



Orange County Transportation Authority

Regional Transportation Planning Committee Agenda

Monday, March 4, 2024 at 10:30 a.m.

Board Room, 550 South Main Street, Orange, California

Committee Members

Andrew Do, Chair
Jamey Federico, Vice Chair
Jon Dumitru
Katrina Foley
Patrick Harper
Farrah N. Khan
John Stephens

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the Orange County Transportation Authority (OCTA) Clerk of the Board's office at (714) 560-5676, no less than two business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda Descriptions

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

Public Availability of Agenda Materials

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

Meeting Access and Public Comments on Agenda Items

Members of the public can either attend in-person or listen to audio live streaming of the Board and Committee meetings by clicking this link: <https://octa.legistar.com/Calendar.aspx>

In-Person Comment

Members of the public may attend in-person and address the Board regarding any item within the subject matter jurisdiction of OCTA. Please complete a speaker's card and submit it to the Clerk of the Board and notify the Clerk regarding the agenda item number on which you wish to speak. Speakers will be recognized by the Chair at the time of the agenda item is to be considered by the Board. Comments will be limited to three minutes. The Brown Act prohibits the Board from either discussing or taking action on any non-agendized items.

Written Comment

Written public comments may also be submitted by emailing them to ClerkOffice@octa.net, and must be sent by 5:00 p.m. the day prior to the meeting. If you wish to comment on a specific agenda item, please identify the item number in your email. All public comments that are timely

REGIONAL TRANSPORTATION PLANNING COMMITTEE MEETING

AGENDA

received will be part of the public record and distributed to the Board. Public comments will be made available to the public upon request.

Call to Order

Pledge of Allegiance

Director Foley

Closed Session

There are no Closed Session items scheduled.

Special Calendar

There are no Special Calendar matters.

Consent Calendar (Items 1 through 3)

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

1. Approval of Minutes

Clerk of the Board

Recommendation

Approve the minutes of the February 5, 2024 Regional Transportation Planning Committee meeting.

Attachments:

[Minutes](#)

2. Amendment to Agreement for Additional Design Services for the Interstate 5 Improvement Project Between Yale Avenue and State Route 55

Niall Barrett/James G. Beil

Overview

On November 9, 2020, the Orange County Transportation Authority Board of Directors authorized an agreement with TranSystems Corporation for the preparation of plans, specifications, and estimates for the Interstate 5 Improvement Project between Yale Avenue and State Route 55. An amendment to the existing agreement is required for additional design services.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Agreement No. C-0-2371 between the Orange County Transportation Authority and TranSystems Corporation, in the amount of \$1,194,527, for additional design services for the Interstate 5 Improvement Project between Yale Avenue and State Route 55. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$14,653,412

REGIONAL TRANSPORTATION PLANNING COMMITTEE MEETING

AGENDA

Attachments:

[Staff Report](#)

[Attachment A](#)

3. Revisions to the Measure M2 Eligibility Guidelines

Charvalen Alacar/Kia Mortazavi

Overview

The Orange County Transportation Authority's Measure M2 Ordinance No. 3 specifies requirements that local jurisdictions must satisfy in order to be eligible to receive Measure M2 net sales tax revenues. The Measure M2 eligibility guidelines and countywide Pavement Management Plan guidelines assist local jurisdictions in navigating Measure M2 eligibility requirements and submittal processes. Proposed updates to these documents are presented for Board of Directors' review and approval.

Recommendations

- A. Approve proposed revisions to the Measure M2 Eligibility Guidelines.
- B. Approve proposed revisions to the countywide Pavement Management Plan Guidelines.

Attachments:

[Staff Report](#)

[Attachment A](#)

[Attachment B](#)

[Attachment C](#)

Regular Calendar

4. Consultant Selection for the Harbor Boulevard Pilot Innovative Transit Signal Priority Study

Alicia Yang/Kia Mortazavi

Overview

On November 27, 2023, the Orange County Transportation Authority Board of Directors authorized the release of a request for proposals to retain a consultant to conduct a comprehensive study and sample implementation of innovative transit and advanced detection solutions as part of the Harbor Boulevard Pilot Innovative Transit Signal Priority Study. Board of Directors' approval is requested for the selection of a firm to perform the required work.

Recommendations

- A. Approve the selection of Arcadis U.S., Inc., as the firm to conduct the Harbor Boulevard Pilot Innovative Transit Signal Priority Study.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-

REGIONAL TRANSPORTATION PLANNING COMMITTEE MEETING AGENDA

2944 between the Orange County Transportation Authority and Arcadis U.S., Inc., in the amount of \$1,197,912, for a two-year term, to conduct the Harbor Boulevard Pilot Innovative Transit Signal Priority Study.

Attachments:

[Staff Report](#)

[Attachment A](#)

[Attachment B](#)

[Attachment C](#)

Discussion Items

5. Update on the Interstate 5 Improvement Project Between State Route 73 and El Toro Road

Niall Barrett/James G. Beil

Overview

Construction activities continue on the Interstate 5 Improvement Project Between State Route 73 and El Toro Road. This presentation provides a status of the latest progress and upcoming milestones.

Attachments:

[Presentation](#)

6. Emergency Coastal Rail Projects Update and Planning for the Future

Dan Phu/Kia Mortazavi

Overview

Present an update on the Coastal Rail Resiliency Study and the recent completion of the Initial Assessment which identified sites recommended for monitoring and reinforcement within the coastal rail corridor in south Orange County.

Attachments:

[Presentation](#)

7. Public Comments

8. Chief Executive Officer's Report

9. Committee Members' Reports

10. Adjournment

The next regularly scheduled meeting of this Committee will be held:

10:30 a.m. on Monday, April 1, 2024

OCTA Headquarters

550 South Main Street, Orange, California

**Committee Members Present**

Andrew Do, Chair
Jamey Federico, Vice Chair
Jon Dumitru
Katrina Foley
John Stephens

Staff Present

Darrell E. Johnson, Chief Executive Officer
Jennifer L. Bergener, Deputy Chief Executive Officer
Allison Cheshire, Clerk of the Board Specialist, Senior
Sahara Meisenheimer, Clerk of the Board Specialist
James Donich, General Counsel
OCTA Staff

Committee Members Absent

Karina Foley
Farrah N. Khan

Call to Order

The February 5, 2024, Regional Transportation Planning Committee meeting was called to order by Committee Chair Do at 10:30 a.m.

Special Calendar**1. Committee Meeting 2024 Schedule**

A motion was made by Director Harper, seconded by Director Stephens, and declared passed by those present to approve the 2024 Regional Transportation Planning Committee meeting calendar.

2. Roles and Responsibilities of the Regional Transportation Planning Committee

A motion was made by Committee Vice Chair Federico, seconded by Director Harper, and declared passed by those present to Approve the 2024 Regional Transportation Planning Committee Roles and Responsibilities.

Consent Calendar (Items 3 through 10)**3. Approval of Minutes**

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to approve the minutes of the December 4, 2023, Regional Transportation Planning Committee meeting.



4. Amendment to Agreement for Construction Management Support Services for the Interstate 5 Improvement Project Between State Route 73 to Oso Parkway

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to authorize the Chief Executive Officer to negotiate and execute Amendment No. 5 to Agreement No. C-8-1969 between the Orange County Transportation Authority and Arcadis U.S., Incorporated, in the amount of \$2,230,587, for additional construction management support services for the Interstate 5 Improvement Project between State Route 73 to Oso Parkway, and extend the agreement term through December 1, 2025. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$13,205,510.

5. Amendments to the Master Plan of Arterial Highways

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to:

- A. Conditionally approve the proposed amendments to the Master Plan of Arterial Highways for the facilities listed below within the City of Anaheim:
 - 1. Reclassify Disney Way, from a major (six-lane, divided) arterial to a primary (four-lane divided) arterial, between Harbor Boulevard and Anaheim Boulevard.
 - 2. Remove Gene Autry Way, an unconstructed major (six-lane, divided) arterial, between Harbor Boulevard and Haster Street.
 - 3. Remove Clementine Street, an unconstructed secondary (four-lane, undivided) arterial, between Katella Avenue and Orangewood Avenue.

Final approval of the proposed amendment is contingent upon the Orange County Transportation Authority receiving documentation that the City of Anaheim has amended its general plan and has complied with the California Environmental Quality Act requirements.

Should the proposed Master Plan of Arterial Highways amendment not be reflected within an approved general plan within three years, the conditional approval will expire, and it must be returned to the Orange County Transportation Authority Board of Directors for reconsideration and action in order to proceed.

Should the proposed Master Plan of Arterial Highways amendment be modified for any reason after receiving conditional approval, the modified Master Plan of Arterial Highways amendment will be returned to the Orange County Transportation Authority Board of Directors for reconsideration and action.



- B. Direct the Executive Director of Planning, or his designee, to file a Notice of Exemption from the California Environmental Quality Act for the Master Plan of Arterial Highways amendments.
- C. Receive and file a status report on the active Master Plan of Arterial Highways amendments.

6. 2023 Orange County Complete Streets Program Project Prioritization Recommendations

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to:

- A. Approve the 2023 Orange County Complete Streets Program project prioritization recommendations.
- B. Authorize submittal of 2023 Orange County Complete Streets Program projects to the Southern California Association of Governments to be considered for final project selection, with four projects contingent on the approval of amendments to the Master Plan of Arterial Highways.
- C. Authorize the Chief Executive Officer or his designee to provide concurrence on future project scope changes, extension requests, and substitutions to the Southern California Association of Governments as needed for the 2023 Orange County Complete Streets Program projects.
- D. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program to facilitate the above actions.

7. 2025 Federal Transportation Improvement Program and Financial Plan

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to:

- A. Authorize the submittal of the Federal Transportation Improvement Program project list and financial plan for the fiscal year 2024-25 through fiscal year 2029-30 to the Southern California Association of Governments.
- B. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program to facilitate the programming of projects.
- C. Adopt Resolution No. 2024-001 of the Board of Directors of the Orange County Transportation Authority.



8. Orange County Transportation Authority State and Federal Grant Programs - Update and Recommendations

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to:

- A. Approve one change request from the City of San Clemente for a Bicycle Corridor Improvement Program project, contingent on final approval by the Southern California Association of Governments.
- B. Approve one technical correction request from Access California Services for an Enhanced Mobility for Seniors and Disabled Grant Program project.
- C. Authorize staff to request that the Southern California Association of Governments make all necessary amendments to the Federal Transportation Improvement Program and execute any required agreements or amendments to facilitate the recommendations above.

9. Measure M2 Environmental Cleanup Program (Project X) - 2024 Tier 1 and Tier 2 Grant Program Call for Projects

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to:

- A. Approve the proposed revisions to the Comprehensive Transportation Funding Programs guidelines for the Environmental Cleanup Program.
- B. Authorize staff to issue the 2024 Environmental Cleanup Program Tier 1 call for projects.
- C. Authorize staff to issue the 2024 Environmental Cleanup Program Tier 2 call for projects.

10. Measure M2 Annual Eligibility Review

A motion was made by Director Stephens, seconded by Director Harper, and declared passed by those present to:

- A. Approve 34 of Orange County's 35 local jurisdictions (excluding the City of Cypress) as eligible to continue receiving Measure M2 net revenues.
- B. Receive and file the Measure M2 eligibility verification documents submitted by the City of Cypress.



Regular Calendar

11. Consultant Selection for Construction Management Support Services for the State Route 91 Improvement Project Between Acacia Street and La Palma Avenue

Jeannie Lee, Senior Project Manager, Highways, provided a report on this item.

A motion was made by Director Harper, seconded by Director Stephens, and declared passed by those present to:

- A. Approve the selection of Arcadis U.S., Inc. as the firm to provide construction management support services for the State Route 91 Improvement Project between Acacia Street and La Palma Avenue.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-2827 between the Orange County Transportation Authority and Arcadis U.S., Inc., to provide construction management support services for the State Route 91 Improvement Project between Acacia Street and La Palma Avenue.

12. Consultant Selection for Professional Services for the Countywide Signal Synchronization Baseline

Alicia Yang, Project Manager, Planning, provided a report on this item.

A discussion ensued among the Members and staff regarding the following:

- Set a new baseline to coordinate with cities;
- Coordination of corridors; and
- Grid system coordination.

A motion was made by Committee Chair Do, seconded by Director Stephens, and declared passed by those present to:

- A. Approve the selection of Iteris, Inc., as the firm to provide professional services for the Countywide Signal Synchronization Baseline.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-2821 between the Orange County Transportation Authority and Iteris, Inc., in the amount of \$9,630,000, for a five-year term, to provide professional services for the Countywide Signal Synchronization Baseline.



Discussion Items

13. Public Comments

No public comments were received.

14. Chief Executive Officer's Report

Darrell E. Johnson, Chief Executive Officer, reported on the following:

- Rail update
- Local fair share funding

15. Committee Members' Reports

There were no Committee Member's reports.

16. Adjournment

The meeting was adjourned at 10:59 a.m.

The next regularly scheduled meeting of this Committee will be held:

10:30 a.m. on Monday, March 4, 2024

OCTA Headquarters

550 South Main Street

Orange, California



March 4, 2024

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Amendment to Agreement for Additional Design Services for the Interstate 5 Improvement Project Between Yale Avenue and State Route 55

Overview

On November 9, 2020, the Orange County Transportation Authority Board of Directors authorized an agreement with TranSystems Corporation for the preparation of plans, specifications, and estimates for the Interstate 5 Improvement Project between Yale Avenue and State Route 55. An amendment to the existing agreement is required for additional design services.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Agreement No. C-0-2371 between the Orange County Transportation Authority and TranSystems Corporation, in the amount of \$1,194,527, for additional design services for the Interstate 5 Improvement Project between Yale Avenue and State Route 55. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$14,653,412.

Discussion

The Interstate 5 (I-5) Improvement Project between Yale Avenue and State Route 55 (SR-55) (Project) is part of Project B in the Measure M2 (M2) freeway program. In the updated Next 10 Delivery Plan, adopted by the Orange County Transportation Authority (OCTA) Board of Directors (Board) in November 2023, the Project is listed as one of the M2 freeway projects to be implemented through construction.

The Project will add one general purpose lane in both directions on I-5 between Yale Avenue and SR-55. The Project will reestablish existing auxiliary lanes, provide new auxiliary lanes where necessary, and provide continuous access to the high-occupancy vehicle lanes. The plans, specifications, and estimates (PS&E) for the Project are currently being prepared.

Additional project scope has been identified, which requires further effort to complete the design on schedule. An amendment to the project design agreement is recommended for the following additional services:

Drainage Design at Myford Creek and Central Irvine Channel

The impacts of the highway improvements on two of the drainage facilities were not included in the project report approved in the environmental phase. The four-sided precast concrete box culvert at Myford Creek needs to be lengthened to accommodate a wider freeway. This will necessitate extending the multiple cell-reinforced concrete box culvert, and constructing a new drainage inlet connection, new apron, and rock slope protection at the extended box culvert. Design-level surveys show that the proposed northbound bridge improvement will impact the roof of the reinforced concrete box culvert at the Central Irvine Channel. The box culvert will be redesigned to allow for the permanent removal of a portion of the roof while not impacting the integrity of the box culvert.

Intelligent Transportation Systems (ITS), Temporary Fiber Optic Communication, and Additional Lighting

The Project will replace or modify existing ITS communication systems at certain locations and provide temporary communication required to keep traffic moving on the freeway and on city streets during construction. At two locations, the existing ITS needs to be replaced so that newer components can continue to provide needed data and to function properly. In addition, as construction will impact existing communication systems, temporary communication needs to be provided during construction. Finally, the California Department of Transportation (Caltrans) has requested that at locations where the distance between on- and off-ramps is less than required, which effectively reduces the length of time for traffic in auxiliary lanes to merge on and off the freeway, additional safety lighting needs to be incorporated into the Project to mitigate this issue.

Soundwalls

As the design progressed, it was discovered that ramp realignment will cause previously unknown impacts to an existing soundwall. This soundwall needs to be demolished and reconstructed, thus the need for additional design services. This also requires additional geotechnical tests, analyses, and a log of test borings. In addition, ongoing cooperation between Caltrans and the design team on the Supplemental Noise Study Report identified additional benefits to noise receptors that can be provided by a higher soundwall in the City of Irvine. This soundwall now requires redesign to ensure it provides sufficient noise mitigation while still adhering to the state's reasonableness and feasibility criteria.

Caltrans Multi-Asset Project (MAP)

Within the I-5 corridor, including this project segment from Yale Avenue to SR-55, Caltrans is developing the PS&E for a MAP which includes pavement rehabilitation, safety device upgrades, lighting and electrical/ITS conduit replacements, and striping. Caltrans began designing the MAP in mid-2023 and requested that OCTA combine the MAP scope of work into the M2 project's final PS&E. Including all improvements in one construction bid package will ensure efficient construction of all improvements and will minimize disruption to the traveling public, construction fatigue, potential construction conflicts, and redundant work. TranSystems Corporation (TranSystems) began their work in May 2021 and now needs to coordinate and combine the new Caltrans MAP scope of work and ensure compatibility of a single PS&E package for construction. The combining efforts would be shared by Caltrans and TranSystems; however, this amendment includes only additional efforts required from TranSystems. Coordination meetings and communication with Caltrans are needed to ensure the combined deliverables will be completed within the project schedule. The Caltrans MAP construction phase cost is funded by Caltrans' State Highway Operation and Protection Program.

This proposed amendment also includes funds for additional project management, coordination, and quality assurance/quality control needed to deliver the final design package on schedule.

Procurement Approach

The original procurement was handled in accordance with OCTA's Board-approved procedures for architectural and engineering services, which conform to both state and federal laws. The original firm-fixed price agreement was issued on May 6, 2021, in the amount of \$12,474,713. This agreement has been previously amended as shown in Attachment A. It has become necessary to amend the existing agreement to add funds for additional design services.

OCTA staff negotiated the required level of effort with TranSystems to provide the additional design services. Staff found TranSystems' cost proposal, in the amount of \$1,194,527, to be fair and reasonable relative to the negotiated level of effort and the independent cost estimate prepared by the OCTA project manager. Proposed Amendment No. 2 to Agreement No. C-0-2371 will increase the total contract value to \$14,653,412.

Amendment to Agreement for Additional Design Services for the Interstate 5 Improvement Project Between Yale Avenue and State Route 55 **Page 4**

Fiscal Impact

The additional funding for the Project is included in OCTA's Fiscal Year 2023-24 Budget, Capital Programs Division, Account No. 0017-7519-FB103-1OD. The source of additional funding is M2.

Summary

Staff requests Board of Directors' approval to authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Agreement No. C-0-2371 between the Orange County Transportation Authority and TranSystems Corporation, in the amount of \$1,194,527, for additional design services for the Interstate 5 Improvement Project between Yale Avenue and State Route 55.

Attachment

- A. TranSystems Corporation, Agreement No. C-0-2371 Fact Sheet

Prepared by:



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Program Manager
(714) 560-5879

Approved by:



James G. Beil, P.E.
Executive Director, Capital Programs
(714) 560-5646



Pia Veasapen
Director, Contracts Administration and
Materials Management
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**TranSystems Corporation
Agreement No. C-0-2371 Fact Sheet**

1. November 9, 2020, Agreement No. C-0-2371, \$12,474,713, approved by the Board of Directors (Board).
 - The agreement was executed on May 6, 2021, for design services for plans, specifications, and estimates for the Interstate 5 Improvement Project between Yale Avenue and State Route 55.
2. August 8, 2022, Amendment No. 1 to Agreement No. C-0-2371, \$984,172, approved by the Board of Directors (Board).
 - Additional design services related to the Jamboree Road northbound off-ramp, overhead signage, soundwalls, landscape design, and exceptions to the ramp metering policy fact sheet.
3. March 11, 2024, Amendment No. 2 to Agreement No. C-0-2371, \$1,194,527, pending approval by the Board.
 - Additional design services for drainage, intelligent transportation systems temporary fiber optic communications and additional lighting, soundwalls, and the California Department of Transportation Multi-Asset Project.

Total funds committed to TranSystems Corporation, after approval of Amendment No. 2 to Agreement No. C-0-2371: \$14,653,412.



March 4, 2024

To: Regional Transportation Planning Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Revisions to the Measure M2 Eligibility Guidelines

Overview

The Orange County Transportation Authority's Measure M2 Ordinance No. 3 specifies requirements that local jurisdictions must satisfy in order to be eligible to receive Measure M2 net sales tax revenues. The Measure M2 eligibility guidelines and countywide Pavement Management Plan guidelines assist local jurisdictions in navigating Measure M2 eligibility requirements and submittal processes. Proposed updates to these documents are presented for Board of Directors' review and approval.

Recommendations

- A. Approve proposed revisions to the Measure M2 Eligibility Guidelines.
- B. Approve proposed revisions to the countywide Pavement Management Plan Guidelines.

Background

The Orange County Transportation Authority's (OCTA) Measure M2 (M2) Ordinance No. 3 specifies requirements that M2-defined local jurisdictions (the cities and the County of Orange) must satisfy in order to be eligible to receive net M2 sales tax revenues. To assist local jurisdictions with these requirements, OCTA regularly updates guideline documents, including the M2 Eligibility Guidelines (Eligibility Guidelines) and the countywide Pavement Management Plan (PMP) guidelines. The OCTA Board of Directors (Board) last approved changes to the Eligibility Guidelines in April 2023.

Staff has completed a review of the Eligibility Guidelines and is recommending approval of revisions (discussed below). These updates are recommended to support local jurisdictions in meeting the M2 eligibility requirements. The recommended revisions incorporate feedback received during the most recent

and previous eligibility review cycles and also include updates to clarify and/or streamline M2 eligibility submittal and review processes.

The local jurisdictions are responsible for meeting and satisfying all required M2 eligibility requirements each year. These guidelines are intended to assist local jurisdictions in completing required M2 eligibility processes. In the most recent eligibility cycle, no issues surfaced that would warrant a change to the guidelines.

Discussion

The next M2 eligibility cycle will start immediately following the approval of the updated Eligibility Guidelines. The recommended revisions for the current cycle also include changes to the countywide PMP guidelines, which are complementary to the Eligibility Guidelines.

Eligibility Guidelines

The Eligibility Guidelines assist local jurisdictions in submitting a compliant eligibility package. The recommended amendments to the guidelines consist primarily of administrative changes. These include minor updates to the eligibility checklist and due dates, general wording modifications, clarification of submittal requirements, deletion of references to the former coronavirus modification for the maintenance of effort benchmark requirement, and technical updates/clarifications throughout the document, appendices, and reporting forms. A summary of the recommended revisions to the Eligibility Guidelines is provided in Attachment A, and a redline version of the proposed changes is provided in Attachment B.

Countywide PMP Guidelines

The PMP guidelines establish a consistent methodology for local jurisdictions to evaluate and report on pavement conditions, monitor changes, anticipate needed improvements, and verify compliance with M2's PMP requirements. Like the Eligibility Guidelines, the PMP guidelines have been revised to update administrative elements such as dates, checklists, and webpage links. The primary revision to the guidelines for the current eligibility cycle is clarification to the accepted electronic submission methods for pavement management data files. Agencies currently submit digital data in various formats, and this change clarifies a consistent electronic method for data submittals. The proposed revisions to the countywide PMP guidelines are identified in Attachment A, and a redline version in Attachment C.

Next Steps

Following the Board's approval of the recommended guidelines revisions, OCTA will conduct a workshop on March 14, 2024, to inform the local jurisdictions of the changes and guide them through the process. Staff will also coordinate with all local jurisdictions throughout the eligibility review process to facilitate timely submittal of required M2 eligibility components.

Staff will return to the Board to seek approval of M2 eligibility findings and recommendations through a two-phased process, with the first components (due in June 2024) being presented for Board consideration in February 2025, and the second component, M2 Expenditure Reports (due in December 2024), being presented in July 2025.

Summary

Revisions to the Eligibility Guidelines are recommended to support and facilitate the initiation of the ongoing M2 eligibility review process. Upon Board approval of recommended Eligibility Guidelines revisions, the first phase of the next M2 eligibility review cycle will commence.

