



# **AGENDA**

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

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### **Committee Members**

Lori Donchak, Chair  
Shawn Nelson, Vice Chairman  
Andrew Do  
Barbara Delgleize  
Mark A. Murphy  
Todd Spitzer  
Michelle Steel

Orange County Transportation Authority Headquarters  
550 South Main Street, Board Room – Conf. Room 07  
Orange, California

**Monday, April 3, 2017, at 10:30 a.m.**

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

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

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

## **Call to Order**

### **Pledge of Allegiance**

Committee Vice Chairman Nelson

### **1. Public Comments**

## **Special Calendar**

There are no Special Calendar matters.

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

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



# **AGENDA**

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

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

Approval of the minutes of the Regional Planning and Highways Committee meeting of March 6, 2017.

### **3. Sole Source Agreement for Freeway Service Patrol Data Collection and Tracking Software Development**

Patrick Sampson/Beth McCormick

#### **Overview**

The Orange County Service Authority for Freeway Emergencies, in cooperation with the California Department of Transportation and the California Highway Patrol, operates a Freeway Service Patrol program that provides roving patrols along Orange County freeways. The service currently utilizes a hosted vehicle tracking and data collection solution provided by Los Alamos Technical Associates, Inc. The solution, originally procured in fiscal year 2011-12, is in need of modification and improvement to effectively meet the ongoing needs of the program.

#### **Recommendations**

- A. Authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-7-1557 between the Orange County Transportation Authority and Los Alamos Technical Associates, Inc., in the amount of \$250,000, to develop and implement improvements to the LATATrax software for a five-year term.
- B. Amend the Orange County Transportation Authority's Fiscal Year 2016-17 adopted Budget to transfer \$50,000 from Account 0013-7519-S1002-TC2 to Capital Account 0013-9028-S1002-TC2.

### **4. Fiscal Year 2016-17 Measure M2 Annual Eligibility Review**

May Hout/Kia Mortazavi

#### **Overview**

Measure M2 requires all local jurisdictions in Orange County to satisfy eligibility requirements in order to receive Measure M2 net revenues. Fiscal year 2016-17 eligibility documentation has been reviewed by staff and the Taxpayer Oversight Committee, and is presented for Board of Directors' review and approval.



# AGENDA

## Regional Planning and Highways Committee Meeting

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### 4. (Continued)

#### Recommendation

Approve all local jurisdictions as conditionally eligible for Measure M2 net revenues for fiscal year 2016-17, and direct staff to return with eligibility findings for local jurisdictions pending the adoption and submittal of fiscal year 2015-16 expenditure reports by local agencies.

### 5. **Fiscal Year 2017-18 Measure M2 Maintenance of Effort Adjustment and Updates to the Eligibility and Local Signal Synchronization Plan Guidelines** May Hout/Kia Mortazavi

#### Overview

The Measure M2 Ordinance includes eligibility requirements that local agencies must satisfy in order to receive Measure M2 net revenues, which include a periodic adjustment to the maintenance of effort benchmark. Local agencies are also required to periodically update a local signal synchronization plan. Updates to the Measure M2 Eligibility Guidelines, including the maintenance of effort benchmark adjustment and the Local Signal Synchronization Plan Guidelines, are presented for the Board of Directors' review and approval.

#### Recommendations

- A. Approve the maintenance of effort benchmark adjustment for the fiscal year 2017-18 eligibility cycle.
- B. Approve the fiscal year 2017-18 Measure M2 Eligibility Guidelines.
- C. Approve the Local Signal Synchronization Plan Guidelines.

### 6. **Agreement for Regional Modeling-Traffic Operations On-Call Support Staffing**

Ronald Keith/Kia Mortazavi

#### Overview

Consultant support staffing for traffic engineering services is needed to support the implementation of the Measure M2 Regional Traffic Signal Synchronization Program over the next three years. Proposals have been received and evaluated in accordance with the Orange County Transportation Authority's procurement procedures for professional and technical services. Approval is requested to execute a new agreement for these services.



# AGENDA

## *Regional Planning and Highways Committee Meeting*

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### 6. (Continued)

#### **Recommendations**

- A. Approve the selection of W. G. Zimmerman Engineering, Inc., as the firm to provide on-call support staffing on an as-needed basis for regional modeling-traffic operations.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-6-1493 between the Orange County Transportation Authority and W. G. Zimmerman Engineering, Inc., in the amount of \$400,000, for a two-year initial term through April 30, 2019, with one, two-year option term to provide on-call support staffing on an as-needed basis for regional modeling-traffic operations.

### 7. **Three-Year Agreement with the Center for Demographic Research at California State University, Fullerton from Fiscal Year 2017-18 to Fiscal Year 2019-20**

Anup Kulkarni/Kia Mortazavi

#### **Overview**

Orange County's demographic projections are developed with the Center for Demographic Research at California State University, Fullerton. A recommendation to continue this effort through a multi-agency funding agreement is provided for review and approval.

#### **Recommendation**

Authorize the Chief Executive Officer to negotiate and execute a three-year agreement through fiscal year 2019-20, in an amount not to exceed \$282,006, with the Center for Demographic Research at California State University, Fullerton.





## **Regular Calendar**

- 8. Guidance for Administration of the Orange County Master Plan of Arterial Highways Related to Complete Streets**  
Carolyn Mamaradlo/Kia Mortazavi

### **Overview**

In September 2016, Orange County Transportation Authority staff convened an ad hoc committee comprised of volunteer members from the Technical Advisory Committee (and/or their designees) to discuss complete streets implementation and the Master Plan of Arterial Highways. The proposed revisions expand allowances for traffic calming measures on Master Plan of Arterial Highways facilities and clarify which types of traffic calming measures are permitted.

### **Recommendation**

Approve proposed revisions to the Guidance for Administration of the Orange County Master Plan of Arterial Highways.

- 9. Comprehensive Transportation Funding Programs - 2017 Call for Projects Programming Recommendations**  
Sam Kaur/Kia Mortazavi

### **Overview**

The Orange County Transportation Authority issued the 2017 annual Measure M2 Regional Capacity Program and Regional Traffic Signal Synchronization Program call for projects in August 2016. This call for projects made available up to \$40 million in grant funding for streets and roads projects countywide. A list of projects recommended for funding is presented for review and approval.

### **Recommendations**

- A. Approve the 2017 Regional Capacity Program to fund 13 projects, in an amount totaling \$32.24 million.
- B. Approve the 2017 Regional Traffic Signal Synchronization Program to fund five projects, in an amount totaling \$2.5 million.



# **AGENDA**

## *Regional Planning and Highways Committee Meeting*

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### **Discussion Calendar**

**10. Chief Executive Officer's Report**

**11. Committee Members' Reports**

**12. Closed Session**

There are no Closed Session items scheduled.

