aerial Strip Map w/ Existing and Proposed Improvements Shown
  - Include right-of-way Improvements and Parcels to be Acquired
- Preliminary Construction Layout Plans\*

##### **Construction**

- CTFP Online Application – submitted through OCFundtracker
- Project Construction Specifications
- Cost Estimate for Complete Project - ALL PHASES
- General Application Sample Resolution
- Peak Hour Turning Movement Counts, LOS Calculations, and ADT for each leg of the intersection
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Project Development Documents - Project Report or Materials Report\*
- Approved Project Construction Plans\*
- ~~Draft Freeway Agreement, Freeway Maintenance Agreement and Cooperative Funding Agreement between lead agency and Caltrans~~ Appropriate agreements between Caltrans and the project lead agency need to be in draft form and/or in place.

***NOTE: To qualify for the 10 percent local match discount for measurable improvement of PCI, please include documentation from the last two PMP biennial Measure M Eligibility submittals that provide average PCI for Overall System.***

***\*Items are due after first application review. OCTA staff will contact you regarding those projects that will require this additional information.***

## Attachments

### OC Fundtracker Application

Agencies must submit a copy of the OCFundtracker application and scoring information with all application submittals. This document is created within the OCFundtracker web-based application.

### "Project Cost Estimate" Form

Include a separate attachment listing all expenditures and costs for the project. Accurate unit prices and a detailed description of work, including design, will be critical when the candidate project is reviewed. For example, design applications should include major tasks that will be performed. Right-of-way cost estimate should include parcel information (including project area needed), improvements taken, severance damages, right-of-way engineering, appraisal and legal costs. Construction should include a listing of all bid items including a maximum 10 percent allowance for contingencies and a maximum 15 percent allowance for construction engineering/project management. The anticipated disbursement of costs (e.g., Agency, Other, Non-Eligible) must also be completed. Agencies should reference the program from which funding is expected to be allocated when completing this portion of the form. Each of the funding programs described in these guidelines may have differing matching fund requirements.

If more than one project phase is requested to be funded, a separate project cost estimate form is to be completed for each phase, or each phase must be clearly indicated and a subtotal prepared on this form. Separate forms should also be prepared if funding for project phases is being requested over multiple fiscal years.

### "Sample Resolution" Form

A resolution or minute action must be approved by the local jurisdiction's governing body prior to the Board approval of grant funds. A sample resolution is included as Exhibit 7-4 [local agencies, at a minimum, must include items a-h](#). The mechanism selected shall serve as a formal request for CTFP funds and states that matching funds will be provided by the agency, if necessary. All project requests must be included in this action. **If a draft copy of the resolution is provided, the local jurisdiction must also provide the date the resolution will be finalized by the local jurisdiction's governing body.**

### Right-of-way Acquisition/Disposal Plan

For all projects requesting right-of-way phase funding, a detailed plan for acquisition/disposal of excess right-of-way, along with any reasonable labor costs expected, must be included. The right-of-way acquisition/disposal plan and labor cost

estimate must be submitted using the “right-of-way acquisition/disposal plan” form provided by OCTA and available for download at <https://ocfundtracker.octa.net>.

## Project Summary Information

For each application that is recommended for funding, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for TAC review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. **OCTA staff will request the PowerPoint when/if a project is recommended for funding.**

## Pavement Management Supporting Documentation

The M2 Ordinance provides for a 10 percent reduction in the required local match if the agency can either:

- a. Show measurable improvement of paved road conditions during the previous reporting period defined as an overall weighted (by area) average system improvement of one Pavement Condition Index (PCI) point with no reduction in the overall weighted (by area) average PCI in the Master Plan of Arterial Highways (MPAH) or local street categories;
- or
- b. Road pavement conditions during the previous reporting period within the highest 20% of the scale for road pavement conditions in conformance with OCTA Ordinance No. 3, defined as a PCI of 75 or higher, otherwise defined as in “good condition”.

If an agency is electing to take the 10 percent local match reduction, **supporting documentation indicating either the PCI improvement or PCI scale must be provided.**

## Additional Information

The following documentation should be included with your completed project application:

If a project includes more than one jurisdiction and is being submitted as a joint application, one agency shall act as lead agency and must provide a resolution of support from the other agency.

1. Letters of support for the candidate project (optional).
2. Geotechnical\materials reports for all applicable candidate projects (e.g., widening, intersection improvement, new roadway). The reports should contain sufficient detail

for an accurate assessment of improvements needed and costs, since funding will be jeopardized if a project is unable to meet proposed schedule and costs.

3. Preliminary plans, if available for the project. The plans (1"=40' preferred) should include:
  - a. Existing and proposed right-of-way (include plat maps and legal descriptions for proposed acquisitions).
  - b. Agency boundaries, dimensions and station numbers.
  - c. Existing and proposed project features such as: pavement width and edge of pavement, curb, gutter and sidewalk, raised median, driveway reconstruction, signal pole locations, etc.
  - d. Typical cross sections.
  - e. Proposed striping.
  - f. Structural sections per the materials report.
  - g. Proposed traffic signals, storm drains, bridges, railroad crossing improvements, safety lighting, etc.
  - h. If requesting funds for traffic signals, include a traffic signal warrant(s) prepared by the City Traffic Engineer or City Engineer.
  - i. If the project includes construction, relocation, alteration or widening of any railroad crossing or facility, include a copy of the letter of intent sent to the railroad, a copy of which must be sent to the Public Utilities Commission (PUC). Any project including work of interest to a railroad will not be considered for eligibility until the railroad and PUC have been notified.
  - j. If the project is proposed as a staged project and additional funds will be necessary in subsequent calls for projects, the preliminary project statement should be accompanied with a complete preliminary estimate and schedule for the completion of the entire project.
  - k. If the project is proposed as a safety improvement, provide justifying accident data for the past three years and show the expected decrease in intersection or mid-block accident rate.
4. Current 24-hour traffic counts (taken for a typical mid-week period within the preceding 12-month period) for the proposed segment. Projects submitted without "current counts" will be considered incomplete and non-responsive.

## Exhibit 7-4

### Sample Resolution for Candidate Orange County Comprehensive Transportation Programs Projects

A resolution of the \_\_\_\_\_ City Council approving the submittal of \_\_\_\_\_ improvement project(s) to the Orange County Transportation Authority for funding under the Comprehensive Transportation Program

THE CITY COUNCIL OF THE CITY OF \_\_\_\_\_ HEREBY RESOLVES, DETERMINES, AND ORDERS AS FOLLOWS THAT:

- (a) WHEREAS, the City of \_\_\_\_\_ desires to implement the transportation improvements listed below; and
- (b) WHEREAS, the City of \_\_\_\_\_ has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive M2 "Fair Share" funds; and
- (c) WHEREAS, the City's Circulation Element is consistent with the County of Orange Master Plan of Arterial Highways; and
- (d) WHEREAS, the City of \_\_\_\_\_ will not use M2 funds to supplant Developer Fees or other commitments;
- (e) WHEREAS, the City/County must include all projects funded by Net Revenues in the seven-year Capital Improvement Program as part of the Measure M2 Ordinance eligibility requirement.
- (f) WHEREAS, the City of \_\_\_\_\_ will provide a minimum in \_\_\_\_% in matching funds for the \_\_\_\_\_ project as required by the Orange County Comprehensive Transportation Funding Programs Guidelines; and
- (g) WHEREAS, the Orange County Transportation Authority intends to allocate funds for transportation improvement projects, if approved, within the incorporated cities and the County; and
- (h) WHEREAS, the City/County authorizes a formal amendment to the seven-year Capital Improvement Program to add projects approved for funding upon approval from the Orange County Transportation Authority Board of Directors, if necessary.

NOW, THEREFORE, BE IT RESOLVED THAT:

The City Council of the City of \_\_\_\_\_ hereby requests the Orange County Transportation Authority allocate funds in the amounts specified in the City's application to said City from the Comprehensive Transportation Funding Programs. Said funds, if approved, shall be matched by funds from said City as required and shall be used as supplemental funding to aid the City in the improvement of the following street(s):

ADOPTED BY THE CITY COUNCIL on \_\_\_\_\_, 20\_\_\_\_.

SIGNED AND APPROVED on \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor



\*Required language a-h

## Application Review Process

OCTA staff will conduct a preliminary review of all applications for completeness and accuracy, request supplemental information (i.e., plans, aerial/strip maps, CEQA forms) for projects that appear to rank well during initial staff evaluations, and prepare a recommended program for the TSC. In addition, OCTA may hire a consultant(s) to verify information within individual applications such as, but not limited to, project scope, cost estimates, ADT and LOS. These applications will be selected through a random process.

The following guidelines will be used in reviewing project applications. Any application that does not meet these minimum guidelines must include an explanation of why the guidelines were not met:

1. The travel lane width should be no less than 11 feet (12 feet if adjacent to a raised median or other obstruction) for all arterial highways.
2. For divided roadways, the minimum median width should be no less than 10 feet to allow for turning movements. Divided roadways are defined as those with either a painted or raised median.
3. Arterial highways that are designated for uses in addition to automobile travel (e.g., bicycle, pedestrian, parking) shall provide additional right-of-way consistent with local jurisdiction standards to facilitate such uses.
4. An eight-lane roadway should provide for a continuous median, protected dual or single left-turn pockets as warranted at signalized intersections, single left-turn pockets at non-signalized intersections, and a right-turn lane at signalized intersections where determined necessary by traffic volumes. Right-of-way for a free right-turn lane should be provided at locations warranted by traffic demand.
5. A six-lane divided roadway should provide a continuous median, protected dual or single left-turn pockets as warranted by existing traffic at all signalized intersections, and single left-turn pockets at non-signalized intersections. A right-turn option lane should also be provided as warranted by traffic demand.
6. A four-lane divided roadway should provide a continuous median, protected dual or single left-turn pockets at all signalized intersections, and a left-turn pocket at all non-signalized intersections. A right-turn lane should also be provided as warranted by traffic demand.
7. A four-lane undivided roadway shall provide for a single left-turn pocket at all intersections as warranted by traffic demand.

Applications will be reviewed by OCTA for consistency, accuracy and concurrence. Applications determined complete in accordance with the program requirements will be



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 2018

Application submittal deadline: October 18, 2018

TSC/TAC Review: February/March 2019

Committee/Board approval: May 2019

### **Funding**

M2 Project O funding will be used for this call.