Attachments

- A. Revisions to the Measure M2 Eligibility Guidelines and Countywide Pavement Management Plan Guidelines
- B. Measure M2 Eligibility Guidelines, Fiscal Year 2024/2025
- C. Countywide Pavement Management Plan Guidelines, March 2024

Prepared by:

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Section Manager, M2 Local Programs
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Approved by:

Kia Mortazavi
Executive Director, Planning
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Revisions to the Measure M2 Eligibility Guidelines and Countywide Pavement Management Plan Guidelines

Recommended Substantive Changes

- **Page 5** – Updated eligibility requirements table to be consistent with eligibility requirements and deadlines discussed in Chapter 2.
- **Page 8** – Updated Exhibit 1 with the latest Master Plan of Arterial Highways centerline mileage that is used to calculate Local Fair Share payments.
- **Pages 10 & 12** – Updated the expenditure report and MOE sections to remove references to the coronavirus modification for the MOE requirement as it no longer applies.
- **Page 14** – Updated Exhibit 2 with all finalized MOE benchmark values.
- **Page 17** – Updated Exhibit 3 with eligibility requirements and deadlines.
- **Page 19** – Updated the interest derived from net revenues section to remove the statement regarding the timely-use of funds requirement for interest earned on M2 funds, aligning with language in the M2 Ordinance No. 3.
- **Appendix D** – Clarified the language of requirements that are not due as part of the FY 2024-25 eligibility cycle.
- **Appendix F** – Updated FYs in the PMP submittal template and clarified acceptable mediums for pavement management data files.
- **Appendix H** – Updated table to add column specifying mileage changes as additions or deletions.
- **Appendix J** – Updated list with additional acronyms referenced in the M2 Eligibility Guidelines.
- **Countywide PMP Guidelines Page 2-1** – Updated source and webpage links for distress identification field manuals

Acronyms

FY = Fiscal Year

MOE = Maintenance of effort

M2 = Measure M2

PMP = Pavement Management Plan



MEASURE M2 ELIGIBILITY GUIDELINES

FISCAL YEAR 2024 / 2025



ORANGE COUNTY TRANSPORTATION AUTHORITY

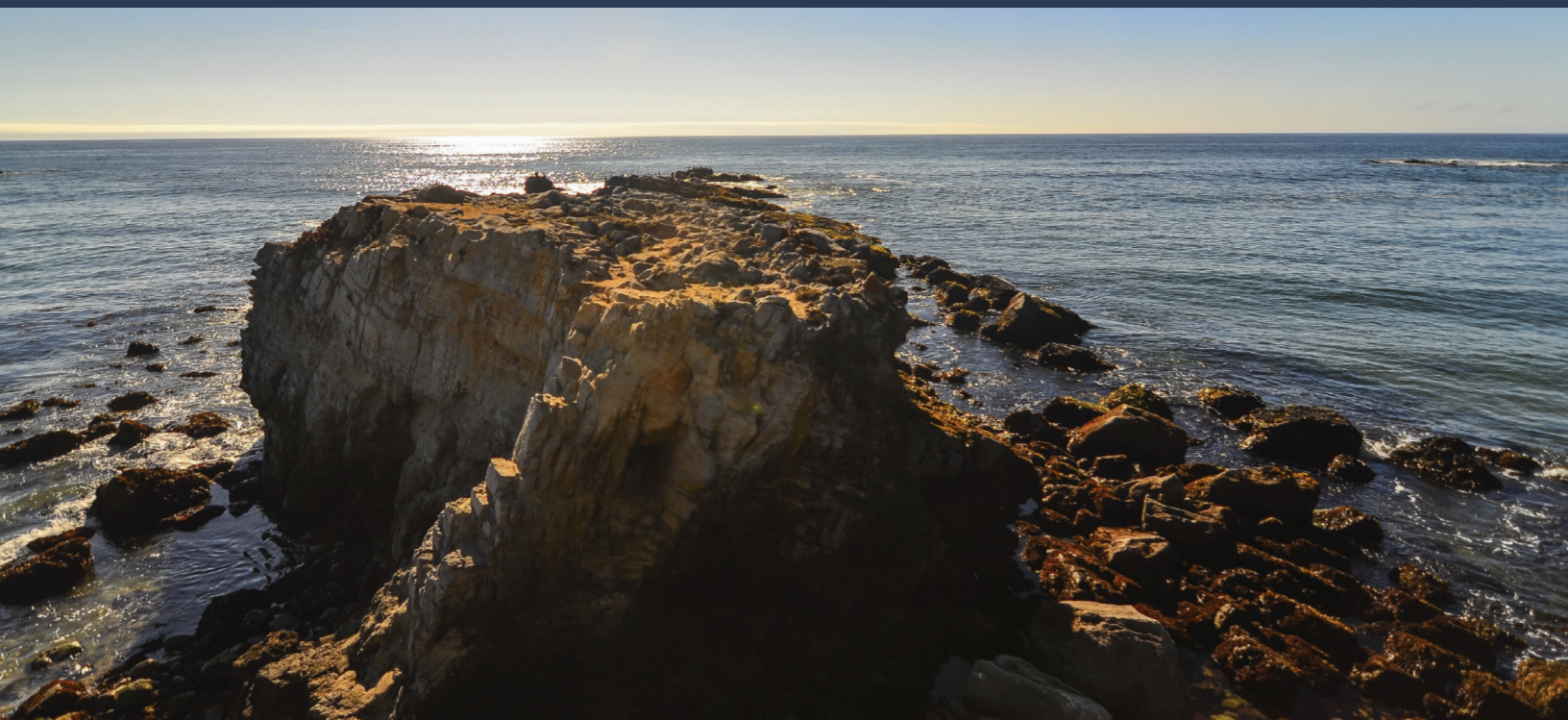


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Chapter 1 – Eligibility Overview

1.1 Introduction

On November 6, 1990, the voters in Orange County approved a ½-cent sales tax for transportation improvements known as Measure M. On November 7, 2006, voters approved a renewal of the original sales tax measure to continue the ½-cent sales tax for thirty years, beginning in 2011. Major improvement plans target Orange County freeways, streets and roads, transit and environmental programs.

The M2 Ordinance, included as Appendix A, outlines the eligibility requirements that local jurisdictions must satisfy to receive M2 Net Revenues. The M2 Eligibility Guidelines (Eligibility Guidelines) provide the resources local jurisdictions need to remain eligible to participate in M2 funding programs. Guidelines for newly incorporated cities are outlined in Appendix B.

Net Revenues are generated from the transactions and use tax plus any interest or other earnings, after allowable deductions. Net Revenues may be allocated to local jurisdictions for a variety of programs and the Orange County Transportation Authority (OCTA) shall allocate the Net Revenues to freeways, environmental, transit, and streets and roads projects.

Freeway Projects

Orange County freeways will receive forty-three percent (43%) of Net Revenues. Relieving congestion on State Route 91 is the centerpiece of the freeway program. Other major projects include improving Interstate 5 (I-5) in south Orange County, Interstate 405 (I-405) in west Orange County and State Route 57 in North Orange County. Under the plan, major traffic chokepoints on almost every freeway will be improved.

Environmental Programs

To address any environmental impact of freeway improvements, five percent (5%) of the allocated freeway funds will be used for environmental mitigation programs. A Master Agreement between OCTA and state and federal resource jurisdictions will provide higher-value environmental benefits such as habitat protection, wildlife corridors and resource preservation in exchange for streamlined project approvals for the freeway program as a whole. Funds are also available under the Environmental Cleanup Program (ECP) to implement transportation-related water quality improvement projects.

Transit Projects

Orange County's rail and bus service will receive twenty-five percent (25%) of Net Revenues. These funds will be used to add transit extensions to the Metrolink corridor, reduce bus fares for senior citizens and persons with disabilities, and establish local bus circulators.

Streets and Roads Projects

Orange County has more than 7,300 lane miles of streets and roads; many in need of repair and rehabilitation. This sales tax measure will allocate thirty-two percent (32%) of Net Revenues to streets and roads. These funds will help fix potholes, improve intersections, synchronize traffic signals countywide, and make the existing network of streets and roads safer and more efficient.

The allocation of thirty-two percent (32%) of the Net Revenues for Streets and Roads Projects shall be made as follows:

1. Ten percent (10%) of the Net Revenues shall be allocated to Project O, Regional Capacity Program (RCP).
2. Four percent (4%) of the Net Revenues shall be allocated to Project P, Regional Traffic Signal Synchronization Program (RTSSP).
3. Eighteen percent (18%) of the Net Revenues shall be allocated to Project Q, Local Fair Share (LFS) Program.

1.2 Competitive Funds

OCTA shall select projects through a competitive process for the RCP, RTSSP, various transit programs (Projects S, T, V, and W), and the ECP (Project X). The criteria for selecting these projects are included in the Comprehensive Transportation Funding Programs (CTFP) Guidelines, which are updated for each call for projects cycle. The process for calculating and distributing LFS funds are described in Section 1.3.

1.3 Local Fair Share (LFS) Funds

The LFS Program is a formula-based allocation provided to eligible jurisdictions for use on allowable transportation planning and implementation activities. It is intended to provide flexible funding to help jurisdictions keep up with the rising cost of repairing the aging street system. In addition, cities can use these funds for other local transportation needs such as residential street projects, traffic and pedestrian safety near schools, signal priority for emergency vehicles, etc. The LFS Program is funded through an eighteen percent (18%) allocation from Net Revenues and is distributed to eligible jurisdictions on a formula basis as determined by the following:

- Fifty percent (50%) is divided between eligible jurisdictions based upon the ratio of the jurisdiction's population to the County's total population, each from the previous calendar year.
- Twenty-five percent (25%) is divided between eligible jurisdictions based upon the ratio of the jurisdiction's existing MPAH centerline miles to the total MPAH centerline miles within the County as determined annually by OCTA.
- Twenty-five percent (25%) is divided between eligible jurisdictions based upon the ratio of the jurisdiction's total taxable sales to the total taxable sales for the County, each from the previous calendar year.
- OCTA contracts with three universities (California State University, Fullerton; Chapman University; University of California, Los Angeles) to provide a long-range forecast of taxable sales to forecast M2 revenues for the purposes of planning projects and program expenditures. In the past, OCTA has taken an average of the three university taxable sales projections to develop a long-range forecast of taxable sales. On March 28, 2016, as part of the fiscal year (FY) 2016-17 budget development process, the Board of Directors (Board) approved a new sales tax forecast methodology. The new methodology included a more conservative approach by utilizing a five-year forecast from MuniServices, Inc. The resulting revenue estimates are used for programming of competitive funds and as a guide for local jurisdiction planning within their respective CIPs.

1.4 Eligibility Requirements for Net Revenues

Every year, OCTA determines if a local jurisdiction is eligible to receive M2 Net Revenues. A local jurisdiction must satisfy certain requirements as outlined in the Ordinance. Specifically, a jurisdiction must:

- Comply with the conditions and requirements of the Orange County CMP
- Establish a policy which requires new development to pay its fair share of transportation-related improvements associated with their new development
- Adopt and maintain a General Plan Circulation Element consistent with the MPAH
- Adopt and update a CIP
- Participate in Traffic Forums
- Adopt and maintain a LSSP
- Adopt and update biennially a PMP
- Adopt and provide an annual Expenditure Report to OCTA
- Provide OCTA with a Project Final Report within six months following completion of a project funded with Net Revenues
- Agree to expend Net Revenues received through M2 within three years of receipt
- Satisfy MOE requirements
- Agree that Net Revenues shall not be used to supplant developer funding
- Consider, as part of the eligible jurisdiction's General Plan, land use and planning strategies that accommodate transit and non-motorized transportation

1.5 Audits

Local jurisdictions are responsible for meeting eligibility requirements and applicable laws regarding the use of public funds. Many eligibility requirements involve self-certification by local jurisdictions. Eligibility requirements are subject to audit. Audits shall be conducted by the OCTA Internal Audit Department or other authorized agent either through a regular annual process or on a schedule to be determined by the OCTA Board. Failure to submit to an audit in a timely manner may result in loss of future funding. Audit findings may result in an ineligibility determination and/or other sanctions. Please see Chapter 4 for more information regarding ineligibility and non-compliance consequences.

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Chapter 2 – Eligibility Requirements

The annual eligibility process relies upon a variety of reporting methods to verify local jurisdiction adherence to M2 eligibility requirements. Most methods leverage tools routinely used in the public planning process while others require certification forms or specialized reports. Templates, forms, and report formats are included as appendices to these guidelines and are available in electronic format. The table below summarizes certification frequency and documentation requirements.

Compliance Category	Schedule	Documentation
Capital Improvement Program (CIP)	Annual Next submittal is due June <u>28, 2024</u> .	<ul style="list-style-type: none"> Submit CIP projects online in OCFundtracker OCFundtracker CIP Project Listing Report City Council/Board of Supervisors approval by July 31, 2024.
Circulation Element/MPAH Consistency	Odd numbered years Next submittal is due June 30, <u>2025</u> .	<ul style="list-style-type: none"> Resolution (Appendix E) Circulation Element Exhibit Arterial Highway Mileage Change Report (Appendix H) Certify that the Circulation Element is consistent with MPAH in the Eligibility Checklist (Appendix D)
Congestion Management Plan (CMP)	Odd numbered years Next submittal is due June 30, <u>2025</u> .	<ul style="list-style-type: none"> Eligibility Checklist item in Appendix D Include projects to address deficient intersections in CIP (if applicable) CMP Checklist (Appendix C)
Expenditure Report	Annual – six months after end of fiscal year Next submittal is due December <u>31, 2024</u> .	<ul style="list-style-type: none"> Expenditure Report and resolution (Appendix G)
Local Signal Synchronization Plan (LSSP)	Every three years Next submittal is due June 30, <u>2026</u>	<ul style="list-style-type: none"> Copy of Plan Resolution (Appendix E)
Maintenance of Effort (MOE)	Annual Next submittal is due June <u>28, 2024</u> .	<ul style="list-style-type: none"> MOE Certification form (Appendix I) signed by Finance Director or equivalent designee that meets/exceeds MOE Benchmark in Exhibit 2 Budget excerpts and fund key
Mitigation Fee Program (MFP)	Odd numbered years Next submittal is due June 30, <u>2025</u> . ¹	<ul style="list-style-type: none"> Eligibility Checklist item in Appendix D Supporting documentation Resolution (Appendix E)
No Supplanting Existing Commitments	Annual Next submittal is due June <u>28, 2024</u> .	<ul style="list-style-type: none"> Eligibility Checklist item in Appendix D
Pavement Management Plan (PMP)	Every two years Next submittal for odd-even year jurisdictions is due June <u>28, 2024</u> . Refer to Exhibit 3 to determine the required PMP submittal schedule.	<ul style="list-style-type: none"> PMP Submittal Template (Appendix F) with PMP Certification form signed by Public Works Director or City Engineer Pavement management data files Adoption - Resolution (Appendix E) or City Council/Board of Supervisors approved adoption recommendation
Project Final Report	Within 6 months of project completion	<ul style="list-style-type: none"> Final Report
Timely Expenditure of Funds	Annual Next submittal is due June <u>28, 2024</u> .	<ul style="list-style-type: none"> Eligibility Checklist item in Appendix D
Traffic Forums	Annual Next submittal is due June <u>28, 2024</u> .	<ul style="list-style-type: none"> Eligibility Checklist item in Appendix D
Transit/Non-motorized Transportation in General Plan	Annual Next submittal is due June <u>28, 2024</u> .	<ul style="list-style-type: none"> Eligibility Checklist item in Appendix D Letter outlining land use planning strategies that accommodate transit and active transportation Excerpts of policies from the land use section of the General Plan

¹ Jurisdictions must submit their updated program and revised fee schedule or process methodology when the jurisdiction updates their mitigation program and/or nexus study regardless of eligibility submittal schedule.

2.1 Capital Improvement Program (CIP)

A CIP is a multi-year funding plan to implement capital transportation projects and/or programs including, but not limited to, capacity, safety, operations, maintenance, and rehabilitation projects. For purposes of eligibility, the Ordinance specifies that each jurisdiction must prepare a CIP. The annual seven-year CIP updates are required to enable timely review of eligible use of funds. The CIP shall include all capital transportation projects, such as projects funded by Net Revenues (i.e. ECP, RTSSP, RCP, other M2 Competitive Programs, and LFS projects) and transportation projects required to demonstrate compliance with signal synchronization, pavement management, and CMP requirements (See section 2.3 for the CIP's relevance to the CMP).

Projects funded by M2 Net Revenues include:

Project Description	Project
Freeway Projects	A-M
Regional Capacity Program (RCP)	O
Regional Traffic Signal Synchronization Program (RTSSP)	P
Local Fair Share (LFS)	Q
High Frequency Metrolink Service	R
Transit Extensions to Metrolink	S
Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems	T
Community Based Transit/Circulators	V
Safe Transit Stops	W
Environmental Cleanup Program (ECP) – Water Quality	X

Each eligible jurisdiction must include projects in their CIP that are needed to meet and maintain the adopted Traffic Level of Service and Performance Standards. The CIP shall also include all projects proposed to receive M2 funding. Local jurisdictions are encouraged, but not required, to include all transportation related projects regardless of M2 funding participation.

If M2 funding needed for a project is not reflected on the current CIP, an amended CIP should be adopted with contract award prior to expending funds. The revised CIP should be submitted to OCTA with evidence of council approval.

Submittal Frequency: Minimum annual or as needed to add M2 projects that are not reflected on the current CIP. Next submittal is due by June 28, 2024. Final CIP adoption due by July 31, 2024.

City Council/Board of Supervisors approval: Required

Documentation Method: OCTA provides a web-based database on OCFundtracker (<https://ocfundtracker.octa.net/>) that is used countywide for reporting approved CIP information. Each jurisdiction must generate a CIP Project Listing Report from OCFundtracker **and take this report to Council/Board of Supervisors for approval**. Please note, the M2 CIP is a planning document and does not commit local jurisdictions to fund the listed projects. However, projects must be listed on the M2 CIP in order for the proposed project to be eligible to receive M2 funding.

A CIP User's Manual to assist local jurisdictions with the preparation of the seven-year CIP is available for download at <https://www.octa.net/OCGoEligibility>.

2.2 Circulation Element/MPAH Consistency

M2 funding eligibility requires that each jurisdiction must adopt and maintain a Circulation Element within the jurisdiction's General Plan that is consistent with the OCTA MPAH. The MPAH is the OCTA plan which identifies the ultimate number of through lanes for arterial streets and designating traffic signal synchronization street routes in Orange County.

Every two years, each local jurisdiction must submit a resolution adopted by their governing body confirming that: the circulation element of their General Plan is in conformance with the MPAH; no unilateral reductions in through lanes have been made during the reporting period; and affirming that it will bring forward requests to amend the MPAH, when necessary, to ensure that the General Plan circulation element remains consistent with the MPAH.

Local jurisdictions shall be determined ineligible to participate in M2 programs if they do not submit the required materials below or if through an audit, it is determined that the jurisdiction did not administer the Circulation Element of its General Plan, consistent with the MPAH disclosures identified in the resolution. Exceptions may be considered subject to appropriate documentation.

Submittal Frequency: Odd numbered Fiscal Years - Next submittal is due by June 30, 2025.

City Council/Board of Supervisors approval: Required (Appendix E)

Documentation Method: Each jurisdiction must provide the following every odd numbered year:

- Eligibility Checklist (Appendix D) confirmation that the local jurisdiction's Circulation Element is in conformance with the MPAH.
- A copy of the most current Circulation Element Exhibit (network map) biennially showing all arterial highways and their individual arterial designations. Any proposed changes and/or requests for changes to the MPAH should also be included.
- Resolution adopted by the governing body of the local jurisdiction.
- The Arterial Highway Mileage Change Report (Appendix H). Changes are in actual (newly built or annexed existing facilities) MPAH centerline miles since the previous MPAH review, and are to be reported to the nearest 0.01 mile, excluding State highways. Data should be current as of April 30 of the reporting year. Exhibit 1 lists the current MPAH centerline miles by jurisdiction that is used to calculate Local Fair Share.

OCTA shall review the materials submitted and determine whether the local jurisdictions' submittals satisfy M2 Eligibility requirements. However, it is ultimately each local jurisdictions' responsibility for ensuring that their Circulation Element is consistent with the MPAH.

Exhibit 1: MPAH Centerline Miles

As of August 31, 2023²

Local Jurisdiction	Centerline Mileage
Aliso Viejo	14.85
Anaheim	148.38 148.90
Brea	21.22 20.57
Buena Park	34.44
Costa Mesa	49.33
County of Orange	60.82 62.17
Cypress	24.93
Dana Point	20.16
Fountain Valley	35.50
Fullerton	62.18
Garden Grove	63.78
Huntington Beach	92.32
Irvine	138.05
La Habra	17.45 17.13
La Palma	7.23
Laguna Beach ³	14.01
Laguna Hills	20.73
Laguna Niguel	35.94
Laguna Woods	5.77
Lake Forest	38.03
Los Alamitos	6.44
Mission Viejo	43.77
Newport Beach	48.92
Orange	84.07
Placentia	25.24 25.01
Rancho Santa Margarita	18.20
San Clemente	25.57
San Juan Capistrano	18.88
Santa Ana	99.10 98.96
Seal Beach	12.24
Stanton	9.48
Tustin	41.72 41.71
Villa Park	3.49
Westminster	35.75
Yorba Linda	33.23 32.67
	1,411.181,411.22

² Based on city boundaries published by the County of Orange in conjunction with mileage reported in OCTA ArcSDE database as of August 31, 2023.

³ Laguna Beach credited with State Highway mileage by agreement of the TAC.

2.3 Congestion Management Plan (CMP)

With the passage of Proposition 111 Gas Tax increase in June 1990, urbanized areas of California were required to adopt a CMP. OCTA was designated as the County's Congestion Management Agency (CMA), and as such, is responsible for the development, monitoring, and biennial updating of Orange County's CMP. Orange County's CMP is a countywide program established in 1992 to support regional mobility and air quality objectives by reducing traffic congestion, providing a mechanism for coordinating land use and development decisions that support the regional economy, and determining gas tax eligibility. Required elements of the County's CMP include traffic level of service (LOS) standards, performance measures, travel demand assessment methods and strategies, land use analysis programs, and Capital Improvement Programs. Each jurisdiction must comply with the following conditions and requirements of the Orange County CMP pursuant to the provisions of Government Code Section 65089 to be considered eligible for both gas tax revenues and M2 funding:

- Level of Service – Highways and roadways designated by OCTA must operate at an established LOS of no less than LOS "E" (unless the LOS from the baseline CMP dataset was lower).
- Deficiency Plans – Any CMP intersections that do not comply with the LOS standards must have a deficiency plan prepared by the responsible local jurisdiction that identifies the cause and necessary improvements for meeting LOS standards (certain exceptions apply).
- Land Use Analysis – Jurisdictions must analyze the impacts of land use decisions on the transportation system, using a designated methodology, consistent with the CMP Traffic Impact Analysis guidelines. The analysis must also include estimated cost to mitigate associated impacts.
- Modeling and Data Consistency – A jurisdiction utilizing a local area model for traffic impact analysis must conform to the Orange County Sub-Area Modeling guidelines, prepared by OCTA.
- CIP – Jurisdictions must submit an adopted seven-year CIP that includes projects to maintain or improve the LOS on CMP facilities or adjacent facilities.

Submittal Frequency: Odd numbered Fiscal Years - Next submittal is due by June 30, 2025.

City Council/Board of Supervisors approval: Not Required

Documentation Method: The CMP checklist, as shown in Appendix C, must be submitted to demonstrate compliance with CMP requirements. If a deficient intersection is identified, the jurisdiction must include a project in their CIP to address the issue or develop a deficiency plan. OCTA will use the M2 CIP prepared by each local jurisdiction as the default CMP CIP rather than require a separate submittal. Projects intended to address CMP deficiencies should be clearly identified in the project description within the CIP. Appendix C is available for download at <https://www.octa.net/OCGoEligibility>.

2.4 Expenditure Report

The Expenditure Report is a detailed financial report that tracks financial activity for M2 and other improvement revenue sources. Each jurisdiction must adopt an annual Expenditure Report to account for M2 funds, developer/traffic impact fees, and funds expended by the jurisdiction that satisfy the MOE requirements. This report is used to validate eligible uses of funds and to report actual MOE expenditures.

- Report required within six months of jurisdiction's end of fiscal year.
- Report to include all Net Revenue, fund balances, and interest earned. If interest earnings are negative, an explanation should be included to explain why.
- Reported expenditures shall be identified by activity type (i.e. construction, maintenance/operations, indirect and/or overhead) and funding source for each M2 program and/or project.

~~The coronavirus (COVID-19) pandemic modification⁴ is no longer in effect. Local jurisdictions will be held to the traditional MOE benchmark dollar amount (shown in Exhibit 2) as in years prior to the COVID-19 pandemic.~~

Submittal Frequency: Annual – Within 6 months of the end of the fiscal year. The deadline is December 31, 2024.

City Council/Board of Supervisors approval: Required (Appendix G)

Documentation Method: The Expenditure Report signed by the jurisdiction's Finance Director (or equivalent) and City Council/Board of Supervisors resolution attesting to the adoption is required. The Expenditure Report is self-certified by the jurisdiction and OCTA's review is to check for consistency with M2 disbursements only. Further, OCTA's receipt of the Expenditure Report does not constitute or confirm OCTA's acceptance or approval of reporting in the Expenditure Report itself, which is ultimately subject to audit review. The Expenditure Report template, instructions, and resolution are provided in Appendix G. Appendix G is available for download at <https://www.octa.net/OCGoEligibility>.

~~⁴-Due to the economic impacts of the COVID-19 pandemic, the Board approved amendments to the M2 Ordinance, which provided flexibility for the MOE requirement for fiscal years (FY) 2019-20 through 2021-22.~~

2.5 Local Signal Synchronization Plan (LSSP)

The LSSP⁵ is a three-year plan identifying traffic signal synchronization, street routes and traffic signals to be improved in eligible jurisdictions. The LSSP shall be consistent with the Regional Traffic Signal Synchronization Master Plan (RTSSMP). The LSSP will outline the costs associated with the identified improvements, funding and phasing of capital, and the operations and maintenance of the street routes and traffic signals. Inter-jurisdictional planning of traffic signal synchronization is also a component of the LSSP. Local jurisdictions must update LSSPs every three years and include a performance assessment which compares the information in the current report to prior cycle activities.

Submittal Frequency: Every 3 years – Next LSSP update submittal is due by June 30, 2026.

City Council/Board of Supervisors approval: Required (Appendix E)

Documentation Method: Local jurisdictions must ensure that their LSSP is in conformance with the RTSSMP. LSSPs must be updated and adopted every three years starting June 30, 2014. At a minimum, a Public Works Director must sign the LSSP Consistency Review Checklist. A separate document prepared by OCTA, "Guidelines for the Preparation of Local Signal Synchronization Plans," provides additional detail for jurisdiction submittal and is available for download at <https://www.octa.net/OCGoEligibility>.

⁵ A local match reduction of ten percent (10%) is provided for competitive grant applications submitted through the Regional Capacity Program (Project O) if the local jurisdiction has adopted a LSSP consistent with the RTSSMP.

2.6 Maintenance of Effort (MOE)

The MOE Certification is a financial reporting document, which provides annual certification of planned/budgeted maintenance, construction and indirect/other transportation related expenditures and the comparison to the annual MOE Benchmark Requirements for the fiscal year. Each jurisdiction must provide annual certification to OCTA that it will meet MOE requirements of Section 6 of the Ordinance. MOE applies to street and road transportation-related discretionary expenditures using GFRs or other non-transportation discretionary funds by local jurisdictions. Eligible expenditures are outlined in the State Controller's "Guidelines Relating to Gas Tax Expenditures for Cities and Counties," consistent with Article XIX of the State Constitution, and are subject to audit.

~~The COVID-19 modification is no longer in effect. On the MOE Certification Form, local jurisdictions must certify that the budgeted MOE expenditures meet the FY 2023-24 traditional MOE benchmark dollar amount (shown in Exhibit 2) as in years prior to the COVID-19 pandemic.~~

MOE Certification Process

M2 funds may be used to supplement, not replace, existing local revenues being used for transportation improvements and programs. A local jurisdiction cannot redirect discretionary funding, such as general fund revenues, currently being used for transportation purposes to other uses and replace the redirected funds with M2 revenues.

Each jurisdiction is required to maintain a minimum level of local streets and roads expenditures to conform to the MOE requirement. The original minimum level of expenditures was based upon an average of General Fund expenditures for local street maintenance and construction over the period from Fiscal Year 1985-86 through Fiscal Year 1989-90. The expenditure information was obtained from the Orange County Transportation Commission's Annual Report data collection sheets. The established benchmark was reported in constant dollars and was not adjusted for inflation. Note: Annexation of land into an existing jurisdiction does not affect the MOE.

Per the Ordinance, the MOE benchmark must be adjusted in 2014 and every three years thereafter based upon Caltrans' Construction Cost Index (CCI) for the preceding three calendar years, provided that the CCI-based adjustment cannot exceed growth rate in General Fund revenues during the update period. The current MOE benchmark is reflected in Exhibit 2. The next MOE benchmark adjustment will be effective July 1, 2026.

Submittal Frequency: Annual - Next MOE submittal is due June 28, 2024.

City Council/Board of Supervisors approval: Not Required

Documentation Method: The MOE Certification form must be completed, signed by the jurisdiction's Finance Director (or equivalent) and submitted on an annual basis. The current form is included in the Eligibility Guidelines as Appendix I and is available for download at <https://www.octa.net/OCGoEligibility>.