**13. Adjournment**

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Monday, May 1, 2017**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.



# MINUTES

## Regional Planning and Highways Committee Meeting

### **Committee Members Present**

*Lori Donchak, Chair  
Shawn Nelson, Vice Chairman  
Andrew Do  
Barbara Delgleize  
Mark A. Murphy  
Todd Spitzer  
Michelle Steel*

### **Staff Present**

*Darrell Johnson, Chief Executive Officer  
Ken Phipps, Deputy Chief Executive Officer  
Laurena Weinert, Clerk of the Board  
Olga Prado, Assistant Clerk of the Board  
David DeBerry, Assistant General Counsel  
OCTA Staff and Members of the General Public*

### **Committee Members Absent**

*None*

## **Call to Order**

The March 6, 2017 regular meeting of the Regional Planning and Highways Committee was called to order by Committee Chair Donchak at 10:50 a.m.

## **Pledge of Allegiance**

Director Steel led in the Pledge of Allegiance.

### **1. Public Comments**

No public comments were received.

## **Special Calendar**

There were no Special Calendar matters.

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

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

A motion was made by Director Nelson, seconded by Director Steel, and declared passed by those present, to approve the minutes of the Regional Planning and Highways Committee meeting of March 6, 2017.

### **3. Regional Traffic Signal Synchronization Program Overview**

This item was pulled by Committee Chair Donchak who reported that 59 projects have been completed since 2008, speed mobility has increased by 15 percent, drivers saved close to \$96 million dollars in fuel costs, and idle time at red lights has been reduced, which has had a significant, positive impact on the environment.



# MINUTES

## *Regional Planning and Highways Committee Meeting*

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### **3. (Continued)**

A motion was made by Director Nelson, seconded by Director Steel, and declared passed by those present, to receive and file as an information item.

### **4. Measure M2 Environmental Cleanup Program - Tier 1 Grant Program Call for Projects**

A motion was made by Director Nelson, seconded by Director Steel, and declared passed by those present, to:

- A. Approve the proposed revisions to the Comprehensive Transportation Funding Programs Guidelines for Environmental Cleanup Program Tier 1 projects.
- B. Authorize staff to issue the fiscal year 2017-18 Environmental Cleanup Program Tier 1 call for projects, totaling approximately \$3.1 million.

### **5. Cooperative Agreement with the California Department of Transportation for the Interstate 5 Plant Establishment Project Between Avenida Pico and San Juan Creek Road**

A motion was made by Director Nelson, seconded by Director Steel, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-7-1561 between the Orange County Transportation Authority and the California Department of Transportation, in the amount of \$1,320,000, for the Interstate 5 Plant Establishment Project between Avenida Pico and San Juan Creek Road.

## **Regular Calendar**

There were no Regular Calendar items scheduled.



# MINUTES

## *Regional Planning and Highways Committee Meeting*

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### **Discussion Calendar**

#### **6. Update on the State Route 55 Improvement Project Between Interstate 405 and Interstate 5**

Rose Casey, Director of Highway Programs, provided a PowerPoint presentation as follows:

- Background;
- Comparison of Alternative 3 and Alternative 3 Modified;
- Traffic Performance Measures Update;
- Current Activities;
- Schedule and Proposed Acceleration; and
- Next Steps.

A discussion ensued regarding:

- Assembly Bill 28 (Frazier);
- Traffic performance measures; and
- Proposed acceleration of the schedule.

No action was taken on this discussion item.

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

Ken Phipps, Deputy Chief Executive Officer, reported that:

- The original goal on the Signal Synchronization Program under Measure M2 was to synchronize 2,000 intersections, and as of December 2016, 2,068 intersections have been synchronized.
- The Riverside County Transportation Commission is hosting an opening event on Friday on March 31<sup>st</sup> for its 91 Express Lanes in Riverside County. The event will take place at 11:00 a.m. at the North Main Corona Metrolink Station.
- There are a few public committee recruitments taking place. Applications for the Taxpayer Oversight Committee are being accepted now through May 1<sup>st</sup>, and there are vacancies for the Citizens Advisory Committee and Special Needs Advisory Committee and those applications are due by April 10<sup>th</sup>.



# MINUTES

## *Regional Planning and Highways Committee Meeting*

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### 7. (Continued)

- The Taxpayer Oversight Committee will conduct its 26<sup>th</sup> annual Measure M public hearing on Tuesday, April 11th, at 6:00 p.m., at the OCTA Headquarters.

### 8. Committee Members' Reports

There were no Committee Members' reports.

### 9. Closed Session

A Closed Session was not conducted at this meeting.

### 10. Adjournment

The meeting adjourned at 11:08 a.m.

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Monday, April 3, 2017**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

ATTEST

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Olga Prado  
Assistant Clerk of the Board

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Lori Donchak  
Committee Chair



***April 3, 2017***

**To:** Regional Planning and Highways Committee

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

**Subject:** Sole Source Agreement for Freeway Service Patrol Data Collection and Tracking Software Development

***Overview***

The Orange County Service Authority for Freeway Emergencies, in cooperation with the California Department of Transportation and the California Highway Patrol, operates a Freeway Service Patrol program that provides roving patrols along Orange County freeways. The service currently utilizes a hosted vehicle tracking and data collection solution provided by Los Alamos Technical Associates, Inc. The solution, originally procured in fiscal year 2011-12, is in need of modification and improvement to effectively meet the ongoing needs of the program.

***Recommendations***

- A. Authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-7-1557 between the Orange County Transportation Authority and Los Alamos Technical Associates, Inc., in the amount of \$250,000, to develop and implement improvements to the LATATrax software for a five-year term.
- B. Amend the Orange County Transportation Authority's Fiscal Year 2016-17 adopted Budget to transfer \$50,000 from Account 0013-7519-S1002-TC2 to Capital Account 0013-9028-S1002-TC2.

***Discussion***

Freeway Service Patrol (FSP) program funding and deployment plans are based on maintaining certain cost benefits. Cost benefit calculations consider traffic congestion levels, assists provided, time-delay savings, fuel savings, pollution reduction, and other factors. Because assist data is an important factor in this calculation, the Orange County Transportation Authority (OCTA) must collect

and maintain timely and accurate assist data. It is also important that the California Highway Patrol program supervisors and dispatchers be able to accurately track vehicles and vehicle activity in a real-time environment for daily program monitoring.

The current solution, known as LATATrax, was originally procured in fiscal year 2011-12. Technological advances and improvements in wireless data services will allow the FSP program to continue to develop more effective and reliable wireless data connectivity and implement improvements to data collection workflow processes. Implementing these solutions will require changes to the LATATrax software application.

The LATATrax application is proprietary software; therefore, modifications to the software must be accomplished through a sole source agreement with the application developer, Los Alamos Technical Associates, Inc. (LATA).