The CTFP Guidelines include a provision that allows applicants to request right of way (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.

## Arterial Capacity Enhancements (ACE)

### Overview

The MPAH serves as the backbone of Orange County's arterial street network. Improvements to the network are required to meet existing needs and address future traffic demand. The ACE improvement category complements freeway improvement initiatives underway, supplements development mitigation activities and enables improvements based upon existing deficiencies.

Projects in the ACE improvement category are selected on a competitive basis. Projects must meet specific criteria in order to compete for funding through this program.

### Objectives

- Complete MPAH network through gap closures and construction of missing segments
- Relieve congestion by providing additional roadway capacity where needed
- Provide timely investment of M2 Revenues
- Leverage funding from other sources

### Project Participation Categories

The ACE category provides capital improvement funding (including planning, design, right-of-way acquisition and construction) for capacity enhancements on the MPAH for the following:

- 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 segment or for completing the terminus of an MPAH roadway. This applies to increased roadway capacity only as it relates to vehicular traffic.
- Roadway widening where additional capacity is needed
- New roads / extension of existing MPAH facility

### Eligible Activities

- Planning, environmental clearance
- Design
- Right-of-way acquisition
- Construction (including curb-to-curb, lighting, drainage, etc.)

## Potentially Eligible Items

Below is a list of potentially eligible items. However, final determination of the eligibility of all project related costs will be made at the time of reimbursement. Prior to the submittal of an application for funding, or at any point in the project life cycle, local agencies may meet with OCTA staff to review the eligibility of project related costs. Application review and approval does not guarantee the eligibility of all items.

- Direct environmental mitigation for projects funded by ACE (subject to limitations identified in precepts)
- Storm drains/catch basins/detention basins/bioswales/other pollutant discharge mitigation devices
- Sound walls (in conjunction with roadway improvement mitigation measures)
- Aesthetic improvements including landscaping within the project right-of-way (eligible improvements up to 10 percent of construction costs, provided costs are reasonable for the transportation benefit)
- ITS infrastructure (advance placement in anticipation of future project)
- 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 right-of-way settlement agreement
- Utility relocation where the serving utility has prior rights as evidenced by a recorded legal document
- Roadway grading within the right-of-way (inclusive of any temporary construction easements and/or right-of-way agreement related improvements) should not exceed a depth for normal roadway excavation (e.g. structural section). Additional grading (e.g. over excavation for poor soil conditions) will be considered on a case by case basis. Agencies shall provide supporting documentation (e.g. soils reports, right-of-way agreements) to justify the additional grading.
- Additional right-of-way to accommodate significant pedestrian volumes or bikeways shown on a Master Plan of Bikeways or in conjunction with the "Complete Streets" effort. These will be considered for eligibility on a case by case basis during the application process.
- Installation of a pedestrian activated traffic signal where necessitated by pedestrian traffic warrants or other engineering criteria.

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 of the total eligible construction costs.

Longitudinal storm drains are eligible for program participation when the storm drain is an incidental part (cost is less than 25 percent of the total eligible construction cost) of an eligible improvement. Program participation shall not exceed 10 percent of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in ACE Program funding. Storm drains outside standard MPAH right-of-way 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 designated by aforementioned criteria.

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

Soundwalls are eligible only if they are required as part of the environmental mitigation for the proposed project and the Measure M contribution to the cost of soundwalls shall not exceed 25 percent of the total eligible construction costs. Aesthetic enhancements and landscaping in excess of minimum environmental mitigation requirements are subject to limitations described in this section above.

Roadway grading will be eligible for structural sections within the roadway right of way. Additional grading required within the project limits will be subject to OCTA's review. OCTA will make the determination based on the additional documentation provided to demonstrate local agency's financial obligation to pay for such improvements. Rough roadway grading must be complete prior to project start.

## Utility Relocations

The expenses associated with the relocation of utilities are eligible for RCP reimbursement only when all conditions listed below have been met:

- 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 right-of-way 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.

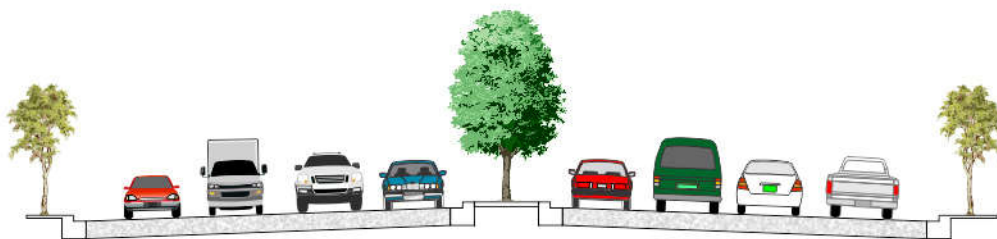
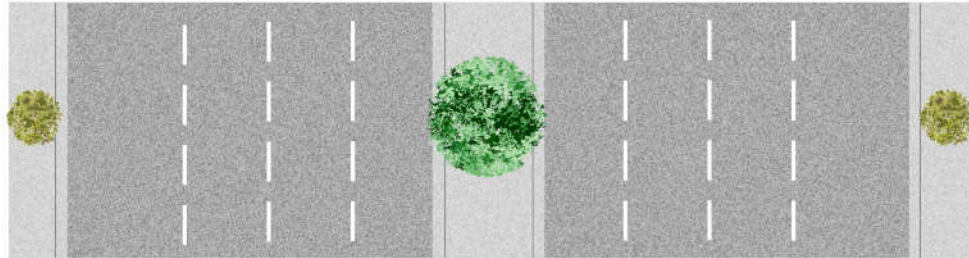
In all cases, eligible costs shall only include "in-kind" relocation. No reimbursements will be made for betterments above the cost of "in-kind" relocation. Additionally, costs submitted for program reimbursement must include any salvage credits received.

## Ineligible Expenditures

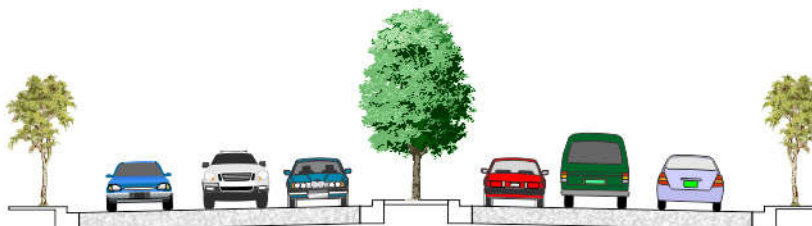
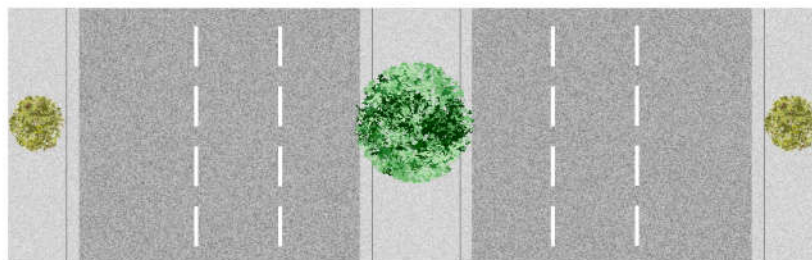
Items that are not eligible under the ACE Program are:

- Grading outside of the roadway right-of-way not related to a temporary construction easement or right-of-way 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 (landscaping that exceeds that necessary for normal erosion control and ornamental hardscape)
- Right-of-way acquisition and construction costs for improvements greater than the typical right-of-way 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 right-of-way 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

## Exhibit 7-5 Standard MPAH Cross Sections



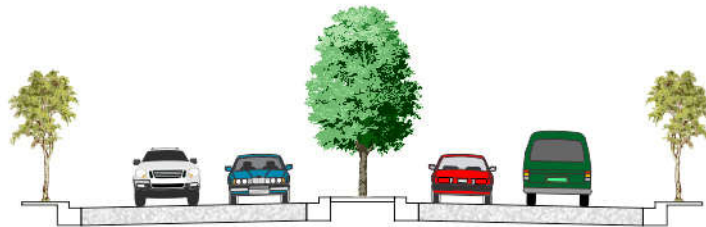
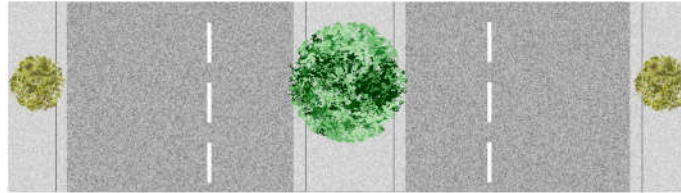
PRINCIPAL  
144 FT  
(8 LANES, DIVIDED)



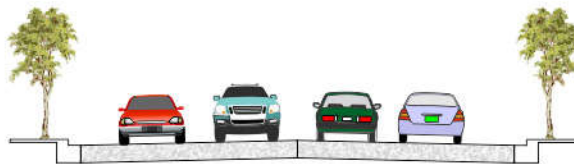
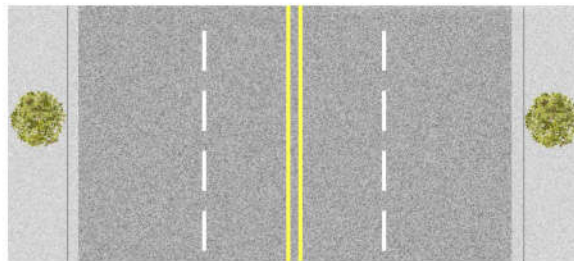
MAJOR  
120FT  
(6 LANES, DIVIDED)



## Exhibit 7-5 *continued* Standard MPAH Cross Sections

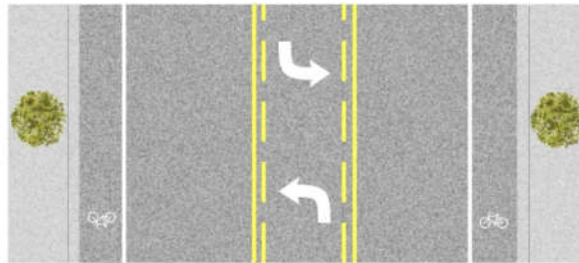


PRIMARY  
100 FT  
(4 LANES, DIVIDED)

