August 1, 2022

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Release 2023 Annual Call for Projects for Measure M2 Comprehensive Transportation Funding Programs

Overview

The Measure M2 Comprehensive Transportation Funding Programs guidelines provide the mechanism for administration of the annual competitive call for projects for the Measure M2 funding program. The 2023 Regional Capacity Program (Project O) and Regional Traffic Signal Synchronization Program (Project P) 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 2023 annual call for projects for the Regional Capacity Program.

C. Authorize staff to issue the 2023 annual call for projects for the Regional Traffic Signal Synchronization Program.

Background

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

The Regional Traffic Signal Synchronization Program (RTSSP) provides M2 Project P funding for multi-agency, corridor-based signal synchronization throughout Orange County to support efficient operation of existing arterials.

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

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

The CTFP guidelines identify procedures and requirements that local agencies must satisfy in order to apply for M2 funding and how project applications are evaluated. The guidelines also define how local agencies can seek reimbursement once funds are awarded. The guidelines were first approved by the OCTA Board of Directors (Board) on March 22, 2010, and were most recently updated and approved in March 2022.

Discussion

Recommended updates to the guidelines have been prepared in anticipation of the release of the 2023 annual call for projects (call) for the RCP and RTSSP. Staff comprehensively reviewed the guidelines and worked closely with both the Technical Steering Committee (TSC) and the Technical Advisory Committee (TAC) to determine areas that needed to be adjusted and/or updated. The guidelines were also reviewed and updated, as appropriate, to provide for better consistency and streamlining throughout the document.

The proposed 2023 guidelines have been updated to reflect appropriate deadlines and call cycle dates for the 2023 call. A total funding target of approximately $45 million is available for Project O and Project P for this call cycle. However, this number may be adjusted based on updated sales tax forecasts that will be included in OCTA's upcoming Comprehensive Business Plan, anticipated for Board review in fall 2022.

In this cycle, staff is recommending several notable changes to the guidelines, which are described below.

RCP – Project O

The changes that are recommended for the RCP were derived from requests by the local jurisdictions and from lessons learned. These include:

- Revisions to the "Operational Attributes" scoring criteria to emphasize safety improvements and to incentivize incorporation of Active Transportation Program attributes (within the roadway) that are executed as part of an approved local or regional transportation plan; and
- Clarification of eligibility of utility relocations with local agency-demonstrated prior rights.

RTSSP – Project P

There are several technical and clarifying changes that are recommended for the RTSSP, which were derived from lessons learned and from efforts to emphasize improvements that best align with the updated Traffic Signal Synchronization Master Plan. The most significant of these proposed changes are listed below:

- Revisions to the point spread and modifications to the "Project Characteristics" scoring criteria to emphasize more critical project elements and prioritize faster, cost-effective project delivery;
- Updates to the project improvements categories with clarified scoring and component descriptions in line with the modified "Project Characteristics" scoring;
- Revisions to the "Current Project Status" scoring criteria to allow for greater competition among applications to claim signal retiming points and to incentivize projects for corridors that have not yet implemented signal coordination improvements through the RTSSP; and
- Clarification of ineligibility of regular signal operations and maintenance, specifically related to communication repairs.

For this call cycle, OCTA is not in a position to lead RTSSP projects on behalf of local agencies. OCTA staff is managing previously committed signal synchronization projects and undertaking the Countywide Signal Synchronization Baseline project to synchronize approximately 2,500 traffic signals throughout. Orange County.

Attachment A provides a table of all proposed guidelines changes, and Attachment B provides a marked-up version of the guidelines in track changes format. It should be noted that proposed changes that were deemed to be non-substantive (i.e., wording/grammatical, streamlining, and minor clarifications) are generally not described in this report but are shown in the attachments.

The guidelines revisions were presented to the TSC and TAC in June 2022, and both committees, after providing input, approved the recommended changes. Accordingly, these proposed revisions are now being submitted to the Board for final consideration and approval. Authorization is also requested to initiate the 2023 call for the M2 RCP and RTSPP to support local streets and roads improvement projects throughout Orange County.

Next Steps

If the Board approves the recommendations noted above, staff will notify the local jurisdictions of the call's initiation timing and any other pertinent information. Staff will offer a workshop for local agencies as an additional resource. The workshop is tentatively scheduled for August 23, 2022. Grant applications will be due to OCTA by October 20, 2022, and based upon selection criteria specified in the 2023 guidelines, projects will be prioritized for TSC, TAC, and Board consideration in spring 2023. Selected projects can be eligible to receive funding as early as July 1, 2023, through fiscal year 2025-26 depending on each project's schedule. Grant allocations for this call will be escalated, consistent with the guidelines, based on inflationary conditions at the time projects are awarded.

Summary

M2 provides funding for roadway improvements through the RCP and signal synchronization improvements through the RTSSP. The guidelines serve as the mechanism that OCTA uses to administer these competitive funding sources. Recommended changes to the guidelines were presented and approved by both the TSC and TAC in June 2022, and staff is now seeking Board approval of proposed modifications to the 2023 guidelines and authorization to initiate the 2023 RCP and RTSSP annual call.

Attachments

A. 2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List
B. Guidelines Excerpt, Comprehensive Transportation Funding Programs Guidelines, 2023 Call for Projects

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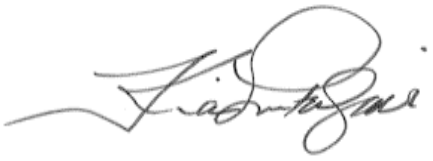

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ATTACHMENT A

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
1	Definitions	Definitions	x	Correction of reference to Precept 12
2	Acronyms	Acronyms	xiii	Correction to Capital Improvement Program
3	7	Call/Applications	7-3	Update year of the call from 2022 to 2023, update three-year project programming period, remove funding available information, and correct Program Precepts reference to Section V
4	7	Applications	7-4	Update submittal deadline to Thursday, October 20, 2022. Change number of hardcopy applications submittals required from 3 to 1 printed copy, add requirement of electronic application submittal, and update contact information
5	7	CTFP Application Checklist Guide	7-5 7-6 7-7	Add "Project Description, Scope of Work and Project Limits" to construction phase checklist for ACE (Exhibit 7-1), ICE (Exhibit 7-2), and FAST (Exhibit 7-3)
6	7	Application Review Process	7-13	Update proposed call schedule to the following: • Board authorization to issue call: August 8, 2022 • Application submittal deadline: October 20, 2022 • TSC/TAC Review: February/March 2023 • Committee/Board approval: April/May 2023
7	7	Utility Relocations	7-17	Clarify that: Adjustment of utilities to grade are not eligible for reimbursement unless local agency has prior rights
8	7	Selection Criteria	7-21 7-22	Update submittal deadline for OCTAM modeling request to September 8, 2022
9	7	Selection Criteria/Operational Attributes (within the roadway)	7-23	Clarify that: points are awarded for only one category per project feature. Remove section “Remove On-street Parking” and add section “Elements of Approved Active Transportation Plan/Active Transportation Focused Sections of Other Types of Mobility Plans” describing new project feature of incorporating elements of a city council-approved active transportation plan or if very focused, in an active transportation focused section of other types of approved mobility plans
10	7	New Facilities	7-25	Update submittal deadline for OCTAM modeling request to September 8, 2022

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
11	7	Table 7-1 Street Widening Selection Criteria	7-29	Change maximum points possible for “Existing ADT” and “Existing VMT” to a combined maximum of 15 points and for “Operational Efficiency” from ten to 15 points. Adjust percentage distributions accordingly
12	7	Table 7-2 Street Widening Point Breakdown/ACE	7-30	Change maximum points possible for “Facility Usage” from 30 to 25 points, for “Existing ADT & VMT” to a combined maximum of 15 points, for “Facility Importance” from 20 to 25 points, and for “Operational Attributes (within the roadway) from 10 to 15 points. Adjust points for “Meets MPAH Configs,” “Pedestrian Facilities (New),” “Bike Lanes (New)”, and “Safety Improvements”. Add “Active Transportation Focused Plan Elements.” Remove “Remove On-Street Parking”
13	7	Utility Relocations	7-35	Clarify that: Adjustment of utilities to grade are not eligible for reimbursement unless local agency has prior rights and that new or relocated fire hydrants are not eligible
14	7	Selection Criteria/Operational Attributes (within the roadway)	7-36	Clarify that: Points are awarded for only one category per project feature
15	7	Selection Criteria/Operational Attributes (within the roadway)	7-37	Add section “Elements of Approved Active Transportation Plan/Active Transportation Focused Sections of other Types of Mobility Plans” describing new project feature of incorporating elements of a city council-approved active transportation plan or if very focused, in an active transportation focused section of other types of approved mobility plans
16	7	Selection Criteria/LOS Improvement	7-38	Update submittal deadline for proposed traffic modeling alternative methodology to September 8, 2022
17	7	Table 7-4 Intersection Widening Point Breakdown/ICE	7-42	Adjust points for “Bike Lanes,” “Pedestrian Facilities (New),” and “Safety Improvements.” Add “Active Transportation Focused Plan Elements”
18	7	Table 7-4 Intersection Widening Point Breakdown/ICE	7-42	Minor correction to “LOS Reduction w/ Project” range, 0.1-0.4

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
19	7	Utility Relocations	7-45	Clarify that: Adjustment of utilities to grade are not eligible for reimbursement unless local agency has prior rights and that new or relocated fire hydrants are not eligible
20	7	Selection Criteria/Operational Attributes (within the roadway)	7-47	Clarify that: Points are awarded for only one category per project feature
21	7	Selection Criteria/Operational Attributes (within the roadway)	7-48	Add section “Elements of Approved Active Transportation Plan/Active Transportation Focused Sections of other Types of Mobility Plans” describing new project feature of incorporating elements of a city council-approved active transportation plan or if very focused, in an active transportation focused section of other types of approved mobility plans
22	7	Selection Criteria/LOS Improvement	7-48	Update submittal deadline for proposed traffic modeling alternative methodology to September 8, 2022
23	7	Table 7-6 Interchange Improvement Point Breakdown/FAST	7-53	Adjust points for “Pedestrian Facilities (New)” and “Safety Improvements.” Add “Active Transportation Focused Plan Elements”
24	8	Overview	8-1	Update year of the call from 2022 to 2023
25	8	Call for Projects	8-2	Remove funding available information
26	8	Call for Projects	8-2	For contiguous projects clarified language to state "signalized intersections"
27	8	Call for Projects	8-3	In section on reapplying - replace "or commitment to operate signal synchronization beyond the three-year grant period is completed, whichever ends later" with "is completed"
28	8	Applications	8-3	Update submittal deadline to Thursday, October 20, 2022, and update number of hardcopy applications submittals required from three to one copy
29	8	Applications	8-4	Updated contact information