### ***Procurement Approach***

This procurement was handled in accordance with OCTA Board of Directors (Board)-approved policies and procedures for a sole source procurement.

LATA is the exclusive owner and the sole entity able to market and sell LATATrax software. LATA is the sole contractor who can provide support and development of the application for tracking and data collection for LATATrax improvements that will be completed on an as-needed basis on this contract. Therefore, the agreement with LATA meets OCTA's criteria for a sole source procurement. Awarding this contract to LATA will allow OCTA to implement improvements and modifications to the LATATrax application and assure that the ongoing data and tracking needs of the program are met. OCTA's project manager will request and approve fixed-hour/fixed-cost quotes for each improvement project before any work will proceed. Based on their technical ability and financial status, LATA is deemed responsible.

LATA's proposal was reviewed by staff from the Contracts Administration and Materials Management and Motorist Services departments to ensure compliance with the contract terms and conditions, as well as the technical requirements.

In accordance with OCTA's sole source procurement procedures, a sole source purchase over \$50,000 requires OCTA's Internal Audit Department (Internal Audit) to conduct a review of LATA's proposed pricing, which was completed on February 28, 2017. The results from Internal Audit indicate that the rates are consistent with pricing offered to other agencies.



**Fiscal Impact**

The project was approved in the Fiscal Year 2016-17 Budget, Motorist Services Department - Service Authority for Freeway Emergencies Fund, Account 0013-7519-S1002-06S. Due to the nature of the project, OCTA's accounting section has determined that the funds should be transferred into a capital expenditure account. Future year funding will be included in the same capital account for each fiscal year budget.

**Summary**

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute sole source Agreement No. C-7-1557 between OCTA and LATA, in the amount of \$250,000, to develop and implement improvements to the LATATrax tracking application.

**Attachment**

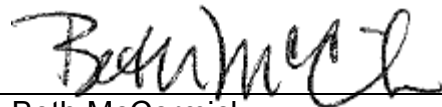
None.

Prepared by:



Patrick Sampson  
Manager of Motorist Services  
714-560-5425

Approved by:




Beth McCormick  
General Manager, Transit  
714-560-5964



Virginia Abadessa  
Director, Contracts Administration and  
Materials Management  
714-560-5623



**April 3, 2017**

**To:** Regional Planning and Highways Committee  
**From:** Darrell Johnson, Chief Executive Officer   
**Subject:** Fiscal Year 2016-17 Measure M2 Annual Eligibility Review

### **Overview**

Measure M2 requires all local jurisdictions in Orange County to satisfy eligibility requirements in order to receive Measure M2 net revenues. Fiscal year 2016-17 eligibility documentation has been reviewed by staff and the Taxpayer Oversight Committee, and is presented for Board of Directors' review and approval.

### **Recommendation**

Approve all local jurisdictions as conditionally eligible for Measure M2 net revenues for fiscal year 2016-17, and direct staff to return with eligibility findings for local jurisdictions pending the adoption and submittal of fiscal year 2015-16 expenditure reports by local agencies.

### **Background**

Local jurisdictions are required to meet eligibility requirements and submit eligibility verification packages to Orange County Transportation Authority (OCTA) staff annually in order to remain eligible to receive Measure M2 (M2) net revenues. There are 13 eligibility requirements local jurisdictions must meet. However, not all of the eligibility requirements require verification each year. The 13 eligibility requirements and submittal schedule are identified in Attachment A.

The Taxpayer Oversight Committee (TOC) is responsible for reviewing five of the 13 eligibility requirements and designating the Annual Eligibility Review (AER) Subcommittee to review the Congestion Management Plan, Mitigation Fee Program, Local Signal Synchronization Plan, Pavement Management Plan (PMP), and expenditure reports. The remaining eight eligibility requirements are reviewed by OCTA staff.

***Discussion***

All 35 local jurisdictions submitted the appropriate eligibility verification documents prior to the June 30<sup>th</sup> deadline. OCTA staff reviewed the submittals to ensure completion and accuracy.

The AER Subcommittee convened on September 20, 2016 and October 20, 2016, to review and discuss the PMPs for 21 local agencies.

The AER Subcommittee members expressed concerns about the downward trend in pavement conditions based on the seven-year projections provided in the current PMPs for the cities of Fullerton and Placentia. AER Subcommittee members noted that it is important to continue to address the condition of pavement on an ongoing basis to avoid further deterioration. The M2 Ordinance requires local jurisdictions to submit PMPs and allows flexibility for local jurisdictions to develop the remedies as appropriate. The AER Subcommittee asked staff to communicate their concerns with the cities of Fullerton and Placentia. OCTA staff will send out letters to the cities of Fullerton and Placentia (Attachments B and C) to express concerns raised by the committee members during the AER Subcommittee meetings.

The AER Subcommittee presented recommendations of eligibility compliance to the TOC on February 14, 2017, for review and approval. The TOC found all local jurisdictions to be in compliance with the M2 Ordinance and recommended conditional eligibility approval for fiscal year (FY) 2016-17, pending the review of expenditure reports (further described below). The eligibility review and findings for FY 2016-17 M2 eligibility are summarized in Attachment D.

The M2 eligibility for FY 2016-17 is conditional, pending the review and approval of expenditure reports for FY 2015-16. All local jurisdictions must adopt an Annual Expenditure Report that tracks financial activity for M2 funds, including interest earned, developer traffic impact fees, and funds expended by the jurisdiction that satisfy maintenance of effort requirements. Upon staff review, the AER Subcommittee, and the TOC, expenditure reports will be presented to the Board of Directors for a final eligibility finding in summer 2017.

***Summary***

All local jurisdictions in Orange County have submitted FY 2016-17 eligibility packages that are consistent with the M2 Ordinance. The TOC has reviewed and approved the appropriate documentation and found that all local jurisdictions conditionally meet the eligibility requirements for FY 2016-17.