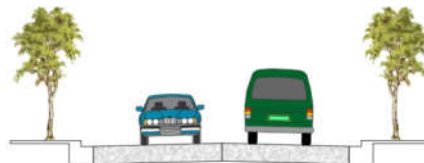
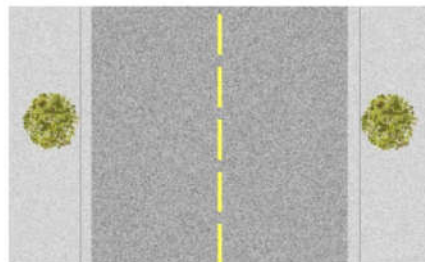


SECONDARY  
80 FT  
(4 LANES, UNDIVIDED)

**Exhibit 7-5 *continued***  
**Standard MPAH Cross Sections**



DIVIDED COLLECTOR  
80 FT  
(2 LANES, DIVIDED)



COLLECTOR  
56 FT  
(2 LANES, UNDIVIDED)



## Master Plan of Arterial Highway Capacities

Below are the approximate roadway capacities that will be used in the determination of level of service:

<u>Type of Arterial</u>	<u>Level of Service</u>				
	<b>A</b> .51 - .60 v/c	<b>B</b> .61 - .70 v/c	<b>C</b> .71 - .80 v/c	<b>D</b> .81 - .90 v/c	<b>E</b> .91 - 1.00 v/c
8 Lanes Divided	45,000	52,500	60,000	67,500	75,000
6 Lanes Divided	33,900	39,400	45,000	50,600	56,300
4 Lanes Divided	22,500	26,300	30,000	33,800	37,500
4 Lanes (Undivided)	15,000	17,500	20,000	22,500	25,000
2 Lanes Divided	9,000	12,000	15,000	20,000	22,000
2 Lanes (Undivided)	7,500	8,800	10,000	11,300	12,500

*Note: Values are maximum Average Daily Traffic*

## Selection Criteria

Specific selection criteria will be used to evaluate competitive program project applications. Emphasis is placed on existing usage, proposed Vehicle Miles Traveled (VMT), level of services benefits, local match rate funding and overall facility importance. Technical categories and point values are shown on Tables 7-1 and 7-2. Data sources and methodology are described below.

Projected/Current Average Daily Trips (ADT): Current ADT is the preferred method of measuring congestion. However, traffic counts projected to the year of opening for the project will be allowed as part of the competitive evaluation. These must be submitted along with current 24-hour traffic counts for the proposed segment for comparison purposes. The agency must submit the project projected ADT, current ADT, the delta, and justification of the increase. Regarding "current" counts, these are defined as those taken for a typical mid-week period within the preceding 12-months. Projects submitted without "current counts" will be considered incomplete and non-responsive. Project applications using projected ADT must use traffic counts taken within the preceding 12 months. Project applications not using projected ADT may use traffic counts taken within the 36 months preceding the application submittal date/release date of the current call.

**Note:** New facilities must be modeled through OCTAM and requests should be submitted to OCTA a minimum of six (6) weeks prior to application submittal deadline. **This**

**deadline is September 7, 2018 for the 2019 Call for Projects.** If modeling requests are not submitted six (6) weeks prior to the application submittal deadline, the application will not be considered. For agencies where event, weekend, or seasonal traffic presents a significant issue, Average Annual Daily Traffic (AADT) counts can be used, provided the agency gives sufficient justification for the use of AADT.

VMT: Centerline length of segment proposed for improvement multiplied by the existing ADT for the proposed segment length. Measurement must be taken proximate to capacity increase. VMT for improvements covering multiple discrete count segments are calculated on a weighted average basis.

Current Project Readiness: This category is additive. Points are earned for the highest qualifying designation at the time applications are submitted. Local agency should select the most current phase of the project.

- Right-of-Way (All easements and titles) – applies where no right-of-way is needed for the project or where all right-of-way has been acquired/dedicated.
- Right-of-Way (all offers issued) – applies where offers have been made for every parcel where acquisition is required and/or offers of dedication or orders of immediate possession have been received by the jurisdiction.
- Final Design (PS&E) – applies where the jurisdiction's City engineer or other authorized person has approved the final design.
- Preliminary design (35 percent level) – will require certification from the City Engineer and is subject to verification.
- Environmental Approvals – applies where all environmental clearances have been obtained on the project.

Cost Benefit: Total project cost (including unfunded phases) divided by the existing ADT (or modeled ADT for new segments).

Funding Over-Match: The percentages shown apply to match rates above a jurisdiction's minimum local match rate requirement. M2 requires a 50 percent local match for RCP projects. This minimum match can be reduced by up to 25 percentage points if certain eligible components are met. If a jurisdiction's minimum match target is 30 percent and a local match of 45 percent is pledged, points are earned for the 15 percent over-match differential. The pledged amount is considered the committed match rate and will be required, at a minimum, from the local agency throughout the life of the project.

Transportation Significance: Roadway classification as shown in the current MPAH.

~~MPAH Needs Assessment Category: Segment designation as shown in the RCP Needs Assessment study.~~

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.
- 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 segment or for completing the terminus of an MPAH roadway. This applies to increased roadway capacity only as it relates to vehicular traffic.

- New Facility/Extensions: Construction of new roadways.
- Bridge crossing: Widening of bridge crossing within the project limits.
- Adds capacity: Addition of through traffic lanes.
- Improves traffic flow: Installation of a median, restricting cross street traffic, adding midblock turn lanes, or elimination of driveways.

LOS Improvement: This category is a product of the existing or projected LOS based upon volume/capacity– or v/c -- and LOS improvement “with project”. **Projects must meet a minimum existing or projected LOS of “D” (.81 v/c) “without project” condition to qualify for priority consideration for funding.** Existing LOS is determined using current 24-hour traffic counts (~~averaging AM/PM peaks~~) for the proposed segment. However, for projects where traffic volumes follow unconventional patterns, unidirectional volumes may be proposed as an acceptable alternate methodology for determining LOS. If unidirectional volumes are used for level of service calculations, ADT for the proposed direction of improvement shall serve as the basis for ADT, cost benefit and vehicle miles travelled (VMT) scoring categories. Projects that do not meet the minimum LOS “D” can be submitted, but are not guaranteed consideration as part of the competitive process.

If during the competitive process, it is determined that additional programming capacity exists after all eligible projects with LOS “D” have been funded, a consideration of projects with a minimum LOS “C” (.71 v/c) may be undertaken. Such consideration will be at the discretion of OCTA. Projects with an LOS better than “C” (.70 v/c) will not be considered.

## Application Process

Project grants are determined through a competitive application process. Local agencies seeking funding must complete a formal application and provide supporting documentation that will be used to evaluate the project proposal as outlined below. Detailed instructions and checklists are provided in this chapter.

### Complete application

- Funding needs by phase and fiscal year
- Local committed match funding source, confirmed through city council resolution or minute order
- Supporting technical information (including current traffic counts)
- Project development and implementation schedule
- Right-of-way status and detailed plan for acquisition/disposal of excess right-of-way. The right-of-way acquisition/disposal plan must be submitted using the “right-of-way acquisition/disposal plan” form provided by OCTA and available for download at <https://ocfundtracker.octa.net>.

- Any additional information deemed relevant by the applicant
- Grants subject to Master Funding Agreement

Calls are expected to be issued on an annual basis, or as determined by the Board. Complete project applications must be submitted by the established due date to be considered eligible for consideration.

## Minimum Eligibility Requirements

Projects must have an existing or projected LOS "D" (.81 v/c) or worse to qualify for priority consideration for funding in this program.

All project roadways must be identified on the MPAH network. Local streets not shown on the MPAH are not eligible for funding through this program.

## New Facilities

New facilities must be modeled through OCTAM. A local agency planning on submitting a request for funding for a new facility must submit a modeling request a minimum of six (6) weeks prior to the application submittal deadline. If modeling requests are not submitted six (6) weeks prior to the application submittal deadline, the application associated with the related project will not be considered. Any request for modeling **must be submitted to OCTA no later than September 7, 2018** for the 2019 Call for Projects.

Facility Modeling: For consistency purposes, all proposed new facilities will be modeled by OCTA using the most current version of OCTAM. Applicants may supplement their application with a locally-derived model with OCTAM used for validation purposes. The facility will be modeled with the lane capacity reflected in the application.

Average Daily Trips Determination: OCTAM will provide an "existing" ADT using a "with project" model run under current conditions. The ADT for the proposed segment will serve as the ADT value to be considered in the application.

LOS Improvement: LOS on existing facilities may be positively or negatively affected by a proposed new roadway segment through trip redistribution. A current condition model run is generated "with" and "without" the proposed project. The intent is to test the efficacy of the proposed segment. A comparison of these before and after project runs (using current traffic volumes) yields potential discernable changes in LOS. The greatest benefit is generally on a parallel facility directly adjacent to the proposed project. Trip distribution changes generally dissipate farther from the project. For evaluation purposes, the segment LOS (determined through a simple volume / capacity calculation) for the "with" and "without project" will be used for the existing LOS and LOS improvement calculations.

## Matching Funds

Local agencies are required to provide local match funding for each phase of the project. As prescribed by the M2 Ordinance, the minimum local match requirement is 50 percent with potential to reduce this amount if certain eligibility requirements are met. The amount pledged during the application process is considered the committed match rate and will be required, at a minimum, from the local agency throughout the life of the project. Actual project contributions by the local agency are dependent on final project costs and may not be equal to the committed match rate in the event of cost overruns. OCTA will not increase the funding grant to cover cost overruns. Ineligible expenditures do not contribute to the local match rate.

## Other Application Materials

Supporting documentation will be required to fully consider each project application. In addition to the funding plan described above, local agencies will be required to submit the following materials:

Council Approval: A Council Resolution or Minute Order action authorizing request for funding consideration with a commitment of local match funding must be provided with the project application. **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 Documentation: If proposed project has completed initial planning activities (such as Project Study Report (PSR) or equivalent, Environmental Impact Report (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. An electronic copy of the PSR and/or environmental document must be supplied as applicable. The applicant will be asked for additional detailed information if necessary to adequately evaluate the project application.