In addition, excerpts from the jurisdiction's annual budget showing referenced MOE expenditures and dedication of funds shall be included in the annual submittal to substantiate planned relevant discretionary fund expenditures, such as General Funds. MOE expenditures should be budgeted carefully, with clear focus upon benefits to local streets and roads, which can withstand periodic expenditure audit processes. **Jurisdictions are encouraged to submit MOE eligible expenditures higher than their MOE benchmark, so that should certain expenses be ruled ineligible during an MOE audit, the local jurisdiction still has sufficient MOE expenditures to demonstrate continued achievement of the MOE benchmark.**

Any California State Constitution Article XIX street and road eligible expenditure may be “counted” in a local jurisdiction’s annual calculation of MOE if the activity is supported (funded) by a local jurisdiction’s discretionary funds (e.g. General Fund). This is similar to how MOE is defined in the Gas Tax Guidelines related to the use of Road Maintenance and Rehabilitation Program funds. The California State Controller also provides useful information on Article XIX and Streets and Highways Code eligible expenditures. These guidelines do not replace statutory or legal authority, but explain the general information found in California Constitution Article XIX and the Streets and Highways Code. Additional expenditures spent in support of streets and roads may also be eligible for MOE, subject to providing acceptable justification.

It is the local jurisdiction’s responsibility to ensure that both the certified budgeted and the actual expenditures reported through the expenditure report are MOE eligible street and road expenditures. **OCTA’s review and receipt of the MOE Certification form does not constitute or confirm OCTA’s acceptance or approval of the MOE expenditures provided in the MOE Certification form.**

Exhibit 2: MOE Benchmark by Local Jurisdiction

Local Jurisdiction	MOE Benchmark
Aliso Viejo	\$ 556,162
Anaheim	\$ 13,196,392
Brea	\$ 838,243
Buena Park	\$ 4,778,989
Costa Mesa	\$ 9,827,861
County of Orange	N/A
Cypress	\$ 3,607,878
Dana Point	\$ 1,698,403
Fountain Valley	\$ 1,720,476
Fullerton	\$ 4,921,569
Garden Grove	\$ 4,497,736
Huntington Beach	\$ 6,494,379
Irvine	\$ 8,681,278
La Habra	\$ 1,983,997
La Palma	\$ 205,036
Laguna Beach	\$ 1,983,557
Laguna Hills	\$ 355,496
Laguna Niguel	\$ 990,064
Laguna Woods	\$ 104,578
Lake Forest	\$ 245,220
Los Alamitos	\$ 208,130
Mission Viejo	\$ 3,150,525
Newport Beach	\$ 14,292,404
Orange	\$ 3,507,565
Placentia	\$ 879,347
Rancho Santa Margarita	\$ 470,957
San Clemente	\$ 1,473,941
San Juan Capistrano	\$ 546,941
Santa Ana	\$ 10,324,712
Seal Beach	\$ 733,847
Stanton	\$ 326,462
Tustin	\$ 1,938,025
Villa Park	\$ 406,086
Westminster	\$ 1,896,546
Yorba Linda	\$ 2,836,929
Totals	\$ 109,672,702

MOE - Maintenance of effort

N/A - Not Applicable

2.7 Mitigation Fee Program (MFP)

The MFP is a locally established fee program, which assesses fees used to mitigate effects of new development on transportation infrastructure. Appropriate mitigation measures, including payment of fees, construction of improvements, or any combination thereof, will be determined through an established and documented process by each jurisdiction.

Each eligible jurisdiction must assess traffic impacts of new development and require new development to pay a fair share of necessary transportation improvements attributable to the new development. To ensure eligibility, each jurisdiction must have a clearly defined mitigation fee program.

[Submittal Frequency:](#) Odd years - Next MFP submittal is due by June 30, 2025.⁶

[City Council/Board of Supervisors approval:](#) Required (Appendix E)

[Documentation Method:](#) In addition to the City Council/Board of Supervisors approved resolution (Appendix E), the eligibility submittal should include one or more of the following supporting documents: a copy of the nexus study improvement list, a current fee schedule, a 5-Year Expenditure Report, or the process methodology. Where mitigation measures—including fair share contributions and construction of direct impact improvements—are used in lieu of an AB1600 compliant Nexus Study fee program, each jurisdiction shall provide a council resolution adopting the mitigation policy.

At such time that a jurisdiction updates their mitigation fee program and/or nexus study, they must submit their updated program and revised fee schedule or process methodology for the following review cycle. In addition, an MFP resolution must be submitted biennially to reaffirm that council concurs with the existing MFP. It is the local jurisdiction's responsibility to ensure fee programs and mitigation measures are updated periodically and meet the infrastructure needs of their community.

2.8 No Supplanting of Developer Commitments

Eligible jurisdictions must ensure that M2 funding will not be used to supplant existing or future development funding commitments for transportation projects. Development must be required to continue paying their fair share for new transportation improvements that are necessary because of the new traffic their project(s) create.

- Development must continue to pay their fair share for needed infrastructure improvements and transportation projects
- Net revenues must not supplant development funding or contributions which have been or will be committed to transportation projects through payment of fees in a defined program, fair share contribution, Community Facilities District financing, or other dedicated contribution to a specific transportation improvement

[Submittal Frequency:](#) Annual - Next submittal is due by June 28, 2024.

[City Council/Board of Supervisors approval:](#) Not Required

[Documentation Method:](#) Each jurisdiction must document within the Eligibility Checklist (Appendix D) that there has been no supplanting of developer commitments for transportation

⁶ Jurisdictions must submit their updated program and revised fee schedule or process methodology when the jurisdiction updates their mitigation program and/or nexus study on an even year. Annual cost adjustments should be reported but do not constitute an "update" on the Eligibility Checklist (Appendix D).

projects as outlined in the Ordinance. Appendix D is available for download at <https://www.octa.net/OCGoEligibility>.

2.9 Pavement Management Plan (PMP)

A PMP⁷ is a plan to manage the preservation, rehabilitation, and maintenance of paved roads by analyzing pavement life cycles, assessing overall system performance costs, and determining alternative strategies and costs necessary to improve paved roads. MicroPaver or StreetSaver will be used for countywide consistency. The software must be consistent with the latest version of ASTM Standard D6433.

Each jurisdiction must biennially update and adopt a PMP consistent with the specific requirements outlined in the Ordinance, and issue, using a common format (Appendix F) approved by OCTA, a report regarding the status of road pavement conditions and implementation of the PMP including, but not limited to, the following elements:

- The current status of pavement roads
- A seven-year plan for road maintenance and rehabilitation, including projects, funding, and unfunded backlog of pavement needs
- Projected pavement conditions resulting from improvements
- Alternative strategies and estimated costs to improve road pavement conditions

The Countywide PMP Guidelines have been prepared by OCTA to assist local jurisdictions with the PMP submittal. Local jurisdictions should refer to the guidelines for additional PMP submittal criteria. The Countywide PMP Guidelines can be downloaded from OCTA's Eligibility webpage: <https://www.octa.net/OCGoEligibility>.

Submittal Frequency: Every two years - 21 local jurisdictions submit PMP updates in even numbered Fiscal Years (i.e. June 28, 2024) and 14 local jurisdictions submit PMP updates in odd numbered Fiscal Years (i.e. June 30, 2025). Refer to Exhibit 3 to determine the local jurisdiction's required PMP submittal schedule.

City Council/Board of Supervisors approval: Required (Appendix E)

Documentation Method: To establish eligibility, each jurisdiction must complete and submit the adopted PMP Submittal Template (Appendix F). The adoption must be approved by the City Council/Board of Supervisors as a staff report recommendation or through a resolution. The template resolution is provided in Appendix E. The PMP certification form included in the template must be signed by the Public Works Director or City Engineer. These appendices are available for download at <https://www.octa.net/OCGoEligibility>.

The Executive Summary should include a brief overview of the PMP highlighting issues that have developed between review cycles and provide additional information regarding projects funded through the program. At a minimum, the Executive Summary should include Pavement Condition Index (PCI) reports, Projected PCI, and Alternative Funding Levels.

⁷ The Regional Capacity Program (RCP) Project O includes an incentive for successful PMP implementation. A local match reduction of ten percent (10%) is provided for competitive grant applications submitted through the RCP, if the jurisdiction either has measurable improvement of paved road conditions during the previous reporting period as determined through the countywide pavement management rating standards, or has road pavement conditions during the previous reporting period which are within the highest twenty percent (20%) of the scale for road pavement conditions in conformance with the Ordinance, defined as a PCI of 75 or higher, otherwise defined as in "good condition".

Exhibit 3: Submittal Schedule for Periodic Components

Local Jurisdiction	Updated PMP	CMP	MPAH Consistency	MFP ⁸	Project Final Reports	LSSP
Aliso Viejo	Even Year	Odd Numbered Fiscal Years (Next submittal is due by June 30, <u>2025</u>)	Odd Numbered Fiscal Years (Next submittal is due by June 30, <u>2025</u>)	Odd Numbered Fiscal Years (Next submittal is due by June 30, <u>2025</u>)	Within 6 months of project completion	Every 3 years (Next submittal is due June 30, <u>2026</u>)
Anaheim	Odd Year					
Brea	Odd Year					
Buena Park	Even Year					
Costa Mesa	Even Year					
County of Orange	Odd Year					
Cypress	Odd Year					
Dana Point	Odd Year					
Fountain Valley	Even Year					
Fullerton	Even Year					
Garden Grove	Even Year					
Huntington Beach	Even Year					
Irvine	Odd Year					
La Habra	Odd Year					
La Palma	Even Year					
Laguna Beach	Even Year					
Laguna Hills	Even Year					
Laguna Niguel	Even Year					
Laguna Woods	Even Year					
Lake Forest	Odd Year					
Los Alamitos	Odd Year					
Mission Viejo	Even Year					
Newport Beach	Odd Year					
Orange	Even Year					
Placentia	Even Year					
Rancho Santa Margarita	Even Year					
San Clemente	Odd Year					
San Juan Capistrano	Odd Year					
Santa Ana	Even Year					
Seal Beach	Even Year					
Stanton	Odd Year					
Tustin	Odd Year					
Villa Park	Even Year					
Westminster	Even Year					
Yorba Linda	Even Year					

⁸ Jurisdictions must submit their updated program and revised fee schedule or process methodology when the jurisdiction updates their mitigation program and/or nexus study regardless of allocated submittal schedule.

2.10 Project Final Report

Each jurisdiction must provide OCTA a project final report within six months following completion of a project funded with Net Revenues. Final report formats follow the template used by the CTFP. The CTFP Guidelines define the term “project phase completion” as the date all final third-party contractor invoices have been paid and any pending litigation has been adjudicated either for the engineering phase or for the right-of-way phase, and all liens/claims have been settled for the construction phase. The date of project phase completion will begin the 180-day requirement for the submission of a project final report as required by the Ordinance. Projects that have been cancelled are not required to submit a project final report but may be asked to submit a certification of cancellation form.

City Council/Board of Supervisors approval: Not Required

Documentation Method: To establish eligibility, a jurisdiction must submit a copy of the CTFP Project Final Report for each project utilizing Net Revenues. Each Final Report must be individually submitted to OCTA within six months of the completion of a project funded by Net Revenues, regardless of the eligibility review cycle. For the purposes of reporting non-project work (indirect and/or overhead, maintenance, repair, and other non-project related costs) funded by LFS funds, the annual Expenditure Report shall satisfy reporting requirements. If LFS funds are used for capital projects, the local jurisdiction shall also include a list of those funds and/or other M2 funds in the Project Final Report.

2.11 Time Limit for Use of Net Revenues

The timely expenditure of funds is a policy which must be adopted by each local jurisdiction to ensure Net Revenues are expended and accounted for within 3 years. The local jurisdiction must certify that the receipt and use of all M2 funds received will adhere to the time limits for use as outlined in the Ordinance.

Competitive Programs

- Jurisdictions must agree that Net Revenues for RCP projects and/or RTSSP projects shall be encumbered by the end of the fiscal year for which Net Revenues are programmed. Jurisdictions can request a delay through the Semi-Annual Review process. Refer to the CTFP Guidelines for additional information regarding encumbrance deadlines and delay requests.
- Local jurisdictions are generally required to expend funds within 36 months from the date of encumbrance for CTFP projects. Jurisdictions can request timely use of funds extensions through the Semi-Annual Review process. Refer to the CTFP Guidelines for additional information regarding expenditure deadlines and extension requests.

Local Fair Share (LFS)

- Per the M2 Ordinance, Net Revenues received by local jurisdictions through the LFS program shall be expended within three years of receipt. An extension may be granted but is limited to a total of five years from the date of receipt of funds. For review purposes, OCTA will track expenditures based on the fiscal year of receipt plus two additional fiscal years. Fiscal year means July 1 through June 30. For example, funds received in March 2022, if tracked by fiscal year, should be spent by June 30, 2024. The OCTA Board may authorize an extension of up to 24 months beyond the deadline. Since OCTA is tracking this based on fiscal year, the local jurisdiction would have to provide documentation of the original disbursement date in order for that date to be used for the deadline and would only be

required if the funding is not spent before the end of the applicable fiscal year. Requests for extensions shall be submitted prior to expiration and may be considered by the OCTA Board through the Semi-Annual Review process. Requests for extension must include a plan of expenditure.

- Expired funds including interest earned and related revenues must be returned to OCTA. These funds shall be returned for redistribution within the same source program.
- Use of LFS revenues for bonding (including debt service) shall be limited to 25% of the jurisdiction's annual LFS revenues. Bonding or loan must clearly support work that is otherwise eligible for LFS funds. The Board may consider an exception to the percentage limitation policy on a case-by-case basis.

Interest Derived from Net Revenues

- Interest from any M2 competitive funding program and LFS must be held in separate accounts.
- Local M2 interest proceeds must be spent by the local jurisdiction on transportation activities consistent with LFS eligible transportation activities.
- ~~Interest revenues must be expended within 2 fiscal years following the fiscal year of receipt.~~
- All interest accumulated at the conclusion of M2 is to be expended within three years of the program sunset date (March 31, 2041).

Submittal Frequency: Annual - Next submittal is due by June ~~28~~, ~~2024~~.

City Council/Board of Supervisors approval: Required if a delay is requested.

Documentation Method: Each jurisdiction must document within the Eligibility Checklist (Appendix D) confirmation that the jurisdiction complies with the timely use of Net Revenues throughout the year as outlined in the Ordinance. Net Revenue and Interest balances are reported on the annual Expenditure Report.

2.12 Traffic Forums

Traffic Forums are working group sessions for local jurisdictions. Traffic forums provide a venue for local jurisdictions to discuss general traffic and transportation issues, traffic circulation between participating jurisdictions, the coordination of specific projects, and the overall RTSSP. Each jurisdiction must participate in Traffic Forums on an annual basis to ensure eligibility.

Submittal Frequency: Annual - Next submittal is due by June 28, 2024.

City Council/Board of Supervisors approval: Not Required

Documentation Method: Each jurisdiction must document within the Eligibility Checklist (Appendix D) evidence of its annual participation in a Traffic Forum.

2.13 Transit/Non-motorized Transportation in General Plan

As part of the eligible jurisdiction's land use section of the General Plan, the jurisdiction must consider land use planning strategies that accommodate transit and non-motorized transportation. Multi-modal options are vital to a comprehensive transportation network. General Plans should include policies and language that demonstrate a thoughtful approach toward land use planning that encourages and facilitates mobility options.

Submittal Frequency: Annual - Next submittal is due by June 28, 2024.

City Council/Board of Supervisors approval: Not Required

Documentation Method: Each jurisdiction must document within the Eligibility Checklist (Appendix D) that it considers, as part of the land use section of the General Plan, land use planning strategies that accommodate transit and non-motorized transportation. A letter outlining the approach to land use planning strategies or policies that accommodate transit and non-motorized transportation should be provided with supporting General Plan excerpts. Policy summaries that directly tie land use planning to alternative modes are required.

These may include:

- Pedestrian friendly neighborhoods
- Transit Oriented Development
- Transportation Demand Management programs
- Mixed-use development

Chapter 3 - Eligibility Determination

3.1 Submittal Review Process

The Eligibility submittal process has two distinct phases.

First Phase

In the first phase, local jurisdictions submit the eligibility checklist, CIP, MOE Certification and land use planning strategies considered in the General Plan on an annual basis. In addition, the PMP, CMP, MFP, and adoption of the Circulation Element for MPAH consistency are due on a biennial basis. The LSSP is due every three years. The periodic submittal schedule of the eligibility requirements is included in Exhibit 3. The applicable eligibility components for a given year must be submitted to OCTA by June 30 (except the Expenditure Report)⁹.

To assist in the initiation of the eligibility process, OCTA hosts eligibility workshops attended by local jurisdictions to prepare for the June 30 submittal date. The workshops outline any changes and provide instructions as to the requirements of the current fiscal year's eligibility cycle. Eligibility package development begins for most local jurisdictions in April and concludes with submittal to OCTA by the June 30 deadline each year.

Second Phase

The second phase includes the submittal of the Expenditure Report, which is due six months following the end of the local jurisdiction's fiscal year per the Ordinance. All local jurisdictions must submit their Expenditure Report annually by December 31¹⁰. OCTA staff typically holds a workshop in July/August to go over the eligibility requirements for submitting an Expenditure Report that is compliant with the Ordinance. The OCTA Finance department reviews Expenditure Reports. However, OCTA's receipt and review of Expenditure Reports does not constitute or confirm OCTA's acceptance or approval of the reporting provided in the Expenditure Report itself, which is ultimately subject to audit review.

3.2 Approval Process

Annual eligibility determinations are based upon satisfactory submittal of the required documentation of eligibility outlined in the Ordinance and further described in Chapter 2 of these guidelines. OCTA and/or its representatives perform an administrative review of the data to determine eligibility compliance for M2 funds. Once all eligibility submittals have been received, the applicable submittals must be prepared for affirmation of receipt and review by the Taxpayer Oversight Committee (TOC).

TOC

M2 established the TOC to provide an enhanced level of accountability for expenditure of Net Revenues under the Ordinance. The TOC is an independent citizens' committee established for overseeing compliance with the Ordinance and ensuring that safeguards are in place to protect the integrity of the overall program. TOC responsibilities include:

- Approval of any amendment to the Ordinance proposed by OCTA which changes the funding categories, programs or discrete projects identified for improvements in the Funding Plan.

⁹ If June 30 falls on a weekend, submittals must be provided to OCTA by the Friday prior.

¹⁰ If December 31 falls on a weekend, submittals must be provided to OCTA by the Friday prior.

- Receive and review select documentation establishing annual eligibility by jurisdictions including the CMP, MFP, Expenditure Report, LSSP, and PMP.
- Verification that the OCTA is proceeding in accordance with the M2 Plan and is meeting the performance standards outlined in the Ordinance.

The TOC designates the Annual Eligibility Review (AER) subcommittee to first receive and review the required eligibility components for each local jurisdiction on an annual basis. The AER subcommittee affirms that it has completed its receipt and review process annually to the TOC.

In addition, OCTA staff will review items that do not directly require TOC receipt and review and confirm acceptance. After TOC and OCTA's review of all eligibility requirements, OCTA staff will prepare eligibility recommendations for the OCTA Board. The OCTA Regional Transportation Planning and Highways Committee reviews the item prior to being considered by the full Board. The Board will make a final determination as to whether or not a local jurisdiction remains eligible for M2 funding on an annual basis.

Chapter 4 – Failure to Meet Eligibility Requirements

4.1 Non-Compliance Consequences

M2 extends a legacy of successful public funding investment in transportation throughout Orange County. The eligibility process includes a review of required compliance components to ensure that programs and funding guidelines are met as defined by Ordinance. The State Controller’s “Guidelines Relating to Gas Tax Expenditures for Cities and Counties”, provides useful information regarding the use of revenues for streets and roads purposes, consistent with Article XIX of the State Constitution. These guidelines are used by OCTA to determine eligibility for MOE expenditures. In addition, other non-Article XIX transportation expenditures may be eligible for certain M2 programs. Local jurisdictions should contact OCTA’s M2 Program Management Office for specific questions on eligible and ineligible expenditures.

OCTA routinely conducts an audit of local jurisdictions’ annual eligibility materials and financial records. Full cooperation is expected to complete the process in a timely manner. Failure to adhere to eligibility compliance components may result in Board action to suspend M2 funds until satisfactory compliance is achieved. For example, failure to meet MOE or other M2 requirements could result in suspension of all M2 formula and competitive grant payments and may prevent approval of awards until specific deficiencies are corrected.

The M2 Ordinance also includes provisions related to misspent M2 funds. For the purposes of this section, “misspent” means misappropriation of public funds, pursuant to state law. If the Board determines that a local jurisdiction has misspent M2 funds, then those funds must be fully re-paid, and the Board may deem that jurisdiction ineligible to receive M2 funds for a period of five (5) years.

4.2 Board Process Related to Ineligibility

Eligibility review and determination is a multi-step process, which relies upon an objective review of information by OCTA staff. Actions related to ineligibility are made by the Board.

4.3 For Additional Information

The Eligibility Guidelines have been developed to assist local jurisdictions located throughout Orange County to understand and continue to implement all eligibility requirements to receive M2 funding. The Guidelines provide general summary information regarding all eligibility requirements as well as a comprehensive summary of all responsibilities and actions for which a local jurisdiction must follow to continue their eligibility.

Please contact the following OCTA staff when seeking additional information or clarification regarding any of the Eligibility Guidelines:

Stephanie Mooney

Transportation Funding Analyst

(714) 560-5312

smooney@octa.net

Or

Charvalen Alacar

Section Manager

(714) 560-5401

calacar@octa.net

Appendices:

Appendix A: M2 Ordinance

The M2 Ordinance can be found on the Eligibility Website:
<https://www.octa.net/OCGoEligibility>

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Appendix B: Eligibility for New Cities

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Eligibility for New Cities

Eligibility for Fair Share Funds – New Cities

At the time of incorporation, a new city may adopt current practices previously established by the County of Orange, which have already established eligibility under current M2. As new cities mature, they will adopt their own general plan and growth strategies.

To provide for this transition period, the OCTA Board has previously adopted the following new city eligibility process for Fair Share funds:

- A new city may, at its discretion, adopt the approved PMP of the predecessor governing body as its own, providing these policies are fully enforced.
- Prior to incorporation, the proposed new city must work with OCTA and the Local Agency Formation Commission to identify the variables used in the LFS funds calculation (population, taxable sales, and MPAH mileage). Preliminary data must be identified prior to the date of incorporation.
- The new city will begin accruing LFS funds as of the date of incorporation.
- OCTA will reserve the accrued funds for the new city, pending the determination of eligibility by the Board within one year of the date of incorporation.
- For the new city to receive the reserved accrued funds, OCTA must receive all necessary elements of the eligibility package, complete the necessary review and approval of the package, and the Board must determine the new city eligible to receive M2 funds within one year of the date of incorporation. OCTA recommends the city submit its eligibility package within six months of incorporation to allow sufficient time for OCTA review and approval processes.
- Upon determination of eligibility by the Board, the new city will receive its first LFS payment including the reserved accrued funds, on the first regular payment cycle following the eligibility determination.
- The first LFS payment will be adjusted to reflect final calculation (population, taxable sales, and MPAH miles) as determined through the new city eligibility process.
- In the event a new city is determined to be ineligible to receive LFS funds by the Board, the reserved accrued funds and interest on the funds, shall be distributed to the eligible local jurisdictions on a pro-rata basis, until such time that the new city attains eligibility.
- Such new city will begin to accrue funds as of the first day of the first regular accrual period following its determination of eligibility by the Board and receive its first LFS payment on the corresponding regular payment cycle.

Eligibility for Competitive Funds – New Cities

In addition to the new city eligibility process for LFS funds, the Board has adopted the following process for eligibility for competitive funds:

- A new city may apply for competitive funding upon the date of incorporation, however, may not be awarded competitive funding until the new city has been determined eligible to receive LFS funds by the Board, as described above.
- A new city must include an adopted PMP that is consistent with countywide pavement condition assessment standards (Arterial Highway Rehabilitation Program), a General Plan Circulation Element consistent with the MPAH, and a City Council resolution attesting that no unilateral reduction in lanes have been made on any MPAH arterials in its eligibility package for review and approval by the Board.

- Applications for competitive funding by new cities will be considered until such time in the process of the competitive funding program that projects are ranked for award. If the new city has not been determined eligible by the Board by the time projects are ranked for award, any application by the new city for competitive funding will be withdrawn from further consideration. OCTA staff will work with the new city to revise the schedule specific to its time of incorporation in relation to the current competitive funding program process.

New Cities – MOE

M2 requires the development of a method to apply the MOE to new cities without five years of streets and roads data, including cities incorporated during the thirty years the tax is in effect. New cities unable to meet this requirement may use the appeals process to establish a benchmark number that more accurately reflects network needs. A phase-in period of two years has been established for new cities to achieve the approved MOE expenditure requirement.

The approved method uses the following formula to calculate the MOE for new cities:

$$\frac{\text{Total Countywide MOE Benchmark}}{\text{Total Countywide Population}} = \text{Per Capita Expenditure}$$

$$\text{Per Capita Expenditure} \times \text{City Population} = \text{MOE Benchmark for the City}$$

Appeals Process

New cities may appeal the formula benchmark determination above where there is a dispute regarding the city population. OCTA shall use the most recent Census or figures from the State of California Department of Finance. Appeals will be submitted first to the TAC and then to the Board for final determination.

Appendix C: Congestion Management Program Checklist

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Jurisdiction: _____

CMP Monitoring Checklist: Level of Service (LOS)				
CMP Checklist		YES	NO	N/A
1.	Check "Yes" if either of the following apply: <ul style="list-style-type: none"> • There are no CMP intersections in your jurisdiction. • Factoring out statutorily-exempt activities¹, all CMP intersections within your jurisdiction are operating at LOS E (or the baseline level, if worse than E) or better. 	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: ONLY THOSE AGENCIES THAT CHECKED "NO" FOR QUESTION 1 NEED TO ANSWER THE REMAINING QUESTIONS.				
2.	If any, please list those intersections that are not operating at the CMP LOS standards. <ul style="list-style-type: none"> • _____ • _____ • _____ 			<input type="checkbox"/>
3.	Will deficient intersections, if any, be improved by mitigation measures to be implemented in the next 18 months or improvements programmed in the first year of any recent funding program (i.e. local jurisdiction CIP, Measure M CIP)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	a. If not, has a deficiency plan been developed for each intersection that will be operating below the CMP LOS standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:				

¹ The following activities are statutorily-exempt from deficiency determinations: interregional travel, traffic generated by the provision of low and very low income housing, construction rehabilitation or maintenance of facilities that impact the system, freeway ramp metering, traffic signal coordination by the state or multi-jurisdictional agencies, traffic generated by high-density residential development within 1/4 mile of a fixed-rail passenger station, traffic generated by mixed-use residential development within 1/4 mile of a fixed-rail passenger station.