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***Attachments***

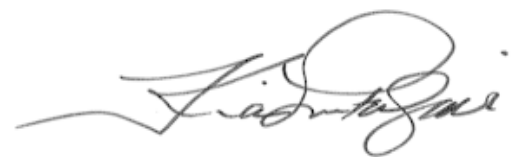
- A. Measure M2 Eligibility Requirements and Submittal Schedule Summary - For Fiscal Year 2016-17
- B. Draft Letter to Mr. Allan Roeder, Interim City Manager - City of Fullerton - Dated April 10, 2017 – Pavement Condition Concerns Expressed by the Annual Eligibility Review Subcommittee
- C. Draft Letter to Mr. Damien Arrula, City Administrator - City of Placentia - Dated April 10, 2017 – Pavement Condition Concerns Expressed by the Annual Eligibility Review Subcommittee
- D. Fiscal Year 2016-17 - Measure M2 Eligibility Review Summary

**Prepared by:**



May Hout  
Senior Transportation Funding Analyst  
(714) 560-5905

**Approved by:**



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

**Measure M2 Eligibility Requirements and Submittal Schedule Summary**  
For Fiscal Year 2016-17

Compliance Category	Frequency	Required
Capital Improvement Program	Annual (June 30 <sup>th</sup> )	✓
Circulation Element/Master Plan of Arterial Highways Consistency	Biennial (June 30 <sup>th</sup> )	
Congestion Management Program	Odd-Numbered Year (i.e. June 2017, 2019)	
Expenditure Report	Annual (December 31 <sup>st</sup> ) <sup>1</sup>	✓
Local Signal Synchronization Plan	Every Three Years Next deadline: June 30, 2017	
Maintenance of Effort	Annual (June 30 <sup>th</sup> )	✓
Mitigation Fee Program (MFP)	Biennial (June 30 <sup>th</sup> ) <sup>2</sup>	
No Supplanting of Developer Fees	Annual (June 30 <sup>th</sup> )	✓
Pavement Management Plan (PMP)	Every Two Years (June 30 <sup>th</sup> ) <sup>3</sup>	✓
Timely Submittal of Project Final Reports	Within Six Months of Project Completion	✓
Timely Use of Net Revenues	Annual (June 30 <sup>th</sup> )	✓
Traffic Forum Participation	Annual	✓
Transit and Non-Motorized Transportation Land-Use Planning Strategies	Annual (June 30 <sup>th</sup> )	✓

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<sup>1</sup>The City of Huntington Beach follows a federal fiscal year (October 1<sup>st</sup> - September 30<sup>th</sup>) and must submit the Measure M2 Expenditure Report by March 31<sup>st</sup>.

<sup>2</sup>A jurisdiction must submit their updated program and revised fee schedule or process methodology when the jurisdiction updates their MFP and/or nexus study.

<sup>3</sup>The 21 agencies update respective PMPs on even-numbered fiscal years, while 14 agencies update on odd-numbered FYs.

April 10, 2017

Mr. Allan Roeder  
Interim City Manager  
City of Fullerton  
303 West Commonwealth Avenue  
Fullerton, CA 92832

**RE: Pavement Condition Concerns Expressed by the Annual Eligibility Review Subcommittee**

Dear Mr. Roeder:

As you know, local agencies are required to submit eligibility verification packages to the Orange County Transportation Authority (OCTA) annually in order to remain eligible to receive Measure M2 net revenues. The Taxpayer Oversight Committee (TOC) is responsible for reviewing eligibility requirements and designates a subcommittee to review this information that includes the Pavement Management Plan (PMP).

Upon review of the City of Fullerton's (City) 2016 PMP submittal, members of the TOC expressed concerns about the downward trend in the City's pavement conditions based on the seven-year projections provided in the current PMP. While this does not impact the City's eligibility status, the TOC believes that it is important for the City to proactively address the projected decline in pavement conditions to avoid further street deterioration.

If you have any questions, please contact Kia Mortazavi, Executive Director, Planning, at [kmortazavi@octa.net](mailto:kmortazavi@octa.net) or (714) 560-5741.

Sincerely,

Darrell Johnson  
Chief Executive Officer

DJ:mh

c: Kia Mortazavi, OCTA  
Kurt Brotcke, OCTA  
Sam Kaur, OCTA

April 10, 2017

Mr. Damien Arrula  
City Administrator  
City of Placentia  
401 East Chapman Avenue  
Placentia, CA 92870

**RE: Pavement Condition Concerns Expressed by the Annual Eligibility Review Subcommittee**

Dear Mr. Arrula:

As you know, local agencies are required to submit eligibility verification packages to the Orange County Transportation Authority (OCTA) annually in order to remain eligible to receive Measure M2 net revenues. The Taxpayer Oversight Committee (TOC) is responsible for reviewing eligibility requirements and designates a subcommittee to review this information that includes the Pavement Management Plan (PMP).

Upon review of the City of Placentia's (City) 2016 PMP submittal, members of the TOC expressed concerns about the downward trend in the City's pavement conditions based on the seven-year projections provided in the current PMP. While this does not impact the City's eligibility status, the TOC believes that it is important for the City to proactively address the projected decline in pavement conditions to avoid further street deterioration.

If you have any questions, please contact Kia Mortazavi, Executive Director, Planning, at [kmortazavi@octa.net](mailto:kmortazavi@octa.net) or (714) 560-5741.

Sincerely,

Darrell Johnson  
Chief Executive Officer

DJ:mh

c: Kia Mortazavi, OCTA  
Kurt Brotcke, OCTA  
Sam Kaur, OCTA

**Fiscal Year 2016-17  
Measure M2 Eligibility Review Summary**

Agency	Capital Improvement Program	Expenditure Report	Land-Use Planning Strategies	Maintenance of Effort	No Supplementing of Developer Fees	Pavement Management Plan	Timely Submittal of Final Reports	Timely Use of Net Revenues	Traffic Forum
Aliso Viejo	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Anaheim	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Brea	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Buena Park	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Costa Mesa	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
County of Orange	Satisfactory	Pending	Satisfactory	N/A	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Cypress	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Dana Point	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Fountain Valley	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Fullerton	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Garden Grove	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Huntington Beach	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Irvine	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
La Habra	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
La Palma	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Laguna Beach	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Laguna Hills	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Laguna Niguel	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Laguna Woods	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Lake Forest	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Los Alamitos	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Mission Viejo	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Newport Beach	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Orange	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Placentia	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Rancho Santa Margarita	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
San Clemente	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
San Juan Capistrano	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Santa Ana	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Seal Beach	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Stanton	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Tustin	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	N/A	Satisfactory	Satisfactory	✓
Villa Park	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Westminster	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
Yorba Linda	Satisfactory	Pending	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	✓
<b>Totals</b>	<b>35</b>		<b>35</b>	<b>35</b>	<b>35</b>	<b>21</b>	<b>35</b>	<b>35</b>	<b>35</b>


Key:  
N/A - Not applicable for this cycle





***April 3, 2017***

**To:** Regional Planning and Highways Committee

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

**Subject:** Fiscal Year 2017-18 Measure M2 Maintenance of Effort Adjustment and Updates to the Eligibility and Local Signal Synchronization Plan Guidelines

### ***Overview***

The Measure M2 Ordinance includes eligibility requirements that local agencies must satisfy in order to receive Measure M2 net revenues, which include a periodic adjustment to the maintenance of effort benchmark. Local agencies are also required to periodically update a local signal synchronization plan. Updates to the Measure M2 Eligibility Guidelines, including the maintenance of effort benchmark adjustment and the Local Signal Synchronization Plan Guidelines, are presented for the Board of Directors' review and approval.