Project Summary Information: With each application being recommended for funding, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. **OCTA staff will request the PowerPoint when/if a project is recommended for funding.**



## Reimbursements

This program is administered on a reimbursement basis for capital improvements, planning, design, and right-of-way acquisition. Reimbursements will be disbursed upon review and approval of an acceptable initial payment submittal, final report, and consistency with Master Funding Agreement or cooperative agreement if federal funds are awarded. The reimbursement process is more fully described in Chapter 9 of this manual.

## 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 during the planning phase 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. All right-of-way funding received for property acquisition prior to cancellation shall be repaid upon cancellation even if property has been acquired. All construction funding received prior to cancellation shall be repaid upon cancellation.

Cancelled projects will be eligible to reapply upon resolution of issues that led to original project termination. Agencies can resubmit an application for funding consideration once either the cancellation of the existing funding grant has been approved by the OCTA Board or is in the process of approval through the semi-annual review. In the event the OCTA Board does not approve the cancellation, the lead agency will be required to withdraw the application.

## 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 misrepresentation of M2 funding will require remediation, which may include repayment, reduction in overall grant, and/or other sanctions to be determined. Audits shall be conducted by OCTA's Internal Audit department or other authorized agent either through the normal annual process or on a schedule to be determined by the Board (see Chapter 10).

Proceeds from the sale of excess right-of-way acquired with program funding must be paid back to the project fund as described in Chapter 9 and the Master Funding Agreement.

**Table 7-1**  
**Regional Capacity Program**  
**Street Widening**

Category	Points Possible	Percentage
<b>Facility Usage</b>		<b>30%</b>
Existing ADT	10	10%
Existing VMT	10	10%
Current Project Readiness	10	10%
<b>Economic Effectiveness</b>		<b>15%</b>
Cost Benefit	10	10%
Funding Over-Match	5	5%
<b>Facility Importance</b>		<b>20%</b>
Transportation Significance	<u>105</u>	<u>105%</u>
<del>MPAH Assessment Category</del>	<del>5</del>	<del>5%</del>
Operational Efficiency	10	10%
<b>Benefit</b>		<b>35%</b>
Improvement Characteristics	10	10%
Level of Improvement and Service	25	25%
<b>Total</b>	<b>100</b>	<b>100%</b>



**Table 7-2**

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

Facility Usage <span>Points: 30</span>			Facility Importance <span>Points: 20</span>		
Existing ADT Range		Points	Transportation Significance Range		Points
45+	thousand	10	Principal or CMP Route		<del>10</del> 105
40 - 44	thousand	8	Major		<del>8</del> 84
35 - 39	thousand	6	Primary		<del>6</del> 63
30 - 34	thousand	5	Secondary		<del>4</del> 42
25 - 29	thousand	4	Collector		<del>2</del> 21
20 - 24	thousand	3			
15 - 19	thousand	2			
10 - 14	thousand	1			
<10	thousand	0			
VMT Range		Points	MPAH Assessment Category		
31+	thousand	10			
26 - 30	thousand	8	Range		Points
22 - 25	thousand	6	Category-1		5
18 - 21	thousand	5	Category-2		4
14 - 17	thousand	4	Category-3		3
11 - 13	thousand	3	Category-4		2
8 - 10	thousand	2	Category-5		1
4 - 7	thousand	1			
<4	thousand	0			
Current Project Readiness		Max Points: 10	Operational Attributes (within the roadway)		Max Points: 10
Environmental Approvals		2	Pedestrian Facilities (New)		3
Preliminary Design (35%)		2	Meets MPAH Configs.		3
ROW (All offers issued)		2	Bike Lanes (New)		3
Final Design (PS&E)		4	Active Transit Route(s)		2
ROW (All easement and titles)		5	Bus Turnouts		2
Points are additive. Design and Right of Way (ROW) limited to highest qualifying designation.			Median (Raised)		2
			Remove On-Street Parking		2
			Water Conservation Elements		2
			Safety Improvements		2
			Sustainability		2
			Other		2
Economic Effectiveness <span>Points: 15</span>			Benefit <span>Points: 35</span>		
Cost Benefit (Total \$/ADT)			Improvement Characteristics		Points
Range*		Points	Gap Closure		10
< 99		10	New Facility/Extension		8
3 - 149		9	Bridge Crossing		8
6 - 199		7	Adds Capacity		6
9 - 249		5	Improves Traffic Flow		2
12 - 299		4			
15 - 349		3			
18 - 399		2			
21 - 499		1			
500+		0			
Funding Over-Match (local match/project cost) minus minimum local match requirement			LOS Improvement		Max Points: 25
Range*		Points			
25+%		5	Existing LOS Starting Point Range (LOS Imp x LOS Starting Pt)		Points
20 - 24%		4	1.01+		5
15 - 19%		3	.96 - 1.00		4
10 - 14%		2	.91 - .95		3
5 - 9%		1	.86 - .90		2
0 - 4%		0	.81 - .85		1
*Range refers to % points above agency minimum requirement.			< .81		0
			LOS Improvement with Project (exist. Volume)		
			Existing LOS Starting Point Range		Points
			.20+		5
			.16 - .19		4
			.1 - .15		3
			.05 - .09		2
			.01 - .05		1
			< .01		0

## Intersection Capacity Enhancements (ICE)

### Overview

The MPAH serves as the backbone of Orange County's arterial street network. Intersections at each intersecting MPAH arterial throughout the County will continue to require improvements to mitigate current and future needs. The ICE improvement category complements roadway improvement initiatives underway and supplements development mitigation opportunities.

Projects in the ICE improvement category are selected on a competitive basis. Projects must meet specific criteria in order to compete for funding through this program.

For the purposes of the ICE improvement category, the limits of an intersection shall be defined as the area that includes all necessary (or planned) through lanes, turn pockets, and associated transitions required for the intersection. Project limits of up to a maximum of 600 feet for each intersection leg are allowable. Projects that, due to special circumstances, must exceed the 600-foot limit, shall include in their application the request for a technical variance. The project shall be presented to the Technical Steering Committee by the local agency to request approval of the variance.

### Objectives

- Improve MPAH network capacity and throughput along MPAH facilities
- Relieve congestion at MPAH intersections by providing additional turn and through lane capacity
- Improve connectivity between neighboring jurisdiction by improving operations
- Provide timely investment of M2 revenues

### Project Participation Categories

The ICE category provides capital improvement funding (including planning, design, right-of-way acquisition and construction) for intersection improvements on the MPAH network for the following:

- Intersection widening – constructing additional through lanes and turn lanes, extending turn lanes where appropriate, and signal equipment
- Street to street grade separation projects

## Eligible Activities

- Planning, environmental clearance
- Design (plans, specifications, and estimates)
- Right-of-way acquisition
- Construction (including bus turnouts, curb ramps, median, and striping)

## Potentially Eligible Items

Below is a list of potentially eligible items. However, final determination of the eligibility of all project related costs will be made at the time of reimbursement. Prior to the submittal of an application for funding, or at any point in the project life cycle, local agencies may meet with OCTA staff to review the eligibility of project related costs. Application review and approval does not guarantee the eligibility of all items.

- Required environmental mitigation for projects funded by ICE
- Storm drains/catch basins/detention basins/bioswales/other pollutant discharge mitigation devices
- Sound walls (in conjunction with roadway improvement mitigation measures)
- Aesthetic improvements including landscaping within the project right-of-way (eligible improvements up to 10 percent of construction costs, provided costs are reasonable for the transportation benefit)
- Signal equipment (as incidental component of program), including the installation or upgrade of pedestrian countdown heads
- Bicycle detection systems
- 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 right-of-way settlement agreement
- Utility relocation where the serving utility has prior rights as evidenced by a recorded legal document and are located within the roadway right-of-way.
- Roadway grading within the right-of-way (inclusive of any temporary construction easements and/or right-of-way agreement related improvements) should not exceed a depth for normal roadway excavation (e.g. structural section). Additional grading (e.g. over excavation for poor soil conditions) will be considered on a case by case basis. Agencies shall provide supporting documentation (e.g. soils reports, right-of-way agreements) to justify the additional grading.

## Ineligible Items

- Grading outside of the roadway right-of-way not related to a temporary construction easement or right-of-way agreement.

- Right-of-way acquisition greater than the typical right-of-way width for the applicable MPAH Roadway Classification. Additional turn lanes not exceeding 12 feet in width needed to maintain an intersection LOS D requiring right-of-way in excess of the typical right-of-way width for the applicable MPAH classification shall be fully eligible. Where full parcel acquisitions are necessary to meet typical right-of-way requirements for the MPAH classification any excess parcels shall be disposed of in accordance with State statutes and the acquisition/disposal plan submitted in accordance with these guidelines.
- Enhanced landscaping and aesthetic improvements (landscaping that exceeds that necessary for normal erosion control and ornamental hardscape).

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 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 of the total eligible improvement cost) of an eligible improvement. Program participation shall not exceed 10 percent of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in ICE improvement category funding. Storm drains outside standard MPAH right-of-way 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 clearance for the proposed project and shall not exceed 25 percent of the total eligible project costs. Aesthetic enhancements and landscaping in excess of minimum environmental mitigation requirements are subject to limitations described in the "Potentially Eligible Item" section above.

The relocation of detention basins/bioswales/other pollutant discharge mitigation devices are potentially eligible dependent on who has prior rights and will be given consideration on a case by case basis (see utility relocations below).

Roadway grading is eligible for structural sections. 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 all conditions listed below have been met:

- 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 right-of-way 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 include any salvage credits received.

## Selection Criteria

Specific selection criteria will be used to evaluate competitive program project applications. Emphasis is placed on existing usage, LOS benefits, local match funding, and overall facility importance. Technical categories and point values are shown on Tables 7-3 and 7-4. Data sources and methodology are described below.

Projected/Current Average Daily Trips (ADT): Current ADT is the preferred method of measuring congestion. However, traffic counts projected to the year of opening for the project will be allowed as part of the competitive evaluation. These must be submitted along with current 24-hour traffic counts for the proposed segment for comparison purposes. The agency must submit the project projected ADT, current ADT, the delta, and justification of the increase. Regarding "current" counts, these are defined as those taken for a typical mid-week period within the preceding 12-months. Project applications using projected ADT must use traffic counts taken within the preceding 12 months. Project applications not using projected ADT may use traffic counts taken within the preceding 36 months. Project applications without "current" counts will be deemed

incomplete and non-responsive. Average ADT for the east and west legs of the intersection will be added to the average ADT for the north and south legs.