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
30	8	Lead Agency/ OCTA Lead	8-6	Add under OCTA Lead "Not available for 2023 Call for Projects." Staff is not offering to lead projects due to Countywide Signal Synchronization Baseline Project
31	8	OCFundtracker Application Components	8-6	Remove "Maintenance of Effort"
32	8	OCFundtracker Application Components	8-6	Remove duplicate listing of "Project Scale"
33	8	Application Review and Program Adoption	8-7	Update proposed call schedule to the following: • Board authorization to issue call: August 8, 2022 • Application submittal deadline: October 20, 2022 • TSC/TAC Review: February/March 2023 • Committee/Board approval: April/May 2023
34	8	Ineligible Expenditures	8-9	Clarify that: Ineligible regular signal operation and maintenance expenses include "communication repairs"
35	8	Selection Criteria	8-10	Change Transportation Significance maximum score from 30 to 25 points
36	8	Selection Criteria/ Project Characteristics	8-10 8-11	Change project characteristics scoring methodology to award points based on project's cumulative average improvement score
37	8	Table/Eligible Improvements	8-11	Clarify Project P Project Characteristics criteria description to specify that the eligible improvements and requirements in this category only apply to signalized intersections included in the application
38	8	Table/Eligible Improvements	8-12	Add Eligible Improvements Table in line with reorganized project characteristics and point breakdown
39	8	Selection Criteria/ Project Characteristics	8-13	Add section "Signal Timing (No Capital). Improvements in this category can only be selected if the entire project is a timing only project without any field improvements"

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
40	8	Selection Criteria/ Project Characteristics	8-13	Peer-to-Peer program on traffic control devices add “that have existing connectivity”
41	8	Selection Criteria/ Project Characteristics	8-13	Remove “Bluetooth and/or connected vehicle roadside units for at least three (3) signals on the projects…"
42	8	Selection Criteria/ Project Characteristics	8-13	Add section "Signal Communication. Scores for this improvement category varies depending on the type of improvement coupled with the existing status of the signal, whether online or offline..."
43	8	Selection Criteria/ Project Characteristics	8-13	Remove "Replacement fiber optic or copper cabling for network communication. Fiber optic is the preferred medium and includes pull boxes, network switches, and distribution systems"
44	8	Selection Criteria/ Project Characteristics	8-14	Add section "Field Elements”. This improvement category is focused on the field equipment/devices that will ensure the signals are enhanced to support advanced signal operations. Scores for this improvement category will vary depending on the existing lifespan of equipment/devices being upgraded. It is the applicant agency’s responsibility to ensure the appropriate score is assigned and OCTA may request for supporting documentation"
45	8	Selection Criteria/ Project Characteristics	8-15	Relocate bulleted items for automated traffic signal performance measures, intelligent cameras, detection system, installation of new and/or improved traffic control devices, new or upgraded communication systems, and intersection/field system modernization under “Field Elements”
46	8	Selection Criteria/ Project Characteristics	8-16	Relocate and clarify meaning of "Minor Signal Operational Improvements” by adding “Scores for this improvement category will vary depending on the existing lifespan. It is the applicant agency’s responsibility to ensure the appropriate score is assigned and OCTA may request for supporting documentation"
47	8	Selection Criteria/ Project Characteristics	8-16	Relocate "Emergency Vehicle Preempt (EVP) intersection control equipment only" to under “Field Elements”

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
48	8	Selection Criteria/ Project Characteristics	8-17	Expand section Traffic Management Center Traffic Operations Centers (TOC) to include "Scores for this improvement category will vary depending on the existing lifespan of equipment or software being upgraded. It is the applicant agency's responsibility to ensure the appropriate score is assigned and OCTA may request for supporting documentation"
49	8	Selection Criteria/ Project Characteristics	8-17	Add description of California Department of Transportation section
50	8	Selection Criteria/ Project Characteristics	8-18	Add "Each project intersection that has proposed improvements will receive an average score per the specific improvements noted above and the project's score will be an average of all intersection averages"
51	8	Selection Criteria/ Project Characteristics	8-18	Remove "Note: that only one feature can be selected for any qualifying improvement; for example, an implementation of a new video detection system that can distinguish bicycles can be selected for points under the "Separate Bicycle/ADA Pedestrian Detection" or "New/Upgraded Detection", but not both
52	8	Selection Criteria/ Maintenance of Effort	8-18	Remove "Maintenance of Effort" section
53	8	Selection Criteria/ Current Project Status	8-18	Under Current Project Status add "(RTSSP of Measure M Signal Improvement Program)..."
54	8	Selection Criteria/ Current Project Status	8-18	Under Current Project Status add "OR at least 75 percent of the corridor (on MPAH) has never been funded"
55	8	Table 8-1 Point Breakdown	8-20	Change maximum points possible for "Transportation Significance" from 30 to 25 points. Adjusted point distribution for "Vehicle Miles Traveled"
56	8	Table 8-1 Point Breakdown	8-20	Change maximum points possible for "Project Characteristics" from ten to 20 points. Replace "Project Features" with "Project Average Improvement Score Range" and associated point spread
57	8	Table 8-1 Point Breakdown	8-20	Remove "Maintenance of Effort" category

2023 CTFP Guidelines (Project O and Project P) – Proposed Changes List				
No.	**Chapter**	**Section**	**Page No.**	**Proposed Change**
58	8	Table 8-1 Point Breakdown	8-20	Under "Current Project Status," add "Timing 75 percent of new eligible project"
59	8	Data Compatibility	8-24	Second paragraph, add "or later" after "Synchro version 10"
60	8	Project P – Application Checklist	8-26	Exhibit 8-1, Remove Maintenance of Effort and add language to match sections and items indicated in the revised Supplemental Application

Acronyms

ACE – Arterial Capacity Enhancement
ADA – Americans with Disabilities Act
ADT – Average Daily Traffic
Board – Board of Directors
Call – Call for Projects
CTFP – Comprehensive Transportation Funding Programs
FAST – Freeway Arterial/Street Transitions
ICE – Intersection Capacity Enhancement
LOS – Level of Service
MPAH – Master Plan of Arterial Highways
OCTA – Orange County Transportation Authority
OCTAM – Orange County Transportation Analysis Model
TAC – Technical Advisory Committee
TSC – Technical Steering Committee
VMT – Vehicle Miles Traveled

ATTACHMENT B

GUIDELINES EXCERPT

COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS GUIDELINES

2023 CALL FOR PROJECTS

Orange County Transportation Authority

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III. Definitions

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

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

13. The term "implementing agency" is the agency responsible for managing the scope, cost and schedule of the proposed project as defined in the grant application.
14. The term "lead agency" shall refer to the agency responsible for the submission of the grant application.
15. The term "Master Funding Agreements" or any form thereof shall refer to cooperative funding agreements described in Precept 4.
16. The term "match rate", "local match", "local matching funds", or any variation thereof, refers to the match funding that an agency is pledging through the competitive process and disposed of through procedures in Chapter 9.
17. A "micro-purchase" is any purchase that does not exceed $2,500. For the purposes of proof of payment, only an invoice is required.
18. The term "obligate" or any variation thereof shall refer to the process of encumbering funds.
19. "OCFundtracker" refers to the online grant application and payment system used by OCTA to administer the competitive programs awarded through the CTFP. Refer to https://ocfundtracker.octa.net/.
20. "Primary Implementation (PI) Report" refers to the report required at the end of the PI phase. It is a technical report that documents the work completed during the PI phase, which contains the Before and After Study. This is a separate report from the project final report required by the M2 Ordinance, Attachment B, Section III.A.9.
21. "Operations and Maintenance (O&M) Report" refers to the report required at the conclusion of O&M phase. It is a technical report that documents the work completed during O&M phase. This is a separate report from the project final report required by the M2 Ordinance, Attachment B, Section III.A.9.
22. The term "project phase" or any form thereof shall refer to the three distinct project phases (engineering, right-of-way, and construction) OCTA funds through the CTFP. Additionally, the "engineering phase" shall include the preparation of environmental documents, preliminary engineering, and ROW engineering. The "ROW phase" shall include ROW acquisition, utility relocation and adjustment to private property as contained in the ROW agreements, private improvements taken, Temporary Construction Easements (TCE), severance damages, relocation costs that are the legal obligation of the agency, as well as loss of good will, fixtures and equipment including legal cost. The "construction phase" shall include

construction and construction engineering. A fourth phase defined as "Operations & Maintenance" applies to select programs and is described more fully in the applicable program chapter.

23. Programming for RCP (Project O) follows a sequential process related to Planning and Implementation elements as described more fully in Chapter 2. The Planning step includes environmental evaluation, planning and engineering activities. The Implementation step includes ROW and construction activities.

24. The term "project phase completion" refers to the date that the local agency has paid the final contractor/consultant invoice (including retention) for work performed and any pending litigation has been adjudicated for the engineering phase or for the ROW 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.

25. The term "Public-Private Partnerships" is defined as direct financial contributions, sponsorships or ROW dedications for eligible program activities.

26. 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.

27. 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.

28. "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.

29. The term "Work Force Labor Rates (WFLR)" include direct salaries plus direct fringe benefits.

30. The term "offset intersection" or "offset signal" refers to traffic signalized intersections within 2,700 feet from either direction of the project corridor. (Project P Only)