### ***Recommendations***

- A. Approve the maintenance of effort benchmark adjustments for the fiscal year 2017-18 eligibility cycle.
- B. Approve the fiscal year 2017-18 Measure M2 Eligibility Guidelines.
- C. Approve the Local Signal Synchronization Plan Guidelines.

### ***Background***

The Measure M2 (M2) Ordinance requires local jurisdictions to satisfy the maintenance of effort (MOE) requirements by maintaining a minimum level of local streets and roads expenditures from local agencies' discretionary funds consistent with the provisions of enabling statutes. The M2 Ordinance provided a process to review the MOE and adjust the benchmark every three years beginning in 2011. The first MOE benchmark adjustment was approved by the Board of Directors (Board) on April 14, 2014 and became effective July 1, 2014. The second MOE benchmark adjustment for the upcoming eligibility cycle is being presented, along with revisions to the M2 Eligibility Guidelines.

The M2 Eligibility Guidelines establish eligibility requirements for local jurisdictions to ensure that all local agencies are in compliance to receive M2 funds as required by the M2 Ordinance.

The M2 Ordinance requires local agencies to develop and regularly update a Local Signal Synchronization Plan (LSSP) on a triennial basis. This plan needs to be consistent with the Regional Traffic Signal Synchronization Master Plan. As part of the next eligibility cycle, local agencies will need to update local plans by June 30, 2017. Minor administrative adjustments to the LSSP Guidelines are being recommended for clarification purposes.

### ***Discussion***

#### **MOE Adjustment**

The M2 Ordinance requires the Orange County Transportation Authority (OCTA) to adjust the MOE benchmark every three years and defines the methodology for the adjustments. This MOE benchmark adjustment is based on the percentage of growth in the California Department of Transportation construction cost index (CCI) between calendar year 2013 and 2016. The M2 Ordinance includes a provision that if the general fund revenues (GFR) growth for the jurisdiction is less than the CCI growth, the GFR growth value will be used for escalating the existing MOE benchmark. If there is negative or zero growth in the GFR, the local jurisdiction's current MOE benchmark will remain unchanged.

In order to determine GFR growth, each local jurisdiction provided excerpts from their 2016 Comprehensive Annual Financial Reports (CAFR). The cities of Huntington Beach and Placentia have not released nor adopted final CAFRs, but provided a draft CAFR or GFR general ledger to calculate an estimated benchmark. Adjustments may be required upon each city's final adoption of its CAFR and will be presented to the Board by June 2017, if required. A comparison of the growth in GFR and CCI has determined the appropriate MOE adjustment for each local jurisdiction and is included in Attachment A.

Between 2013 and 2016, local agencies GFR have grown by 17 percent on average. During the same period, the published CCI has grown by approximately 45 percent. As such, the MOE adjustments will be based on GFR growth. The exact amount varies for each jurisdiction and depends on data specific to that agency. The fiscal year (FY) 2015-16 MOE actual expenditures reported in Attachment A indicate that the majority of the local agencies' expenditures are above the required MOE benchmark.

**M2 Eligibility Guidelines**

The M2 FY 2017-18 eligibility cycle will start immediately following Board approval of the updated M2 Eligibility Guidelines. The guidelines assist local agencies in submitting a compliant eligibility package. The administrative changes and clarifications proposed to the guidelines incorporate comments and feedback received from local agencies and OCTA staff during the FY 2016-17 eligibility review cycle.

Administrative changes to the M2 Eligibility Guidelines include providing an updated webpage link to the eligibility website, and clarifying language and requirements. There have also been updates to the tables and the exhibits to be consistent with the eligibility requirements discussed in Chapter 2, which include details on each eligibility requirement. A summary of the substantial modifications is provided in Attachment B.

The proposed revisions will clarify and streamline the eligibility process and also make it easier for local agencies to follow the guidelines and adhere to the eligibility requirements. The revised M2 Eligibility Guidelines are included as Attachment C.

**LSSP Guidelines**

The LSSP Guidelines outline the procedures necessary for local agencies to adopt and update an LSSP in accordance with the M2 Ordinance. Local agencies are obligated to triennially update their respective LSSP in order to continue receiving M2 funds, including both M2 Fair Share and Competitive Program funding. Minor modifications to the preparation guidelines are included in Attachment D.

***Summary***

The MOE benchmarks for each local jurisdiction have been provided for the upcoming eligibility cycle for FY 2017-18. Modifications to the M2 Eligibility Guidelines and to the LSSP Guidelines are also provided to assist local jurisdictions with upcoming submittals.

***Attachments***

- A. MOE Benchmark by Local Jurisdiction
- B. Substantial Revisions to the Measure M2 Eligibility Guidelines
- C. Redlined - FY 2017-18 Measure M2 Eligibility Guidelines
- D. Redlined - Guidelines for the Preparation of Local Signal Synchronization Plans 2017

**Prepared by:**



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**Approved by:**



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Executive Director, Planning  
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## MOE Benchmark by Local Jurisdiction