CMP Monitoring Checklist: Deficiency Plans				
CMP Checklist		YES	NO	N/A
1.	Check "Yes" if either of the following apply: <ul style="list-style-type: none"> There are no CMP intersections in your jurisdiction. Factoring out statutorily-exempt activities², all CMP Highway System (CMPHS) intersections within your jurisdiction are operating at LOS E (or the baseline level, if worse than E) or better. 	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: ONLY THOSE AGENCIES THAT CHECKED "NO" FOR QUESTION 1 NEED TO ANSWER THE REMAINING QUESTIONS.				
2	If any, please list those intersections that are not operating at the CMP LOS standards. <ul style="list-style-type: none"> _____ _____ _____ 			<input type="checkbox"/>
3.	Are there improvements to bring these intersections to the CMP LOS standard scheduled for completion during the next 18 months or programmed in the first year of the CIP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOTE: ONLY THOSE AGENCIES THAT CHECKED "NO" FOR QUESTION 3 NEED TO ANSWER THE REMAINING QUESTIONS.				
4.	Has a deficiency plan or a schedule for preparing a deficiency plan been submitted to OCTA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Does the deficiency plan fulfill the following statutory requirements? :			
	a. Include an analysis of the causes of the deficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. Include a list of improvements necessary to maintain minimum LOS standards on the CMPHS and the estimated costs of the improvements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c. Include a list of improvements, programs, or actions and estimates of their costs, which will improve LOS on the CMPHS and improve air quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	i. Do the improvements, programs, or actions meet the criteria established by South Coast Air Quality Management District (SCAQMD) (see the CMP Preparation Manual)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

² The following activities are statutorily-exempt from deficiency determinations: interregional travel, traffic generated by the provision of low and very low income housing, construction rehabilitation or maintenance of facilities that impact the system, freeway ramp metering, traffic signal coordination by the state or multi-jurisdictional agencies, traffic generated by high-density residential development within 1/4 mile of a fixed-rail passenger station, traffic generated by mixed-use residential development within 1/4 mile of a fixed-rail passenger station.

CMP Monitoring Checklist: Deficiency Plans (cont.)

CMP Checklist		YES	NO	N/A
6.	Are the capital improvements identified in the deficiency plan programmed in your seven-year CIP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Does the deficiency plan include a monitoring program that will ensure its implementation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Does the deficiency plan include a process to allow some level of development to proceed pending correction of the deficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Has necessary inter-jurisdictional coordination occurred?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Please describe any innovative programs, if any, included in the deficiency plan:	<input type="checkbox"/>		
Additional Comments:				

CMP Monitoring Checklist: Land Use Coordination				
CMP Checklist		YES	NO	N/A
1.	Have you maintained the CMP traffic impact analysis (TIA) process you selected for the previous CMP?	<input type="checkbox"/>	<input type="checkbox"/>	
	a. If not, have you submitted the revised TIA approach and methodology to OCTA for review and approval?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Did any development projects require a CMP TIA during this CMP cycle? ³	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: ONLY THOSE AGENCIES THAT CHECKED "YES" FOR QUESTION 2 NEED TO ANSWER THE REMAINING QUESTIONS.				
3.	If so, how many?	_____		
4.	Please list any CMPHS links & intersections that were projected to not meet the CMP LOS standards (indicate whether any are outside of your jurisdiction). • _____ • _____ • _____			<input type="checkbox"/>
	a. Were mitigation measures and costs identified for each and included in your seven-year CIP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. If any impacted links & intersections were outside your jurisdiction, did your jurisdiction coordinate with other jurisdictions to develop a mitigation strategy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	If a local traffic model was/will be used, did you follow the data and modeling consistency requirements as described in the CMP Preparation Manual (available online at http://www.octa.net/pdf/cmpprepmanual.pdf)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:				

³ Exemptions include: any development generating less than 2,400 daily trips, any development generating less than 1,600 daily trips (if it directly accesses a CMP highway), final tract and parcel maps, issuance of building permits, issuance of certificate of use and occupancy, and minor modifications to approved developments where the location and intensity of project uses have been approved through previous and separate local government actions prior to January 1, 1992.

CMP Monitoring Checklist: Capital Improvement Program (CIP)				
CMP Checklist		YES	NO	N/A
1.	Did you submit a seven-year CIP to OCTA by June 30?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Does the CIP include projects to maintain or improve the performance of the CMPHS (including capacity expansion, safety, maintenance, and rehabilitation)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Is it consistent with air quality mitigation measures for transportation- related vehicle emissions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Was the OCFundtracker CIP provided by the OCTA used to prepare the CIP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:				

NOT DUE

OPTIONAL - CMP Monitoring Checklist: Federal Congestion Management				
CMP Checklist		YES	NO	N/A
1.	Does any federally funded project in the CIP result in a significant increase in single occupant vehicle (SOV) capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOTE: ONLY THOSE AGENCIES THAT CHECKED "YES" FOR QUESTION 1 NEED TO ANSWER THE REMAINING QUESTION.				
2.	If so, was the project developed as part of the federal Congestion Management Process, in other words, was there an appropriate analysis of reasonable travel demand reduction and operational strategies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:				
<div style="position: relative; width: 100%; height: 100%;"> NOT DUE </div>				
I certify that the information contained in this checklist is true.				
<div style="border-bottom: 1px solid black; width: 100%;"></div> Name (Print)		<div style="border-bottom: 1px solid black; width: 100%;"></div> Title		<div style="border-bottom: 1px solid black; width: 100%;"></div> Signature
				<div style="border-bottom: 1px solid black; width: 100%;"></div> Date

Appendix D: Eligibility Checklist

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Jurisdiction:	
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Capital Improvement Program (CIP)		YES	NO
1.	Did you submit your draft or adopted M2 seven-year CIP to OCTA by June 28?	<input type="checkbox"/>	<input type="checkbox"/>
	a. Did you utilize the required OCTA OCFundtracker CIP database?	<input type="checkbox"/>	<input type="checkbox"/>
	b. Have you included projects required to demonstrate compliance with signal synchronization, pavement maintenance, the Congestion Management Program, and environmental clean-up commitments?	<input type="checkbox"/>	<input type="checkbox"/>
	c. Are there any non-transportation related projects included in your M2 CIP? (Note: Projects funded through ECP are considered transportation-related)	<input type="checkbox"/>	<input type="checkbox"/>
	d. Did you include all projects that are partially, fully, or potentially funded by M2 Net Revenues?	<input type="checkbox"/>	<input type="checkbox"/>
	e. The City Council/Board of Supervisors approval date* to adopt the final 7-Year CIP is: _____ *Must be prior to July 31		
Maintenance of Effort (MOE)		YES	NO
2.	Did you submit the MOE certification form (Appendix I) to OCTA by June 30?	<input type="checkbox"/>	<input type="checkbox"/>
	a. Did you provide supporting budget documentation?	<input type="checkbox"/>	<input type="checkbox"/>
	b. Has the MOE Reporting form been signed by the Finance Director or appropriate designee?	<input type="checkbox"/>	<input type="checkbox"/>
Pavement Management Plan (PMP)		YES	NO
3.	Are you required to submit a PMP update to OCTA for this eligibility cycle? Refer to Exhibit 3 for PMP submittal schedule.	<input type="checkbox"/>	<input type="checkbox"/>
	a. If yes, did you use the current PMP Submittal Template (Appendix F)?	<input type="checkbox"/>	<input type="checkbox"/>
	b. If yes, is the adopted PMP consistent with the OCTA Countywide Pavement Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>
4.	If you answered "no" to question 3, did you submit a PMP Update to OCTA through the previous eligibility cycle by June 30?	<input type="checkbox"/>	<input type="checkbox"/>
Resolution of MPAH Consistency		YES	NO
5.	Did you submit a resolution indicating conformance with the MPAH?	N/A	N/A
	a. Have you enclosed an exhibit showing roadway designations that represent your most current circulation element?	N/A	N/A
Local Signal Synchronization Plan (LSSP)		YES	NO
6.	Did you adopt and submit an update to the LSSP as part of the current cycle?	N/A	N/A
	a. Is your LSSP consistent with the Regional Traffic Signal Synchronization Master Plan?	N/A	N/A

Time Limits for Use of Net Revenues		YES	NO
7.	Has your jurisdiction complied with the three-year time limit for the use of Net Revenues over the last year per the requirements outlined in the Ordinance?	<input type="checkbox"/>	<input type="checkbox"/>
	a. If no, has a time extension been requested through the CTFP semi-annual review process for funds subject to expiration?	<input type="checkbox"/>	<input type="checkbox"/>
Supplanting of Developer Commitments		YES	NO
8.	Has your jurisdiction ensured they have not supplanted developer commitments for transportation projects and funding with M2 funds?	<input type="checkbox"/>	<input type="checkbox"/>
Mitigation Fee Program (MFP)		YES	NO
9.	Does your jurisdiction currently have a defined development impact MFP in place?	<input type="checkbox"/>	<input type="checkbox"/>
10.	Has an update to the MFP occurred since the last reporting period?	<input type="checkbox"/>	<input type="checkbox"/>
11.	If yes to 10, has your jurisdiction submitted one or more of the supporting documents outlined in chapter 2.7 of the Eligibility Guidelines?	<input type="checkbox"/>	<input type="checkbox"/>
Planning Strategies		YES	NO
12.	Does your jurisdiction consider as part of its General Plan, land use planning strategies that accommodate transit and non-motorized transportation?	<input type="checkbox"/>	<input type="checkbox"/>
13.	Have you provided a letter identifying land use planning strategies that accommodate transit and non-motorized transportation consideration in the General Plan?	<input type="checkbox"/>	<input type="checkbox"/>
Traffic Forums		YES	NO
14.	Did representatives of your jurisdiction participate in the regional traffic forum(s)?	<input type="checkbox"/>	<input type="checkbox"/>
	a. If you answered yes, provide date(s) of attendance: _____		
Congestion Management Program (CMP)		YES	NO
15.	Has your jurisdiction completed the required CMP checklist? (Appendix C)	N/A	N/A

Name (Print)

Signature

Date

Appendix E: Resolutions

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[RESOLUTION FOR MPAH CIRCULATION ELEMENT CONSISTENCY AND MITIGATION FEE PROGRAMS]

A RESOLUTION OF THE CITY COUNCIL/BOARD OF SUPERVISORS OF THE CITY/COUNTY OF _____ CONCERNING THE STATUS AND UPDATE OF THE CIRCULATION ELEMENT, AND MITIGATION FEE PROGRAM FOR THE MEASURE M (M2) PROGRAM

WHEREAS, the City/County of _____ desires to maintain and improve the streets within its jurisdiction, including those arterials contained in the Master Plan of Arterial Highways (MPAH); and

WHEREAS, the City/County of _____ has endorsed a definition of and process for, determining consistency of the City's/County's Traffic Circulation Plan with the MPAH; and

WHEREAS, the City/County has adopted a General Plan Circulation Element which does not preclude implementation of the MPAH within its jurisdiction; and

WHEREAS, the City/County is required to adopt a resolution biennially informing the Orange County Transportation Authority (OCTA) that the City/County's Circulation Element is in conformance with the MPAH and whether any changes to any arterial highways of said Circulation Element have been adopted by the City/County during Fiscal Years (FY) 2023-24 and FY 2024-25; and

WHEREAS, the City/County is required to send biennially to the OCTA all recommended changes to the City/County Circulation Element and the MPAH for the purposes of re-qualifying for participation in the Comprehensive Transportation Funding Programs; and

WHEREAS, the City/County is required to adopt a resolution biennially certifying that the City/County has an existing Mitigation Fee Program that assesses traffic impacts of new development and requires new development to pay a fair share of necessary transportation improvements attributable to the new development; and

NOW, THEREFORE, BE IT RESOLVED that the City Council/Board of Supervisors for the City/County of _____, does hereby inform OCTA that:

- a) The arterial highway portion of the Circulation Element of the _____ City/County is in conformance with the MPAH.
- b) The City/County attests that no unilateral reduction in through lanes has been made on any MPAH arterials during FY 2023-24 and FY 2024-25.
- c) The City/County affirms that it will bring forward requests to amend the MPAH, when necessary, in order to ensure that the MPAH and the General Plan Circulation Element remain consistent.
- d) The City/County reaffirms that the existing Mitigation Fee Program is in effect.

PASSED, APPROVED AND ADOPTED THIS [Insert Day] day of [Insert Month], [Insert Year].

[RESOLUTION FOR LOCAL SIGNAL SYNCHRONIZATION PLAN UPDATE]

A RESOLUTION OF THE CITY COUNCIL/BOARD OF SUPERVISORS OF THE CITY/COUNTY OF _____
_____ CONCERNING THE UPDATE OF THE LOCAL SIGNAL SYNCHRONIZATION PLAN FOR THE
MEASURE M (M2) PROGRAM.

WHEREAS, the Orange County Transportation Authority has developed the Regional Traffic Signal Synchronization Master Plan to identify traffic signal synchronization street routes and traffic signals within and across jurisdictional boundaries, and defines the means of implementing the Regional Traffic Signal Synchronization Program; and

WHEREAS, the Regional Traffic Signal Synchronization Program requires that local jurisdictions adopt a Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local jurisdictions' efforts to synchronizing traffic signals across local jurisdictions' boundaries; and

WHEREAS, the Local Signal Synchronization Plan must be updated by June 30, 2026 to continue to be eligible to receive Net Revenues as part of Measure M2;

NOW, THEREFORE, BE IT RESOLVED that the City Council/Board of Supervisors for the City/County of _____, does hereby inform OCTA that:

- a) The City/County adopts and maintains a Local Signal Synchronization Plan which includes goals that are consistent with those outlined as part of the Regional Signal Synchronization Master Plan, including signal synchronization across jurisdictions.
- b) The Local Signal Synchronization Plan identifies traffic signal synchronization street routes, including all elements of the Regional Signal Synchronization Network located within the City/County.
- c) The Local Signal Synchronization Plan includes the traffic signal inventory for all traffic signal synchronization street routes.
- d) The Local Signal Synchronization Plan includes a three-year plan showing capital, operations, and maintenance of signal synchronization along the traffic signal synchronization street routes and traffic signals.
- e) The Local Signal Synchronization Plan includes an update on the status and performance of traffic signal synchronization activities.
- f) The Local Signal Synchronization Plan includes a discussion on the review and revision, as may be necessary, on the timing of traffic signals on the traffic signal synchronization street routes.

PASSED, APPROVED AND ADOPTED THIS [Insert Day] day of [Insert Month], [Insert Year].

[RESOLUTION FOR PAVEMENT MANAGEMENT PLAN ADOPTION]

A RESOLUTION OF THE CITY COUNCIL/BOARD OF SUPERVISORS OF THE CITY/COUNTY OF _____ CONCERNING THE STATUS AND UPDATE OF THE PAVEMENT MANAGEMENT PLAN FOR THE MEASURE M2 (M2) PROGRAM

WHEREAS, the local jurisdiction is required to meet eligibility requirements and submit eligibility verification packages to the Orange County Transportation Authority (OCTA) in order to remain eligible to receive M2 funds; and

WHEREAS, the local jurisdiction is required to adopt and update a Pavement Management Plan (PMP), using the required format, regarding the status of road pavement conditions and implementation of the PMP on a biennial basis; and

WHEREAS, the local jurisdiction is required to provide a plan that manages the preservation, rehabilitation, and maintenance of paved roads by analyzing pavement life cycles, assessing overall system performance costs, and determining alternative strategies and costs necessary to improve paved roads.

NOW, THEREFORE, BE IT RESOLVED that the City Council/Board of Supervisors for the City/County of _____ does hereby inform OCTA that:

- a) The PMP is in conformance with the PMP Submittal Template provided in the Countywide Pavement Management Plan Guidelines.
- b) The City/County hereby adopts a PMP and has provided an updated PMP report, using the required format, to OCTA.
- c) The Public Works Director, City Engineer or designee is authorized to sign the PMP certification form.

PASSED, APPROVED, AND ADOPTED THIS [Insert Day] day of [Insert Month], [Insert Year].

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Appendix F: PMP Submittal Template

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Appendix G: M2 Expenditure Report Template, Instructions & Resolution

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Measure M2 Expenditure Report Template

Schedule 1: Summary Statement of Beginning and Ending Balances

Lines 1 – 12: Balances at Beginning of Fiscal Year

Report all fund balances and interest intended for transportation purposes at the beginning of the fiscal year. These balances should be classified by funding source as illustrated in the table below. To provide for continuity of reporting, the beginning balances of any restricted funds must agree with the ending balances of such funds as shown in the prior year's report.

Project	Description
A-M	Freeway Projects
O	Regional Capacity Program (RCP)
P	Regional Traffic Signal Synchronization Program (RTSSP)
Q	Local Fair Share
R	High Frequency Metrolink Service
S	Transit Extensions to Metrolink
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems
U	Senior Mobility Program or Senior Non-Emergency Medical Program
V	Community Based Transit/Circulators
W	Safe Transit Stops
X	Environmental Cleanup Program (Water Quality)
Other	Please provide description for other categories

Line 13: Balances at Beginning of Fiscal Year - TOTAL

Sum of Lines 1 – 12 in the "Amount" and "Interest" columns

Line 14: Monies Made Available During Fiscal Year

Report total available monies (revenues) from Schedule 2, Line 13 in the "Amount" and "Interest" columns

Line 15: Total Monies Available

Sum of Lines 13 - 14 in the "Amount" and "Interest" columns

Line 16: Expenditures During Fiscal Year

Report total available monies (revenues) from Schedule 2, Line 26 in the "Amount" and "Interest" columns

Lines 17 - 28: Balances at End of Fiscal Year

Report by funding source all fund balances and interest for transportation purposes at the end of the fiscal year. To provide for continuity of reporting, the beginning balances of the fund sources in next year's report must agree with the ending balances of such funds as shown in this year's report (or otherwise reconciled).

City/County of: _____

Schedule 1

**M2 Expenditure Report
Fiscal Year Ended June 30, 20____
Beginning and Ending Balances**

Description		Line No.	Amount	Interest
Balances at Beginning of Fiscal Year				
A-M	Freeway Projects	1		
O	Regional Capacity Program (RCP)	2		
P	Regional Traffic Signal Synchronization Program (RTSSP)	3		
Q	Local Fair Share	4		
R	High Frequency Metrolink Service	5		
S	Transit Extensions to Metrolink	6		
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems	7		
U	Senior Mobility Program or Senior Non-Emergency Medical Program	8		
V	Community Based Transit/Circulators	9		
W	Safe Transit Stops	10		
X	Environmental Cleanup Program (Water Quality)	11		
	Other*	12		
Balances at Beginning of the Fiscal Year (Sum Lines 1 to 12)		13		
	Monies Made Available During Fiscal Year	14		
Total Monies Available (Sum Lines 13 & 14)		15		
	Expenditures During Fiscal Year	16		
Balances at End of Fiscal Year				
A-M	Freeway Projects	17		
O	Regional Capacity Program (RCP)	18		
P	Regional Traffic Signal Synchronization Program (RTSSP)	19		
Q	Local Fair Share	20		
R	High Frequency Metrolink Service	21		
S	Transit Extensions to Metrolink	22		
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems	23		
U	Senior Mobility Program or Senior Non-Emergency Medical Program	24		
V	Community Based Transit/Circulators	25		
W	Safe Transit Stops	26		
X	Environmental Cleanup Program (Water Quality)	27		
	Other*	28		

* Please provide a specific description

Measure M2 Expenditure Report

Schedule 2: Summary Statement of Sources and Uses

Lines 1 - 12: Report the Following Revenue Sources and Interest on the Appropriate Line

Project	Description
A-M	Freeway Projects
O	Regional Capacity Program (RCP)
P	Regional Traffic Signal Synchronization Program (RTSSP)
Q	Local Fair Share
R	High Frequency Metrolink Service
S	Transit Extensions to Metrolink
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems
U	Senior Mobility Program or Senior Non-Emergency Medical Program
V	Community Based Transit/Circulators
W	Safe Transit Stops
X	Environmental Cleanup Program (Water Quality)
Other	Please provide description for other categories

Line 13: Total Revenues

Sum of Lines 1 - 12 (should match Total in Schedule 1, Line 14 in the "Amount" and "Interest" columns)

Lines 14 - 25: Report the Following Expenditures on the Appropriate Line

Project	Description
A-M	Freeway Projects
O	Regional Capacity Program (RCP)
P	Regional Traffic Signal Synchronization Program (RTSSP)
Q	Local Fair Share
R	High Frequency Metrolink Service
S	Transit Extensions to Metrolink
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems
U	Senior Mobility Program or Senior Non-Emergency Medical Program
V	Community Based Transit/Circulators
W	Safe Transit Stops
X	Environmental Cleanup Program (Water Quality)
Other	Please provide description for other categories

Line 26: Total Expenditures

Sum of Lines 14 - 25 (Should match Total in Schedule 1, Line 16 in the "Amount" and "Interest" columns)

Line 27: Total Balance

Subtract Line 26 from Line 13 in the "Amount" and "Interest" columns

City/County of: _____

Schedule 2

M2 Expenditure Report
Fiscal Year Ended June 30, 20____
Sources and Uses

	Description	Line No.	Amount	Interest
	Revenues:			
A-M	Freeway Projects	1		
O	Regional Capacity Program (RCP)	2		
P	Regional Traffic Signal Synchronization Program (RTSSP)	3		
Q	Local Fair Share	4		
R	High Frequency Metrolink Service	5		
S	Transit Extensions to Metrolink	6		
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems	7		
U	Senior Mobility Program or Senior Non-Emergency Medical Program	8		
V	Community Based Transit/Circulators	9		
W	Safe Transit Stops	10		
X	Environmental Cleanup Program (Water Quality)	11		
	Other*	12		
	TOTAL REVENUES: (Sum Lines 1 to 12)	13	\$	\$
	Expenditures:			
A-M	Freeway Projects	14		
O	Regional Capacity Program	15		
P	Regional Traffic Signal Synchronization Program	16		
Q	Local Fair Share	17		
R	High Frequency Metrolink Service	18		
S	Transit Extensions to Metrolink	19		
T	Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems	20		
U	Senior Mobility Program or Senior Non-Emergency Medical Program	21		
V	Community Based Transit/Circulators	22		
W	Safe Transit Stops	23		
X	Environmental Cleanup Program (Water Quality)	24		
	Other*	25		
	TOTAL EXPENDITURES: (Sum Lines 14 to 25)	26	\$	\$
	TOTAL BALANCE (Subtract line 26 from 13)	27	\$	\$

* Please provide a specific description

Measure M2 Expenditure Report Template Instructions

Schedule 3: Summary Statement of Detailed Use of Funds

Line 1: Indirect and/or Overhead

This line covers local jurisdiction costs that cannot be readily identified to a specific project. The costs listed in this line item represent an equitable share of expenditures for activities not directly allocated to right-of-way, construction, or other categories. Allocations must be based on a reasonable, documented methodology.

This includes, but is not limited to:

Payroll	General accounting/finance
Personnel	Departmental accounts/finance
Purchasing/Procurement	Facilities
Advertising	Data processing
Legal costs	Top management
General government	Bids

Lines 2 - 7: Construction

Construction expenditures include the following:

- Projects developing new streets, bridges, lighting facilities, storm drains, etc., in locations that formerly had no such facilities, or projects departing to such an extent from existing alignment and grade that no material salvage value is realized from the old facilities.
- Additions and betterments to the street system and its rights-of-way, including grade separations and urban extensions.
- Any work that materially increases the service life of the original project.
- Resurfacing to a thickness greater than one inch.
- Resurfacing to a thickness less than one inch if the project has been certified by a lead jurisdiction as construction.
- Construction of traffic islands and other traffic safety devices.
- Transit facilities including, but not limited to, bus stops, shelters, and maintenance facilities.
- Streetscape including original landscaping, tree planting, and similar work.
- Acquisition and installation of street lighting facilities, traffic signals, and/or street signs (only when such signs are installed in connection with developing new streets).
- Planning, environmental, or design related to construction.
- Salaries and expenses of employees in connection with construction (direct costs).

Line 8: Total Construction

Sum of Lines 2 - 7

Line 9: Right-of-Way Acquisition

Right-of-way expenditures include the following:

- The acquisition of land or interest for use as a right-of-way in connection with the city's street system; the amount reported should include the cost of acquisition of any improvements situated on the real property at the date of its acquisition by the city.
- The cost of removing, demolishing, moving, resetting, and altering buildings or other structures that obstruct the right-of-way.
- The court costs of condemnation proceedings.

- Title searches and reports.
- Salaries and expenses of employees and right-of-way agents in connection with the acquisition of rights-of-way (direct costs).
- Severance damage to property sustained due to the city's street projects.
- All other costs of acquiring rights-of-way free and clear of all physical obstructions and legal encumbrances.

Line 10: Total Construction and Right-of-Way

Sum of Lines 8-9

Line 11 - 15: Maintenance / Operations

Maintenance expenditures include the following:

- The preservation and keeping of rights-of-way, street structures, and facilities in the safe and usable condition, to which they have been improved or constructed, but not reconstruction or other improvements.
- General utility services such as roadside planting, tree trimming, street cleaning, snow removal, and general weed control.
- Repairs or other work necessitated by damage to street structures or facilities resulting from storms, slides, settlements, or other causes unless it has been determined by the city engineer that such work is properly classified as construction.
- Maintenance of traffic signal equipment, coordination and timing on the city streets, as well as the city's share of such expenditures covering traffic signals situated at intersections of city streets and state highways within the incorporated area of the city.
- Salaries and expenses of employees in connection with maintenance and/or operations (direct costs).

Line 16: Total Maintenance

Sum of Lines 11 - 15

Line 17: Other

Please provide description for other categories. For example: transit, Senior Mobility Program, water quality, transit operations such as vehicle leases and other related operating expenses, etc. This category is not applicable to the MOE column as MOE expenditures would fall into the categories listed above.

Line 18: Grand Totals

Sum of Lines 1, 10, 16, and 17

Line 19: Finance Director Confirmation

Finance Director initials to confirm understanding of MOE.