IV. Acronyms

AADT – Average Annual Daily Traffic

ACE – Arterial Capacity Enhancements

ADA – Americans with Disabilities Act of 1990

ADT – Average Daily Trips

A/E – Architectural/Engineering

APIRI – Applications Programming Interface with Referenced Implementations

ATC – Advanced Transportation Controller

ATMS – Advanced Transportation Management System

BMP – Best Management Practices

B/RVH – Boardings Divided by the Revenue Vehicle Hours

C2C – Center-to-Center Communication

CASQA – California Stormwater Quality Association

CAPPM – Cost Accounting Policies and Procedures Manual

CCI – Construction Cost Index

CCTV – Closed Circuit Television

CDS – Continuous Deflection Separator

CFS – Climate Forecast System

CE – Categorical Exclusion

CEQA – California Environmental Quality Act

CIP – Capital Improvement ~~Plan~~Program

CPI – Catchment Prioritization Index

CSPI – Corridor System Performance Index

CTC – California Transportation Commission

CTFP – Comprehensive Transportation Funding Programs

ECAC – Environmental Cleanup Allocation Committee

ECP – Environmental Cleanup Program

EIR – Environmental Impact Report

ENR – Engineering News Record

EVP – Emergency Vehicle Preempt

FAST – Freeway Arterial/Streets Transition

FTA – Federal Transit Administration

FY – Fiscal Year

GIS – Geographic Information System

GSRD – Gross Solid Removal Device

HAWK – High-Intensity Activated Crosswalk Signaling Systems

ICE – Intersection Capacity Enhancements

ICU – Intersection Capacity Utilization

ID – Identification

IRWMP – Integrated Regional Water Management Plan

ITS – Intelligent Transportation System

LFS – Local Fair Share

LID – Low-Impact Development

LOS – Level of Service

M2 – Measure M2

MG/yr – Megagrams per Year

MPAH – Master Plan of Arterial Highways

MUTCD – Manual on Uniform Traffic Control Devices

ND – Negative Declaration

NDS – National Data & Surveying Services

NEPA – National Environmental Policy Act

NTP – Notice to Proceed

O&M – Operations and Maintenance

OCTA – Orange County Transportation Authority

OCTAM – Orange County Transportation Analysis Model

PA/ED – Project Approvals/Environmental Documentation

PCI – Pavement Condition Index

PI – Primary Implementation

PSR – Project Study Report

PS&E – Plan, Specification and Estimate

PUC – Public Utilities Commission

RCP – Regional Capacity Program

RGSP – Regional Grade Separation Program

RTSSP – Regional Traffic Signal Synchronization Program

ROADS – Roadway Operations and Analysis Database System

ROW – Right-of-Way

RVH – Revenue Vehicle Hours

SAR – Semi-Annual Review

SBPAT – Structural BMP Prioritization Analysis Tool

SLPP – State-Local Partnership Program

TAC – Technical Advisory Committee

TCE – Temporary Construction Easement

TCIF – Trade Corridors Improvement Funds

TDA – Transportation Development Act

TMC – Traffic Management Center

TOC – Traffic Operations Center

TPC – Total Project Cost

TPI – Transportation Priority Index

TSC – Technical Steering Committee

TSP – Transit Signal Priority

UPS – Uninterruptible Power Supply

UTDF – Universal Traffic Data Format

v/c – Volume/Capacity

VMT – Vehicle Miles Traveled

WFLR – Work Force Labor Rates

WQLRI – Water Quality Load Reduction Index

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Chapter 7 – Regional Capacity Program (Project O)

Overview

The RCP (Project O) 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 and the California State Controller's Guidelines Relating to Gas Tax Expenditures (March 2019). These Guidelines are available at the following link: https://sco.ca.gov/Files-AUD/gas_tax_guidelines31219.pdf.

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 Regional 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 California Transportation Commission (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.

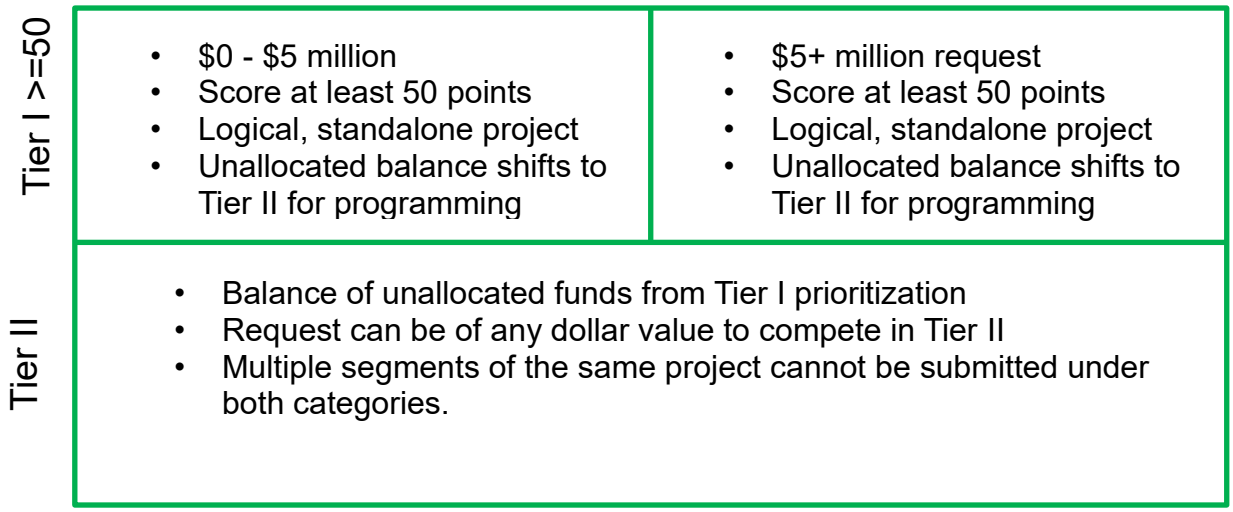
Programming Approach

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, ROW, construction or a combination of these activities. Effective grant programs include a combination of project development as well as implementation projects. In order to ensure continued distribution of funding opportunities between small and large-scale projects, a tiered funding approach will be used.

Typically, OCTA has made approximately $32 million available for each RCP (Project O) programming cycle. Category 1 projects are limited to those projects requesting $5 million or less. Category 2 projects are defined as those requesting more than $5 million in Measure M2 funds.

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

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



2023 Call for Projects

~~Contingent on OCTA Board approval, the 2022 Call for Projects (call) for the RCP (Project O) and Regional Traffic Signal Synchronization Program (Project P), will make approximately $xx million in M2 funds available to support street and roads and signal synchronization improvements across Orange County. The target for this program is $xx million, but recommendations for Project O may be higher or lower depending on the projects submitted.~~

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 23/24 – 25/26), 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 ~~I~~V 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 2023 call for projects by **5:00 p.m. on Thursday, October 20, 2022. Late and/or incomplete submittals will not be accepted.**

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

Additionally, ~~three~~**one (1) unbound hardcopy and one electronic copy on a USB, thumb drive, memory stick, or via electronic file upload and/or email** of the application and any supporting documentation must be submitted to OCTA by the application deadline. Please note, hardcopies of the supporting plans, drawings and/or specifications are to be in a minimum size of 11 x 17 inches.

Hardcopy applications should be mailed to:

OCTA
Attention: ~~Joseph Alcock~~ Adrian Salazar
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

Electronic application copies can be sent via email to: asalazar@octa.net

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 Description, Scope of Work and Project Limits
- 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 (10%) 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/ICU 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 Description, Scope of Work and Project Limits
- 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 (10%) 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 Description, Scope of Work and Project Limits
- 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*
- 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 (10%) 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

OCFundtracker 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. ROW cost estimate should include parcel information (including project area needed), improvements taken, severance damages, ROW engineering, appraisal and legal costs. Construction should include a listing of all bid items including a maximum 10 percent (10%) allowance for contingencies and a maximum 15 percent (15%) 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.**

ROW Acquisition/Disposal Plan

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

"ROW 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 (10%) 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 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 (10%) 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 be included in hard copy attachments at a minimum size of 11 x 17 inches and include:
   a. Existing and proposed ROW (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 ROW 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. ROW 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 8, 2022

Application submittal deadline: October 20, 2022

TSC/TAC Review: February/March 2023

Committee/Board approval: April/May 2023

Funding

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

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

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, ROW 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
- ROW 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 ROW (eligible improvements up to 10 percent (10%) 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 ROW settlement agreement
- Utility relocation where the serving utility has prior rights as evidenced by a recorded legal document
- Roadway grading within the ROW (inclusive of any TCE and/or ROW agreement related improvements) should not exceed a depth for normal roadway excavation (e.g. structural section). Additional grading will be considered on a case by case basis. Agencies shall provide supporting documentation (e.g. soils reports, ROW agreements) to justify the additional grading.
- Additional ROW 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 (25%) 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 (25%) of the total eligible construction cost) of an eligible improvement. Program participation shall not exceed 10 percent (10%) of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in ACE Program funding. Storm drains outside standard MPAH ROW widths are not eligible, excluding catch basins within reasonable distance and in general proximity to a project intersection (e.g. within ten feet of the curb return). Catch basins and drainage systems extending into adjacent areas (including public streets) shall not be eligible past the first catch basin 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 (25%) 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 is eligible for structural sections if within the standard MPAH cross section for the facility (inclusive of any TCEs). Rough grading can be considered eligible, so long as it supports MPAH improvement(s) within the ROW and does not supplant developer (or any other project obligations). Any proposed rough grading outside of the MPAH ROW, will be evaluated by OCTA on a case-by-case basis but must be tied to the MPAH improvement(s) and not supplant developer (or any other project obligations).

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

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

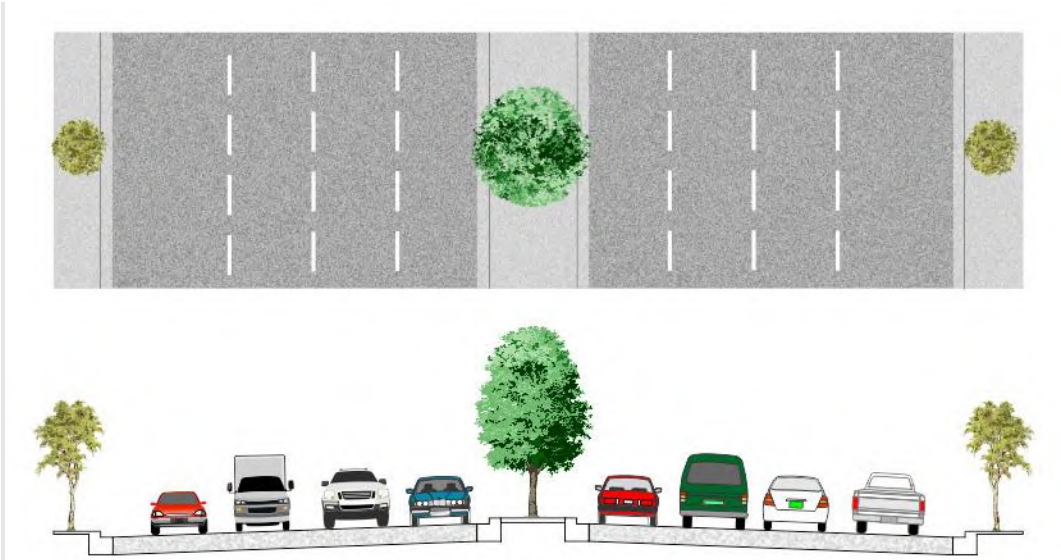
Ineligible Expenditures

Items that are not eligible under the ACE Program are:

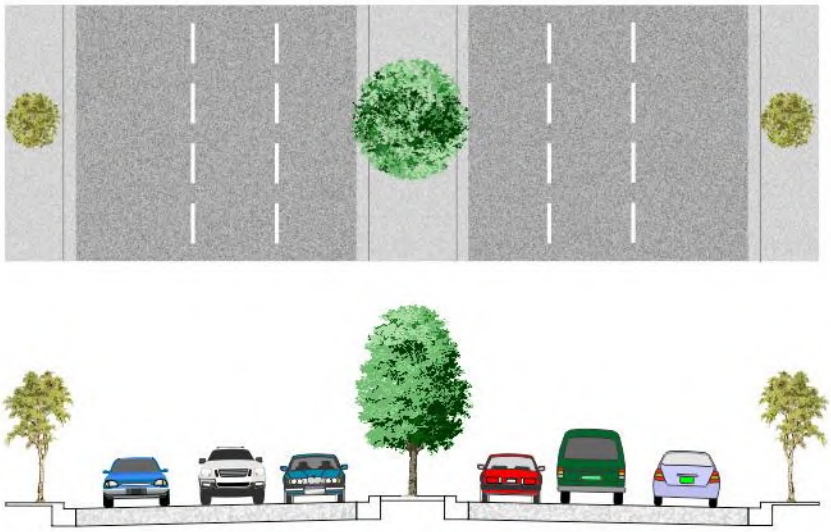
- Grading outside of the roadway ROW not related to a TCE or ROW agreement is generally considered ineligible but can be evaluated by OCTA on a case by case basis, but must be tied to the MPAH improvement(s) and not supplant developer (or any other project obligations).
- Rehabilitation (unless performed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

Exhibit 7-5

Standard MPAH Cross Sections



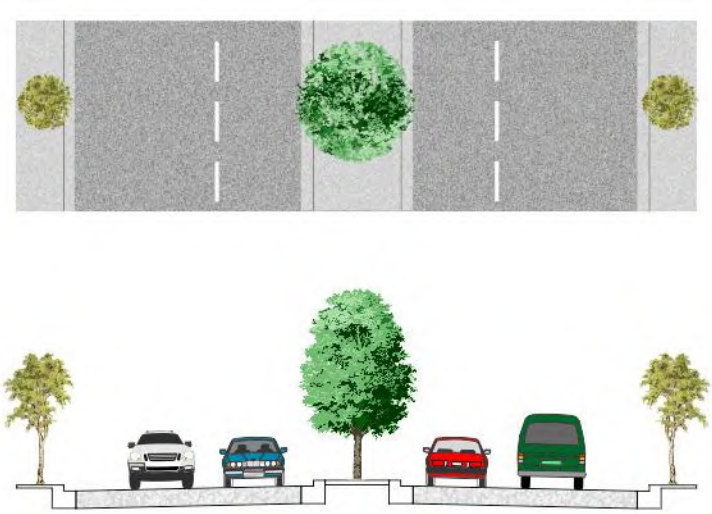
PRINCIPAL
144 FT
(8 LANES, DIVIDED)



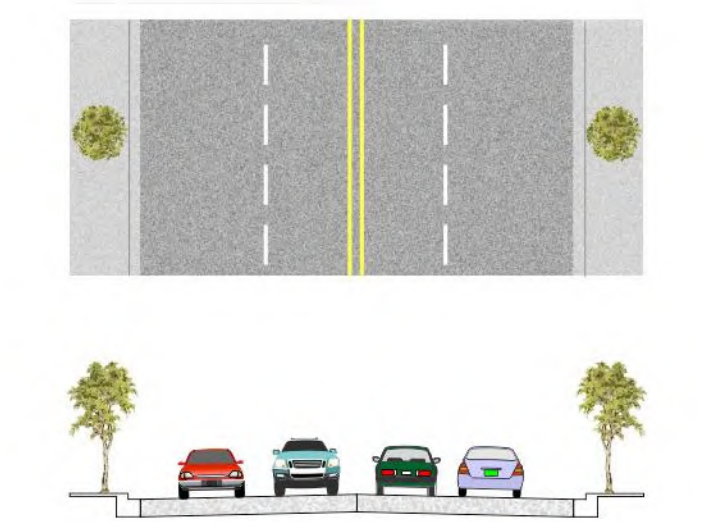
MAJOR
120FT
(6 LANES, DIVIDED)

Exhibit 7-5 *continued*

Standard MPAH Cross Sections



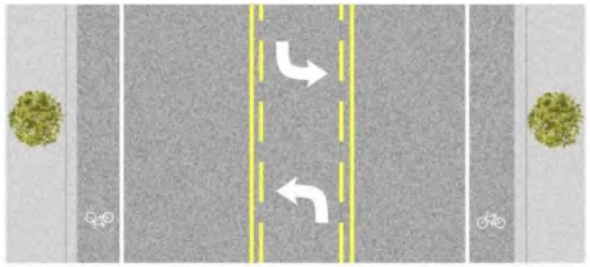
PRIMARY
100 FT
(4 LANES, DIVIDED)

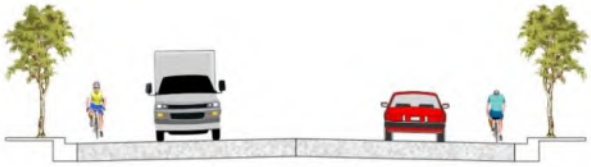


SECONDARY
80 FT
(4 LANES, UNDIVIDED)

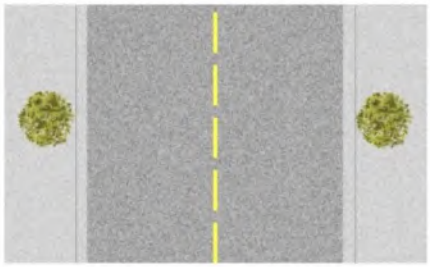
Exhibit 7-5 *continued*

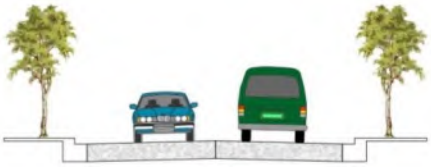
Standard MPAH Cross Sections





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 LOS:

	Level of Service (LOS)				
Type of Arterial	**A** .51 - .60 v/c	**B** .61 - .70 v/c	**C** .71 - .80 v/c	**D** .81 - .90 v/c	**E** .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's 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 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. **The OCTAM modeling request**

deadline is September 8, 2022 for the 2023 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.

- Environmental Approvals – applies where all environmental clearances have been obtained on the project.
- Preliminary design (35 percent (35%) level) – will require certification from the City Engineer and is subject to verification.
- Final Design (PS&E) – applies where the jurisdiction's City Engineer or other authorized person has approved the final design.
- ROW (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 ROW possession will be required with application submittal.
- ROW (all easements and titles) – applies where no ROW is needed for the project or where all ROW has been acquired/dedicated.

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 (50%) 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 (30%) and a local match of 45 percent (45%) is pledged, points are earned for the 15 percent (15%) 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.

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. Only one feature can be selected for any qualifying category. For example, installation of a bike lane that is identified in an adopted ATP plan can be awarded points under "Bike Lanes" or " Active Transportation Focused Plan Elements," but not both.

- 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.
- 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.
- Elements of Approved Active Transportation Plan/Active Transportation Focused Sections of other Types of Mobility Plans: Incorporate project features that are approved in an active transportation plan or if very focused, in active transportation focused sections of other types of plans that improve mobility. These elements can include bike infrastructure and pedestrian elements. Other elements of an active transportation plan may be considered on a case by case basis. Documentation of approved plan will be required with application submittal and assignment of points for active transportation focused sections of other types of plans will be considered on a case by case basis.
- ~~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. Points are awarded at construction phase only.~~
- Sustainability Elements: Includes the use of multiple complete street elements, the installation of solar lighting within the roadway cross section, or water conservation 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. Other elements of

sustainability may be considered on a case by case basis. Points are awarded at construction phase only.

- Other (e.g. 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 to full MPAH width. Widening beyond MPAH shall not qualify for Project O funding.
- 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 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 LOS 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 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 committed match funding source, confirmed through city council resolution or minute order
- Supporting technical information (including current traffic counts)
- Project development and implementation schedule
- ROW status and detailed plan for acquisition/disposal of excess right-of-way. The ROW acquisition/disposal plan must be submitted using the "ROW 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 8, 2022** for the 2023 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 (50%) 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 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 ROW 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 ROW 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 ROW 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 Selection Criteria

Category	Points Possible	Percentage
Facility Usage		**~~30~~25%**
Existing ADT & VMT	~~10~~15	~~10~~15%
~~Existing VMT~~	~~10~~	~~10%~~
Current Project Readiness	10	10%
Economic Effectiveness		**15%**
Cost Benefit	10	10%
Funding Over-Match	5	5%
Facility Importance		**~~20~~25%**
Transportation Significance	10	10%
Operational Efficiency	~~10~~15	~~10~~15%
Benefit		**35%**
Improvement Characteristics	10	10%
Level of Improvement and Service	25	25%
Total	**100**	**100%**

Table 7-2 Street Widening Point Breakdown

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

Facility Usage **Points:**
~~30~~25

Existing ADT & VMT — Max Points: 15

Existing ADT Range		Points
45+	thousand	10
40 – 44	thousand	8
35 – 39	thousand	6
30 – 34	thousand	5
25 – 29	thousand	4
20 – 24	thousand	3
15 – 19	thousand	2
10 – 14	thousand	1
<10	thousand	0

VMT Range		Points
31+	thousand	10
26 – 30	thousand	8
22 – 25	thousand	6
18 – 21	thousand	5
14 – 17	thousand	4
11 – 13	thousand	3
08 – 10	thousand	2
04 – 07	thousand	1
<4	thousand	0

Current Project Readiness	Max Points: 10
ROW (All Easement and Titles)	5
Final Design (PS&E)	4
Environmental Approvals	2
Preliminary Design (35%)	2
ROW (All Offers Issued)	2

~~Points are additive. Design and ROW limited to highest qualifying designation.~~

Economic Effectiveness **Points: 15**

Cost Benefit (Total $/ADT)

Range*	Points
< 49	10
50 – 74	9
75 – 99	7
100 – 149	5
150 – 199	4
200 – 249	3
250 – 299	2
300 – 349	1
350+	0

Funding Over-Match (local match/project cost) minus minimum local match requirement.

Range*	Points
25+%	5

Facility Importance **Points:**
~~20~~25

Transportation Significance Range	Points
Principal or CMP Route	10
Major	8
Primary	6
Secondary	4
Collector	2

Operational Attributes (within the roadway)	Max Points: ~~10~~15
Meets MPAH Configs.	~~3~~ 4
Pedestrian Facilities (New)	~~3~~ 4
Bike Lanes (New)	~~3~~ 4
Active Transit Route(s)	2
Bus Turnouts	2
Median (Raised)	2
~~Remove On-Street Parking~~	~~2~~
Safety Improvements	~~2~~3
Active Transportation Focused Plan Elements	2
Sustainability Elements	2
Other	2

Benefit **Points: 35**

Improve Characteristics	Points
Gap Closure	10
New Facility/Extension	8
Bridge Crossing	8
Adds Capacity	6
Improves Traffic Flow	2

LOS Improvement — Max Points: 25

Existing LOS Starting Point Range

(LOS Imp x LOS Starting Pt)	Points
1.01+	5
.96 – 1.00	4
.91 – .95	3
.86 – .90	2
.81 – .85	1
<.81	0

LOS Improvements with Project (exist. Volume)

Existing LOS Starting Point Range	Points
.20+	5
.16 – .20	4
.10 – .15	3
.05 – .09	2
.01 – .05	1
<.01	0

20 – 24%	4
15 – 19%	3
10 – 14%	2
05 – 09%	1
00 – 04%	0

*Range refers to % points above agency minimum requirement.