Column	A	B	C	D	E
Agency	Current MOE Benchmark	MOE Adjustment*	Amount Increased (A * B)	New MOE Benchmark (A + C)	Reported FY 15-16 Actual Expenditures
Aliso Viejo	\$ 409,360	12.86%	\$ 52,644	\$ 462,004	\$ 428,591
Anaheim	\$ 8,127,913	23.75%	\$ 1,930,379	\$ 10,058,292	\$ 9,226,446
Brea	\$ 703,000	2.28%	\$ 16,028	\$ 719,028	\$ 1,354,760
Buena Park	\$ 3,738,212	0.13%	\$ 4,860	\$ 3,743,072	\$ 5,466,533
Costa Mesa	\$ 6,457,802	14.33%	\$ 925,403	\$ 7,383,205	\$ 7,960,484
County of Orange	\$ -	0.00%	\$ -	\$ -	N/A
Cypress	\$ 2,767,411	12.66%	\$ 350,354	\$ 3,117,765	\$ 6,755,402
Dana Point	\$ 1,065,496	23.23%	\$ 247,515	\$ 1,313,011	\$ 1,775,199
Fountain Valley	\$ 1,180,712	13.67%	\$ 161,403	\$ 1,342,115	\$ 2,493,170
Fullerton	\$ 3,427,988	10.44%	\$ 357,882	\$ 3,785,870	\$ 5,740,353
Garden Grove	\$ 2,823,522	19.65%	\$ 554,822	\$ 3,378,344	\$ 5,807,439
Huntington Beach**	\$ 4,954,235	13.18%	\$ 652,968	\$ 5,607,203	\$ 10,433,271
Irvine	\$ 5,452,970	29.29%	\$ 1,597,175	\$ 7,050,145	\$ 19,973,892
La Habra	\$ 1,356,014	12.78%	\$ 173,299	\$ 1,529,313	\$ 2,419,948
La Palma	\$ 173,004	-8.22%	\$ -	\$ 173,004	\$ 519,913
Laguna Beach	\$ 1,417,616	9.30%	\$ 131,838	\$ 1,549,454	\$ 4,729,432
Laguna Hills	\$ 269,339	15.27%	\$ 41,128	\$ 310,467	\$ 1,467,102
Laguna Niguel	\$ 721,542	25.92%	\$ 187,024	\$ 908,566	\$ 2,032,253
Laguna Woods	\$ 83,501	7.43%	\$ 6,204	\$ 89,705	\$ 88,396
Lake Forest	\$ 145,670	33.48%	\$ 48,770	\$ 194,440	\$ 1,301,934
Los Alamitos	\$ 147,465	10.20%	\$ 15,041	\$ 162,506	\$ 592,081
Mission Viejo	\$ 2,247,610	12.96%	\$ 291,290	\$ 2,538,900	\$ 4,596,548
Newport Beach	\$ 8,868,393	22.59%	\$ 2,003,370	\$ 10,871,763	\$ 19,027,594
Orange	\$ 2,430,131	20.07%	\$ 487,727	\$ 2,917,858	\$ 3,520,215
Placentia**	\$ 546,000	20.01%	\$ 109,255	\$ 655,255	\$ 994,922
Rancho Santa Margarita	\$ 358,155	9.10%	\$ 32,592	\$ 390,747	\$ 358,155
San Clemente	\$ 951,000	19.37%	\$ 184,209	\$ 1,135,209	\$ 3,643,808
San Juan Capistrano	\$ 390,383	11.43%	\$ 44,621	\$ 435,004	\$ 2,342,553
Santa Ana	\$ 6,958,998	11.44%	\$ 796,109	\$ 7,755,107	\$ 7,670,183
Seal Beach	\$ 551,208	-0.17%	\$ -	\$ 551,208	\$ 1,191,688
Stanton	\$ 186,035	31.81%	\$ 59,178	\$ 245,213	\$ 197,057
Tustin	\$ 1,222,756	19.05%	\$ 232,935	\$ 1,455,691	\$ 2,245,527
Villa Park	\$ 279,227	15.21%	\$ 42,470	\$ 321,697	\$ 658,359
Westminster	\$ 1,284,000	20.62%	\$ 264,761	\$ 1,548,761	\$ 1,651,008
Yorba Linda	\$ 1,985,964	14.79%	\$ 293,724	\$ 2,279,688	\$ 2,429,941
Totals	\$ 73,682,632		\$ 12,296,978	\$ 85,979,610	\$ 141,094,157

\* The MOE benchmark adjustment is based on the percent change in CCI for the immediately preceding three-year period. The adjustment cannot exceed the percent change in the jurisdiction's GFR over the same period of time. If there is negative growth in the jurisdiction's GFR, the local agencies will have a zero percent MOE adjustment. The 2013 CCI is 97.09, and the 2016 CCI is 140.75. The percent change is 44.97 percent. The MOE adjustment is based on the growth in the jurisdiction's GFR.

\*\* Final CAFR has not been adopted/released. The draft CAFR or GFR GL has been used to calculate the estimated benchmark. Adjustments may be required.

MOE - Maintenance of effort  
FY - Fiscal year  
CCI - Construction cost index  
GFR - General fund revenue

CAFR - Comprehensive Annual Financial Report  
GL - General ledger  
N/A - Not Applicable

## **Substantial Revisions to the Measure M2 Eligibility Guidelines**

### Local Fair Share (Section 1.3)

The Orange County Transportation Authority Board of Directors (Board) approved a new sales tax forecast methodology. Updates have been incorporated in Section 1.3 of these guidelines to be consistent with the updates previously approved by the Board.

### Maintenance of Effort Benchmark Adjustment (MOE) (Exhibit 2)

Exhibit 2 has been updated to reflect the revised MOE benchmarks for all local agencies.

### Eligibility Checklist (Appendix D)

Although the eligibility requirements have not changed, checklist items have been added to Appendix D to align with requirements discussed in Chapter 2 that are due as part of this eligibility cycle.

### Sample Resolution (Appendix E)

The resolution has been updated to include eligibility requirements that must receive the Board of Supervisors/City Council approval for this cycle. These requirements include the Local Signal Synchronization Plan, Circulation Element/Master Plan of Arterial Highways Consistency, Mitigation Fee Program, and Pavement Management Plan.

### Appendix G: Measure M2 (M2) Expenditure Report

- Removed foot note tables included in Schedule 2 which breaks down revenues and expenditures for other M2 funding. Other M2 funding previously included any funding received and/or expended by local agencies from any other M2 Program besides the Project O, Regional Capacity Program and Project Q, Local Fair Share. A separate line item for each program is now included in Schedules 1 and 2. On Schedule 3, other M2 funding now includes A-M, R, S, T, U, V, and W.
- A separate interest column was added that was previously included as a row for each funding program on Schedules 1 and 2.



Redlined

FY 2017-18

# Measure M2

## Eligibility Guidelines



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## Chapter 1 – Eligibility Overview

### **1.1 Measure M2 Introduction**

In order to meet expected growth in Orange County over the next 30 years, continued investment in the County's infrastructure will be required. To meet these needs, additional projects were identified which could be funded through an extension of the Measure M program. Voters approved Renewed Measure M (M2) on November 7, 2006.

M2 is a 30-year, multi-billion dollar program extension of the original Measure M (1991-2011) with a new slate of projects and programs planned. These include improvements to the Orange County freeway system and streets & road network throughout the County, additional expansion of the Metrolink system, more transit services for seniors and the disabled and funding for the cleanup of roadway storm water runoff.

M2 extends Orange County's self-help legacy toward financing infrastructure. A seamless transition from the original Measure M to the new slate of projects required careful consideration of the Ordinance and inventory of new requirements. Consistent with the first ordinance, the eligibility guidelines have been prepared to assist local jurisdictions to understand the requirements necessary to maintain their eligibility to receive M2 funds.

The M2 Eligibility Guidelines identify annual eligibility requirements as specified in Ordinance No. 3, Attachment B, and Section III. Ordinance No. 3 (M2 Ordinance) outlines all programs and requirements and is included as Appendix A. Compliance with the eligibility requirements in the ordinance must be established and maintained in order for local jurisdictions to receive Net Revenues. Policies and procedures are presented to enable and facilitate annual eligibility for local jurisdiction participation. Guidelines for newly incorporated cities are outlined in Appendix B.

With the passage of M2, several eligibility requirements applicable to the previous program are no longer valid. Prominent features of the past program that have been discontinued include preparation of the Growth Management Program (GMP), a development phasing & monitoring program, and a balanced housing options and job opportunities component of the General Plan. Although these planning tools are no longer elements of the eligibility process, local jurisdictions are encouraged to consider these elements as sound planning principles.