City/County of: _____

Schedule 3

M2 Expenditure Report
Fiscal Year Ended June 30, 20____
Streets and Roads Detailed Use of Funds

Type of Expenditure	Line Item	MOE	Developer / Impact Fee ⁺	O	O Interest	P	P Interest	Q	Q Interest	X	X Interest	Other M2 ²	Other M2 Interest	Other*	TOTAL
Indirect and/or Overhead	1														\$
Construction & Right-of-Way															
New Street Construction	2														\$
Street Reconstruction	3														\$
Signals, Safety Devices, & Street Lights	4														\$
Pedestrian Ways & Bike paths	5														\$
Storm Drains	6														\$
Storm Damage	7														\$
Total Construction¹	8														\$
Right of Way Acquisition	9														\$
Total Construction & Right-of-Way	10														\$
Maintenance															
Patching	11														\$
Overlay & Sealing	12														\$
Street Lights & Traffic Signals	13														\$
Storm Damage	14														\$
Other Street Purpose Maintenance	15														\$
Total Maintenance¹	16														\$
Other	17														\$
GRAND TOTALS (Sum Lines 1, 10, 16, 17)	18	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Finance Director Confirmation	19	<p>Any California State Constitution Article XIX streets and road eligible expenditure may be "counted" in local jurisdictions' calculation of MOE if the activity is supported (funded) by a local jurisdictions' discretionary funds (e.g. general fund). The California State Controller also provides useful information on Article XIX and the Streets and Highways Code eligible expenditures in its "Guidelines Relating to Gas Tax Expenditures for Cities and Counties". I have reviewed and am aware of these guidelines and their applicability in calculating and reporting on Maintenance of Effort expenditures.</p> <p>Finance Director initial: _____</p>													

¹ Includes direct charges for staff time

+ Transportation related only

² Other M2 includes A-M, R, S, T, U, V, and W

* Please provide a specific description

Measure M2 Expenditure Report Template Instructions

Schedule 4: Summary Statement of Local Fair Share Project List

List the project titles and brief description (maximum of two sentences) for all projects that utilized any portion of Measure M2 (M2) Local Fair Share funding. Please include the total amount of **M2 Local Fair Share** funds only that were expended.

Schedule 4

[illegible]

City/County of: _____

Signature Page

**M2 Expenditure Report
Fiscal Year Ended June 30, 20____**

I hereby certify that:

- ☐ All the information attached herein and included in schedules 1 through 4 is true and accurate to the best of my knowledge;
- ☐ The interest earned on Net Revenues allocated pursuant to the Ordinance shall be expended only for those purposes for which the Net Revenues were allocated;
- ☐ The City/County of _____ is aware of the State Controller's "Guidelines Relating to Gas Tax Expenditures for Cities and Counties", which is a guide for determining MOE Expenditures for M2 Eligibility purposes;
- ☐ The City/County's Expenditure Report is in compliance with direction provided in the State Controller's "Guidelines Relating to Gas Tax Expenditures for Cities and Counties;" and
- ☐ The City/County of _____ has expended in this fiscal year an amount of local discretionary funds for streets and roads purposes at least equal to or exceeding the FY 2023-24 MOE benchmark dollar amount¹¹.

Director of Finance (Print Name)

Date

Signature

¹¹ Jurisdictions are encouraged to submit MOE eligible expenditures higher than their MOE benchmark, so that should certain expenses be ruled ineligible during an MOE audit, the local jurisdiction still has sufficient MOE expenditures to demonstrate continued achievement of the MOE benchmark.

[EXPENDITURE REPORT RESOLUTION]

A RESOLUTION OF THE CITY COUNCIL/BOARD OF SUPERVISORS OF THE CITY/COUNTY OF _____ CONCERNING THE MEASURE M2 (M2) EXPENDITURE REPORT FOR THE CITY/COUNTY OF _____.

WHEREAS, local jurisdictions are required to meet eligibility requirements and submit eligibility verification packages to the Orange County Transportation Authority (OCTA) in order to remain eligible to receive M2 funds; and

WHEREAS, local jurisdictions are required to adopt an annual M2 Expenditure Report as part of one of the eligibility requirements; and

WHEREAS, local jurisdictions are required to account for Net Revenues, developer/traffic impact fees, and funds expended by the local jurisdiction in the M2 Expenditure Report that satisfy the Maintenance of Effort requirements; and

WHEREAS, the M2 Expenditure Report shall include all Net Revenue fund balances, interest earned and expenditures identified by type and program or project; and

WHEREAS, the M2 Expenditure Report must be adopted and submitted to the OCTA each year within six months of the end of the local jurisdiction's fiscal year to be eligible to receive Net Revenues as part of M2.

NOW, THEREFORE, BE IT RESOLVED that the City Council/Board of Supervisors for the City/County of _____ does hereby inform OCTA that:

- a) The M2 Expenditure Report is in conformance with the template provided in the Measure M2 Eligibility Guidelines and accounts for Net Revenues including interest earned, expenditures during the fiscal year, and balances at the end of fiscal year.
- b) The M2 Expenditure Report is hereby adopted by the City/County of _____.
- c) The City/County of _____ Finance Director is hereby authorized to sign and submit the M2 Expenditure Report to OCTA for the fiscal year ending _____.

PASSED, APPROVED, AND ADOPTED THIS [Insert Day] day of [Insert Month], [Insert Year].

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Appendix H: Arterial Highway Mileage Change Report

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APPENDIX H

Arterial Highway Mileage Change Report

Jurisdiction:	Choose an item.
----------------------	-----------------

☐ Check here if there are no changes to report[illegible]

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Appendix I: Maintenance of Effort Certification Form

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APPENDIX I

Maintenance of Effort (MOE) Certification Form

Jurisdiction: _____

Type of GENERAL FUND Transportation Expenditures:

Please complete and attach supporting budget documentation for each line item listed below.

MAINTENANCE	Total Expenditure
Subtotal Maintenance	\$

CONSTRUCTION	Total Expenditure
Subtotal Construction	\$

INDIRECT / OTHER	Total Expenditure
Subtotal Indirect / Other	\$

Total General Fund Transportation Expenditures	\$
(Less Total MOE Exclusions ¹)	\$
MOE Expenditures	\$
MOE Benchmark Requirement²	\$
(Shortfall)/Surplus	\$

Certification:

I hereby certify that:

- ☐ The City/County of _____ is aware of the State Controller's "Guidelines Relating to Gas Tax Expenditures for Cities and Counties", which is a guide for determining MOE Expenditures for Measure M2 Eligibility purposes and;
- ☐ The City/County of _____'s MOE Certification Form is in compliance with direction provided in the State Controller's "Guidelines Relating to Gas Tax Expenditures for Cities and Counties" and;
- ☐ The City/County of _____ certifies that the budgeted MOE expenditures meet or exceed the fiscal year (FY) 2024-25 MOE benchmark requirement³.

Finance Director Signature

Finance Director (Print Name)

Date

¹ Funding sources include Measure M, federal, state, redevelopment, and bond financing.

² Please refer to Exhibit 2 in the M2 Eligibility Guidelines for the City's MOE benchmark requirement.

³ Jurisdictions are encouraged to submit MOE eligible expenditures higher than their MOE benchmark, so that should certain expenses be ruled ineligible during an MOE audit, the local jurisdiction still has sufficient MOE expenditures to demonstrate continued achievement of the MOE benchmark.

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Appendix J: Acronyms

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Acronym	Description
AHRP	Arterial Highway Rehabilitation Program
AER	Annual Eligibility Review (Subcommittee)
<u>ASTM</u>	<u>American Society for Testing and Materials</u>
CCI	Construction Cost Index
CFD	Community Facilities District
CIP	Capital Improvement Program
CMP	Congestion Management Program
<u>CMPHS</u>	<u>Congestion Management Program Highway System</u>
CTFP	Comprehensive Transportation Funding Programs
ECP	Environmental Cleanup Program (Project X)
<u>FY</u>	<u>Fiscal Year</u>
<u>GIS</u>	<u>Geographic Information System</u>
LAFCO	Local Agency Formation Commission
<u>LFS</u>	<u>Local Fair Share (Project Q)</u>
LOS	Level of Service
LSSP	Local Signal Synchronization Plan
<u>M2</u>	<u>Measure M2</u>
MFP	Mitigation Fee Program
MOE	Maintenance of Effort
MPAH	Master Plan of Arterial Highways
OCTA	Orange County Transportation Authority
OCTC	Orange County Transportation Commission
PCI	Pavement Condition Index
PMP	Pavement Management Plan
RCP	Regional Capacity Program (Project O)
RTSSMP	Regional Traffic Signal Synchronization Master Plan (Project P)
<u>RTSSP</u>	<u>Regional Traffic Signal Synchronization Program (Project P)</u>
SCAQMD	South Coast Air Quality Management District
<u>SF</u>	<u>Square Foot</u>
TAC	Technical Advisory Committee
TDM	Traffic Demand Management
<u>TIA</u>	<u>Traffic Impact Analysis</u>
TOC	Taxpayer Oversight Committee
TOD	Transit Oriented Development
TSC	Technical Steering Committee

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Countywide Pavement Management Plan Guidelines

March 2024

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Chapter 1 – Introduction

On November 6, 1990, the voters in Orange County approved a ½-cent sales tax for transportation improvements known as Measure M. This sales tax includes funding for streets and roads that is available to local agencies through both a formula distribution and a competitive process. On November 6, 2006, voters approved a renewal of Measure M to continue the ½-cent sales tax for thirty years, beginning in 2011.

Background

The primary goal of these guidelines is to ensure consistent field data collection and reporting procedures so that countywide funding allocations can be based on agency comparable pavement conditions.

Given that all agencies are using uniform data collection procedures, the Orange County Transportation Authority (OCTA) can answer typical questions such as:

- What is the average countywide condition of local streets and roads? For individual streets? For Arterial Highways?
- Which streets have a higher priority and need to be funded first?
- How much does it cost to bring them up to an acceptable condition?
- How much will it cost to maintain them in an acceptable condition over the next seven years or more?
- What are the impacts on pavement condition at the existing funding levels?

Training is provided, periodically, by OCTA to maintain consistency in data collection procedures and assist local agencies in the use of pavement management software.

The goal is to ensure a reliable, consistent, and uniform approach to data collection and reporting.

Eligibility Requirements

One of the eligibility requirements included in Measure M2 (M2) specifies that each local jurisdiction must adopt and update a Pavement Management Plan (PMP) every two years. All agencies must use a common format as part of the countywide pavement management effort conforming to American Society for Testing and Materials (ASTM) Standard D6433. In 2010, the OCTA adopted MicroPaver as the countywide standard PMP software and all agencies participating in M2 were required to adopt this software for consistency in reporting pavement management conditions. In 2011, all local agencies submitted PMPs that were in conformance with the requirements in the PMP Guidelines. Local agencies may now also utilize StreetSaver, since it is in conformance with ASTM Standard D6433. The PMP must include:

- The current status of road pavement conditions;
- A seven-year plan for road maintenance and rehabilitation (including projects, funding, and any unfunded backlog of pavement needs);
- The projected pavement condition resulting from the maintenance and rehabilitation plan; and
- Alternative strategies and costs necessary to improve road pavement conditions.

Local Match Reduction

In addition to the above requirements, a local agency match reduction of 10% of the eligible cost for projects submitted for consideration of Project O funding through the Comprehensive Transportation Funding Programs (CTFP) call for projects is available if the local jurisdiction either:

- a. Shows measurable improvement of paved road conditions during the previous reporting period defined as an overall weighted (by area) average system improvement of one Pavement Condition Index (PCI) point with no reduction in the overall weighted (by area) average PCI in the Master Plan of Arterial Highways (MPAH) or local street categories;

or

- b. Road pavement conditions during the previous reporting period within the highest 20% of the scale for road pavement conditions in conformance with OCTA Ordinance No. 3, defined as a PCI of 75 or higher, otherwise defined as in "good condition".

Chapter 2 – Pavement Management Plan Guidelines

These guidelines and procedures are necessary for Orange County agencies to implement and update their PMPs with respect to conducting condition surveys. This is required to certify conformance with the criteria stated in OCTA's Ordinance No. 3. This ordinance requires that a PMP be in place and maintained to qualify for an allocation of net revenues generated from M2. A copy of Ordinance No. 3 is available from OCTA. PMP Certification is part of the submittal required for each agency (see Appendix A).

The pavement management guidelines are discussed under the following categories:

1. Condition Survey Protocols
2. Inspection Frequency
3. Countywide Assessment Standards
4. Quality Assurance/Quality Control (QA/QC) Plan
5. Re-inspections
6. Prequalification/Calibration of Inspectors
7. Pavement Management Software Training
8. Pavement Management Data Files

Condition Survey Protocols

In 1998, OCTA adopted condition survey protocols that required the collection of certain surface distresses as a minimum for both asphalt concrete and Portland cement concrete pavements. These distresses were common to the variety of pavement management systems then in use by Orange County local agencies. Based on the usage of a common county-wide software, it is now possible to include all of the distresses in ASTM Standard D6433 "Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys" in these Guidelines. These surface distresses are as follows:

Asphalt Concrete (AC)

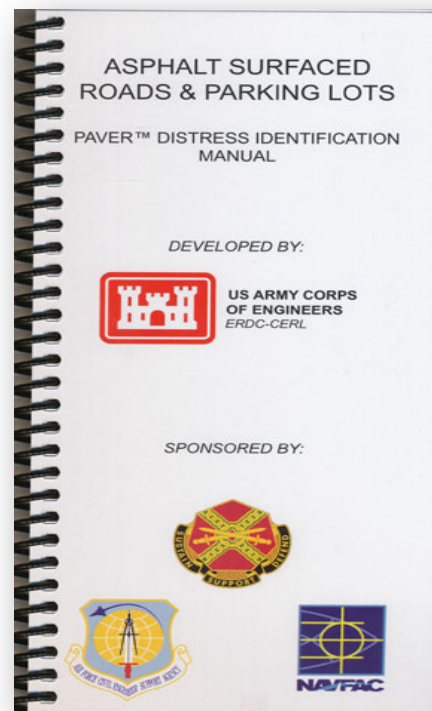
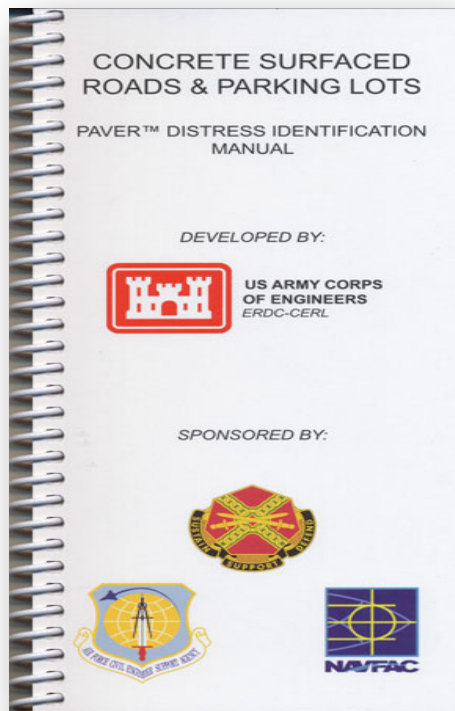
1. Alligator or Fatigue Cracking
2. Bleeding
3. Block Cracking
4. Bumps and Sags
5. Corrugation
6. Depression
7. Edge Cracking
8. Joint Reflection Cracking
9. Lane/ Shoulder Drop-off
10. Longitudinal Cracking
11. Patching and Utility Cut Patching
12. Polished Aggregate
13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Raveling
20. Weathering (Surface Wear)

Portland Cement Concrete (PCC)

1. Blowup/ Buckling
2. Corner Break
3. Divided Slab
4. Durability ("D") Cracking
5. Faulting
6. Joint Seal Damage
7. Lane/ Shoulder Drop-Off
8. Linear Cracking
9. Patching, Large And Utility Cuts
10. Patching, Small
11. Polished Aggregate
12. Popouts
13. Pumping
14. Punchout
15. Railroad Crossing
16. Scaling
17. Shrinkage Cracks
18. Spalling, Corner
19. Spalling, Joint

The distress definitions, severity levels, and measurement methods are based on criteria described in Pavement Management for Airports, Roads and Parking Lots¹. This reference has been formalized as ASTM Standard D6433². ASTM's copyright does not allow for electronic distribution or copying of this standard. However, a link to purchase the standard is included in the footnote. OCTA's guidelines follow ASTM D6433, with a few minor exceptions.

In addition, field manuals are available from the military Tri-Services (US Army Corps of Engineers, Naval Facilities Engineering Command, and Air Force Civil Engineer Center)~~American Public Works Association (APWA)~~^{3,4}. The field manuals include photographs of distress types and detailed descriptions and definitions, and are intended for the field inspector. All personnel involved with inspection or performing condition surveys must have read and understood these manuals.



¹ Shahin, M.Y. *Pavement Management for Airports, Roads and Parking Lots*, Chapman & Hall, 1994.

² ASTM D6433 – *Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys*. A copy may be purchased at <https://www.astm.org/d6433-23.html>.

³ *Paver Distress Identification Manual: Asphalt-Surfaced Roads and Parking Lots*, U.S. Army Corps of Engineers, Construction Engineering Research Laboratories, June 2009. To purchase, go to [www.apwa.net](https://transportation.ercd.dren.mil/paver/Index.htm) <https://transportation.ercd.dren.mil/paver/Index.htm>.

⁴ *Paver Concrete Distress Identification Manual: Concrete Surfaced Roads and Parking Lots*, U.S. Army Corps of Engineers, Construction Engineering Research Laboratories, June 2009. To purchase go to [www.apwa.net](https://transportation.ercd.dren.mil/paver/Index.htm) <https://transportation.ercd.dren.mil/paver/Index.htm>.

Note that both ASTM D6433 and these field manuals contain 20 distresses and 19 distresses for AC and PCC pavements, respectively. These distresses are now required for data collection.

OCTA allows windshield, walking, and calibrated automated surveys. It is recommended that windshield surveys be supplemented with walking surveys.

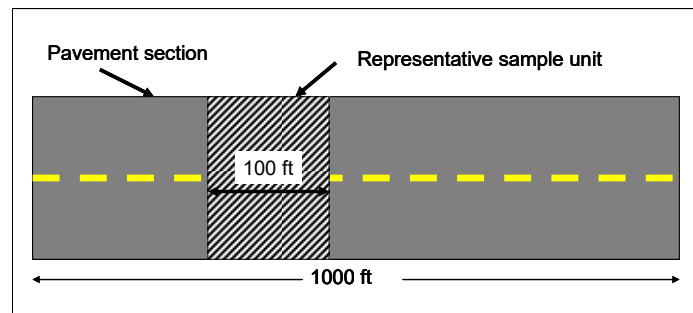
In a windshield survey, the inspector travels in a vehicle at slow speeds (5 to 10 mph) and observes the pavement condition from within the vehicle. The entire length of the pavement section is driven and observed. A driver is required for safety reasons, with the inspector/recorder in the passenger side of the vehicle. The inspector should have a list of street sections to be surveyed and a planned route.

The entire pavement section is surveyed, and the distress data are estimated and recorded. In situations where the distresses need closer examination, or where there are difficulties in observation, the inspector should stop the vehicle and walk the pavement section to verify the distresses observed from the vehicle.

All field data collection procedures should conform to the local agency's safety practices and should be included in the QA/QC Plan (see Appendix A).

When walking surveys are used, the following procedure should be followed:

1. Each pavement section must be inspected using sample units. Individual sample units should be representative of the pavement section conditions and may be marked or identified to allow easy location for quality control purposes. Paint marks along the edge or sketches with locations connected to physical pavement features are acceptable. The figure below illustrates the definition of a pavement section and a representative sample unit.



2. The area of AC sample units should be 2500 ± 1500 square feet, and for PCC sample units, this should be 20 ± 8 slabs. The total inspected area or slabs for a pavement section must be at least 10% of the total pavement section area or slabs. This is an exception to the procedure described in ASTM D6433.

For example, a pavement section 950 feet long and 32 feet wide must have at least one sample unit (typically 100 feet long x 32 feet wide = 3200 sf). Longer sections will require multiple sample units.

3. Additional sample units are to be inspected only when non-representative distresses are observed. Typically, these will be distresses that are localized in nature and not

representative of the entire pavement section e.g. high severity alligator cracking found near bus pads, rutting in intersections, distresses due to landscape watering/ponding etc.

4. Conduct the distress inspection by walking on the pavement shoulder or sidewalk adjacent to the sample unit being surveyed, measuring the quantity of each severity level of every distress type present, and recording the data. Each distress must correspond in type and severity to that described in the Paver Distress Identification Manuals.
5. A copy of the recorded distress data should be provided on a weekly basis to the responsible agency personnel for quality assurance.

It should be noted that windshield surveys, while reasonably fast and inexpensive, do have shortcomings. Chief among these are that low severity distresses are difficult to identify in this procedure, and consequently, the PCI may be significantly higher than it ought to be. A pavement may therefore be selected for a slurry seal when a thin overlay is more appropriate or for a thin overlay when a thick overlay is more appropriate. This may result in treatments that are not cost-effective.

When certain pavements are a high priority (usually those with high traffic volumes or other distinctive features) for a local agency, walking surveys are preferred to ensure that all pertinent distresses are captured, although windshield surveys are the minimum standard. For residential or local streets, windshield surveys are acceptable.

When automated or semi-automated surveys are used, the following procedure should be followed.

The Local Agency should:

- Establish a series of test sites
- Determine the distress data on those sites using a walking survey
- Compare the data from the automated equipment with the walking survey data.

It is desirable for the PCI values from the automated survey to be within plus or minus five PCI points of the values obtained from the walking survey. However, plus or minus ten PCI points is generally considered acceptable. Any site with a difference greater than ten PCI points should be carefully rechecked to determine the cause for the discrepancy. The agency must then make a judgement whether the automated data is acceptable.

OCTA's role is limited to the evaluation of the distress data submitted by the agencies and does not include a verification or evaluation of the automated equipment or procedure used by the agency submitting the automated survey.

Inspection Frequency

All streets identified on the MPAH must be surveyed at least once every two years. All local streets must be surveyed at least once every six years. This is a requirement of OCTA's PMP certification program.

Countywide Assessment Standards

In 1998, OCTA adopted the countywide pavement condition assessment standards for treatments as shown in Table 2.1.

Table 2.1 Pavement Condition Assessment Standards

Pavement Quality	PCI Thresholds	Funded Treatment
Very Good	86-100	None
Good	75-85	Surface seal*
Fair	60-74	Thin overlay
Poor	41-59	Thick overlay
Very Poor	0-40	Reconstruction

* Not eligible for CTFP competitive funding program

Note that Table 2.1 does NOT preclude other treatments that a local agency may choose to select or use. Indeed, there have been many new pavement technologies and techniques introduced since 1998 that a local agency should consider for preventive maintenance, and which may be funded under the M2 Fair Share program. **The treatments in Table 2.1 are intended to identify the types of treatments that OCTA will fund under the competitive grant program only.**

Quality Assurance/Quality Control (QA/QC) Plan

A QA/QC plan must be prepared by all agencies. The purpose of the QA/QC plan is to ensure that all procedures used to collect distress data comply with OCTA's guidelines and result in the delivery of a quality data product. The QA/QC plan should also provide for corrective actions when deficiencies are encountered. As a minimum, the following components must be included:

- Description of condition survey procedures (distress types, severities) or reference to the relevant documents in Chapter 3. All procedures, changes or modifications should be well documented in the QA/QC plan so that future updates will be consistent. In particular, unique situations are especially important and their documentation should be included.
- How data will be collected (windshield, walking, automated or combination of methods).
- Accuracy required for data collection.
- Description of how data will be checked for accuracy by agency (e.g. re-inspections).
- Schedule for when data will be submitted to local agency staff.
- Experience of inspectors including past training on condition surveys or calibration procedures.
- Field data collection safety procedures.

Any findings that may compromise data integrity and consistency should be discussed and corrected. Examples of these include differences in survey methods from the last update (e.g. changing from windshield to walking surveys), collecting additional distress types and unique situations that may not lend themselves to existing condition survey procedures (e.g. gap-graded mixes, edge cracking with unpaved shoulders).

Prior to performing any work, local jurisdictions must review the QA/QC plan with inspection personnel.

A copy of the QA/QC plan must be submitted to OCTA together with the PMP certification.

Re-inspections

As part of any QA/QC process, it is essential to re-inspect portions of the network with different personnel than those performing the condition surveys. Re-inspections should be performed within one month of the original date of collection as pavement data will change with time, and during the winter, may change very rapidly.

The data to be re-inspected should include distress types, severities and quantities collected during the survey. At least 5% of the pavement sections should be re-inspected.

The selected sections for re-inspections should be representative of the local agency's network. This should include sections from:

- All functional classifications (i.e. MPAH and residential/local)
- All surface types (i.e. AC and PCC)
- Entire range of pavement conditions (i.e. good, fair, poor)
- All significant changes in PCI (i.e. sections with more than ± 10 PCI points a year with no plausible explanations should be targeted for re-inspections)
- All inspectors
- Different geographical areas

Acceptability Criteria

In general, inspectors should identify distress types accurately 95% of the time. Linear measurements should be considered accurate when they are within $\pm 10\%$ if re-measured, and area measurements should be considered accurate when they are within $\pm 20\%$ if re-measured.

For the data to be acceptable, 90% of the re-inspected sections must be within ± 10 PCI points.

If the results of the re-inspections do not meet the above criteria, all inspections should be immediately halted and any differences should be identified and discussed. Corrective actions should be taken immediately. The local jurisdiction should then perform re-inspections of an additional 5% of the pavement sections.

Prequalification/Calibration of Inspectors

Prequalification or calibration of inspectors ensures that proper procedures are followed and that the results obtained are within acceptable variability ranges. This will be implemented by OCTA.

Briefly, the procedures to prequalify or calibrate inspectors are as follows:

- OCTA will select approximately 20 pavement sections to be used as control or test sites. Collectively, the control sites should exhibit common distress types and levels of severity that will be encountered in the pavement network and should be across all functional classes, pavement age, surface type, pavement condition and distresses.
- Inspect the sections manually (walking survey) using at least two different experienced inspectors and the established survey protocols (Appendix A and ASTM D6433), including any modifications. This will establish the baseline PCI for each control section.
- The candidate inspectors should then survey the same pavement sections within one month of the control surveys established in Step (b). The data for the sections should be collected and submitted to OCTA as soon as they are completed.
- OCTA will calculate the PCIs based on the survey data collected by inspectors.
- Compare the control PCI data with survey results by candidate inspectors. Identify the differences and areas of variability.

Acceptability Criteria

The criteria for acceptability are:

- $nRMSE \leq 1.4$ where:

$$nRMSE = \sqrt{\frac{\sum_{i=1}^n \left(\frac{RPCI_i - BPCI_i}{SD_{PCI}} \right)^2}{n}}$$

Where:

$nRMSE$ = Normalized root mean square error or deviation

$RPCI_i$ = Reported PCI for control section i

$BPCI_i$ = Baseline PCI for control section i

n = Number of control sections

and

$$SD_{PCI} = \frac{100 + 3(5.29 - BPCI)}{5.29}$$

- Inspectors that obtain $nRMSE$ values higher than 1.4 will be allowed to re-inspect and re-submit PCI values for three control sections. OCTA will indicate the three control sections where the inspectors showed the highest deviations from the baseline survey. Re-inspections are allowed only once. The normalized root mean square error ($nRMSE$) will be recalculated and the criteria described at point (a) applied.
- All inspections must be performed independently by each inspector.

- d. Inspectors will be individually prequalified
- e. At least one inspector of a consultant firm or local agency staff must be prequalified for a submitted Pavement Management Plan to be considered compliant with these Guidelines.