For agencies where event or seasonal traffic presents a significant issue, Average Annual Daily Traffic (AADT) counts can be used, provided the agency gives sufficient justification for the use of AADT.

Current Project Readiness: This category is additive. Points are earned for each satisfied readiness stage at the time applications are submitted. Local agency should select the most current phase of the project.

- Right-of-Way (all easements and titles) – applies where no right-of-way is needed for the project or where all right-of-way has been acquired/dedicated.
- Right-of-Way (all offers issued) – applies where offers have been made for every parcel where acquisition is required and/or offers of dedication or orders of immediate possession have been received by the jurisdiction. Documentation of right-of-way possession will be required with application submittal.
- Final Design (PS&E) – applies where the jurisdiction's City Engineer or other authorized person has approved the final design.
- Preliminary design (35 percent level) – will require certification from the City Engineer and is subject to verification.
- Environmental Approvals – applies where all environmental clearances have been obtained on the project.

Cost Benefit: Total project cost (included unfunded phases) divided by the existing ADT (or modeled ADT for new segments).

Funding Over-Match: The percentages shown apply to match rates above a jurisdiction's minimum match rate requirement. M2 requires a 50 percent local match for RCP projects. This minimum match can be reduced by up to 25 percentage points if certain eligible components are met. If a jurisdiction's minimum match target is 30 percent and a local match of 45 percent is pledged, points are earned for the 15 percent over-match. The pledged amount is considered the committed match rate and will be required, at a minimum, from the local agency throughout the life of the project.

Coordination with Contiguous project: Projects that complement a proposed arterial improvement project with a similar implementation schedule earn points in this category. This category is intended to recognize large projects that segregate intersection components from arterial components for funding purposes.

Transportation Significance: Roadway classification as shown in the current MPAH.

~~MPAH Needs Assessment Category: Segment designation as shown in the RCP Needs Assessment study.~~

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

- Bike Lanes: Extension of bike lanes through intersection
- Bus Turnouts: Construction of a bus turnout as a new feature.
- Lowers density: Addition of through travel lanes.
- Channels traffic: Addition and/or extension of turn pockets (other than free right turn).
- Free right turn: installation of new free right or conversion of an existing right turn to free right
- Protected/permissive left turn: Convert from protected to protected/permissive
- Pedestrian Facilities: Placement of a new sidewalk if none currently exists.
- Grade separations: Street to street grade separations and do not apply to rail grade separation projects which are covered by the grade separation program category.
- 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.
- Water Conservation: Includes elements that reduce water consumption. 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.

LOS Improvement: This category is a product of the existing or projected LOS based upon volume/capacity– or v/c -- and LOS improvement "with project" using Intersection Capacity Utilization (ICU) calculation with 1,700 vehicles per lane per hour and a .05 clearance interval. Calculations will be based upon "current" arterial link and turning movement counts projected to opening year. **Projects must meet a minimum existing or projected LOS of "D" (.81 v/c) to qualify for priority consideration for funding.** Existing LOS is determined using ~~current~~ 24 peak hour traffic counts/turning movements (~~averaging~~ AM/PM peak periods) for the proposed segment



utilizing Intersection Capacity Utilization (ICU) methodology and using 1,700 vehicles per lane/per hour and a .05 clearance interval.

For projects where traffic volumes follow unconventional patterns (e.g. unidirectional congestion, large disparity between AM and PM peaks, etc.) HCM 2010 may be proposed as an alternate methodology for determining LOS. HCM calculations must use SYNCHRO and be supported with complete calculation documentation using standard industry approaches and current signal timing plans. If an alternative methodology is proposed, all analysis **must be submitted to OCTA for review no later than September 7, 2018** for the 2019 Call for Projects. OCTA will contract with an independent third-party firm to review the technical analysis. The cost for the review will be charged to the applicant.

Projects that do not meet the minimum LOS "D" can be submitted but are not guaranteed consideration as part of the competitive process.

If during the competitive process, it is determined that additional programming capacity exists after all eligible projects with LOS "D" have been funded, a consideration of projects with a minimum LOS "C" (.71 v/c) may be undertaken. Such consideration will be at the discretion of OCTA. Projects with a LOS better than "C" (.70 v/c) will not be considered.

## Application Process

Project grants are determined through a competitive application process. Local agencies seeking funding must complete a formal application and provide supporting documentation that will be used to evaluate the project proposal as outlined below. Detailed instructions and checklists are provided in this chapter.

- Complete application
  - Funding needs by phase and fiscal year
  - Local match funding source, confirmed through city council resolution or minute order
  - Supporting technical information (including current arterial link and turning movement counts)
  - Project development and implementation schedule
  - Right-of-way status and a detailed plan for acquisition/disposal of excess right-of-way. The right-of-way acquisition/disposal plan must be submitted using the "right-of-way acquisition/disposal plan" form provided by OCTA and available for download at <https://ocfundtracker.octa.net>.
  - Any additional information deemed relevant by the applicant
- Grants subject to master funding agreement



Calls for projects are expected to be issued on an annual basis, or as determined by the Board. Complete project applications must be submitted by the established due date to be considered eligible for consideration.

## Minimum Eligibility Requirements

Projects must have an existing or projected LOS "D" (.81 v/c) or worse to qualify for priority consideration for funding in this program.

All project roadways must be identified on the MPAH network. Local streets not shown on the MPAH are not eligible for funding through this program.

## Matching Funds

Local agencies are required to provide local match funding for each phase of the project. As prescribed by the M2 Ordinance, the minimum local match requirement is 50 percent with potential to reduce this amount if certain eligibility requirements are met. The amount pledged during the application process is considered the committed match rate and will be required, at a minimum, from the local agency throughout the life of the project. Actual project contributions by the local agency are dependent on final project costs and may not be equal to the committed match rate in the event of cost overruns. OCTA will not increase the funding grant to cover cost overruns. Ineligible expenditures do not contribute to the local match rate.

## Other Application Materials

Supporting documentation will be required to fully consider each project application. In addition to the funding plan described above, local agencies will be required to submit the following materials:

Council Approval: A Council Resolution or Minute Order action authorizing request for funding consideration with a commitment of local match funding must be provided with the project application. **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 Documentation: 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. An electronic copy of the PSR and/or environmental document must be supplied

as applicable. The applicant will be asked for additional detailed information only if necessary to adequately evaluate the project application.

Project Summary Information: With each application being recommended for funding, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. **OCTA staff will request the PowerPoint when/if a project is recommended for funding.**

## Reimbursements

This program is administered on a reimbursement basis for capital improvements, planning, design, and right-of-way acquisition. Reimbursements will be disbursed upon review and approval of an acceptable initial payment submittal, final report and consistency with Master Funding Agreement or cooperative agreement. The reimbursement process is more fully described in Chapter 9 of this manual.

## 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 during the planning phase 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. Right-of-way funding received for property acquisition prior to cancellation shall be repaid upon cancellation even if property has been acquired. Construction funding received prior to cancellation shall be repaid upon cancellation.

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

## 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 misrepresentation of M2 funding will require remediation which may include repayment, reduction in overall grant, and/or other sanctions to be determined. Audits shall be conducted by OCTA's Internal Audit department or other authorized agent either through the normal annual process or on a schedule to be determined by the Board (see Chapter 10).

Proceeds from the sale of excess right-of-way acquired with program funding must be paid back to the project fund as described in Chapter 9 and the Master Funding Agreement.

**Table 7-3  
Regional Capacity Program  
Intersection Improvement**

Category	Points Possible	Percentage
<b>Facility Usage</b>		<b>25%</b>
Existing ADT	15	15%
Current Project Readiness	10	10%
<b>Economic Effectiveness</b>		<b>20%</b>
Cost Benefit	10	10%
Funding Over-Match	5	5%
Coordination with Contiguous Project	5	5%
<b>Facility Importance</b>		<b>30%</b>
Transportation Significance	<del>5</del> 10	<del>5</del> 10%
<del>MPAH Assessment Category</del>	<del>5</del>	<del>5%</del>
Operational Efficiency	20	20%
<b>Benefit</b>		<b>25%</b>
LOS Improvement	25	25%
<b>Total</b>	<b>100</b>	<b>100%</b>

## Table 7-4

### ICE SCORING CRITERIA Point Breakdown for Intersection Capacity Enhancement Projects Maximum Points = 100

Facility Usage <span>Points: 25</span>			Facility Importance <span>Points: 30</span>		
ADT Range*		Points	Transportation Significance Range		Points
60+	thousand	15	Principal or CMP Route		<del>5</del> 10
55 - 59	thousand	13	Major		<del>4</del> 8
50 - 54	thousand	11	Primary		<del>3</del> 6
45 - 49	thousand	9	Secondary		<del>2</del> 4
40 - 44	thousand	7	Collector		<del>1</del> 2
35 - 39	thousand	5			
30 - 34	thousand	3			
25 - 29	thousand	1			
*AVG ADT for east and west legs plus AVG ADT for north and south legs of intersection			MPAH Assessment Category		
Current Project Readiness		Max Points: 10	Range		Points
Environmental Approvals		2	Category-1		5
Preliminary Design (35%)		2	Category-2		4
ROW (All offers issued)		2	Category-3		3
Final Design (PS&E)		4	Category-4		2
ROW (All easement and titles)		5	Category-5		1
Points are additive. Design and Right of Way (ROW) limited to highest qualifying designation.			Operational Attributes (within the roadway)		Max Points: 20
<b>Economic Effectiveness <span>Points: 20</span></b>			Grade Separations		10
Cost Benefit (Total \$/ADT)			Bus Turnouts		4
Range*		Points	Bike Lanes		4
< 20		10	Ped. Facilities (New)		4
21 - 30		9	Free Right		4
31 - 50		7	Lowers Density		3
51 - 75		5	Channels Traffic		3
76 - 100		3	Protected/Permissive Left Turn		2
>100		1	Water Conservation Elements		2
*=Total Cost/Average ADT			Safety Improvements		2
Funding Over-Match (local match/project cost) minus minimum local match requirement			Sustainability		2
Range*		Points	<b>Benefit <span>Points: 25</span></b>		
25+%		5	LOS Improvement		Max Points: 25
20 - 24%		4	Calculation: LOS Imp x LOS Starting Pt.		
15 - 19%		3	Existing LOS (Peak Hour) Range		Points
10 - 14%		2	1.01+		5
5 - 9%		1	.96 - 1.00		4
0 - 4%		0	.91 - .95		3
Coordination with Contiguous Project			.86 - .90		2
Range		Points	.81 - .85		1
Yes		5	< .81		0
No		0	LOS Reduction w/ Project (exist. volume) Range		Points
Coordination with ACE project with similar implementation schedule.			.20+		5
			.16 - .19		4
			.1 - .15		3
			.05 - .09		2
			.01 - .05		1
			< .01		0

## Freeway Arterial/Streets Transitions (FAST)

### Overview

The MPAH serves as the backbone of Orange County's arterial street network. Current and future needs at existing interchanges along MPAH highways and freeways will need to be addressed in order to improve connectivity between freeways and MPAH arterials. The interchange improvement program complements roadway improvement initiatives underway as well, and supplements development mitigation opportunities.