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 TSC 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 jurisdictions by improving operations
- Provide timely investment of M2 revenues

Project Participation Categories

The ICE category provides capital improvement funding (including planning, design, ROW 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)
- ROW 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 ROW (eligible improvements up to 10 percent (10%) 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 ROW 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 ROW (inclusive of any TCEs and/or ROW agreement related improvements) should not exceed a depth for normal roadway excavation (e.g. structural section). Additional grading will be considered on a case by case basis. Agencies shall provide supporting documentation (e.g. soils reports, ROW agreements) to justify the additional grading.

Ineligible Items

- Grading outside of the roadway ROW not related to a TCE or ROW agreement is generally assumed to be ineligible but can be evaluated by OCTA on a case by case basis, but must be tied to the MPAH improvement(s) and not supplant developer (or any other project obligations).
- ROW acquisition greater than the typical ROW width for the applicable MPAH Roadway Classification. Additional turn lanes not exceeding 12 feet in width needed to maintain an intersection LOS D requiring ROW in excess of the typical ROW width for the applicable MPAH classification shall be fully eligible. Where full parcel acquisitions are necessary to meet typical ROW requirements for the MPAH classification any excess parcels shall be disposed of in accordance with 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 (25%) of the total eligible project costs.

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

Soundwalls are eligible only if they are required as part of the environmental clearance for the proposed project and shall not exceed 25 percent (25%) 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 if within the standard MPAH cross section for the facility (inclusive of any TCEs). Rough grading can be considered eligible, so long as it supports MPAH improvement(s) within the ROW and does not supplant developer (or any other project obligations). Any proposed rough grading outside of the MPAH ROW, will be evaluated by OCTA on a case-by-case basis but must be tied to the MPAH improvement(s) and not supplant developer (or any other project obligations).

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 ROW phase costs and clearly identified in the project application submittal. For eligible relocations to be performed during the construction phase by the local agency's contractor, the work should be included in the plans and specifications similar to other construction activities. Adjustment of existing utilities to grade (e.g. water valves, manhole frames and covers), due to new roadway cross sections are either eligible or ~~generally~~ not eligible in the construction phase subject to the limitations previously described (e.g. prior rights). 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.

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's 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, 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.

- Environmental Approvals – applies where all environmental clearances have been obtained on the project.
- Preliminary design (35 percent (35%) level) – will require certification from the City Engineer and is subject to verification.
- Final Design (PS&E) – applies where the jurisdiction's City Engineer or other authorized person has approved the final design.
- ROW (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 ROW possession will be required with application submittal.
- ROW (all easements and titles) – applies where no ROW is needed for the project or where all ROW has been acquired/dedicated.

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 (50%) 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 (30%) and a local match of 45 percent (45%) is pledged, points are earned for the 15 percent (15%) 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.

Operational Attributes (within the roadway): This category is additive. Each category must be a new feature added as a part of the proposed project. Only one feature can be selected for any qualifying category. For example, installation of a bike lane that is identified in an adopted ATP plan can be awarded points under "Bike Lanes" or " Active Transportation Focused Plan Elements," but not both.

- 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.
- 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.
- Elements of Approved Active Transportation Plan/Active Transportation Focused Sections of other Types of Mobility Plans: Incorporate project features that are approved in an active transportation plan or if very focused, in active transportation focused sections of other types of plans that improve mobility. These elements can include bike infrastructure and pedestrian elements. Other elements of an active transportation plan may be considered on a case by case basis. Documentation of approved plan will be required with application submittal and assignment of points for active transportation focused sections of other types of plans will be considered on a case by case basis.
- Sustainability Elements: Includes the use of multiple complete street elements, the installation of solar lighting within the roadway cross section, or water conservation 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. Other elements of sustainability may be considered on a case by case basis. Points are awarded at construction phase only.

LOS Improvement: This category is a product of the existing or projected LOS based upon v/c and LOS improvement "with project" using 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 peak hour traffic counts/turning movements AM/PM peak periods for the proposed segment utilizing 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 8, 2022** for the 2023 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
- ROW status and a detailed plan for acquisition/disposal of excess right-of-way. The ROW acquisition/disposal plan must be submitted using the "ROW 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 (50%) 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 ROW 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. ROW 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 ROW 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 Selection Criteria

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

Table 7-4 Intersection Widening Point Breakdown

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

Facility Usage **Points: 25**

ADT Range*		Points
60+	thousand	15
55 – 59	thousand	13
50 – 54	thousand	11
45 – 49	thousand	9
40 – 44	thousand	7
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.

Current Project Readiness	Max Points: 10
ROW (All Easement and Titles)	5
Final Design (PS&E)	4
Environmental Approvals	2
Preliminary Design (35%)	2
ROW (All Offers Issued)	2

Points are additive. Design and ROW limited to highest qualifying designation.

Economic Effectiveness **Points: 20**

Cost Benefit (Total $/ADT) Range*	Points
< 20	10
21 – 30	9
31 – 50	7
51 – 75	5
76 – 100	3
>100	1

*= Total Cost/Average ADT

Funding Over-Match (local match/project cost) minus minimum local match requirement.

Range*	Points
25+%	5
20 – 24%	4
15 – 19%	3
10 – 14%	2
05 – 09%	1
00 – 04%	0

Coordination with Contiguous Project Range	Points
Yes	5
No	0

Coordination with ACE Project with similar implementation schedule.

Facility Importance **Points: 30**

Transportation Significance Range	Points
Principal or CMP Route	10
Major	8
Primary	6
Secondary	4
Collector	2

Operational Attributes (within the roadway)	Max Points: 20
Grade Separations	10
Bike Lanes	~~4~~5
Pedestrian Facilities (New)	~~4~~5
Bus Turnouts	4
Free Right	4
Lowers Density	3
Channels Traffic	3
Protected/Permissive Left Turn	2
Safety Improvements	~~2~~3
Active Transportation Focused Plan Elements	2
Sustainability Elements	2

Benefit **Points: 25**

LOS Improvement Max Points: 25

Calculation: LOS Imp x LOS Starting Point

Existing LOS (Peak Hour) Range	Points
1.01+	5
.96 – 1.00	4
.91 – .95	3
.86 – .90	2
.81 – .85	1
<.81	0

LOS Reduction w/ Project (existing Volume) Range	Points
.20+	5
.16 – .20	4
.10 – .15	3
.05 – .09	2
.01 – ~~.05~~.04	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, ROW 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
- ROW 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 ROW (eligible improvements up to 10 percent (10%) of construction costs, provided costs are reasonable for the transportation benefit)
- Rehabilitation and/or resurfacing of existing pavement when necessitated by proposed improvement (such as change in profile and cross section)
- Improvements to private property if part of a ROW settlement agreement
- Utility relocation where the serving utility has prior rights as evidenced by a recorded legal document
- Roadway grading within the ROW shall not exceed a depth for normal roadway excavation (e.g. structural section) or as required by TCEs, and/or ROW agreement related improvements. Additional grading will be considered on a case by case basis. Agencies shall provide supporting documentation (e.g. soils reports, ROW agreements) to justify the additional grading.
- Auxiliary lanes if necessitated by interchange improvements
- Soundwalls (in conjunction with roadway improvement mitigation measures)

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

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

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

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

Roadway grading is eligible for structural sections if within the standard MPAH cross section for the facility (inclusive of any TCEs). Rough grading can be considered eligible, so long as it supports MPAH improvement(s) within the ROW and does not supplant developer (or any other project obligations). Any proposed rough grading outside of the MPAH ROW, will be evaluated by OCTA on a case-by-case basis but must be tied to the MPAH improvement(s) and not supplant developer (or any other project obligations).

Utility Relocations

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

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

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

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

Ineligible Projects

- Seismic retrofit projects (unless combined with eligible capacity enhancements)

- Grading outside of the roadway ROW not related to a TCE or ROW agreement is generally assumed to be ineligible but can be evaluated by OCTA on a case by case basis but must be tied to the MPAH improvement(s) and not supplant developer (or any other project obligations).
- Enhanced landscaping, aesthetics and gateway treatments (landscaping that exceeds that necessary for normal erosion control and ornamental hardscape).

Selection Criteria

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

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's 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, 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.

- Environmental Approvals – applies where all environmental clearances have been obtained on the project.
- Preliminary design (35 percent (35%) level) – will require certification from the City Engineer and is subject to verification.
- Final Design (PS&E) – applies where the jurisdiction's City Engineer or other authorized person has approved the final design.
- ROW (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 ROW possession will be required with application submittal.

- ROW (all easements and titles) – applies where no ROW is needed for the project or where all ROW has been acquired/dedicated.

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 (50%) 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 (30%) and a local match of 45 percent (45%) is pledged, points are earned for the 15 percent (15%) 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.

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. Only one feature can be selected for any qualifying category. For example, installation of a bike lane that is identified in an adopted ATP plan can be awarded points under "Bike Lanes" or "Active Transportation Focused Plan Elements," but not both.

- 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
- 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.

- Elements of Approved Active Transportation Plan/Active Transportation Focused Sections of other Types of Mobility Plans: Incorporate project features that are approved in an active transportation plan or if very focused, in active transportation focused sections of other types of plans that improve mobility. These elements can include bike infrastructure and pedestrian elements. Other elements of an active transportation plan may be considered on a case by case basis. Documentation of approved plan will be required with application submittal and assignment of points for active transportation focused sections of other types of plans will be considered on a case by case basis.
- Sustainability Elements: Includes the use of multiple complete street elements, the installation of solar lighting within the roadway cross section, or water conservation 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. Other elements of sustainability may be considered on a case by case basis. Points are awarded at construction phase only.

LOS Improvement: This category is a product of the existing or projected LOS based upon 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 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 8, 2022** 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 a 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
- ROW status and a detailed plan for acquisition/disposal of excess right-of-way. The ROW acquisition/disposal plan must be submitted using the "ROW 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 (50%) 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 ROW 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. ROW 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 ROW 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 Improvement Selection Criteria

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

Table 7-6 Interchange Improvement Point Breakdown

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

Facility Usage **Points: 20**

ADT Range*		Points
55+	thousand	10
50 – 54	thousand	9
45 – 49	thousand	8
40 – 44	thousand	6
35 – 39	thousand	4
30 – 34	thousand	3
25 – 29	thousand	2
20 – 24	thousand	1
<10 – 19	thousand	0

*Arterial plus daily ramp exit volume

Current Project Readiness	Max Points: 10
ROW (All Easement and Titles)	6
ROW (All Offers Issued)	4
Final Design (PS&E)	4
PA/ED	2
Project Study Report or Equiv.	1

Points are additive. ROW is the highest qualifying designation.