Pavement Management Software Training

Local agencies may utilize either MicroPAVER or StreetSaver® software for their PMPs, as long as they conform to ASTM D6433 and these guidelines. At least one representative of the local agency must be familiar with the PMP software utilized and have attended one training class. In the case of MicroPAVER, training classes are conducted regularly. The American Public Works Association (APWA) conducts “hands-on” MicroPAVER training for a fee, at least once a year (see www.apwa.net www.apwa.org for more information). Web-based training programs on specific modules are also available for a fee and broadcast schedules are periodically posted on the APWA website.

The Metropolitan Transportation Commission (MTC) provides free training classes on their StreetSaver® software program as well as field condition surveys. Typically, two field training classes are conducted annually; one in Northern California and one in Southern California (see www.mtcpsms.org mtc.ca.gov for more information). There are enough similarities between StreetSaver’s and MicroPAVER’s condition surveys that this training class will benefit any inspector new to the process.

OCTA offers limited software and field training focusing on those items to be included in the biennial PMP submittals. However, the training is not mandatory but highly recommended for any local agency submitting a Pavement Management Plan to OCTA. This training is sufficient to satisfy the training requirement of these Guidelines. Both software and field training may be offered online at the discretion of OCTA.

Pavement Management Data Files

The Pavement Management data files shall be submitted to OCTA in spreadsheet and Geographic Information System (GIS) format (Appendix A). This must include the following information:

- Street name and limits for all public streets
- Street identifiers (Branch ID, Section ID)
- Direction (if applicable)
- Beginning and ending of each section
- Length, widths and true areas
- Functional Classification (MPAH, local)
- Number of travel lanes
- PCI and date of inspection
- Type of recommended treatment
- Cost of recommended treatment
- Street geometry as linear features

Public alleys formally accepted as part of the local agency’s street system may be included in the PMP submittal at the local agency’s option. Public parking lots and private streets shall not be included in this submittal.

If the agency is unable to provide pavement data in the requested GIS format, a request for exception must be submitted by the agency. When requesting an exception, the agency must provide a letter signed by the Public Works Director with an explanation and a timeline of when the agency will have capabilities of providing pavement data in the required GIS digital format. Cost to convert pavement data to GIS digital format is an eligible expense under Local Fair Share.

Chapter 3 – Agency Submittals

Local agencies must submit to OCTA the following as part of the biennial certification:

1. PMP Agency Submittal Template (See Appendix A)
2. PMP certification (see Page A-5)
3. QA/QC plan (see Pages A-17 – A-21)
4. Pavement management data files in a form useable by OCTA (see Page 2-7)
5. PMP “hard copies” which include the following:
 - a. Average (weighted by area) PCI as of June 30 of the submittal year for:
 - i. Entire pavement network
 - ii. MPAH roadways
 - iii. Local streets
 - b. Projected PCI under existing funding levels, by year, over the next seven years for:
 - i. Entire pavement network
 - ii. MPAH roadways
 - iii. Local streets
 - c. Seven-year plan for road maintenance and rehabilitation based on current and projected budget, identifying street sections selected for treatment. Specific data to be submitted are:
 - i. Street name
 - ii. Limits of work
 - iii. Lengths, widths
 - iv. Pavement areas
 1. Each street
 2. Total area for local streets
 3. Total area for MPAH roadways
 4. Total area for entire public streets network
 - v. Functional classification (i.e. MPAH or local street)
 - vi. PCI and most recent date of inspection
 - vii. Type of treatment
 - viii. Cost of treatment
 - ix. Year of treatment
 - d. Alternative funding levels required to:
 - i. Maintain existing average network PCI
 - ii. To improve average network PCI
 - e. Backlog by year of unfunded pavement rehabilitation, restoration, and reconstruction needs.
 - f. Centerline mileage for MPAH, local streets, and total network.
 - g. Percentage of total network in each of the five condition categories based on centerline miles.
6. In order to be eligible for the local match reduction of 10%, the local jurisdiction must 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 PCI point with no reduction in the overall weighted (by area) average PCI in the MPAH or local street categories;

or

- b. Have road pavement conditions for the overall network 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.

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Appendix A – Pavement Management Plan Submittal Template

The following template shall be used to submit the required Pavement Management Plan to OCTA. The Word document is available for download at octa.net/OCGoEligibility.

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Agency

Pavement Management Plan

Prepared by: [Author Name]
Submitted to OCTA: [Date]

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I. Pavement Management Plan Certification

The City/County of **Type Here** certifies that it has a Pavement Management Plan in conformance with the criteria stated in the Orange County Transportation Authority Ordinance No. 3. This ordinance requires that a Pavement Management Plan be in place and maintained to qualify for allocation of revenues generated from renewed Measure M2.

The plan was developed by **Type here*** using **Type here**, a pavement management system, conforming to American Society of Testing and Materials (ASTM) Standard D6433, and contains, at a minimum, the following elements:

- Inventory of MPAH and local routes reviewed and updated biennially. The last update of the inventory was completed on **Month, Year** for Arterial (MPAH) streets and **Month, Year** for local streets.
- Assessment of pavement condition for all routes in the system, updated biennially. The last field review of pavement condition was completed on **Month, Year**.
- Percentage of all sections of pavement needing:
 - Preventative Maintenance: **Type here**%
 - Rehabilitation: **Type here**%
 - Reconstruction: **Type here**%
- Budget needs for Preventative Maintenance, Rehabilitation, and/or Reconstruction of deficient sections of pavement for:
 - Current biennial period **\$Type here**
 - Following biennial period **\$Type here**
- Funds budgeted or available for Preventative Maintenance, Rehabilitation, and/or Reconstruction:
 - Current biennial period **\$Type here**
 - Following biennial period **\$Type here**
- Backlog by year of unfunded pavement rehabilitation, restoration, and reconstruction needs.
- The Pavement Management Plan is consistent with countywide pavement condition assessment standards as described in the OCTA Countywide Pavement Management Plan Guidelines adopted by the OCTA Board of Directors.

*An electronic copy of the Pavement Management Plan (with Micro Paver or StreetSaver compatible files) has been, or will be, submitted with the certification statement.

A copy of this certification is being provided to the Orange County Transportation Authority.

Submitted by:

Click here to enter text.

Name (Print)

Click here to enter text.

Jurisdiction

Signed

Click here to enter a date.

Date

Click here to enter text.

Title (Public Works Director and/or City Engineer)

II. Executive Summary

Click here to enter text.

III. Background (Optional)

Click here to enter text.

IV. Current Pavement Conditions (PCI)

Current Network PCI	Current MPAH PCI	Current Local PCI
Click here to enter	Click here to enter	Click here to enter

V. Projected Pavement Conditions (PCI)

Should be by projected PCI by year under existing or expected funding levels for next seven fiscal years (“Today” is before June 30, 2024).

Fiscal Year	Current Funding	Entire Network PCI	MPAH	Local
Today	Click here to enter	Click here to enter	Click here to enter	Click here to enter
202 <u>4</u> -2 <u>5</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter
202 <u>5</u> -2 <u>6</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter
202 <u>6</u> -2 <u>7</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter
202 <u>7</u> -2 <u>8</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter
202 <u>8</u> -2 <u>9</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter
202 <u>9</u> -3 <u>0</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter
203 <u>0</u> -3 <u>1</u>	Click here to enter	Click here to enter	Click here to enter	Click here to enter

VI. Alternative Funding Levels

Maintain Existing Average Network PCI

Fiscal Year	Maintain Funding	Entire Network PCI	MPAH	Local
Today	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2024-25	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2025-26	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2026-27	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2027-28	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2028-29	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2029-30	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2030-31	Click here to enter	Click here to enter	Click here to enter	Click here to enter

Improve Average Network PCI

Fiscal Year	Current Funding	Entire Network PCI	MPAH	Local
Today	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2024-25	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2025-26	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2026-27	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2027-28	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2028-29	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2029-30	Click here to enter	Click here to enter	Click here to enter	Click here to enter
2030-31	Click here to enter	Click here to enter	Click here to enter	Click here to enter

VII. Current and Projected Backlog by Year of Pavement Maintenance Needs

Fiscal Year	Current Funding Backlog	Maintain PCI Backlog	Increase PCI Backlog
Current	Click here to enter	Click here to enter	Click here to enter
2024-25	Click here to enter	Click here to enter	Click here to enter
2025-26	Click here to enter	Click here to enter	Click here to enter
2026-27	Click here to enter	Click here to enter	Click here to enter
2027-28	Click here to enter	Click here to enter	Click here to enter
2028-29	Click here to enter	Click here to enter	Click here to enter
2029-30	Click here to enter	Click here to enter	Click here to enter
2030-31	Click here to enter	Click here to enter	Click here to enter

VIII. Centerline Mileage

Entire Pavement Network	MPAH	Local Roads
Click here to enter	Click here to enter	Click here to enter

IX. Percentage of Network in Each of Five Condition Categories Based on Centerline Miles

Condition Category	PCI Range	Network	Percent Area of Total Pavement	Area of Pavement (sf)	Percent Centerline Mileage of Network	Centerline Mileage of Network
Very Good	86-100	MPAH	Click here to enter%	Click here to enter	Click here to enter%	Click here to enter
		Local	Click here to enter%	Click here to enter		Click here to enter
Good	75-85	MPAH	Click here to enter%	Click here to enter	Click here to enter%	Click here to enter
		Local	Click here to enter%	Click here to enter		Click here to enter
Fair	60-74	MPAH	Click here to enter%	Click here to enter	Click here to enter%	Click here to enter
		Local	Click here to enter%	Click here to enter		Click here to enter
Poor	41-59	MPAH	Click here to enter%	Click here to enter	Click here to enter%	Click here to enter
		Local	Click here to enter%	Click here to enter		Click here to enter
Very Poor	0-40	MPAH	Click here to enter%	Click here to enter	Click here to enter%	Click here to enter
		Local	Click here to enter%	Click here to enter		Click here to enter

X. Reduction in Local Match

A local agency match reduction of 10% of the eligible cost for Project O submitted for consideration of funding through the Comprehensive Transportation Funding Programs (CTFP) call for projects is available if the local agency either:

- a. Shows measurable improvement of paved road conditions during the previous reporting period defined as an overall weighted (by area) average system improvement of one Pavement Condition Index (PCI) point with no reduction in the overall weighted (by area) average PCI in the Master Plan of Arterial Highways (MPAH) or local street categories;

or

- b. Have 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 applicable, please use the space below to justify the local agency’s eligibility for a reduction in Local Match based on the statement above.

[Click here to enter text.](#)

XI. Appendix A – Seven-Year Road Maintenance and Rehabilitation Plan Based on Current or Expected Funding Level and Maintenance of Current System PCIs

The seven-year plan for road maintenance and rehabilitation should be based on current and projected budget. Street sections selected for treatment should be identified here. Specific data to be submitted should follow the format below:

MPAH								
Street Name	Limits of Work		Length of Segment	Width of Segment	Pavement Area	Type of Treatment	Cost of Treatment	Year of Treatment
	From	To						

LOCAL								
Street Name	Limits of Work		Length of Segment	Width of Segment	Pavement Area	Type of Treatment	Cost of Treatment	Year of Treatment
	From	To						

Please attach the seven-year road maintenance and rehabilitation plan, following the above template, after this sheet. The plan should be labeled Appendix A.

XII. Appendix B – Complete Listing of Current Street Conditions

A complete listing of current pavement conditions should be included in this report. Specific data to be submitted should follow the format below:

MPAH						
Street Name	From	To	Width of Segment	Area	Current PCI	Most Recent Inspection Date

LOCAL						
Street Name	From	To	Width of Segment	Area	Current PCI	Most Recent Inspection Date

Please attach the complete street listing, following the above template, after this sheet. The pages should be labeled Appendix B.

XIII. Appendix C – GIS Digital Data

Introduction

The OCTA GIS Section maintains a spatial inventory of transportation infrastructure which mostly consists of major arterial streets, roads, and highways. A key component of road information is pavement condition. Maintaining an inventory of pavement condition will enhance OCTA's GIS visualization and analysis capabilities and assist in understanding the transportation investment needs throughout the region. Therefore, a GIS dataset in digital format should be included in this report.

If the agency is unable to provide pavement data in the requested GIS format, a request for exception must be submitted by the agency. When requesting an exception, the agency must provide a letter signed by the Public Works Director with an explanation and a timeline of when the agency will have capabilities of providing pavement data in the required GIS digital format.

Structure of GIS Data

The GIS dataset must consist of linear geographic features that represent road/street segments. All segments that are part of the report should be included in the GIS dataset. The attribute information of each segment should generally follow the format of the Complete Listing of Current Street Conditions in Appendix B above.

The GIS data requirements are discussed below. Most commercial and open-source GIS software provide industry-standard tools to manage GIS data to meet these requirements.

GIS Digital Data Format

The GIS data must be submitted in either one of the following formats:

- Esri Shapefile, or
- Esri File Geodatabase

Metadata

The GIS data are required to have associated metadata. The minimum metadata items required are:

- Title of Dataset
- Tags (A set of words that can be used by GIS to search for the resource. For example: "pavement", "transportation", "roads")
- Summary (A brief purpose statement of the dataset)
- Description (A brief narrative of the dataset's content)
- Credits (A recognition of those who created or contributed to the resource)

Spatial Geometry Type

The spatial geometry of the segment features must be lines that represent the roadway centerline as accurately as possible.

Projection

The GIS data must have spatial reference information and have its coordinate system identified and embedded in or associated with the data file(s). All GIS data submitted to OCTA should be in the following projected coordinate system:

- NAD 1983 State Plane California VI FIPS 0406 (US Feet) - More information about this system can be found at: <https://spatialreference.org/ref/epsg/nad83-california-zone-6-ftus/>

GIS Feature Attributes

The required segment attributes are:

- Street name
- Unique segment identifier (Segment ID from original source if available)
- Name of intersecting road at the beginning of a segment
- Name of intersecting road at the end of the segment
- Current pavement condition index (PCI)
- Current PCI inspection date
- Length of road segment in feet
- Width of road segment in feet
- Paved area of road segment in square feet or square yards
- Projected PCI at end of Seven-Year Road Maintenance and Rehabilitation Plan

Additional attributes such as number of through travel lanes, direction of travel and pavement surface type may be provided. An example of a GIS attribute table for road segments is shown below (Note that there are additional attributes such as surface, functional class, and number of travel lanes).

	OBJECTID *	Sec ID	Street Name	From	To	PCI	Insp Date	Length	Width	Area	Surface	FuncClass	Lanes
1	43	4022	ARBORWOOD	HEDGE LN	CANYONWOOD	89	1/11/2013	254	48	12192	AC	SECONDARY	2
2	44	4025	ARBORWOOD	BETHESDA	YALE CT	92	1/11/2013	374	48	17952	AC	SECONDARY	2
3	45	4031	ARBORWOOD	WINTHROP	BETHESDA	89	1/11/2013	866	48	41568	AC	SECONDARY	2
4	46	4187	ARBORWOOD	YALE CT	HEDGE LN	89	1/11/2013	1691	48	81168	AC	SECONDARY	2
5	47	4195	ARBORWOOD	CITRUSGLEN	WINTHROP	90	1/11/2013	434	48	20832	AC	SECONDARY	2
6	109	1862	CAMPUS DR	CARLSON AVE	UNIVERSITY DR	99	12/19/2012	3963	58	200334	AC	SECONDARY	4
7	110	2057	CAMPUS DR	MAC ARTHUR BLVD	VON KARMAN AVE	93	12/19/2012	1689	30	64670	AC	SECONDARY	4
8	111	2058	CAMPUS DR	VON KARMAN AVE	TELLER AVE	93	12/19/2012	1310	30	39300	AC	SECONDARY	4
9	112	2060	CAMPUS DR	TELLER AVE	JAMBOREE RD	96	12/19/2012	700	24	18300	AC	SECONDARY	4
10	116	9961	CAMPUS DR	JAMBOREE RD	CARLSON AVE	98	12/19/2012	1164	68	88752	AC	SECONDARY	2
11	117	4186	CANYONWOOD	MEADOWOOD	ARBORWOOD	89	1/11/2013	1026	47	48472	AC	SECONDARY	2
12	118	1409	CARLSON AVE	MICHELSON DR	PALATINE	100	12/19/2012	1146	65	74490	AC	SECONDARY	4

XIV. Appendix D – Quality Assurance/Quality Control Plan

Introduction

When performing data collection in any field, the need for quality control is paramount as it is essential for accurate planning, analysis and design. This is particularly true for collecting pavement distress data for a pavement management system.

The Quality Assurance/Quality Control (QA/QC) Plan establishes minimum quality standards for performance and procedures for updates of the pavement management system.

If applicable, utilize the space below to include information on the agency's QA/QC policies:

[Click here to enter text.](#)

Objectives

This document constitutes a formal QA/QC Plan for the City/County. It was prepared on [Select date](#) and last revised on [Select date](#).

Specifically, it is intended for the [Year Applicable](#) Pavement Management Plan Update. The focus is on the collection of network-level pavement distress data (defined by National Cooperative Highway Research Program (NCHRP) Synthesis 401 Quality Management of Pavement Data Collection, as "Network-level data collection involves collection of large quantities of pavement condition data, which is often converted to individual condition indices or aggregated into composite condition indices.")

This document also addresses the QA/QC plan requirements of the Orange County Transportation Authority (OCTA)'s "Countywide Pavement Management Plan Guidelines" (section 2.4), originally adopted in May 2010.

Structure of QA/QC Plan

The following components are addressed in this QA/QC Plan:

- Condition survey procedures used
- Accuracy required for data collection
- Inspector qualifications and experience
- Safety

Condition Survey Procedures

The governing document in performing condition surveys for the [Enter agency name](#) is ASTM D6433 “Standard Practice for Roads and Parking Lots Pavement Condition Index (PCI) Surveys.” Both asphalt concrete (AC) and Portland cement concrete (PCC) pavements are included in this protocol. The following distresses are collected for each pavement type.

Asphalt Concrete AC Pavements

1. Alligator (fatigue) cracking
2. Bleeding
3. Block cracking
4. Bumps and sags
5. Corrugation
6. Depression
7. Edge cracking
8. Joint reflection cracking
9. Lane/Shoulder drop off
10. Longitudinal & Transverse cracking
11. Patching and utility cut patching
12. Polished aggregate
13. Potholes
14. Railroad crossing
15. Rutting
16. Shoving
17. Slippage cracking
18. Swell
19. Weathering
20. Raveling

Portland Cement Concrete (Jointed)

1. Blowup/buckling
2. Corner breaks
3. Divided slab
4. Durability (“D”) cracking
5. Faulting
6. Joint seal damage
7. Lane/shoulder drop off
8. Linear cracking
9. Patching (large) and utility cuts
10. Patching (small)
11. Polished aggregate
12. Popouts
13. Pumping
14. Punchout
15. Railroad crossing
16. Scaling, map cracking and crazing
17. Shrinkage cracks
18. Spalling (corner)
19. Spalling (joint)

Any exceptions to the above procedures are discussed before any surveys are performed. These are documented in the paragraphs below.

[Note to agency: these are usually related to distresses or situations that are not covered in the manuals. Examples include roller check marks or edge cracking on streets with no curbs and gutters. Others include the raveling of surface seals or the use of open-graded asphalt concrete mixes where the surface appears to have large voids present. Any modifications must be documented and included in this document. Photos are extremely helpful.]

All surveys are performed as [Indicate type of surveys](#) – walking, windshield, semi-automated etc. surveys, and a minimum 10% sampling rate is utilized. Field crews are typically composed of [Click here to enter field crew information](#) (Typically a one-person crew on residential streets and some collectors, and up to two-person crews for major arterials, depending on traffic volumes and speeds. Edit as appropriate). The safety of field personnel is paramount in all instances.

The sample unit selected must be representative of the entire pavement section. This assumes that the section is homogenous; if it is not homogeneous, then the section must be split according to the criteria agreed upon by the agency. Typically, the criteria used are:

- Pavement condition
- Construction age, if known
- Maintenance history, if known
- Traffic volumes (or functional classification as a surrogate)
- Surface types (e.g. asphalt concrete or Portland cement concrete)
- Geometric elements (e.g. widths)

Any modifications to the section inventory data are documented in the pavement management report. A sample unit must be between $2,500 \pm 1,000$ square feet in conformance with ASTM D6433 protocols. Typical sample unit dimensions are 100 feet long by the width of the street. Streets that are wider than 40 feet wide will have shorter lengths (generally 50 feet) or if they are divided by a raised median, separate sample units will be taken in each direction.

Any pavement areas that are not representative of the section will be noted and surveyed as an additional sample unit.

Accuracy Required for Data Collection

The accuracy required for data collection has two components, both of which are further described in the following paragraphs.

- Re-inspections
- PCI comparisons with past surveys

Random and Systematic Re-Inspections

Random Re-inspections

Random re-inspections will include a representative selection across the following categories:

- Functional classes (i.e. MPAH, locals);
- Surface types (e.g. asphalt concrete or Portland cement concrete);
- Pavement conditions (e.g. good, fair, poor);
- Inspectors;
- Geographical areas, if applicable.

Systematic Re-inspections

For systematic re-inspections, this could be due to noticed trends such as specific treatment types (e.g. open-graded mixes), a specific inspector or geographical area. In such cases, more than 5% will be re-inspected.

Acceptability Criteria

At the time of re-inspection, the actual distresses will be re-inspected and verified, and any corrections made, if necessary. Distress types and severities must be the same and re-measured quantities within $\pm 10\%$ of the original measured quantity.

If corrections are required on more than 10% of the re-inspected sample unit, then an additional 5% will be re-inspected. This will continue until more than 95% of the re-inspected sections meet the acceptability criteria.

PCI Comparison with Past Surveys

As another level of quality control, the new PCIs are compared with the previous PCIs. If they differ by more than ± 10 PCI points, these sections are automatically flagged for further investigation.

If PCI Increases 10 points

The section is investigated to see if a maintenance and rehabilitation event has occurred since the last survey, but has not been recorded. Typically, it may include activities such as:

- Crack sealing activities – changes medium or high severity cracking to low severity
- Patching activities – alligator cracking that has been removed and patched, so that the resultant PCI is increased.
- Surface seals
- Overlay
- Others

Therefore, an up to date maintenance and rehabilitation history file in the pavement management database is desirable, both for historical accuracy as well as to provide additional quality control.

If PCI decreases 10 points

The section is checked to see if the average deterioration rate (usually 3 to 4 points per year) is exceeded. If the drop in PCI is within range of what is acceptable, no further action is required. If the drop is more than the acceptable range, a re-inspection will be performed. The default performance curves in the pavement management software form the basis for what is acceptable.

Inspector's Qualifications and Experience

The [Enter](#) agency here inspectors have attended formal training on pavement condition distress surveys. This training was conducted prior to performing any work using the ASTM D6433 protocols, consistent with OCTA's requirements.

Inspector Name	Date of ASTM D6433 Training	Training Conducted By:
Click here to enter	Click here to enter	Click here to enter
Click here to enter	Click here to enter	Click here to enter

Resumes of the technicians utilized on this project are included as an attachment.

Safety Procedures

The [Enter](#) agency here administers a health and safety program in compliance with the Cal Occupational Safety and Health Administration (OSHA) Title VIII, Section 3203. The program is documented in [Enter document name here](#).

Generally, the safety procedures include (Edit as applicable to agency):

- Inspectors to wear a Class 2 or 3 safety vest at all times;
- Flashing beacon on all vehicles utilized for surveys; and
- Stopped vehicles to be parked at locations away from moving traffic (e.g. nearby parking, shoulders, etc.).
- [Enter safety protocol here](#).

On streets where there is a high volume of traffic or high speeds, additional measures may be necessary, such as:

- Surveys to occur during off-peak periods or on weekends;
- Additional inspector to watch out for traffic; and
- Traffic flaggers in extreme cases.

Attachment – Appendix C: Resumes of Field Inspectors

---End of QA/QC Plan---

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XV. Appendix E – Pavement Management Data Files

The Pavement Management data files shall be submitted to OCTA in spreadsheet format. This must include the following information:

- Street name and limits for all public streets
- Street identifiers (Branch ID, Section ID)
- Direction (if applicable)
- Beginning and ending of each section
- Length, widths, and true areas
- Functional Classification (MPAH, Local)
- Number of travel lanes
- PCI and date of inspection
- Type of recommended treatment
- Cost of recommended treatment
- Street geometry as linear features

The Pavement Management data files are ~~attached~~submitted here-as an electronic copy sent via email as an attachment, via a link to an online storage device site, such as DropBox and/or OneDrive, or USB drive on a CD/flash drive, and/-or included as Appendix ~~D~~E.

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XVI. Appendix F – GIS Maps – Current Conditions (Optional)

If included, attach and label Appendix F.

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Appendix B – Prequalified Pavement Inspection Consultants and Local Agencies

The Prequalified Pavement Inspection Consultants and Local Agencies can be found on the Eligibility Website: <https://www.octa.net/OCGoEligibility>

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Appendix C – Recommendations for Pavement Inspectors

Since 2011, OCTA has completed prequalification studies which involved over 60 different pavement control sections. From one prequalification cycle to the next, OCTA made an effort to streamline and improve the process by learning from the observations made during each prequalification cycle. Following are recommendations for inspectors interested in participating in the prequalification program:

General

- Inspectors should have in their possession the latest edition of the Paver pocket guides for easy reference to distress definitions and severity levels during field surveys.
- It is important to accurately measure crack width in order to correctly identify the severity of distress.
- It is strongly advised that inspectors have a second person watch for traffic while they are conducting the surveys. Visually approximating quantities of distress and severities will most certainly result in inaccurate estimates of the PCI.

PCC Pavements

- There are a limited number of concrete pavements in Orange County. The majority of these pavements are old and in some instances the slabs are more than 50 feet long. According to ASTM D6433, slabs longer than 9m (29.5 feet) must be divided into imaginary joints that are considered to be in perfect condition.
- Missing joint seal on concrete pavement is recorded as high severity joint seal damage for the entire length of joints affected. Most PCC pavements in the county completely lack joint sealant.
- When surveying a PCC section, it is very important to make sketch of the slabs being evaluated. Without the sketch, it will be very difficult to correctly count and report distress.

Asphalt Concrete Pavements

- Several types of distress may occur in the same area. With few exceptions, all types of distress have to be recorded: e.g. raveling and alligator cracking.
- Measurements of rutting require the use of a straight edge of minimum 6 feet length. Repeated measurements are required to correctly identify the areas of rutting and severity levels. This type of measurement requires the help of a second person to watch for traffic. Remember that OCTA does not provide traffic control.

Surface Treatments

- ASTM D6433 does not include distresses specific to surface treatment such as slurry seals or chip seals. Inspectors should use their best judgment to evaluate the condition of the original asphalt concrete surface underneath the surface treatment.

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March 4, 2024

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Consultant Selection for the Harbor Boulevard Pilot Innovative Transit Signal Priority Study

Overview

On November 27, 2023, the Orange County Transportation Authority Board of Directors authorized the release of a request for proposals to retain a consultant to conduct a comprehensive study and sample implementation of innovative transit and advanced detection solutions as part of the Harbor Boulevard Pilot Innovative Transit Signal Priority Study. Board of Directors' approval is requested for the selection of a firm to perform the required work.