Projects in the FAST improvement category are selected on a competitive basis. Projects must meet specific criteria in order to compete for funding through this program.

### Objectives

- Improve transition to and from Orange County freeways with emphasis on MPAH performance
- Provide timely investment of M2 revenues

### Project Participation Categories

The FAST category provides capital improvement funding (including planning, design, right-of-way acquisition and construction) for interchange improvements on the MPAH network for the following:

- MPAH facility interchange connections to Orange County freeways (including on-ramp, off-ramp and arterial improvements)

### Eligible Activities

- Planning, environmental clearance
- Design
- Right-of-way acquisition
- Construction (including ramps, intersection and structural improvements/reconstruction incidental to project)
- Signal equipment (as incidental component of the program)

### Potentially Eligible Items

Below is a list of potentially eligible items. However, final determination of the eligibility of all project related costs will be made at the time of reimbursement. Prior to the submittal of an application for funding, or at any point in the project life cycle, local agencies may meet with OCTA staff to review the eligibility of project related costs. Application review and approval does not guarantee the eligibility of all items.

- Direct environmental mitigation for projects funded by FAST (details below)
- Storm drains/catch basins/detention basins/bioswales/other pollutant discharge mitigation devices (details below)
- Aesthetic improvements including landscaping within the project right-of-way (eligible improvements up to 10 percent 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 right-of-way settlement agreement
- Utility relocation where the serving utility has prior rights as evidenced by a recorded legal document
- Roadway grading within the right-of-way should not to exceed a depth for normal roadway excavation (e.g. structural section) or as required by temporary construction easements, and/or right-of-way 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 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 of the total eligible improvement cost) of an eligible improvement. Program participation shall not exceed 10 percent 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 right-of-way 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 of the total eligible project cost. Aesthetic enhancements and landscaping in excess of minimum environmental mitigation requirements are eligible at up to 10 percent 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 temporary construction easements). 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 right-of-way 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 (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.

Projected/Current Average Daily Trips (ADT): Current ADT is the preferred method of measuring congestion. However, traffic counts and ramp volumes projected to the year of opening for the project will be allowed as part of the competitive evaluation. These must be submitted along with current 24-hour traffic counts for the proposed segment for comparison purposes. The agency must submit the project projected ADT, current ADT, the delta, and justification of the increase. Regarding “current” counts, these are defined as those taken for a typical mid-week period within the preceding 12-months. Project applications using projected ADT must use traffic counts taken within the preceding 12 months. Project applications not using projected ADT may use traffic counts taken within the preceding 36 months. Project applications without “current” counts will be deemed incomplete and non-responsive. Average ramp intersection volume for each interchange ramp will be used for the current counts. New facilities will rely on projected ramp volume based upon Caltrans approved projection.

For agencies where event or seasonal traffic presents a significant issue, Average Annual Daily Traffic (AADT) counts can be used, provided the agency gives sufficient justification for the use of AADT.

Current Project Readiness: This category is additive. Points are earned for each satisfied readiness stage at the time applications are submitted. Local agency should select the most current phase of the project.

- Right-of-Way (all easements and titles) – applies where no right-of-way is needed for the project or where all right-of-way has been acquired/dedicated).
- Right-of-Way (all offers issued) – applies where offers have been made for every parcel where acquisition is required and/or offers of dedication have been received by the jurisdiction.
- Final Design (PS&E) – applies where the jurisdiction’s City engineer or other authorized person has approved the final design.
- Preliminary design (35 percent level) – will require certification from the City engineer and is subject to verification.
- Project Approvals/Environmental Documentation (PA/ED) – applies where a Project Report-level analysis has been completed and environmental approvals have been attained.

Cost Benefit: Total project cost (including unfunded phases) divided by the existing ADT (or modeled ADT for new segments).

Funding Over-Match: The percentages shown apply to match rates above a jurisdiction's minimum local match requirement. M2 requires a 50 percent local match for RCP projects. This minimum match can be reduced by up to 25 percentage points if certain eligible components are met. If a jurisdiction's minimum match target is 30 percent and a local match of 45 percent is pledged, points are earned for the 15 percent over-match. The pledged amount is considered the committed match rate and will be required, at a minimum, from the local agency throughout the life of the project.

Coordination with Freeway Project: Interchanges planned to coincide with or accommodate programmed freeway improvements receive points in this category.

Transportation Significance: Roadway classification as shown in the current MPAH.

~~MPAH Needs Assessment Category: Segment designation as shown in the RCP Needs Assessment study.~~

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

- Eliminate left turn conflicts: Ramp intersection reconfiguration which does not permit left turns onto ramps.
- Coordinated signal: Ramp intersections within a coordinated corridor where coordination did not previously exist.
- Add turn lanes: Increase in number of turn lanes on arterial.
- Add traffic control: Signalization of ramp intersection.
- Enhanced ramp storage: Extension or widening of existing ramp to improve off-street storage capacity.
- Pedestrian facilities: Add crosswalk and/or sidewalk to ramp or bridge crossing within context of interchange improvements.
- Active Transit Route: facility contains a currently active OCTA transit route
- 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.
- Water Conservation: Includes elements that reduce water consumption. This includes 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: intersection median barriers, curb extensions, pedestrian crossing islands, 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.

**LOS Improvement:** This category is a product of the existing or projected LOS based upon volume/capacity– or v/c -- and LOS improvement “with project” for arterial based improvements and ICU for intersection based improvements. **Projects must meet a minimum existing or projected LOS of “D” (.81 v/c) to qualify for priority consideration for funding.** Existing LOS is determined using current 24-hour traffic counts for arterials and /peak hour turning movements at intersections (averaging AM/PM peaks) for the proposed segment. However, for projects where traffic volumes follow unconventional patterns (e.g. unidirectional congestion, large disparity between AM and PM peaks, etc.) alternate methodologies for determining LOS can be proposed. If HCM 2010 is proposed for intersections as an alternative methodology, all analysis **must be submitted to OCTA no later than September 7, 2018** and the cost for independent review shall be reimbursed by the applicant. Projects that do not meet the minimum LOS “D” can be submitted, but are not guaranteed consideration as part of the competitive process.

If during the competitive process, it is determined that additional programming capacity exists after all eligible projects with LOS “D” have been funded, a consideration of projects with a minimum LOS “C” (.71 v/c) may be undertaken. Such consideration will be at the discretion of OCTA. Projects with an LOS better than “C” (.70 v/c) will not be considered.

**Improvement Characteristics:** Select the attribute that best fits your project definition.

- **New facility:** New interchange where none exists.
- **Partial facility:** New interchange which does not provide full access.
- **Interchange reconstruction:** improvement of existing interchange to provide additional arterial capacity (widening of overcrossing or undercrossing).
- **Ramp reconfiguration:** Widening of ramp or arterial to improve turning movements or other operational efficiencies.
- **Ramp metering:** Installation of metering on ramp.

## Application Process

Project grants are determined through a competitive application process. Local agencies seeking funding must complete a formal application and provide supporting documentation that will be used to evaluate the project proposal as outlined below.

- Complete application

- Funding needs by phase and fiscal year
- Local match funding source
- Supporting technical information
- Project development and implementation schedule
- Right-of-way status and a detailed plan for acquisition/disposal of excess right-of-way. The right-of-way acquisition/disposal plan must be submitted using the "right-of-way acquisition/disposal plan" form provided by OCTA and available for download at <https://ocfundtracker.octa.net>.
- Any additional information deemed relevant by the applicant
- Grants subject to a Master Funding Agreement or cooperative agreement if federal funds are awarded

Calls for projects are expected to be issued on an annual basis, or as determined by the OCTA Board of Directors. Complete project applications must be submitted by the established due date to be considered eligible for consideration.

## Minimum Eligibility Requirements

Projects must have an existing or projected LOS "D" (.81 v/c) or worse to qualify for priority consideration for funding in this program. Worst peak hour period is used for this evaluation and eligibility purposes.

## Matching Funds

Local agencies are required to provide local match funding for each phase of the project. As prescribed by the M2 Ordinance, a 50 percent minimum local match is required. A lower local match may be permitted if certain eligibility criteria are met. The amount pledged during the application process is considered the committed match rate and will be required, at a minimum, from the local agency throughout the life of the project. Actual project contributions by the local agency are dependent on final project costs and may not be equal to the committed match rate in the event of cost overruns. OCTA will not increase the funding grant to cover cost overruns. Ineligible expenditures do not contribute to the local match rate.

## Reimbursements

This program is administered on a reimbursement basis for capital improvements, planning, design, and right-of-way acquisition. Reimbursements will be disbursed upon review and approval of an acceptable initial payment submittal, final report and consistency with Master Funding Agreement. The reimbursement process is described in Chapter 9.

## Caltrans Coordination

Caltrans is not eligible to submit applications or receive payment under this program. Only cities or the County of Orange may submit applications and receive funds. This program was designed to benefit local agencies.

Coordination with Caltrans will be essential for most, if not all, of the projects submitted for this program. Local agencies should therefore establish contacts with the Caltrans District 12 Office (Project Development Branch) to ensure that candidate projects have been reviewed and approved by Caltrans. All other affected agencies should be consulted as well.