Economic Effectiveness **Points: 25**

Cost Benefit (Total $/ADT)

Range*	Points
< 20	10
20 – 39	8
40 –79	6
80 – 159	4
160 – 319	2
320 – 640	1
>640	0

Funding Over-Match (local match/project cost) minus minimum local match requirement.

Range*	Points
30+%	10
25 – 29%	8
20 – 24%	6
15 – 19%	4
10 – 14%	2
00 – 09%	1

Range refers to % points above agency minimum requirement

Coordination with Freeway Mainline Improvements

Project Range	Points
Yes	5
No	0

Facility Importance **Points: 25**

Transportation Significance Range	Points
Principal or CMP Route	10
Major	8
Primary	6
Secondary	4
Collector	2

Operational Attributes (within the roadway)	Max Points: 15
Pedestrian Facilities (New)	~~3~~4
Eliminate Left Turn Conflict	3
Add Turn Lanes	3
Enhanced Ramp Storage	3
Coordinated Signal	2
Safety Improvements	~~2~~3
Active Transportation Focused Plan Elements	2
Sustainability Elements	2
Add Traffic Control	1

Benefit **Points: 30**

LOS Improvement Max Points: 20

Calculation: Avg. LOS Imp + Avg. LOS Starting Point

LOS Reduction w/ Project (existing Volume) Range	Points
.20+	10
.16 – .19	8
.10 – .15	6
.05 – .09	4
<.05	2

Existing LOS Range	Points
1.06+	10
1.01 – 1.05	8
0.96 – 1.00	6
0.91 – 0.95	4
0.86 – 0.90	2
0.81 – 0.85	1

Improvement Characteristics Max Points: 10

Improvement Characteristics	Points
New Facility (Full Interchange)	10
New Facility (Partial Interchange)	8
Interchange Reconstruction	6
Ramp Reconfiguration	4
Ramp Metering	2

Regional Grade Separation Program (RGSP)

Background

Seven rail crossing projects along the 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 RCP (Project O) 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 RTSSP (Project P) 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 2023, Priority Corridors are an eligible inclusion, but 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. 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
- 2023 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, intersecting crossing arterial and/or route basis reflecting existing traffic patterns in contiguous zones or road segments that have common operations.

2023 Call for Projects

~~Contingent on OCTA Board approval, the 2022 Call for Projects (call) for the RCP (Project O) and Regional Traffic Signal Synchronization Program (Project P), will make approximately $xx million in M2 funds available to support street and roads and signal synchronization improvements across Orange County. The target for this program is $x million, but recommendations for Project P may be higher or lower depending on the projects submitted.~~

The following information provides an overview of the 2023 RTSSP (Project P) Call for Projects:

1. Projects must result in new, optimized, and field-implemented coordination timing.
2. Project shall be a single contiguous corridor or set of contiguous corridors related to each other. Multiple corridors and related systems of corridors that form a "grid" may be submitted as a single optimized timing project. However, the total number of corridors per project will be limited to three (3) and the total number of signalized intersections between these corridors are limited to fifty (50).
3. Projects selected will be programmed after July 1 of the programmed year (July 1 – June 30).
4. Project delays resulting in a time extension request will fall within the process outlined in the CTFP Guidelines.
5. Projects are funded for a grant period of three (3) years and are divided into two phases:
   a. Primary Implementation (PI) – includes the required implementation of optimized signal timing as well as any signal improvements proposed as part of a project. A report is required at the conclusion of this phase to document work completed during the PI phase. This PI Report shall be submitted with the final report.
   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 O&M Report is required at the conclusion of this phase to document work completed during the O&M phase and shall be submitted with the final report.

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 synchronization performance index (CSPI) metric. This information shall be collected both before and after signal timing changes have been implemented and approved by all agencies. The study shall compare the information collected both before and after the timing changes. Comparisons should identify the absolute and percent differences for the entire corridor, by segment, direction, and time period. Segments will be defined by major traffic movements as observed during the project (e.g. commuting segments between freeways, pedestrian-friendly segments in a downtown area, etc.). The Before and After study shall also include field inventory, count data, modeling data, and Greenhouse Gas calculations. The Before and After Study shall be submitted as part of the PI Report.
7. Any corridor or portion of a corridor funded through this call cannot re-apply for funding until the three-year grant period is completed ~~or commitment to operate signal synchronization beyond the three-year grant period is completed, whichever ends later~~ and a final report has been submitted to OCTA.
8. This chapter identifies the selection criteria for projects, eligible activities, minimum project requirements, data compatibility required as part of any funded project, and other key information.

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

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

Applications

In order for OCTA to consider a project for funding, applications will be prepared by the local agency responsible for the project application. OCTA shall require agencies to submit applications for the call for projects by **5:00 p.m. on Thursday, October 20, 2022**. 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**~~ **One (1) unbound printed hardcopy and one electronic copy on a USB, thumb drive, memory stick, or via electronic file upload and/or email** of each complete application shall also be mailed or delivered to:

Orange County Transportation Authority
550 South Main Street
P.O. Box 14184
Orange, California 92863-1584
Attn: ~~Joseph Alcock~~ Adrian Salazar
Email: ~~-~~asalazar@octa.net

Application Process

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

- Funding needs by phase and fiscal year
- Percent match rate including funds type, source, and description (minimum 20 percent (20%))
- Lead agency (default – local agency)
- Lead and supporting agencies' contact information
- 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 exceed one million dollars in capital improvements. Original photos shall be uploaded to OCFundtracker or included with electronic copy of application.

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

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

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

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

Other Application Materials

Supporting documentation is required to fully consider each project application. A Supplemental Application (available on the OCTA website and OCFundtracker) is required to be completed for each project application and included in the electronic submittal. **Any Supplemental Application not submitted in the 2023 format will NOT be considered.** 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 additional materials.

Lead Agency: Eligible jurisdictions consistent with Measure M2 ordinance definitions and requirements.

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 the application claims Caltrans as a participant, then it shall contain a letter of support from Caltrans for the specific project and letters of support from all applicable agencies pledging to sign a cooperative agreement with Caltrans at the start of the project. The lead agency shall also pledge this commitment in the cover letter of the application. The required Caltrans fee will be a line item in the improvements list. The applicable agencies will be required to cover the required 20% match for the Caltrans line items. All agencies that have a Caltrans intersection/ramp in their jurisdiction are required to sign a cooperative agreement with Caltrans in order for the entire project to claim Caltrans as a participant.

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.

Lead Agency

This Program is administered through a single lead agency: See Lead Agency definition above.

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

OCTA Lead (NOT AVAILABLE FOR 2023 CALL FOR PROJECTS): OCTA may, at the request of the involved local agencies, act as the lead agency for RTSSP projects. If the involved local agencies would like OCTA to implement a project on the signal synchronization network, the local agency shall work cooperatively with OCTA to develop the scope of work and cost elements of the project. For example, accounting for OCTA's administrative and project management efforts by incorporating an additional 10 percent of the total project cost when calculating the Cost Benefit 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**. Applications must be prepared by a designated local agency acting in a lead capacity during grant preparation. Applications must include a complete photographic field review (as outlined above) when submitted. The application will be scored using the criteria outlined in the following sections. Based on local agency interest and OCTA resource availability, a limited number of projects can be developed and implemented by OCTA.

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

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:

Transportation Significance, Cost Benefit, Project Characteristics, ~~Maintenance of Effort,~~ Project Scale, ~~Project Scale,~~ Number of Local Agencies, Current Project Status, and 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.

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 8, 2022
Application submittal deadline: October 20, 2022
TSC/TAC Review: February/March 2023
Committee/Board approval: April/May 2023

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 table of contents for **each** application submitted. For any items that are required for the candidate project or program that are missing or incomplete, an explanation should be included in a cover letter with the application.

Sample Resolution Form

A resolution or minute action must be approved by the local agency's governing body. A sample resolution is included as Exhibit 8-2. Local agencies, at a minimum, must include items a-h from the sample resolution. The mechanism selected shall serve as a formal request for RTSSP funds and will state 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 include design improvements, but do not field implement the improvements are ineligible.

Projects must consist of a corridor along the priority corridor network, signal synchronization network, or the MPAH. Projects previously awarded RTSSP funding must be complete with a Final Report submitted to OCTA. Projects can be the full length of the corridor or a segment that complies with the project requirements identified later in the chapter.

Applicant agency and owning agency must demonstrate through simulation, or actual vehicle counts showing Origin – Destination that proposed linked corridors do form a route. A "grid" project shall consist of one main corridor that is specifically identified in the application with a maximum of two crossing corridors to make a grid. Grid projects shall also be multijurisdictional with a minimum of two local agencies, excluding Caltrans. For a grid project, applicant agency and owning agency must demonstrate through simulation or actual vehicle counts the following:

- Show that timing changes on the main corridor will greatly impact the crossing corridor(s)
- Crossing corridors shall have closely spaced signals in close proximity to the main corridor with timing changes along these crossings impacting the operation of the main corridor

All corridors in the grid shall individually meet the Minimum Eligibility Requirements and, as part of the project, travel time studies shall also be collected along all corridors making the grid.

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 as outlined in the following section.

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:

- Developing and implementing new signal synchronization timing parameters based on current travel patterns, and federal and state traffic signal timing mandates and guidance, including but not limited to the Manual on Uniform Traffic Control Devices (MUTCD)
- Monitor, maintain (minimum quarterly/maximum monthly) and/or regularly improve the newly implemented signal synchronization timing and parameters for the remainder of the project

- "Before" and "after" studies for the project comparing travel times, average speeds, ratio of green lights passed to red lights stopped (greens per red), average stops per mile, and emissions of greenhouse gases

In addition to developing optimized signal timing, a project may include other improvements, as long as they contribute to the goal of multi-agency signal synchronization of corridors throughout Orange County. These improvements are restricted to the signal synchronization project limits but may include synchronization with traffic signalized intersections within 2,700 feet from either direction of the project corridor. These offset signals; however, will not be counted towards the total number of signals on the project (for implementation of timing plans only). All improvements must be designed to enhance the specific project. Expenditures related to the design of systems, permitting, and environmental clearance are eligible for funding.

Caltrans encroachment permits and agency to Caltrans Cooperative Agreement fees are eligible activities. This includes Caltrans labor, such as expenses for reviewing signal timing plans, providing signal timing parameters, and providing existing timing sheets, etc. Applicant must specify how to handle Caltrans intersections on projects.

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 or communication repairs)
- Field display equipment (Traffic signal heads other than pedestrian countdown, or special bicycle, or Transit Vehicle signal heads)
- Feasibility studies
- Relocation of utilities except for electrical service requirements
- Right-of-way
- Rewiring of complete intersection because of age or isolated mitigation

Funding Estimates

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

The RTSSP targets over 2,000 intersections across Orange County for coordinated operations. Because of the limited amount of funds available for the RTSSP, project cap of $75,000 per signal or $250,000 per project corridor mile included as part of each

project (whichever is higher) has been established for this call for projects. Note that any offset signals will not be counted towards the total number of signals on the project.