Recommendations

- A. Approve the selection of Arcadis U.S., Inc., as the firm to conduct the Harbor Boulevard Pilot Innovative Transit Signal Priority Study.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-2944 between the Orange County Transportation Authority and Arcadis U.S., Inc., in the amount of \$1,197,912, for a two-year term, to conduct the Harbor Boulevard Pilot Innovative Transit Signal Priority Study.

Discussion

Harbor Boulevard is a multimodal corridor in central Orange County spanning the cities of Anaheim, Fountain Valley, Fullerton, Garden Grove, and Santa Ana. The 12-mile Harbor Boulevard Bravo! 543 and 43 bus routes have a combined average of more than 10,000 daily boardings. Eight percent of all Orange County Transportation Authority (OCTA) bus ridership and over 50,000 vehicles travel this route each day. Harbor Boulevard connects key destinations including medical facilities, California State University, Fullerton, Disneyland, Santa Ana College, places of worship, and shopping.

On November 18, 2022, OCTA applied for Strengthening Mobility and Revolutionizing Transportation (SMART) grants program for Stage 1 funds to pilot innovative transit signal priority (TSP) and advanced detection solutions at sample intersections along Harbor Boulevard. On May 9, 2023, OCTA applied for matching funds from the Regional Early Action Planning Grants of 2021 (REAP 2.0) administered by the Southern California Association of Governments (SCAG). On July 24, 2023, the OCTA Board of Directors (Board) approved the acceptance of grant funds to cover the \$1.8 million budget, for the pilot as an innovative TSP solution study.

The Harbor Boulevard Pilot Innovative TSP Study (Project) aims to enhance bus operations along Harbor Boulevard through a comprehensive study and sample implementation of innovative TSP and advanced detection solutions at nine intersections, with plans for wider deployment. The idea is to use wireless internet capabilities to enable the local traffic management centers to sense the location of buses and whether there are methods that would allow for minor signal timing changes to reduce the time the buses are stopped at red lights. The study will include data collection, field reviews, prototype deployment, technology assessment, and conceptual planning for future improvements. Improved bus reliability and predictability will allow commuters to reach their jobs, medical appointments, schools, and homes in a safe and timely manner. Additionally, traffic management centers can obtain more information about movements at signalized intersections from the advanced detection solutions to identify potential intersection modifications that can improve the safe travel of all modes through the intersection. Further, the Project has the potential to enhance OCTA's bus utilization, leading to more efficient operations, and it could contribute to an improved driving experience for OCTA coach operators.

Procurement Approach

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

On November 27, 2023, the Board authorized the release of Request for Proposals (RFP) 3-2944 and the proposed evaluation criteria and weightings, which was issued electronically through OCTA's procurement system. The RFP was advertised in a newspaper of general circulation on November 27 and December 4, 2023. A pre-proposal conference was held on December 6, 2023, with eight attendees representing three firms. Three addenda were issued to make available the pre-proposal conference presentation and registration sheets, provide responses to questions received, and handle administrative issues related to the RFP.

On December 20, 2023, four proposals were received. An evaluation committee consisting of members from OCTA's Contracts Administration and Materials Management and Strategic Planning departments, as well as external representatives from the cities of Anaheim, Fullerton, and Santa Ana, met to review all submitted proposals. The proposals were evaluated utilizing the following Board-approved evaluation criteria and weightings:

- Qualifications of the firm 20 percent
- Staffing and project organization 25 percent
- Work plan 30 percent
- Cost and price 25 percent

Several factors were considered in developing the evaluation criteria weightings. Qualifications of the firm was weighted at 20 percent as the firm must demonstrate experience with TSP, intelligent transportation systems (ITS) detection technology, and performance measures of a similar scope and scale. Staffing and project organization was weighted at 25 percent as the firm must demonstrate the level of expertise, resource availability, and involvement for the various roles of the proposed project team. The work plan was weighted at 30 percent as the firm's proposed technology solution must be able to meet the functional and technical requirements and challenges for a pilot implementation with plans to scale up on a corridor with multiple stakeholders. Cost and price was weighted at 25 percent to ensure that OCTA receives value for the services provided.

The evaluation committee reviewed all proposals based on the Board-approved evaluation criteria and short-listed the two most qualified firms listed below in alphabetical order:

Firm and Location

Arcadis U.S., Inc. (Arcadis)
Irvine, California

Kimley-Horn and Associates, Inc. (KHA)
Orange, California

On January 16, 2024, the evaluation committee interviewed the two short-listed firms. The interviews consisted of a presentation allowing each team to present its qualifications, highlight its proposal, and respond to the evaluation committee questions. Each firm also discussed its staffing plan, work plan, and perceived Project challenges. Each firm was asked general questions related to qualifications, staffing availability, proposed project organization, and approach to the work plan. Both firms were asked questions specific to their proposals regarding their teams' approach to the requirements of the scope of work,

management of the Project, coordination with the various agencies, experience with similar projects, and the proposed solutions toward achieving the Project goals.

After considering responses to the questions asked during the interviews, the evaluation committee adjusted the preliminary scores of both firms but did not change the overall ranking. Arcadis remained the top-ranked firm with the higher cumulative score.

Based on the evaluation of the written proposals and the information obtained during the interviews as well as cost and price, the evaluation committee recommends Arcadis as the top-ranked firm to conduct the study. The following is a summary of the proposal evaluation results.

Qualifications of the Firm

Both short-listed firms demonstrated relevant experience providing TSP, ITS detection technology, and performance measures of a similar scope and scale services for other agencies.

Founded in 1957, Arcadis is a global consulting firm with over 36,000 employees specializing in the design, construction, inspection, and traffic management of roads, highways, bridges, and railroads. Arcadis has more than 700 employees within its 13 California offices with local offices in the cities of Irvine, Los Angeles, San Diego, and Riverside. Arcadis has experience supporting OCTA along the Harbor Boulevard corridor as part of the Regional Traffic Signal Synchronization Program (RTSSP), which implemented signal synchronization and equipment upgrades. Arcadis demonstrated recent experience with its proposed TSP solution, LYT, through its effort with Tri-County Metropolitan District of Oregon which was deployed across 62 signals shared between three agencies. Other experience with relevant scope elements includes putting into operation a TSP functionality along the mid-city bus rapid transit corridor for the San Diego Association of Governments (SANDAG). Additionally, Arcadis designed a full fiber signal interconnect for a project consisting of 29 signalized intersections for the Nashville Department of Transportation. During the interview, when asked to expand on the specific duties that Arcadis performed on a relevant project from its proposal, Arcadis noted the individual experience of its key personnel and involvement with OCTA's OC Streetcar project. Arcadis proposed to utilize three subconsultants providing traffic, signal and data analytics, installation, and the cloud-based TSP solution, LYT. Positive references were received for the firm.

KHA was founded in 1967 as an engineering, planning, and environmental consulting firm with over 7,500 employees. KHA has 12 offices in California with a local office in the City of Orange. The firm detailed recent experience including an on-going project with the Los Angeles County Metropolitan Transportation

Authority in which KHA is implementing its cloud-based TSP solution, Traction Priority, in more than 1,600 signals. KHA also noted other projects in which its Traction Priority solution is being implemented for agencies such as SANDAG, the City of Austin, and the City of Indianapolis among others. KHA proposed to utilize one subconsultant to provide transportation strategies and solutions and detailed the firm's experience in the cities of Costa Mesa and Garden Grove related to installing new video detection systems for RTSSP projects. Positive references were received for the firm.

Staffing and Project Organization

Both short-listed firms proposed experienced project managers, key personnel, and subconsultants with relevant experience in TSP, ITS detection technology, and performance measures.

Arcadis proposed a comprehensive project team. The proposed project manager (PM) has over 34 years of experience in the industry. Arcadis proposed two senior advisors, each with 25 years of experience, in addition to specific task leaders with a range of 12 to 36 years of experience. Arcadis' proposal lacked detail on the specific roles of the key personnel on the Project; however, when asked to expand on them during the interview, the team was able to delineate the duties and responsibilities of the key personnel and discussed the strengths they bring to the Project. The PM will oversee scheduling, communication with the stakeholder agencies, and installation of the technology. The proposed senior advisors have relevant TSP experience and will be the link between the technology and customer experience, providing the 'big picture' in terms of work plan approach. Additionally, during the interview, each of the Arcadis team members participated in their respective areas of expertise during the presentation and when responding to evaluators' questions.

KHA proposed an experienced and knowledgeable project team. The proposed PM has over 17 years of experience with KHA. The PM has delivered projects deploying the Traction Priority solution and served as expert advisor on OCTA's Traffic Signal Synchronization Master Plan 2021 update. The PM will primarily focus on systems engineering for TSP concept development with the software engineering team based in Phoenix, Arizona. The deputy PM has four years of experience and will be responsible for day-to-day project tasks including scope, budget, invoicing, grant reporting and stakeholder coordination. During the interview, the KHA team members participated in providing responses within their areas of expertise. However, during the presentation and when responding to evaluators' questions the team did not demonstrate a strong understanding of the corridor.

Work Plan

Both short-listed firms met the requirements of the RFP, and each firm adequately discussed its approach to conducting the Project.

Arcadis presented a comprehensive work plan that demonstrated an understanding of the Project requirements and challenges, particularly related to grant funding requirements and project delivery. Arcadis proposed to utilize LYT as its cloud-based TSP solution. Arcadis made this selection based upon its experience and access to nearly all cloud-based solutions. Arcadis stated that LYT is the most widely deployed and time-tested system and further emphasized it would perform a detailed and thorough analysis of the LYT solution to ensure all functionalities desired by OCTA and its stakeholders are evaluated. Arcadis proposed to install a detection solution that is more comprehensive along the prototype area. When asked about this during the interview, Arcadis noted that while evaluating the corridor, the detection systems in the same environment will result in a direct comparison and allow for some cost savings. Additionally, during the interview, the team discussed its qualifications and provided an overview of the solution for completing the Project. The team underscored the need of an objective assessment of the performance of the proposed TSP and ITS detection technical solutions.

KHA provided a detailed work plan that demonstrated an understanding of the Project scope of work and grant funding requirements. The firm's proposed TSP solution, Traction Priority, was developed by KHA. The work plan emphasized that its solution would come with a one-time perpetual license should the results of the study recommend the technology be more widely deployed. During the interview, the team discussed its qualifications and provided an overview of the Traction Priority software and its dashboards. While KHA emphasized the benefits of its proposed solution, when asked whether the team could provide an objective review of its proposed solution, KHA did not demonstrate how their solution could be objectively evaluated as the most advantageous solution available to OCTA and its stakeholders. The team emphasized it created and developed the proposed technology solution and believed it to be the most optimal solution available; however, did not describe any experience with other existing solutions.

Cost and Price

Pricing scores were based on a formula which assigned the highest score to the firm with the lowest total firm-fixed price and scored the other proposals' total firm-fixed price based on its relation to the lowest total firm-fixed price. Arcadis proposed the lowest overall cost, which was lower than the OCTA project manager's independent cost estimate of \$1,800,000 and is therefore considered fair and reasonable.

Procurement Summary

Based on the evaluation of the written proposals, the firms' qualifications, work plan approach, the information obtained from the interviews, as well as cost and price, the evaluation committee recommends the selection of Arcadis as the top-ranked firm to provide professional services for the Project. Arcadis delivered a comprehensive proposal and an interview that was responsive to all the requirements of the RFP.

Fiscal Impact

This project was approved in OCTA's Fiscal Year 2023-2024 Budget, Planning Division, Account No. 0017-7519-SPT01-0Q7, and will be funded using the SMART and REAP 2.0 program funds.

Governor Gavin Newsom's (Governor) fiscal year 2024-25 budget proposal includes partial reversion of REAP 2.0 funds that may impact project funding. The impacts of the Governor's budget proposal will not be known until approval by California State Legislature, which is expected in June 2024. If funds are rescinded by the State and SCAG, staff will propose use of State Transportation Improvement Program Planning, Programming and Monitoring (STIP-PPM) funds to replace the REAP 2.0 funds, if necessary. The STIP-PPM supports transportation planning and feasibility studies, and the Harbor Boulevard Pilot Innovative Transit Signal Priority Study is an eligible project.

Summary

Staff is recommending the Board authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-2944 between OCTA and Arcadis, in the amount of \$1,197,912, for a two-year term, to conduct the Project.

Attachments

- A. Review of Proposals, RFP 3-2944, Harbor Boulevard Pilot Innovative Transit Signal Priority Study
- B. Proposal Evaluation Matrix (Short-Listed Firms), RFP 3-2944, Harbor Boulevard Pilot Innovative Transit Signal Priority Study
- C. Contract History for the Past Two Years, RFP 3-2944, Harbor Boulevard Pilot Innovative Transit Signal Priority Study

Prepared by:

A handwritten signature in blue ink, appearing to read 'Alicia Yang'.

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(714) 560-5362

A handwritten signature in blue ink, appearing to read 'Pia Veasapen'.

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Approved by:

A handwritten signature in blue ink, appearing to read 'Kia Mortazavi'.

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

Review of Proposals

RFP 3-2944, Harbor Boulevard Pilot Innovative Transit Signal Priority Study

Presented to the Regional Transportation Planning Committee - March 4, 2024

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

Overall Ranking	Proposal Score	Firm and Location	Sub-Contractors	Evaluation Committee Comments	Total Firm-Fixed Price
1	86	Arcadis U.S., Inc. Irvine, California	SinWaves, Inc. Iteris, Inc. Yunex, LLC	Firm has recent, relevant experience with project corridor as part of the traffic signal synchronization program. Demonstrated recent experience with its proposed solution through projects with Tri-County Metropolitan District of Oregon in Portland, Oregon and the San Diego Association of Governments. Highly qualified and experienced key personnel, senior advisors, technical staff, and subconsultants, each with decades of experience. Proposed senior advisors have relevant transit signal priority (TSP) experience. Comprehensive work plan demonstrated an understanding of the project requirements and challenges, particularly related to grant funding requirements and project delivery. Proposed cloud-based TSP solution, LYT for its time-tested system. Thorough team presentation and interview with project specific responses to all questions. Positive references received.	\$1,197,912
2	77	Kimley-Horn and Associates, Inc. Orange, California	AET and Associates	Firm has recent, relevant experience with ongoing project with the Los Angeles County Metropolitan Transportation Authority. Qualified team, including key personnel, technical staff, and subconsultants. Proposed project manager has over 17 years of experience with the firm and with the firm's own cloud-based solution. Proposed comprehensive work plan that is responsive to all the tasks in the scope of work with detailed and easy to understand graphics. Proposed firm's own cloud-based solution named Traction Priority. Comprehensive team presentation and interview with project specific responses to all questions. Positive references received.	\$1,596,035

Evaluation Panel:

Contracts Administration and Materials Management (1)
Transportation Modeling (1)
Transit Service Planning (1)
City of Fullerton (1)
City of Santa Ana (1)
City of Anaheim (1)

Proposal Criteria

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

Weight Factors

20 percent
25 percent
30 percent
25 percent

Acronyms

RFP = Request for proposal
TSP = transit signal priority

PROPOSAL EVALUATION CRITERIA MATRIX (Short-Listed)
RFP 3-2944, Harbor Boulevard Pilot Innovative Transit Signal Priority Study

Arcadis U.S., Inc.							Weights	Overall Score
Evaluator Number	1	2	3	4	5	6		
Qualifications of Firm	3.5	4.5	4.5	4.0	4.0	4.0	4	16.3
Staffing/Project Organization	3.5	4.0	4.0	4.0	4.0	4.0	5	19.6
Work Plan	4.0	4.0	4.5	4.5	4.0	4.5	6	25.5
Cost and Price	5.0	5.0	5.0	5.0	5.0	5.0	5	25.0
Overall Score	80.5	87.0	90.0	88.0	85.0	88.0		86
Kimley-Horn and Associates, Inc.							Weights	Overall Score
Evaluator Number	1	2	3	4	5	6		
Qualifications of Firm	3.5	4.5	4.5	4.0	4.0	4.0	4	16.3
Staffing/Project Organization	3.0	3.5	4.0	3.5	3.5	4.0	5	17.9
Work Plan	3.5	4.0	4.5	4.0	3.5	4.0	6	23.5
Cost and Price	3.8	3.8	3.8	3.8	3.8	3.8	5	18.8
Overall Score	68.8	78.3	83.8	76.3	73.3	78.8		77
The range of scores for the non-short-listed firms was 46-56.								

CONTRACT HISTORY FOR THE PAST TWO YEARS
RFP 3-2944, Harbor Boulevard Pilot Innovative Transit Signal Priority Study

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Arcadis U.S., Inc.						
Contract Type: Contract Task Order	C-0-2112	On-Call Design and Construction Support Services for Facility Modification Projects	September 1, 2020	November 3, 2025		\$ 186,902
<i>Subconsultants:</i>						
<i>Jensen Hughes</i>						
<i>Jones And Stokes</i>						
<i>Mark Thomas And Company</i>						
<i>Miyamoto International, Inc.</i>						
<i>Psomas</i>						
<i>TK1SC</i>						
<i>Triunity, Inc.</i>						
Contract Type: Firm-Fixed Price	C-2-2697	Regional Synchronization Performance Analysis Support	October 5, 2022	September 30, 2024		\$ 41,400
<i>Subconsultants:</i>						
<i>None</i>						
Contract Type: Time and Expense	C-3-2354	On-Call Regional Planning Support Services	July 17, 2023	May 31, 2026		\$ 250,000
<i>Subconsultants:</i>						
<i>Michael Baker International</i>						
Contract Type: Time and Expense	C-8-1969	Construction Management Support Services for Interstate 5 Widening Project Between State Route 73 and Oso Parkway	December 2, 2019	December 1, 2024		\$ 10,974,923
<i>Subconsultants:</i>						
<i>Balk Biological, Inc.</i>						
<i>Dynamic Engineering Services</i>						
<i>Ninyo And Moore</i>						
<i>Paleo Solutions, Inc.</i>						
<i>TRC Solutions, Inc.</i>						
Contract Type: Time and Expense	C-3-2827	Construction Management Support Services for State Route 91 Improvement Project Between Acacia Street and La Palma Avenue	TBD	TBD		TBD
<i>Subconsultants:</i>						
<i>Calvada Surveying, Inc.</i>						
<i>Dynamic Engineering Services</i>						
<i>Leighton Consulting, Inc.</i>						
Total						\$ 11,453,225

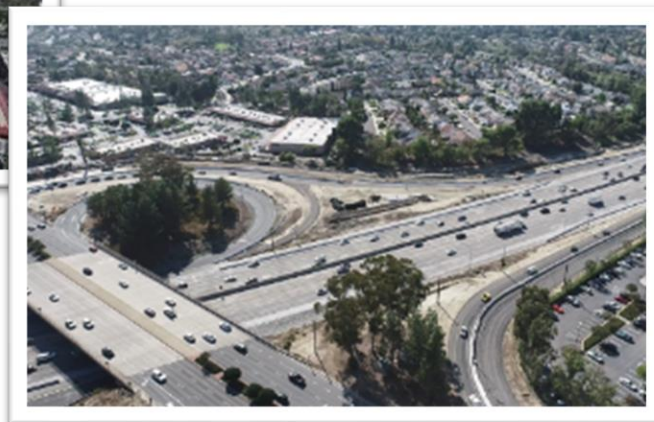
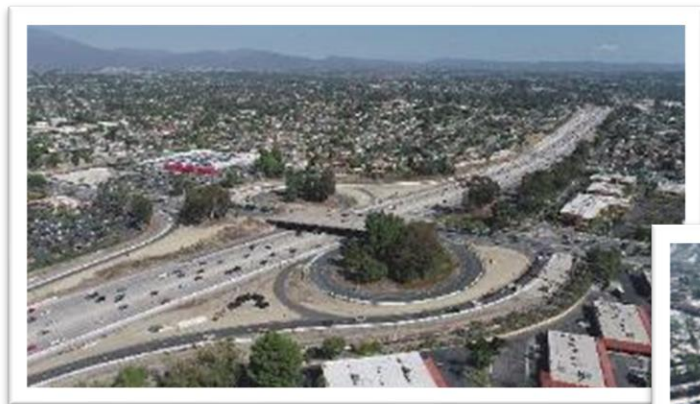
Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Kimley-Horn and Associates, Inc.						
Contract Type: Contract Task Order	C-4-1806	On-Call Traffic Engineering and Related Services for Regional Traffic Signal Synchronization Program	June 26, 2018	June 30, 2023		\$ 4,264,963
<i>Subconsultants:</i>						
<i>Crosstown Electrical and Data, Inc.</i>						
Contract Type: Firm-Fixed Price	C-0-2172	2009 Traffic Signal Synchronization Master Plan for Orange County Update	May 28, 2020	May 31, 2022		\$ 249,653
<i>Subconsultants:</i>						
<i>KOA Corporation</i>					\$ 46,380	
<i>Rock E. Miller and Associates</i>					\$ 24,500	
Contract Type: Firm-Fixed Price	C-1-3273	Santa Ana Transit Cooperative Study	April 19, 2021	April 30, 2022		\$ 249,400
<i>Subconsultants:</i>						
<i>Cambridge Systematics, Inc.</i>					\$ 40,800	
<i>Texas A and M Transportation Institute</i>					\$ 34,000	
Contract Type: Firm-Fixed Price	C-1-3653	Transit Asset Management Plan Update	November 18, 2021	October 31, 2022		\$ 174,860
<i>Subconsultants:</i>						
<i>Jacobs Engineering Group, Inc.</i>					\$ 55,000	
Total						\$ 4,938,876

Acronyms

No. = Number

RFP = Request for proposal

Update on the Interstate 5 Improvement Project Between State Route 73 and El Toro Road

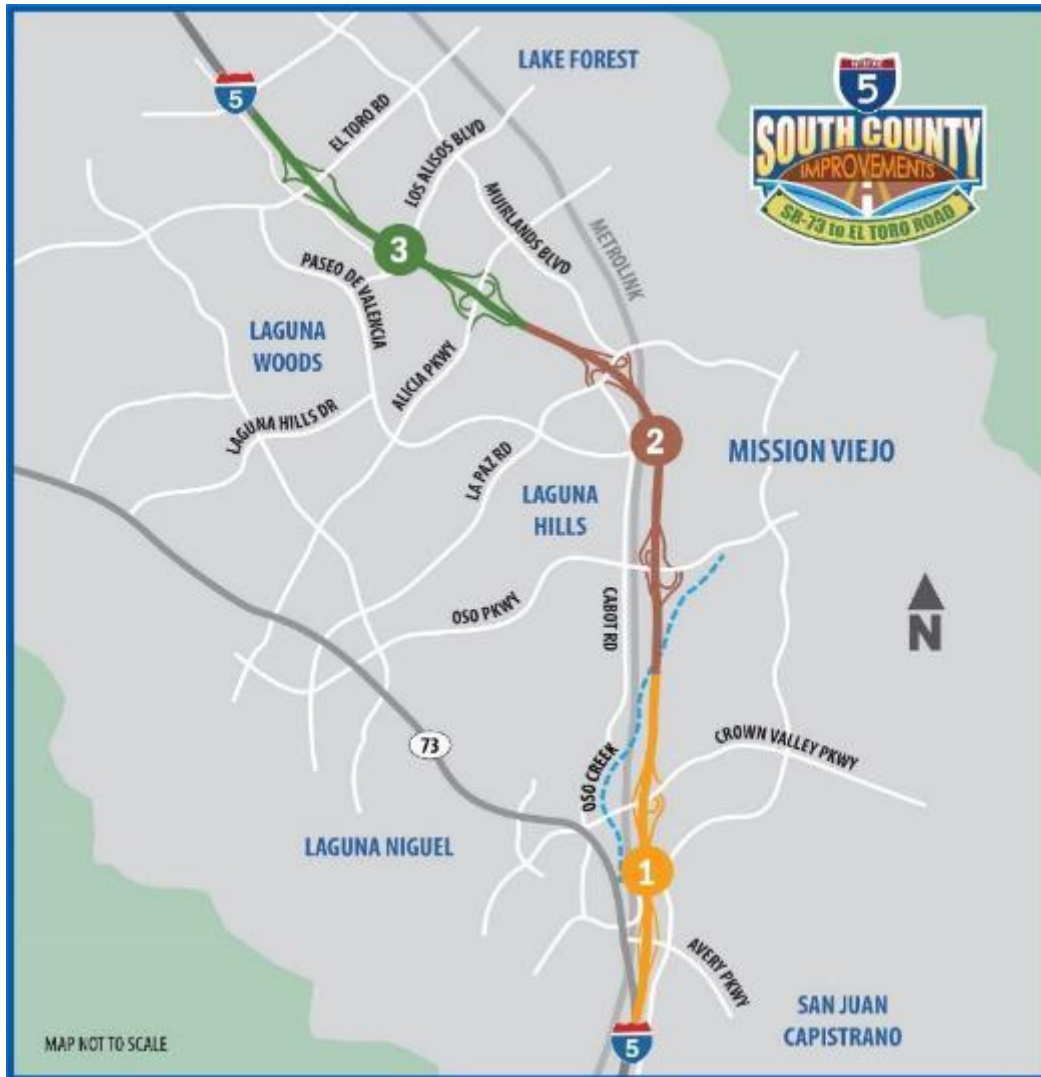


Project Update

March 4, 2024



Project Overview



Segment ①

State Route 73 to Oso Parkway

Segment ②

Oso Parkway to Alicia Parkway

Segment ③

Alicia Parkway to El Toro Road

Total Length: 6.5 miles

Total Estimated Cost: \$664 million



Major Project Improvements

- 1** Add one general purpose lane in both directions from Avery Parkway to Alicia Parkway
- 2** Extend second carpool lane in both directions from Alicia Parkway to El Toro Road and restripe for continuous access
- 3** Reconstruct Avery Parkway and La Paz Road interchanges and Los Alisos Boulevard overcrossing
- 4** Reconstruct and add auxiliary lanes
- 5** Realign and improve on- and off-ramps

Estimated Construction Schedule

Segment	Estimated Schedule
Segment 1 State Route 73 to Oso Parkway	February 2020 – Early 2025 <i>Construction is 90 percent complete</i>
Segment 2 Oso Parkway to Alicia Parkway	May 2019 – Late 2024 <i>Construction is 92 percent complete</i>
Segment 3 Alicia Parkway to El Toro Road	January 2021 – Late 2024 <i>Construction is 87 percent complete</i>

Interstate 5 (I-5) at Avery Parkway Interchange



I-5 at Crown Valley Parkway



I-5 at Oso Parkway





**I-5 South Improvement Project
La Paz Bridge Lowering**

I-5 at Alicia Parkway



Los Alisos Boulevard Bridge



Aliso Creek Bike and Hiking Trail



I-5 at El Toro Road



I-5 Looking South Towards Los Alisos Bridge





OC I-5 South County
Published by Later - January 2 at 5:00 PM

UPDATED: Attention South County! The I-5 Alicia Parkway straight southbound on-ramp closure has been postponed and will now close at 10 p.m. on Tuesday, Jan. 9 for roadway reconstruction and paving. The ramp will reopen at 8 a.m. on Saturday, Jan. 13.