**Agencies submitting projects for this program must have confirmation from Caltrans that the proposed improvement is consistent with other freeway improvements as evidenced by an agreement or other formal document.**

Applications should be submitted so that interchange projects are done in conjunction with construction of other freeway improvements whenever possible. However, if the interchange project can be done in advance of the freeway project, verification and/or supporting documentation must be submitted showing the interchange improvement has merit for advanced construction and that it will be compatible with the freeway design and operation. Additionally, the interchange improvements should take into account the ultimate freeway improvements if the interchange is to be improved in advance.

## 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 during the planning phase 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. Right-of-way funding received for property acquisition prior to cancellation shall be repaid upon cancellation even if property has been acquired. Construction funding received prior to cancellation shall be repaid upon cancellation.

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

## 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 misrepresentation of M2 funding will require remediation which may include repayment, reduction in overall grant, and/or other sanctions to be determined. Audits shall be

conducted by OCTA's Internal Audit department or other authorized agent either through the normal annual process or on a schedule to be determined by the Board (see Chapter 10).

Proceeds from the sale of excess right-of-way acquired with program funding must be paid back to the project fund as described in Chapter 9 and Master Funding Agreement.

### Other Application Materials

Supporting documentation will be required to fully consider each project application. In addition to the funding plan described above, local agencies will be required to submit the following materials:

Council Approval: A Council Resolution or minute order authorizing request for funding consideration with a commitment of local match funding must be provided with the project application. **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 Documentation: 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 of planning phases. An electronic copy of the PSR and/or environmental document must be supplied as applicable. The applicant will be asked for additional detailed information only if necessary to adequately evaluate the project application.

Project Summary Information: With each application being recommended for funding, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. **OCTA staff will request the PowerPoint when/if a project is recommended for funding.**

**Table 7-5  
Freeway/Arterial Street Transitions  
Interchange Improvements**

Category	Points Possible	Percentage
<b>Facility Usage</b>		<b>20%</b>
Existing ADT	10	10%
Current Project Readiness	10	10%
<b>Economic Effectiveness</b>		<b>25%</b>
Cost Benefit	10	10%
Matching Funds	10	10%
Coordination with Freeway Project	5	5%
<b>Facility Importance</b>		<b>25%</b>
Transportation Significance	<del>5</del> 10	<del>5</del> 10%
<del>MPAH Assessment Category</del>	<del>5</del>	<del>5%</del>
Operational Efficiencies	15	15%
<b>Benefit</b>		<b>30%</b>
Existing LOS	10	10%
LOS Reduction w/ Project	10	10%
Improvement Characteristics	10	10%
<b>Total</b>	<b>100</b>	<b>100%</b>



**FAST SCORING CRITERIA**  
**Point Breakdown for Freeway/Arterial Street Transitions Projects**  
**Maximum Points = 100**

**7-53**



## Regional Grade Separation Program (RGSP)

### Background

Seven rail crossing projects along the Master Plan of Arterial Highways (MPAH) network were identified by the CTC to receive Trade Corridors Improvement Funds (TCIF). These TCIF allocations required an additional local funding commitment. To meet this need, the Board approved the commitment of \$160 million in Regional Capacity Program funds to be allocated from M2. The RGSP captures these prior funding commitments.

Future calls for projects for grade separations are not anticipated.

## Chapter 8 - Regional Traffic Signal Synchronization Program (Project P)

### Overview

The Project P - Regional Traffic Signal Synchronization Program (RTSSP) includes competitive funding for the coordination of traffic signals across jurisdictional boundaries including Project based operational and maintenance funding. OCTA will provide funding priority to programs and projects, which are multi-jurisdictional in nature.

The RTSSP is based on the Traffic Signal Synchronization Master Plan (Master Plan). The Board adopted the Master Plan as an element of the MPAH on July 26, 2010. The Master Plan defines the foundation of the RTSSP. The Master Plan consists of the following components:

- Regional signal synchronization network
- Priority corridors for accelerated signal synchronization
- Definition of Traffic Forums
- Model agreements presenting roles and responsibilities for Project P
- Signal synchronization regional assessment every three years
  - NOTE: For Call for Projects 2019, Priority Corridors are not an eligible inclusion and no additional points will be awarded. A Priority Corridor is on the Signal Synchronization Network.

The Master Plan will be reviewed and updated by OCTA every three years and will provide details on the status and performance of the traffic signal synchronization activities over that period. Local agencies are required to adopt and maintain a Local Traffic Signal Synchronization Plan (Local Plan) that is consistent with the Master Plan and shall issue a report on the status and performance of its traffic signal synchronization activities. Details on both the Master Plan and requirements for Local Plan development are available in the "Guidelines for the Preparation of Local Signal Synchronization Plans". A hard copy of these guidelines can be requested from OCTA.

The remainder of this chapter details the key components of the RTSSP:

- Funding guidelines for the competitive call for projects
- 2019 Call for Projects

Projects compete for funding as part of the RTSSP. Projects submitted by local agencies as part of the call must meet specific criteria. Projects are rated based on scoring criteria and are selected based on their competitive ratings.

## Objectives

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

## 2019 Call for Projects

The 2019 Call for Projects (call) for Project P – the Regional Traffic Signal Synchronization Program (RTSSP) – under M2 will provide approximately **\$8 million** for signal coordination across Orange County. The following information provides an overview of the 2019 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 two (2) and the total number of intersections between the two corridors is 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 – includes the required implementation of optimized signal timing as well as any signal improvements proposed as part of a project.
  - b. Ongoing Operations and Maintenance (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). A 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 Primary Implementation. 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 report 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 Primary Implementation phase is completed.
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 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 ~~Friday~~Thursday, October ~~19~~18, 2018**. 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** 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: Jodie McCann

## 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)
- 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, ~~related systems of corridors, and 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 two (2) and the total number of intersections between the two corridors is 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-intersection50-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: 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 project study report or equivalent, environmental impact report, 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 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: 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).

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.
  - Before and After Study - Each local agency traffic engineer or equivalent reviews consultant developed draft and final project Before and After Study, approximately 2-5 hours per local agency.
  - Engineering design/review - Each local agency traffic engineer or equivalent reviews consultant developed engineer design within the local agency, approximately 2-4 hours per affected local agency intersection.

- System integration - Each local agency traffic engineer or equivalent provides support for this function (hours vary depending on improvements).
- Construction management - Each local agency traffic engineer or equivalent provides construction management support including inspection (hour vary depending on improvements).
- Ongoing Operations and Maintenance (O&M) (24 months) - Each local agency's traffic engineer or equivalent participates in continued project level meetings of 2-5 hours per local agency per month to review consultant traffic engineering progress. In addition, each local agency's traffic engineer or equivalent reviews consultant developed draft and final project report.

For projects designating a local agency as lead, the above may be used as a guide with additional local match related to implementation, development, design, monitoring and other costs that the local agency may choose to include as local match. For instance, O&M may be performed by in-house staff and be calculated using a different formula (e.g., 2-5 hours per local agency signal for 24 months).

## OCFundtracker Application Components

Final applications MUST be submitted via OCFundtracker and in hard copy format. Selection criteria must be inputted as part of the OCFundtracker online application and includes the following categories of information:

- Vehicle Miles Traveled
- Cost Benefit
- Project Characteristics
- Transportation Significance
- Maintenance of Effort
- Project Scale
- Number of Local agencies
- Current Project Readiness
- Funding Match Rate

## Application Review and Program Adoption

OCTA staff will conduct a preliminary review of all applications for completeness and accuracy, may request supplemental information for projects during initial staff evaluations, and prepare a recommended program of projects for the TSC. In addition, OCTA may hire a consultant(s) to verify information within individual applications including, but not limited to, project scope, cost estimates, vehicle miles traveled, and average daily traffic.

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 2018

Application submittal deadline: October 189, 2018

TSC/TAC Review: February/March 2019

Committee/Board approval: May 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. 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 Master Plan of Arterial Highways (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.**

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 ( $T_0$ ) 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 MUTCD traffic signal timing mandates and guidance
  - 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 and pedestrian 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, 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 and detection 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 Primary Implementation 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 Primary Implementation 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))
  - 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. but not requiring street construction
  - 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 (MUTCD) for traffic signal design as related to signal synchronization including pedestrian, bicycle, and vehicular timing intervals.
- ADA compliant Pedestrian Signal countdown 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 center-to-center communication “ready” with nearby agencies and/or OCTA
- Motorist information systems (up to 10 percent of total project costs)
- Video display equipment, including wall monitors, screens, mounting cabinets, and optical engines (up to 10 percent of total construction costs for PI phase only)
- 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, capital, and permitting fees and expenses
- 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 Accessibility-Accessible Pedestrian Push Button Systems
    - High-Intensity Activated crosswalk signaling systems (HAWK)

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 ~~not~~ pedestrian signal countdown, or special bicycle, or Transit Vehicle signal heads)
- Feasibility studies
- Relocation of utilities except for electrical service requirements
- Right-of-way

## Funding Estimates

The streets and roads component of M2 is to receive 32 percent of net revenues, 4 percent 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 will not be a part of the 2019 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)

Project Scale: Points are earned for including more intersections along signal synchronization network, or serving as a signal corridor "gap closure". (maximum: 10 points)

Number of Local Agencies: Points are earned for including multiple local agencies as part of the project. (maximum: 20 points)



Current Project Readiness: Points are earned based on the current status of the project development. Evidence of actual preliminary engineering performed for proposals requesting funding for implementation phases must be provided to qualify for points related to this attribute. (maximum for category: 10 points)

Funding Rate: The percentages shown in Table 8-1 apply to match rates above a local agency's minimum match requirement. M2 requires a 20 percent local match for RTSSP projects. Project match rates above 20 percent are limited to dollar match only. (maximum: 5 points)

## Table 8-1

### RTSSP SCORING CRITERIA Point Breakdown for Regional Traffic Signal Synchronization 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 Points: 10</b>			4		16
Project Feature		Points	3		12
<del>Timing only, no capital</del>		<del>10</del>	2		8
TMC/TOC and motorist information		2	1		0
New or upgraded communications systems		2	<b>Current Project Readiness Points: 10</b>		
New or upgraded detection		<del>2</del>	Project Status		Points
Intersection/field system modernization		2	<del>Preliminary Engineering Complete</del>		<del>5</del>
Minor Signal operational improvements		2	Re-timing of prior RTSSP project		<del>3</del>
New Protected/Permissive signals		<del>3</del>	Implementation within 12 months		5
Adaptive traffic & demonstration projects		<del>3</del>	<b>Funding Match Points: 5</b>		
TMC/ <del>CMC</del> TOC Connections between agencies		<del>3</del>	Overall Match %		Points
<b>Transportation Significance Points: 10</b>			50+%		5
Corridor Type		Points	40 - 49%		4
Signal Synchronization Corridor		5	35 - 39%		3
Corridor "Gap Closure"		5	30 - 34%		2
<b>Maintenance of Effort Points: 5</b>			25 - 29%		1
MOE After Grant Period		Points	< 25%		0
3 years		5			
2 years		3			
1 year		1			
None		0			

## Minimum Eligibility Requirements

All local agencies may participate in the RTSSP. Caltrans facilities are eligible for the RTSSP, but Caltrans cannot act as the lead agency. Local agencies will be required to provide a minimum of 20 percent matching funds for eligible projects (see definition of matching funds below).