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.

Transportation Significance: Points are awarded for projects that include offset signals along the project corridor, route, or grid. These offset signals do not count towards the project cap; however, are in relatively close proximity to affect the operation of the corridor(s). The applicant shall identify the number of offset signals on the corridor and the percentage of those offset signals that will be included in the project.

Vehicle miles traveled (VMT) is calculated as the centerline length of segment(s) on the corridor, route, or grid 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 vehicles * 1 mile + 300 vehicles * 1 mile + 400 vehicles * 1 mile = 900 vehicle miles.*

VMT should be calculated by the smallest segmentation on which the city typically collects ADT data. ADT must be based upon actual count information taken within 36 months preceding the application date and include 24-hour, midweek, bi-directional counts for each segment. All supporting data shall be organized in order in which they appear for the calculation of the VMT. Data from the OCTA Traffic Flow Map may not be used. Furthermore, outdated and/or non-compliant counts may result in project ineligibility~~.~~ (maximum: 25~~30~~ points).

Cost Benefit: Total project cost divided by Existing VMT. If the applicant is electing OCTA to be the lead agency, the total project cost in this calculation must also include an additional 10% of the total project for OCTA administrative and project management efforts. This additional 10% is used to determine the project effectiveness only and is not counted towards the overall project budget cap~~.~~ (maximum: 10 points).

Project Characteristics: Points are awarded based on the project's average improvement score. Eligible improvements for each intersection are assigned an improvement score based on factors, such as priority for overall signal operations and existing conditions. Intersection improvement scores are then averaged together, and the average project score is used in the point breakdown table in the Project Characteristics. For instance, a maximum ~~points~~ score of 50 is~~are~~ awarded to projects that are timing only without any capital improvements or ~~points~~ average scores accumulate if a signal synchronization

project is combined with eligible improvements. The following improvements and requirements only apply to signalized intersections that are part of the application.

Eligible Improvements	Score Based on Status	
Signal Timing (No Capital)	Online	Offline
Timing Only	50	30
Timing + Traffic Responsive (license only)	50	15
Timing + Peer-to-Peer (configuration only)	50	40
Timing + Traffic Adaptive (license only)	40	1
Signal Communication	No Time Source	Time Source
Above ground (e.g. wireless, cellular, etc.)	50	30
Fiber Optic underground	25	15
All other (e.g. copper, aerial fiber, GPS, etc.)	5	1
Field Elements	None/5+ Years	Within 5 years
ATC signal controller	50	10
Signal cabinet on existing foundation	30	10
Signal cabinet on new foundation	15	5
BBS/USP (attached)	20	10
BBS/UPS on existing foundation	10	5
BBS/UPS on new foundation	5	1
CCTV	30	10
Vehicle detection (ATSPM inputs + counts)	50	30
Vehicle detection (ATSPM inputs)	40	20
Vehicle detection + bicycle detection	30	15
Vehicle detection	30	15
Bicycle detection	30	15
Pedestrian detection (audible)	50	30
Pedestrian detection	30	15
Active transportation/pedestrian safety	50	30
Transit Signal Priority	30	10
EVP (hybrid or GPS)	40	10
EVP (infrared)	30	10
Speed feedback signs (existing post)	40	10
Speed feedback signs (new post)	20	10
Corridor ~~/p~~Performance M~~m~~onitoring	40	10
Minor Signal Operational Improvements	None/5+ Years	Within 5 years
Channelization	40	20
Signal phasing improvement	50	25
TMC/TOC	None/10+ Years	Within 10 years
Central System (server, licenses, workstations)	40	20

Eligible Improvements		Score Based on Status	
	Display (video wall, VMS, etc.)	30	10
	UPS	20	5
Caltrans		Participation	No Participation
	Cooperative Agreement	50	25

Signal Timing (No Capital). Improvements in this category can only be selected if the entire project is a timing only project without any field improvements.
Scores for this improvement category ~~Real-time traffic actuated operations and demonstration projects~~ can be claimed for any one of the following ~~(4 points)~~depending on the status of the signal, whether is it online (connected to a central system and active) or offline (either connected and not active or not connected to a central system):

- Traffic Responsive only if all signals, in at least one agency on the project, are included in the system.
- Peer-to-Peer program on traffic control devices that have existing connectivity.
- Adaptive traffic signal systems only if all signals, in at least one agency on the project, are included in the system.
- ~~Bluetooth and/or connected vehicle roadside units for at least three (3) signals on the project. If implemented, these items will require a data sharing agreement with OCTA.~~

Signal Communication. Scores for this improvement category varies depending on the type of improvement coupled with the existing status of the signal, whether there is an existing reliable time source (e.g. GPS, master controller, direct connection to central system, etc.) that will keep the signal in synchronization along the corridor:

- Above ground communication installations, such as wireless radios and cellular devices, that are quick to build is the preferred medium to ensure all signals are online and operating. This should not include any construction between signalized intersections.
- New or upgraded fiber optic communication systems ~~(2 points)~~
    - New contemporary communication system improvements (e.g. Ethernet) including all conduits, pull boxes, fiber optic and/or copper cabling (not to exceed 120 strands), network switches and distribution systems. These systems should be sufficiently sized for the needs/capacity of the Intelligent Transportation System (ITS) network. Excess capacity is deemed non-participating and also, cannot be used as part of the required project match.
    - ~~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).
    - Communication 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. Only communication links that are installed from a central location and/or communications hub to the project corridor that does not currently have a fiber connection to a central location are eligible.
- All other communication mediums, such as GPS clocks, copper twisted pair or aerial interconnect between signalized intersections, are eligible to ensure signals are online and in operation but are not encouraged.

Field Elements. This improvement category is focused on the field equipment/devices that will ensure the signals are enhanced to support advanced signal operations. Scores for this improvement category will vary depending on the existing lifespan of equipment/devices being upgraded. It is the applicant agency's responsibility to ensure the appropriate score is assigned and OCTA may request for supporting documentation.

- Traffic signal controller replacement of antiquated units with Advanced Transportation controller (ATC) units. ATC shall comply with latest industry standards.
- Controller cabinet (assemblies) replacements that can be shown to enhance signal synchronization.
- Traffic signal Battery Backup System (BBS) or Uninterruptible Power Supply (UPS) that includes cabinet, batteries, and necessary configurations.
- Closed Circuit Television (CCTV). Intelligent cameras that include analytics, such as automated continuous counts are the preferred solution. If implemented, these cameras may require a data sharing agreement with OCTA in the future.
- Vehicle Detection System (VDS)
    - The ideal implementation for signal operations is a detection system that will increase the number of inputs, including separate bicycle and pedestrian detection inputs, into the signal controller for the purpose of signal performance measures, such as Automated Traffic Signal Performance Measures (ATSPM). Additionally, inputs that are specifically set for capture turning movement counts at the intersection.
    - Inductive loops, video detection, radar, sonar, thermal, hybrids thereof, and other types of vehicle detection systems that can distinguish bicycles. This includes implementing a separate bicycle minimum and/or clearance parameter in the traffic signal controller.

- Installation of new and/or improved traffic control devices to improve the accessibility, mobility, and safety of the facility for pedestrians and bicyclists. Americans with Disabilities Act (ADA) compliant pedestrian signals include, but not limited to, tactile and audible buttons in countdown signal heads.
- Active Transportation/Pedestrian Safety related elements
  - High-Intensity Activated crosswalk signaling systems (HAWK) Pedestrian detection modules Bicycle detection modules.
  - Rectangular Rapid Flashing Beacon Systems (RRFB) including striping, legends, and signage.
- Transit Signal Priority (TSP) intersection control equipment only.
- Emergency Vehicle Preempt (EVP) intersection control equipment only.
- Corridor Performance Monitoring implementations, such as Bluetooth and/or connected vehicle roadside units for signals on the project. If implemented, these items will require a data sharing agreement with OCTA.

- ~~Automated Traffic Signal Performance Measures (ATSPM) system can only be claimed (4 points) if all signals, in at least one agency on the project, are included in the system, which will also be used during the O&M phase of the project. If implemented, these items will require a data sharing agreement with OCTA.~~
- ~~Intelligent cameras that include analytics, such as automated continuous counts and other metrics can only be claimed (3 points) if a minimum of three (3) implementations are included on the project. Furthermore, confirmation that an analytics module or camera with built in analytics will be purchased for this category to receive points. If implemented, these cameras will require a data sharing agreement with OCTA.~~
- ~~Detection system that will increase the number of inputs into the signal controller for the purpose of signal performance measures (e.g. ATSPM) and traffic counts can only be claimed (3 points) if a minimum of three (3) implementations are included on the project.~~
- ~~Installation of new and/or improved traffic control devices to improve the accessibility, mobility, and safety of the facility for pedestrians and bicyclists can be claimed (3 points) if a minimum of three (3) implementations are included on the project. This can include:~~

~~o Inductive loops, video detection, radar, sonar, thermal, hybrids thereof, and other types of detection systems that can distinguish bicycles. This includes implementing a separate bicycle minimum and/or clearance parameter in the traffic signal controller.~~

~~o ADA compliant Pedestrian Signals including, but not limited to, tactile and audible buttons in countdown signal heads.~~

- ~~New or upgraded communication systems (2 points)~~

- ~~New contemporary communication system improvements (e.g. Ethernet) including all conduits, pull boxes, fiber optic and/or copper cabling (not to exceed 120 strands), network switches and distribution systems. These systems should be sufficiently sized for the needs/capacity of the Intelligent Transportation System (ITS) network. Excess capacity is deemed non-participating and also, cannot be used as part of the required project match.~~
- ~~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).~~
- ~~Communication 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. Only communication links that are installed from a central location and/or communications hub to the project corridor that does not currently have a fiber connection to a central location are eligible.~~
  - ~~Intersection/field system modernization and replacement (2 points)~~
- ~~Traffic signal controller replacement of antiquated units with Advanced Transportation controller (ATC) units. ATC shall comply with latest industry standards.~~
- ~~Controller cabinet (assemblies) replacements that can be shown to enhance signal synchronization.~~
- ~~Closed Circuit Television (CCTV).~~
- ~~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. UPS for ATMS is not intended to provide power to entire TMC and approval of request for UPS is at the sole discretion of OCTA.~~
- ~~Active Transportation/Pedestrian Safety related elements~~
  - ~~High-Intensity Activated crosswalk signaling systems (HAWK) Pedestrian detection modules Bicycle detection modules.~~
  - ~~Rectangular Rapid Flashing Beacon Systems (RRFB) including striping, legends, and signage.~~

Minor Signal Operational Improvements. Scores for this improvement category will vary depending on the existing lifespan. It is the applicant agency's responsibility to ensure the appropriate score is assigned and OCTA may request for supporting documentation. ~~(2 points)~~

- ~~Emergency Vehicle Preempt (EVP) intersection control equipment only~~

- ~~Transit Signal Priority (TSP) intersection control equipment only~~
- Channelization (signing, striping, raised pavement markers, in lane flashing guidance or warning marking systems, and legends) improvements required for traffic signal phasing.
- Traffic signal phasing improvements that will improve traffic flow and system performance including protected permissive left turn phasing and shared pedestrian phasing, excluding display equipment and other ineligible activities as mentioned in these guidelines.