Detour signs will be in place to assist motorists. Plan for additional travel time and any detours within the area. The schedule is subject to change due to inclement weather or unforeseen operational issues. For the latest upd... See more

EXTENDED

RAMP CLOSURE

NEW TIMES

I-5 Alicia Pkwy SB Straight On-Ramp
10 p.m. Tuesday, Jan. 9 - 8 a.m. Saturday, Jan. 13

See insights and ads

Boost again

88 23 22

Like Comment Share

WEEKEND RAMP CLOSURE
I-5 El Toro Road Southbound Off-Ramp Closed

Dear Neighbor,
The I-5 El Toro Road southbound off-ramp will be closed for roadway reconstruction starting Friday, Jan. 19. The ramp will be closed over the weekend and will reopen Monday morning, Jan. 22.

WHEN:

I-5 El Toro Road southbound off-ramp closed
11 p.m. Friday, Jan. 19 -
5 a.m. Monday, Jan. 22

WHAT TO EXPECT:

Plan for additional travel time through the area.

Detour signs will be in place to assist motorists.

The schedule is subject to change due to inclement weather or unforeseen operational issues.

To see the latest construction updates, SCAN HERE

For additional project information, please visit octa.net/i5southcounty

STAY INFORMED
OCGO Local Tax Dollars at Work

Outreach Team Contact Information



octa.net/i5SouthCounty



i5SouthCounty@octa.net



[@OCi5SouthCounty](https://www.instagram.com/OCi5SouthCounty)



[Facebook.com/OCi5SouthCounty](https://www.facebook.com/OCi5SouthCounty)



949-614-0202
(English/Español)

THANK YOU





Emergency Coastal Rail Projects Update and Planning for the Future

Regional Transportation Planning Committee • March 4, 2024

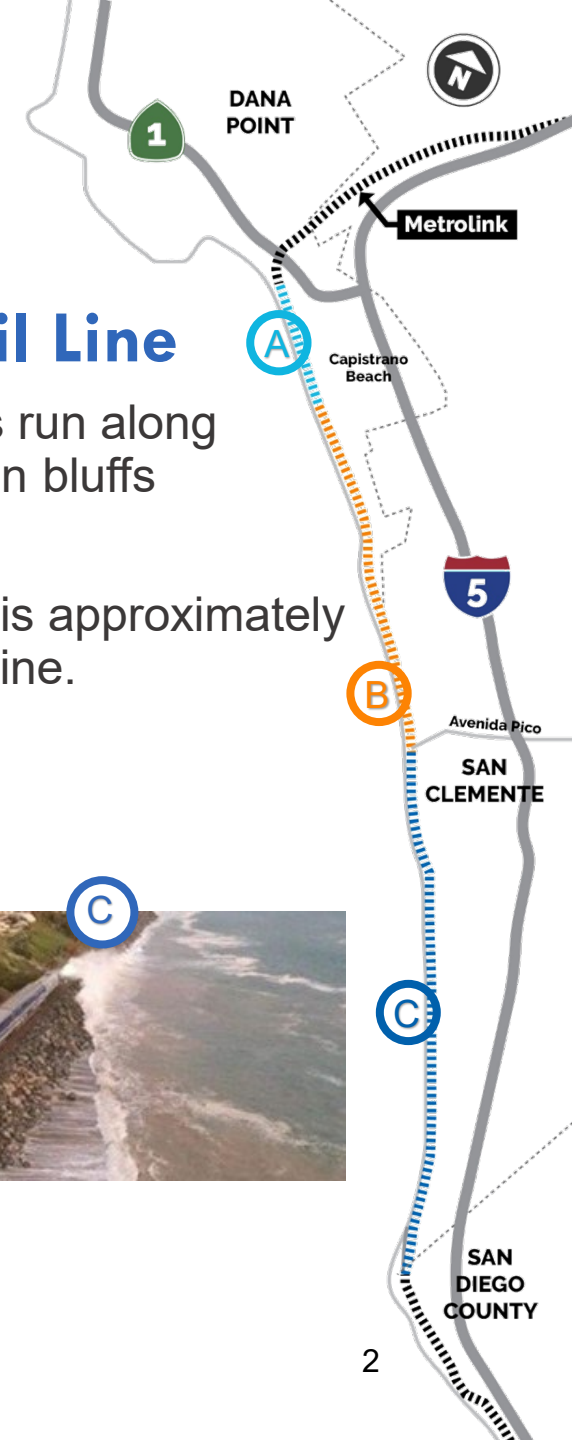
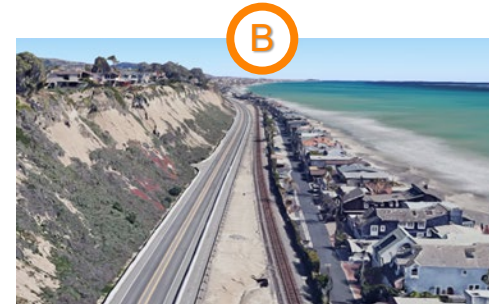
OCTA's Role in the LOSSAN Corridor

- Owns 40+ miles of the corridor, including seven miles of critical coastal track in south Orange County
- Serves as the managing agency for the LOSSAN Rail Corridor Agency
- Member of the Southern California Regional Rail Authority (Metrolink) joint powers authority that uses the LOSSAN corridor

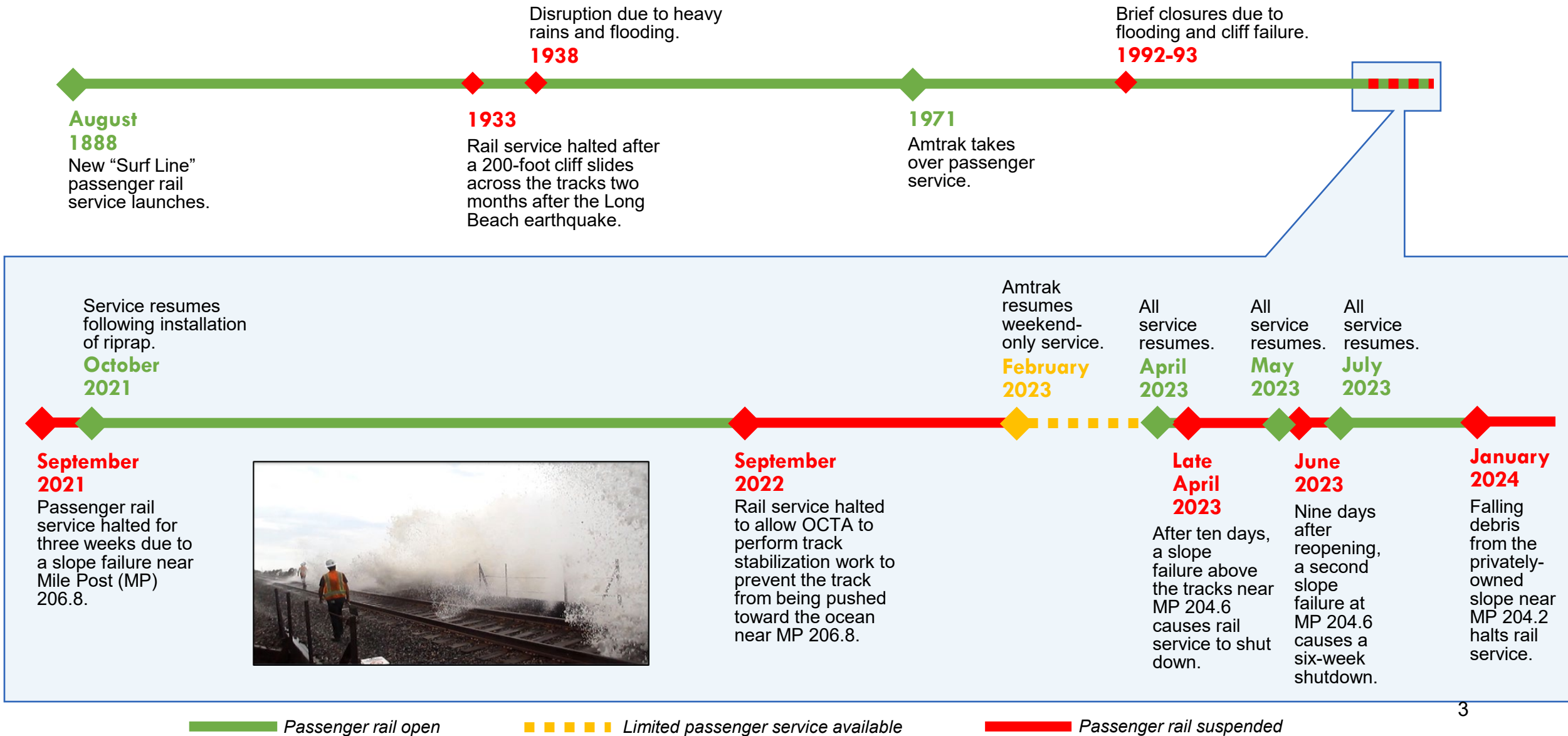
OCTA's Beachside Rail Line

In south Orange County, tracks run along the beach, sandwiched between bluffs and the ocean.

Most of this beachside rail line is approximately 200 feet or less from the coastline.



Passenger Rail Closures



Changing Conditions



Milepost 206.8



- Beach erosion
- Recent coastal studies
- Prior studies by state/federal agencies
- Milepost 206.8 incident
- Need to develop phased solutions to address infrastructure impacts

Cyprus Shore Track Stabilization Project (MP 206.8)



Project Cost: ~\$21.7 million

- **\$8 million** – OCTA funds
 - Initial track stabilization work
- **\$6 million** – Federal Surface Transportation Block Grant Program
- **\$6 million** – State Interregional Transportation Improvement Program
- **\$1 million** – Federal Coronavirus Response and Relief Supplemental Appropriation Act
- **\$700,000** – OCTA funds



- Homes constructed on historic landslide
- Landslide movements pushed tracks toward the ocean
- Solution – Installed tieback anchors to stabilize the slope
- Project in close-out stages, pending resolution of right-of-way (ROW) considerations
- Passenger rail operations resumed April 2023



San Clemente Track Protection (MP 204.6)

Project Cost: \$6 million

- **\$3 million** – OCTA funds
- **\$3 million** – State Interregional Transportation Improvement Program

- Installed temporary barrier wall to prevent debris on track
- Removed landslide soil on rail side of wall
- Cleared project site for reinstatement of rail service
- Passenger rail service restored July 2023
- Remove temporary wall after City of San Clemente installs permanent solution

Mariposa Point Track Protection (MP 204.2)



Project Cost: ~\$10 million

- Caltrans issued an emergency declaration on Feb. 1, making \$10 million in State funding available
- **\$2 million** – Phase 1 (cleanup)
- **\$8 million** – Phase 2 (barrier wall)



- Removed two damaged spans of the pedestrian bridge
- Grading the slope and clearing debris
- Placement of Visqueen plastic, and other best management practices to prevent surface water infiltration
- Debris cleared and limited freight service restored on January 29, 2024
- Work advancing to build barrier wall to protect tracks

Coastal Rail Resiliency Study *short- to medium-term solutions*

- Develop options to protect seven miles of coastal rail infrastructure at various sea levels
- Gain an understanding of climate effects on coastal rail infrastructure
- Identify potential solutions, including sand replenishment / retention
- Engage key stakeholders / agencies
- OCTA Board of Directors (Board) awarded contract August 14, 2023
- **Next Step:** Environmental for Coastal Rail Infrastructure Resiliency Projects

Coastal Rail Long-Term Solutions Study

- Develop options for potential long-term solutions for the coastal section of rail line
- Create an action plan for key elements
- Partner with LOSSAN, state and federal agencies
- Engage key stakeholders / agencies

Goals & Objectives for Short- & Mid-term Study

- Continual stakeholder engagement
- Minimize passenger and freight service disruptions
- Protect the railroad in place (up to 30 years)
 - Assess, identify, and develop a program of capital projects within the OCTA ROW
 - Develop short-term (ten years) and medium-term (30 years) conceptual alternatives
 - Work with adjacent stakeholders to develop a comprehensive coastal capital program with roles and responsibilities beyond the OCTA ROW





- Conduct an Initial Assessment along OCTA's Coastal Railroad ROW (MP 200 – MP 207.4)
- Identify activities for immediate action
- Builds on previous efforts to maintain railroad operations
- Identify potential solutions and strategies
- Emergent issues, monitoring, and reinforcement areas

Monitoring Areas 1 & 2



Monitoring Area #1

- MP 200.80 - 201.00
- South Doheny Beach Erosion
- Recommendation: monitor riprap condition & beach erosion (semi-annually)



Monitoring Area #2

- MP 202.70 Poche Beach Outfall and Pedestrian Underpass
- Recommendation: monitor beach erosion & scour protection around structures (quarterly)



Monitoring Areas 3, 4, & 5



Monitoring Area #3

- MP 203.65 - 203.70

North Beach

- Recommendation: monitor riprap condition and beach erosion (semi-annually)



Monitoring Areas #4, #5

- MP 204.00 – 204.30 Mariposa Pedestrian Bridge, MP 204.50 – Linda Lane

- Recommendations: #4 – install sensors to monitor potential track-bed movement (monthly)
#5 – monitor riprap condition and beach erosion (semi-annually)



Monitoring Areas 6 & 7



Monitoring Area #6

- MP 206.10 Calafia State Beach
- Recommendation: monitor effectiveness of culvert replacement (post-storm)



Monitoring Area #7

- MP 206.70 – 207.25
- Cyprus Shore to County Line
- Recommendation: monitor effectiveness of emergency riprap (semi-annually)



Potential Reinforcement Area 1

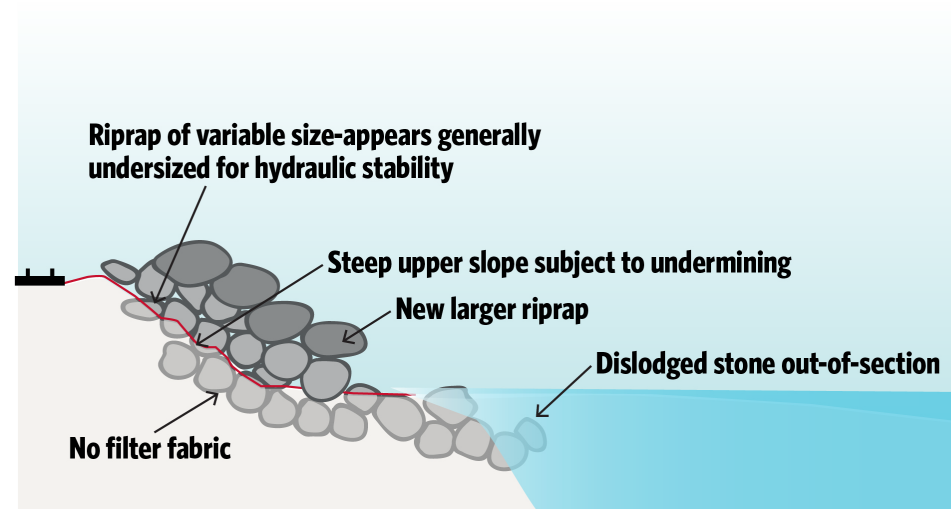
Existing Condition



MP 203.80 - 203.90:
Erosion Hazard deteriorating

Possible Solution

- Stabilize track by repairing/augmenting existing riprap



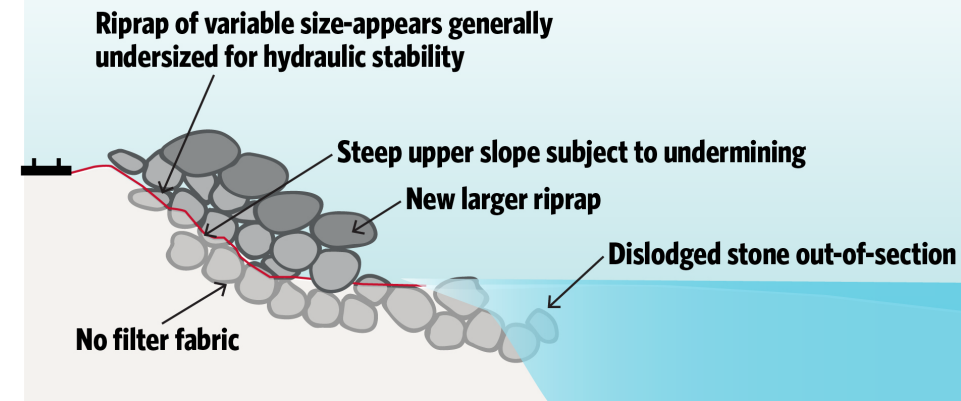
Existing Condition



MP 204.00 - 204.40:
Erosion - no beach at high tide and
direct wave attack

Possible Solution

- Reinforce riprap section as needed to stabilize track

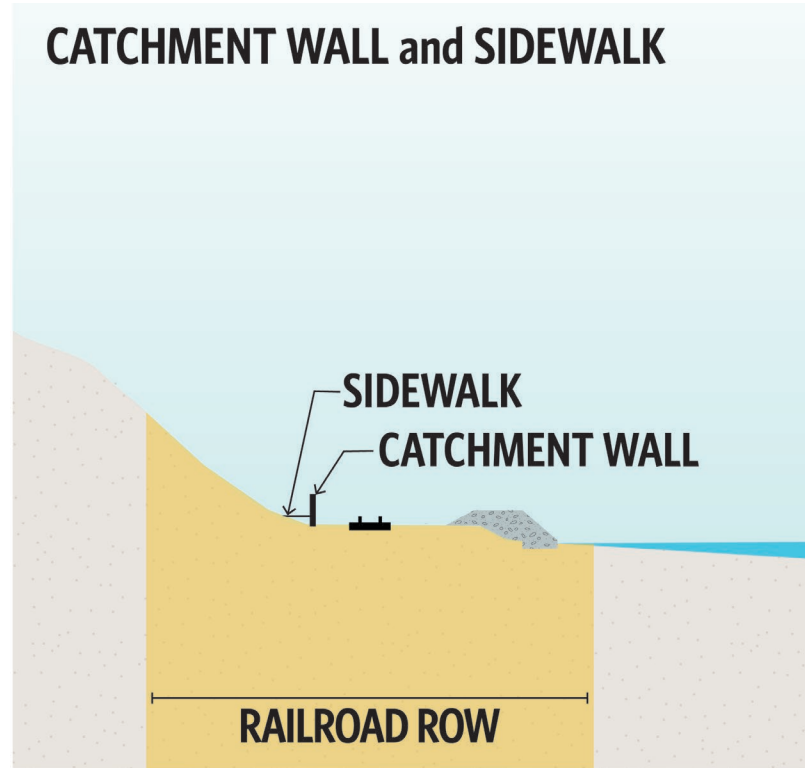


Potential Reinforcement Area 3

Existing Condition



Possible Solution



MP 204.00 - 204.50: Steep bluffs, potential to impact tracks, poor track side drainage with potential for liquefaction.

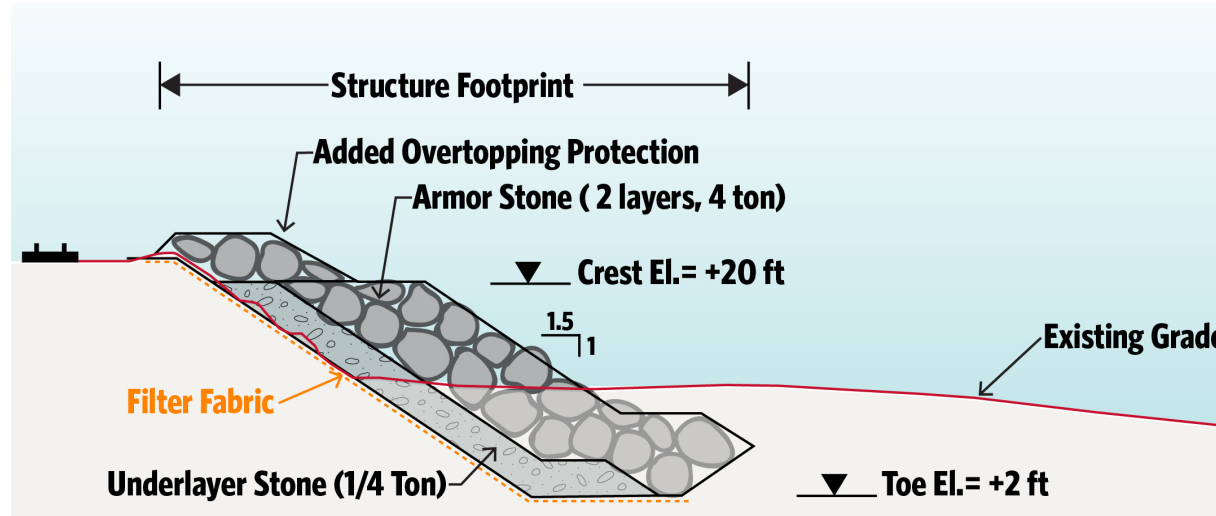
Potential Reinforcement Area 4

Existing Condition



MP 206.00 - 206.67: North End of Cyprus Shore Project – Erosion exposing rock and creating a shelf adjacent to tracks where riprap once existed.

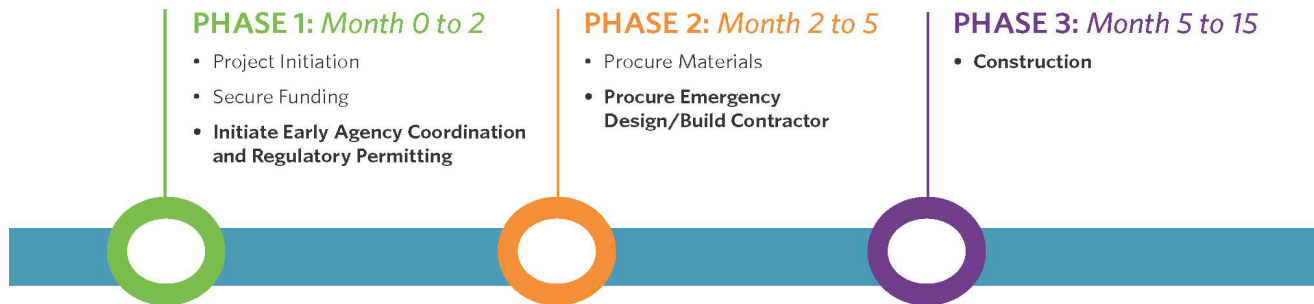
Possible Solution



Initial Assessment Implementation

CRITICAL PROJECT ROADMAP

- OCTA conducted an Initial Assessment as a part of the Coastal Rail Resiliency Study (CRRS) to identify imminent threats that impact railroad operations and require immediate action.
- The imminent threats were identified in January 2024, but other imminent threats may emerge due to the dynamic nature of the coastal rail corridor.
- Two of the locations have already required reinforcements due to emergencies
- Proposed schedule assumes emergency permitting and emergency design/build procurement**



REQUIRED FUNDING

Rough Order of Magnitude: \$200M
Includes Up to:

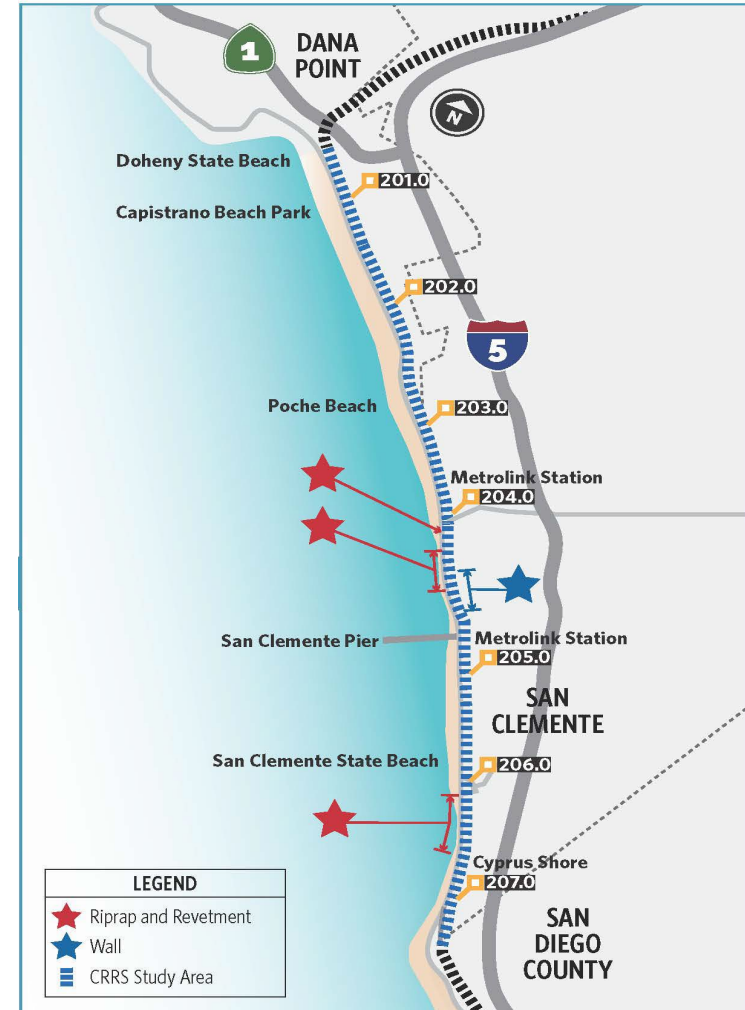
- 0.50 miles of wall
- 0.67 miles of engineered revetment
- 0.50 miles of rock placement

ROLES & RESPONSIBILITIES

- Outreach - OCTA
- Funding - CALSTA, CALTRANS
- Concept Design - OCTA
- Design/Build Contract - SCRRRA
- Permitting/Environmental - OCTA
- Pedestrian Path Restoration - City of San Clemente

OCTA - Orange County Transportation Authority
SCRRRA - Southern California Regional Rail Authority
CALSTA - California State Transportation Agency
CALTRANS - California Department of Transportation

February 2024 



Map of Critical Project Areas

- Listening Sessions
- Draft Concept Outreach
- Draft Plan Outreach
- Support community engagement
 - Feedback loop



- Consider other natural solutions
- Seek partnering opportunities
- Continue streamlined communication of service disruption
- Concern regarding impacts to employee commute patterns and regional tourism
- Support for early, comprehensive, preventive action
- Seek partnering opportunities to minimize overlapping efforts



Initial Assessment

- Address Owner/Operators concerns regarding imminent issues affecting the railroad
- Focused on protecting rail operations, track infrastructure, and maintaining railroad service
- Identified Areas of Concern
 - Monitoring Areas
 - Potential Reinforcement Areas
- Identify Next Steps