The goal of the RTSSP is to provide regional signal synchronization that cross jurisdictional, geographical, or physical boundaries. To be eligible for funding through this Program, a project must meet the following requirements:

1. Be on a street segment that is part of the signal synchronization network, or the MPAH. The project must be consistent with Local Signal Synchronization Plans and support the Regional Traffic Signal Synchronization Master Plan goals.

2. Be multi-jurisdictional, have documented support from all participating local agencies (cities, County, or Caltrans) and a minimum of 20 signals

or

Be multi-jurisdictional, have documented support from all participating local agencies (cities, County, or Caltrans) and a minimum distance of five miles

or

Include at minimum three local agencies, have documented support from all participating local agencies (cities, County, or Caltrans), and have a minimum intersection density of four intersections per mile with a minimum of eight signals

or

Include the full length of the signal synchronization network corridor, or MPAH corridor

## Matching Funds

Local agencies along the corridor are required to provide minimum local match funding of 20 percent for each project. As prescribed by the M2 Ordinance, this includes local sources, M2 Fair Share, and other public or private sources (herein referred to as a “cash match”). Projects can designate local matching funds as cash match, in-kind match provided by local agency staff and equipment, or a combination of both.

“In-kind match” is defined as those actions that local agencies will do in support of the project including staffing commitment and/or new signal system investment related to improved signal synchronization. Examples of staffing commitment include, but are not limited to, implementation of intersection or system timing parameters, review of timing documentation, meeting participation, conducting or assisting in before/after studies, and other similar efforts that directly enhance the signal synchronization project.

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:

<b>Project category</b>	<b>Type of matching allowed*</b>
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
Traffic management center/traffic operations centers and motorist information systems	Cash match
Real-time traffic actuated operations and demonstration projects	Cash match
<u>Caltrans fees and expenses (labor and capital)</u>	<u>Cash match</u>

\* Project match beyond 20 percent is limited to cash match only.

\*\* In-kind 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. Operations and Maintenance 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 Notice to Proceed (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 misrepresentation of M2 funding will require remediation which may include repayment, reduction in overall grant, and/or other sanctions to be determined. Audits shall be conducted by OCTA Internal Audit Department or other authorized agent either through the normal annual process or on a schedule to be determined by the Board.

### **Data Compatibility**

All count data collected as part of any funded project shall be provided to OCTA in one of the two following digital formats: 1) NDS/Southland Car Counters style Excel spreadsheet; or 2) JAMAR comma separated value style text file. The data shall then be loaded into the OCTA Roadway Operations and Analysis Database System (ROADS). Any data files containing numeric intersection or node identifiers shall use the same node identification (ID) numbers as is stored in the ROADS database. OCTA shall provide a listing of intersections and corresponding unique node ID numbers. Each count data file shall adhere to the following file naming or csv. As an example, a turning movement count file for the intersection of Harbor Boulevard and Wilson Street in Costa Mesa would be given the filename CostaMesa\_Harbor-Wilson\_4534.csv.

All traffic signal synchronization data collected and compiled as part of any funded project for both existing (before) and final optimized (after) conditions shall be provided to OCTA in Synchro version 8/9 csv Universal Traffic Data Format (UTDF) format and version 7 combined data UTDF format. This data shall include the network layout, node, link, lane, volume, timing, and phase data for all coordinated times. All such data shall be consistent with the OCTA ROADS database.

## Exhibit 8-1

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

Project P Application Checklist	Included
<b>RTSSP Online Application – submitted through OCFundTracker</b> <ol style="list-style-type: none"> <li>Vehicle Miles Traveled</li> <li>Benefit Cost Ratio</li> <li>Project Characteristics</li> <li>Transportation Significance</li> <li>Maintenance of Effort</li> <li>Project Scale</li> <li>Number of Jurisdictions</li> <li>Current Project Readiness</li> <li>Funding Over-Match</li> </ol>	
<b>Section 1: Key Technical Information</b> <ol style="list-style-type: none"> <li>Project limits of the corridor to synchronize</li> <li>Designation of the corridor to synchronize: priority corridor, signal synchronization network corridor, or master plan of arterial highways corridor</li> <li>Project start date and end date, including any commitment to operate signal synchronization beyond the three-year grant period</li> <li>Signalized intersections that are part of the project</li> <li>Traffic Forum members</li> </ol>	
<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> <p>The plans shall include details about both phases of the project: <u>Primary Implementation</u> and <u>Ongoing Operations and Maintenance</u>. The plan should be organized using the following setup:</p> <p><u>Primary Implementation</u> shall include details about the following:</p> <ol style="list-style-type: none"> <li>Developing and implementing optimized signal synchronization timing (required)</li> <li>Producing a Before and After study for the proposed project (required)</li> <li>Proposed signal improvements (optional): <ol style="list-style-type: none"> <li>New or upgraded detection</li> <li>New or upgraded communication systems</li> <li>Intersection/field system modernization and replacement</li> <li>Minor signal operation improvements</li> <li>Traffic Management centers</li> <li>Real-time traffic actuated operations and demonstration projects</li> </ol> </li> </ol> <p><u>Ongoing Operations and Maintenance</u> will begin after the <u>Primary Implementation</u> of the project is completed. It shall include details about the following:</p> <ol style="list-style-type: none"> <li>Monitoring and improving optimized signal timing (required)</li> <li>Communications and detection support (optional)</li> </ol>	
<b>Section 5: Total Proposed Project Cost by Task</b>	
<b>Section 6: Project Schedule by Task for the 3 Year Grant Period</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>	

## Exhibit 8-2

### Sample Resolution for Orange County Regional Traffic Signal Synchronization Program Projects

A resolution of the \_\_\_\_\_ City Council approving the submittal of \_\_\_\_\_ improvement project(s) to the Orange County Transportation Authority for funding under the competitive Measure M2 Regional Traffic Signal Synchronization Program.

THE CITY COUNCIL OF THE CITY OF \_\_\_\_\_ HEREBY RESOLVES, DETERMINES, AND ORDERS AS FOLLOWS THAT:

- a) WHEREAS, the Measure M2 Regional Traffic Signal Synchronization Program targets over 2000 signalized intersections across Orange County to maintain traffic signal synchronization, improve traffic flow, and reduce congestion across jurisdictions; and
- b) WHEREAS, the City of \_\_\_\_\_ has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive revenues as part of Measure M2;
- c) WHEREAS, the CITY must include all projects funded by Net Revenues in the seven-year Capital Improvement Program as part of the Renewed Measure M Ordinance eligibility requirement.
- d) WHEREAS, the CITY authorizes a formal amendment to the seven-year Capital Improvement Program to add projects approved for funding upon approval from the Orange County Transportation Authority Board of Directors, if necessary.
- e) WHEREAS, the City of \_\_\_\_\_ has currently adopted a Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local agencies' efforts to synchronizing traffic signals across local agencies' boundaries; and
- f) WHEREAS, the City of \_\_\_\_\_ will provide matching funds for each project as required by the Comprehensive Transportation Funding Programs Procedures Manual; and
- g) WHEREAS, the City of \_\_\_\_\_ will not use Renewed Measure M funds to supplant Developer Fees or other commitments; and
- h) WHEREAS, the City of \_\_\_\_\_ desires to implement multi-jurisdictional signal synchronization listed below; and

NOW, THEREFORE, BE IT RESOLVED THAT:

The City Council of the City of \_\_\_\_\_ hereby requests the Orange County Transportation Authority allocate funds in the amounts specified in the City's application to said City from the Transportation Signal Synchronization Program. Said funds, if approved, shall be matched by funds from said City as required and shall be used as supplemental funding to aid the City in signal synchronization along the following street(s):

\*Required language a-h



- Revised Cost Estimate (initial)
- Plans, Specifications, and Estimate (PS&E) Certification (initial and final)
- Certification of Phase (initial)
- Final Report Submission
- Division of Cost Schedule (final)
- Work Schedule - OCTA requires a complete project schedule, including expected start and completion dates for tasks in the Primary Implementation and Ongoing Maintenance and Operation phases (initial and final)
- Right-of-Way Documents - No requirements as Right-of-Way is not a part of RTSSP

Detail on other aspects on Initial Payment Requests for Primary Implementation including project advancement and reimbursement is available in this chapter.

## **Example of Initial Reimbursement for Primary Implementation:**

CTFP Grant Allocation	OCTA Match Rate	Local Agency Match Rate
\$900,000	80%	20%

### **Step 1**

$$\text{Eligible Expenses} \times \text{OCTA Match Rate} = \text{Product}$$

$$\$ 900,000.00 \times 80\% = \$ 720,000.00$$

### **Step 2**

Check if Product is greater than or less than

**CTFP Allocation Amount:** **\$900,000**

### **Step 3**

Use the lower of the **Product** or **Allocation** **\$ 720,000.00**

In this case the \$720,000 amount is less

### **Step 4**

Then multiply the **\$720,000** amount by **75%** (Initial Payment Percentage)

\$ 720,000.00	X	75%	=	<b>\$540,000.00</b>
				<b>Invoice Amount</b>