M2 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 Authority shall allocate the Net Revenues to freeways, environmental, transit, and street 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

In order 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 (Project X) to implement water quality improvement projects.

### Transit Projects

Orange County's rail and bus service will receive twenty-five percent (25%) of M2 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.

### Street and Roads Projects

Orange County has more than 7,300 lane miles of streets and roads; many in need of repair and rehabilitation. M2 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 Street and Road Projects shall be made as follows:

1. Ten percent (10%) of the Net Revenues shall be allocated for Regional Capacity Programs (Project O).
2. Four percent (4%) of the Net Revenues shall be allocated for Regional Traffic Signal Synchronization Program projects (Project P).
3. Eighteen percent (18%) of the Net Revenues shall be allocation for Local Fair Share Programs.

## **1.2 Competitive Funds**

OCTA shall select projects through a competitive process for the Regional Capacity Program (Project O), the Regional Traffic Signal Synchronization Program (Project P), the various transit programs (Projects S, T, V, and W), and the Environmental Cleanup Program (Project X). The criteria for selecting these projects are included in the Comprehensive Transportation Funding Programs (CTFP) Guidelines. The process for calculating and distributing local fair share 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 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%) 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%) divided between eligible jurisdictions based upon the ratio of the jurisdiction's existing Master Plan of Arterial Highways (MPAH) centerline miles to the total MPAH centerline miles within the County as determined annually by the OCTA.
- Twenty-five percent (25%) 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.



- Revenue projections are updated based upon a blended economic forecast developed by Chapman University, California State University, Fullerton (CSUF), and University of California, Los Angeles (UCLA). OCTA contracts with three universities (Chapman University; University of California, Los Angeles; and California State University, Fullerton) to provide a long-range forecast of taxable sales to forecast Measure M2 revenues for 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 Measure M2 taxable sales. On March 28, 2016, as part of the FY 2016-17 budget development process, the Board approved a new sales tax forecast methodology. The new methodology includes 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, the Orange County Transportation Authority (OCTA) determines if a local jurisdiction is eligible to receive M2 LFS and competitive program funds. A local jurisdiction must satisfy certain requirements as outlined in Ordinance No. 3. Specifically, a jurisdiction must:

- Comply with the conditions and requirements of the Orange County Congestion Management Program
- Establish a policy which requires new development to pay its fair share of transportation-related improvements associated with their new development
- Adopt a General Plan Circulation Element consistent with the MPAH
- Adopt and update a Capital Improvement Program
- Participate in Traffic Forums
- Adopt and maintain a Local Signal Synchronization Plan
- Adopt and update biennially a Pavement Management Plan
- Adopt and provide an annual Expenditure Report to the OCTA
- Provide the OCTA with a Project Final Report within six months following completion of a project funded with Net Revenues
- Agree to expend all LFS revenues received through M2 within three years of receipt
- Satisfy Maintenance of Effort 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



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## Chapter 2 – Eligibility Requirements

The annual eligibility process relies upon a variety of reporting methods to verify local jurisdiction compliance. 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 eligibility guidelines and are available in electronic format. The table below summarizes certification frequency and documentation requirements.

Compliance Category	Frequency Schedule	Documentation
Capital Improvement Program	<b>Annual</b> Next submittal is due on June 30, 201 <del>6</del> <u>7</u> .	<ul style="list-style-type: none"> <li>Electronic, hard copy</li> <li>City Council/ Board of Supervisors approval</li> </ul>
Circulation Element/MPAH Consistency	<b>Biennial</b> Next submittal is due on June 30, 2017.	<ul style="list-style-type: none"> <li>Resolution (Appendix E)</li> <li>Circulation Element Exhibit</li> <li>Changes in actual MPAH centerline miles should be reported on the Arterial Highway Mileage Change Report (Appendix H)</li> <li>Certify that the Circulation Element is consistent with MPAH in the Eligibility Checklist (Appendix D)</li> </ul>
Congestion Management Program	<b>Odd numbered years</b> Next submittal is due on June 30, 2017.	<ul style="list-style-type: none"> <li>Eligibility Checklist item in Appendix D</li> <li>Include projects to address deficient intersections in CIP (if applicable)</li> <li>CMP Checklist (Appendix C)</li> </ul>
Expenditure Report	<b>Annual</b> – six months after end of fiscal year Next submittal is due on December 31, 201 <del>6</del> <u>7</u> .*	<ul style="list-style-type: none"> <li>Expenditure Report and resolution (Appendix G)</li> </ul>
Local Signal Synchronization Plan	<b>Every three years</b> Next submittal is due on June 30, 2017	<ul style="list-style-type: none"> <li>Copy of plan</li> <li><del>Optional</del> Resolution (<a href="#">Appendix E</a>)</li> </ul>
Maintenance of Effort	<b>Annual</b> Next submittal is due on June 30, 201 <del>6</del> <u>7</u> .	<ul style="list-style-type: none"> <li>MOE Certification form (Appendix I) signed by Finance Director or equivalent designee that meets/exceeds MOE Benchmark in Exhibit 2</li> <li>Budget excerpts</li> </ul>
Mitigation Fee Program	<b>Biennial</b> Next submittal is due on June 30, 2017.	<ul style="list-style-type: none"> <li>Eligibility Checklist item in Appendix D</li> <li>Copy of nexus study, revised impact fee schedule, or process methodology</li> <li>Resolution (Appendix E)</li> </ul>
No Supplanting Existing Commitments	<b>Annual</b> Next submittal is due on June 30, 201 <del>6</del> <u>7</u> .	<ul style="list-style-type: none"> <li>Eligibility Checklist item in Appendix D</li> </ul>
Pavement Management Plan	<b>Every two years</b> Next submittal for <del>odd even</del> year agencies is due on June 30, 201 <del>6</del> <u>7</u> . Refer to Exhibit 3 to determine the required PMP submittal schedule.	<ul style="list-style-type: none"> <li>PMP Certification form signed by Public Works Director or City Engineer</li> <li>Agency Submittal Checklist</li> <li>PMP report with street listings</li> <li><del>CD with pavement report, and</del> street listings, <del>and</del> <del>E65 file</del></li> <li><a href="#">Resolution (Appendix E)</a></li> </ul>
Project Final Report	<b>Within 6 months of project completion</b>	<ul style="list-style-type: none"> <li>Final Report</li> </ul>
Timely Expenditure of Funds	<b>Annual</b> Next submittal is due on June 30, 201 <del>6</del> <u>7</u> .	<ul style="list-style-type: none"> <li>Eligibility Checklist item in Appendix D</li> </ul>
Traffic Forums	<b>Annual</b> Next submittal is due on June 30, 201 <del>6</del> <u>7</u> .	<ul style="list-style-type: none"> <li>Eligibility Checklist item in Appendix D</li> </ul>
Transit/Non-motorized Transportation in General Plan	<b>Annual (June 30<sup>th</sup>)</b> Next submittal is due on June 30, 201 <del>6</del> <u>7</u> .	<ul style="list-style-type: none"> <li>Eligibility Checklist item in Appendix D</li> <li>Letter outlining land use planning strategies that accommodate transit and active transportation</li> <li>Excerpts of policies from the land use section of the General Plan</li> </ul>

\*Huntington Beach follows a federal fiscal year and must submit the M2 Expenditure Report by March 31.