Traffic Management Center (TMC)/Traffic Operations Centers (TOC). Scores for this improvement category will vary depending on the existing lifespan of equipment or software being upgraded. It is the applicant agency's responsibility to ensure the appropriate score is assigned and OCTA may request for supporting documentation. ~~and motorist information (1 point)~~

- Central system
  - New TMCs or TOCs, such as a new Advanced Traffic Management System (ATMS), (any project funded under this category should plan for center-to-center communication (C2C) with nearby agencies and/or OCTA).
  - Upgrades to existing TMCs or TOCs (any project funded under this category should plan for C2C with nearby agencies and/or OCTA).
  - Motorist information systems (up to 10 percent (10%) of total project costs for PI phase only).
  - Automated Traffic Signal Performance Measures (ATSPM) system can only be implemented if all signals, in at least one agency on the project, are included in the system, which will also be used during the O&M phase of the project. If implemented, these items will require a data sharing agreement with OCTA.
- Video display equipment, including wall monitors, screens, mounting cabinets, and optical engines (up to 10 percent (10%) of total construction costs for PI phase only).
- Uninterruptible Power Supply (UPS) for ATMS shall solely provide electrical power for ATMS Server(s), one dedicated workstation (console terminal) and related communications devices. UPS for ATMS is not intended to provide power to entire TMC and approval of request for UPS is at the sole discretion of OCTA.

Caltrans. Scores for this category will depend on the commitment of a cooperative agreement with Caltrans that results in active Caltrans participation and inclusion of Caltrans as a partnering agency. The associated timing fee is an eligible expense. Note that if a cooperative agreement with Caltrans will not be executed, the participating agencies will still be responsible for modeling any Caltrans signalized intersections within the project limits.

Each project intersection that has proposed improvements will receive an average score per the specific improvements noted above and the project's score will be an average of all intersection averages

~~Note: that only one feature can be selected for any qualifying improvement; for example, an implementation of a new video detection system that can distinguish bicycles can be selected for points under the "Separate Bicycle/ADA Pedestrian Detection" or "New/Upgraded Detection", but not both.~~ (maximum: 20 points).

~~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. Note that the project will not be eligible for funding until after the completion of all maintenance commitments. (maximum: 5 points)~~

Project Scale: Points are earned for including more intersections along signal synchronization network. For a grid, the number of signals and percent of signals being retimed will only be calculated for the corridor that is designated as the Main Corridor (maximum: 20 points).

Note: Due to the length of Pacific Coast Highway (PCH) and the fact that broad portions of it are a Caltrans' owned facility, for CTFP project scoring purposes only, the "Percent of Main Corridor Being Retimed" scoring criteria (identified in Table 8-1) can be divided into the four following segments.

1. San Gabriel River (Los Angeles County Line) to North of Goldenwest Street
2. Goldenwest Street to School/State Park
3. South of School State Park to Doheny Park Road
4. South of Doheny Park Road to County Line

If an application is proposed to span two or more segments of PCH the "Percent of Main Corridor Being Retimed" calculation will be based upon the number of signals in the project application divided by total number of signals in the applicable segments.

Number of Local Agencies: Points are earned for including multiple local agencies as part of the project~~.~~ (maximum: 10 points).

Current Project Status: Points are earned based on the current status of the project development. Points for re-timing of a corridor can be claimed only if at least 75% of the previous project (RTSSP or Measure M Signal Improvement Program) is part of the new application OR at least 75% of the corridor (on MPAH) has never been funded. Points can also be claimed for applicants who provide evidence that they can complete primary implementation within twelve months. Agencies that receive points for this category **cannot request delays or time extensions throughout the life of the project**.

Note: Applications that designate OCTA as the lead agency are not eligible to claim implementation within 12 months (maximum ~~for category~~: 10 points).

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

Table 8-1 Point Breakdown

RTSSP SCORING CRITERIA
Point Breakdown for Regional Traffic Signal Synchronization Program Projects
Maximum Points = 100

Transportation Significance **Points: ~~30~~25**

Inclusion of offset signals within 2700'

	Points
90% or above	10
50 – 89%	5
< 50%	0

AND

Vehicle Miles Traveled (VMT)

Range		Points
250+	thousand	~~20~~ 15
200 - 249	thousand	~~15~~ 10
150 - 199	thousand	~~10~~ 6
100 - 149	thousand	~~6~~ 3
~~5~~0 - 99	thousand	~~3~~ 1
~~0 – 49~~	~~thousand~~	~~1~~

Calculation: ADT x segment length
(Applies only to coordinated segments of project)

Economic Effectiveness **Points: 10**

Cost Benefit (Total $/VMT)

Range	Points
< 3	10
3 – 5	9
6 – 8	8
9 – 11	7
12 – 14	6
15 - 17	5
18 – 20	4
21 – 23	3
24 – 26	2
27+	1

Project Characteristics **Max Points: ~~10~~20**

~~Project Feature~~Project Average Improvement Score

Range	Points
45 – 50	20
35 – 44	15
25 – 34	10
15 – 24	5
5 – 14	2
0 – 4	1

~~**Maintenance of Effort** **Points: 5**~~

~~MOE After Grant Period~~	~~Points~~
~~3 years~~	~~5~~
~~2 years~~	~~3~~
~~1 year~~	~~1~~
~~None~~	~~0~~

Project Scale **Points: 20**

Number of Signals on Main Corridor Coordinated by Project

Range	Points
50+	10
40 - 49	8
30 - 39	6
20 - 29	4
10 - 19	2
< 10	0

AND

Percent of Main Corridor Signals Being Retimed

Range	Points
90% or above	10
80 - 89%	8
70 - 79%	6
60 - 69%	4
50 - 59%	2
< 50%	0

Calculation: Number of signals in project divided by total signals in full corridor length.

Number of Jurisdictions **Points: 10**

Total Number of Involved Jurisdictions

Range	Points
5 or more	10
4	8
3	6
2	4
1	0

Current Project Status **Points: 10**

Project Status	Point
Re-timing 75% of ~~prior RTSSP project or Measure M Signal Improvement Program funded~~ previous project	5
Timing 75% of new eligible project	5
Implementation within 12 months	5

Funding Match **Points: 5**

Overall Match %	Point
50+%	5
40 - 49%	4
35 - 39%	3
30 - 34%	2
25 - 29%	1
< 25%	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 (20%) matching funds for eligible projects (see definition of matching funds below).

The goal of the RTSSP is to provide regional signal synchronization that crosses 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 a minimum local match funding of 20 percent (20%) 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. Project

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

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. For OCTA-led projects, match for equipment shall be in cash except when an agency elects to purchase equipment per the application.

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 (limited to eligible activities)
  - Cost of any signal system investment
  - Benefit to project

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

OCTA staff will review in detail the presented cash and in-kind match by local agency for reasonableness.

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 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 O&M 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).

Participating agencies pledging in-kind services shall be responsible for keeping track of said hours and/or improvements. For OCTA-led projects, an in-kind services match report will be requested throughout the project to ensure agencies meet their promised in-kind match. All submissions shall include backup documentations, such as accounting/payroll detailed summaries, third-party invoices (consultant, contractor, and equipment) and are subject to Audit.

Project Cancellation

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

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

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

Project Extensions

Local agencies are provided 36 months to expend the funds from the date of encumbrance. Agencies can request timely use of funds extensions through the SAR in accordance with the CTFP guidelines. Local agencies should issue a separate NTP when 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, including average daily traffic (ADT) and intersection turning movement (ITM), collected as part of any funded project shall be provided to OCTA Microsoft Excel format. Any data files containing numeric intersection or node identifiers shall use the same node identification (ID) numbers as is stored and maintained by OCTA. OCTA will provide a listing of intersections and corresponding unique node ID numbers upon request. Each count data filename shall describe the year the counts were collected, agency, type of count file, intersection name, and OCTA node ID number. As an example, a turning movement count file recently collected for the intersection of Harbor Boulevard and Wilson Street in the City of Costa Mesa would be given the filename 2020_CostaMesa_ITM_Harbor-Wilson_4534.xls.

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 10 or later format. This data shall include validated network layout, node, link, lane, volume, timing, and phase data for all coordinated times. The nodes for these files shall also correspond to the OCTA node ID numbers.

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.**

Exhibit 8-1

Project P – Regional Traffic Signal Synchronization Program Application Checklist

Project P Application Checklist	Page
RTSSP Online Application – submitted through OCFundTracker a. Transportation Significance b. Benefit Cost Ratio c. Project Characteristics ~~d. Maintenance of Effort~~ ~~e.~~d. Project Scale ~~f.~~e. Number of Jurisdictions ~~g.~~f. Current Project Status g. Funding Over-Match h. Cabinet photos, equipment specifications, as-built drawings, cabinet drawings, etc.	Online
Section 1: Key Technical Information a. Name of Project Corridor/Grid/Route b. Project Limits c. Project Length d. Number of Signalized Intersections Along Corridor e. Participating Agencies/Traffic Forum Members f. Lead Agency g. Designation of the corridor to synchronize h. Project start and end date i. Previous funding j. Contact Information k. Signalized intersections that are part of the project l. Offset signalized intersections that are part of the project m. Project Map Depicting the Project Limits	
Section 2: Regional Significance	
Section 3: Acknowledgement of Required Tasks	
Section 4: Funding Needs/Costs for Proposed Project by Task a. Summary of Project Cost b. Summary of Cost by Agency ~~c. Table I: Agency Improvement Preferences~~ c. ~~Table II: Description of Work by Intersection~~Summary of Intersection Improvement Costs	
Section 5: Detailed Local Match Commitment	
Section 6: Project Schedule for the 3 Year Grant Period by Task a. Project State and End Dates ~~b.~~ Project Schedule by Task b. ~~Agency Commitment of Extended Monitoring and Maintenance~~	
Appendices a. Calculations and Estimated Points b. Agency Improvement Calculations c. Vehicle Miles Traveled (VMT) ~~a.~~d. Agency Resolutions and Letters of Support ~~b. Vehicle Miles Traveled (VMT)~~ ~~c. Calculations and Estimated Points~~ e. Additional Information (Optional)	

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 2,000 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 Regional Traffic 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