

# **Comprehensive Transportation Funding Programs**

## **Guidelines Excerpt Proposed Revisions**

## III. Definitions

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

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

## **IV. Acronyms**

AADT – Average Annual Daily Traffic

ACE – Arterial Capacity Enhancements

ADA – Americans with Disabilities Act of 1990

ADT – Average Daily Trips

A/E – Architectural/Engineering

APIRI – Applications Programming Interface with Referenced Implementations

ATC – Advanced Transportation Controller

ATMS – Advanced Transportation Management System

BMP – Best Management Practices

B/RVH – Boardings Divided by the Revenue Vehicle Hours

C2C – Center-to-Center Communication

CASQA – California Stormwater Quality Association

CAPPM – Cost Accounting Policies and Procedures Manual

CCI – Construction Cost Index

CCTV – Closed Circuit Television

CDS – Continuous Deflection Separator

CFS – Climate Forecast System

CE – Categorical Exclusion

CEQA – California Environmental Quality Act

CIP – Capital Improvement Plan

CPI – Catchment Prioritization Index

CSPI – Corridor System Performance Index

CTC – California Transportation Commission

CTFP – Comprehensive Transportation Funding Programs

ECAC – Environmental Cleanup Allocation Committee

ECP – Environmental Cleanup Program

EIR – Environmental Impact Report

ENR – Engineering News Record

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

PSR – Project Study Report

PS&E – Plan, Specification and Estimate

PUC – Public Utilities Commission

RCP – Regional Capacity Program

RGSP – Regional Grade Separation Program

RTSSP – Regional Traffic Signal Synchronization Program

ROADS – Roadway Operations and Analysis Database System

ROW – ROW

RVH – Revenue Vehicle Hours

SAR – Semi-Annual Review

SBPAT – Structural BMP Prioritization Analysis Tool

SLPP – State-Local Partnership Program

TAC – Technical Advisory Committee

TCE – Temporary Construction Easement

TCIF – Trade Corridors Improvement Funds

TDA – Transportation Development Act

TMC – Traffic Management Center

TOC – Traffic Operations Center

TPC – Total Project Cost

TPI – Transportation Priority Index

TSC – Technical Steering Committee

TSP – Transit Signal Priority

UPS – Uninterruptible Power Supply

UTDF – Universal Traffic Data Format

v/c – Volume/Capacity

VMT – Vehicle Miles Traveled

WFLR – Work Force Labor Rates

WQLRI – Water Quality Load Reduction Index

## **IV.V. Precepts**

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

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

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

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



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

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

## Funding Estimates

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

## Programming Approach

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

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

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

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

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

## 2020 Call for Projects

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

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

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

## Applications

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

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

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

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

Hardcopy applications should be mailed to:

OCTA

Attention: ~~Joe Alcock~~ Alfonso Hernandez

600 S. Main Street

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

Hardcopy applications can be hand delivered to:

600 S. Main Street

Orange, CA 92868

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

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

Board authorization to issue call: August 2019~~8~~

Application submittal deadline: October 24~~18~~, 2019~~8~~

TSC/TAC Review: February/March 2020~~19~~

Committee/Board approval: May 2020~~19~~

## Funding

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

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

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

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

## Ineligible Expenditures

Items that are not eligible under the ACE Program are:

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

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

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

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

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

## Table 7-2 Street Widening Point Breakdown

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

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



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

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

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

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

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

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

## Utility Relocations

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

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

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

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

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

## Ineligible Projects

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

## Selection Criteria

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

## Objectives

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

## 2020 Call for Projects

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

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

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

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

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

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

## Applications

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

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

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

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

## Application Process

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

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

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

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

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

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

## Other Application Materials

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

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

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

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

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

## Lead Agency

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



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

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

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

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

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

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

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

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

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

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

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

## Checklist Guide

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

## Sample Resolution Form

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

## Project Definition

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

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



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

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

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

## Eligible Activities

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

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

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

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

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

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

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

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

## Ineligible Expenditures

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

## Funding Estimates

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

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

## Selection Criteria

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

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

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

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

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

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

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

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

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

## Table 8-1 Point Breakdown

### RTSSP SCORING CRITERIA

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

Maximum Points = 100

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

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

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

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

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

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

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

- Staffing commitment
  - Staff position
  - Number of hours



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

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

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

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

## Project Cancellation

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

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

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

## Project Extensions

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

## Audits

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



## Exhibit 8-1

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

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

# Comprehensive Transportation Funding Programs



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