## 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 M2 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. Environmental Cleanup Program, Traffic Signal Synchronization Plan, Regional Capacity Program, and Local Fair Share 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 Environmental Mitigation	A-M
Regional Capacity Program	O
Regional Traffic Signal Synchronization Program	P
Local Fair Share Program	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
Senior Mobility Program or Senior Non-Emergency Medical Program	U
Community Based Transit/Circulators	V
Safe Transit Stops	W
Water Quality Program	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. Cities 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 in hard copy format 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 30, 2016.

**City Council/ Board of Supervisors approval:** Required

### Verification Method

Each jurisdiction must submit an electronic (online) and hard copy of its CIP with evidence of council approval. The OCTA provides a web-based database called the Web Smart CIP used countywide for reporting Council-approved CIP information. The Web Smart CIP includes all projects submitted in the previous eligibility cycle. New projects should be added to the database and completed, prior program year projects should be archived. Cancelled projects may be archived or removed. In addition, the funding schedule, source, and cost data for ongoing projects should be reviewed and updated for accuracy. A separate CIP User's Manual has been developed to assist local jurisdictions with the preparation of the seven-year CIP. The CIP User's Manual can be found on the M2 Eligibility Website: <http://www.octa.net/M2Eligibility>



## 2.2 Circulation Element/ MPAH Consistency

A Circulation Element is one component of a jurisdiction's General Plan that depicts a planned multimodal network and related policies. M2 funding eligibility requires that each jurisdiction must adopt and maintain a Circulation Element that is consistent with the OCTA MPAH, which defines the minimum planned lane configurations for major regionally significant roads in Orange County.

### MPAH Consistency

Through a cooperative process, the OCTA, the City Engineers Association, the City Managers Association, and the County of Orange developed criteria for determining consistency with the MPAH. Criteria and policies for determining MPAH Consistency are included in a separate manual titled "Guidance for Administration of the Orange County Master Plan of Arterial Highways" that can be downloaded on OCTA's Eligibility webpage (<http://www.octa.net/M2Eligibility>) and are summarized below:

- The local jurisdiction's Circulation Element is to have the minimum planned carrying capacity equivalent to the MPAH for all MPAH links within its jurisdiction. "Planned carrying capacity" is the number of through lanes on each arterial highway as shown on the local Circulation Element.
- Local jurisdictions will not be found inconsistent with the MPAH as a result of existing capacity limitations on arterials not yet constructed to the ultimate capacity shown on the MPAH.
- Every two years, each local jurisdiction must submit a resolution adopted by the governing body attesting that no unilateral reduction in lanes has been made on any MPAH arterial.
- The local agency will be ineligible to participate in M2 programs if a roadway on the MPAH has been unilaterally removed from or downgraded on their Circulation Element and/or does not meet the planned capacity criteria. Eligibility may be reinstated upon completion of a cooperative study that resolves the inconsistency. Additionally, the local jurisdiction can re-establish eligibility upon restoring its Circulation Element to its previous state of MPAH consistency.
- The local jurisdiction must adopt a General Plan Circulation Element that does not preclude implementation of the MPAH.
- A local jurisdiction is inconsistent with the MPAH as of the date the governing body takes unilateral action reducing the number of existing and/or planned through lanes on an MPAH arterial built to its ultimate configuration to less than the ultimate capacity shown on the MPAH. "Unilateral action" means physical action such as striping, signing, or other physical restrictions executed by the local jurisdiction.
- A local jurisdiction may be permitted to reduce existing through lanes, if prior to taking action, it can demonstrate to the OCTA ~~TAC~~ that such action is temporary and can be justified for operational reasons. The local jurisdiction must enter into a binding agreement to restore capacity upon demand by OCTA. The OCTA ~~TAC~~ may recommend that the local jurisdiction remain eligible on a conditional basis. If it is found to be ineligible, it may regain eligibility upon physical restoration of the arterial to the original state that is consistent with the MPAH.
- Traffic calming measures shall be administered on MPAH facilities per the latest version of the Guidance for the Administration of the Orange County (OC) MPAH. ~~not be used on~~





~~arterials classified as Secondary and above on the MPAH. Traffic calming measures may be allowed only on Divided Collectors and Collectors, where it can be demonstrated the calming measures will not reduce vehicle carrying capacity below the actual and projected traffic volumes for the segment and the increased traffic volume on the affected MPAH facilities does not result in an intersection level of service (LOS) worse than LOS "D" or the General Plan standard adopted by the affected jurisdiction.~~

- If a local jurisdiction requests a change to the MPAH and enters into a cooperative study to analyze the request, it may be considered conditionally consistent. No change shall be made to its Circulation Element until after the cooperative study is completed and agreement is reached on the proposed amendment.

Submittal Frequency: Odd year requirement. Next submittal is due by June 30, 2017.

City Council/ Board of Supervisors approval: Required

Verification Method

Each jurisdiction must provide the following every odd year:

- Document within the Eligibility Checklist (Appendix D) that confirms the Circulation Element is consistent with the MPAH.
- A copy of the most current Circulation Element Exhibit 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 (Appendix E).
- The Arterial Highway Mileage Change Report (Appendix H). Changes in actual (built or annexed) MPAH centerline miles since the previous MPAH Consistency Review 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 agency Circulation Elements are consistent with the MPAH, meaning there is a minimum planned carrying capacity equivalent to the MPAH for all MPAH links within the local agency's jurisdiction.



## Exhibit 1: Master Plan of Arterial Highways Centerline Miles

Agency	2016 Centerline Mileage (7/30/2016)
Aliso Viejo	14.85
Anaheim	148.80
Brea	20.57
Buena Park	34.44
Costa Mesa	49.33
County of Orange	51.74
Cypress	24.93
Dana Point	15.72
Fountain Valley	35.28
Fullerton	62.18
Garden Grove	63.59
Huntington Beach	93.05
Irvine	135.11
La Habra	17.13
La Palma	7.23
Laguna Beach**	14.01
Laguna Hills	20.73
Laguna Niguel	35.94
Laguna Woods	5.77
Lake Forest	38.25
Los Alamitos	6.44
Mission Viejo	43.54
Newport Beach	48.92
Orange	85.24
Placentia	25.01
Rancho Santa Margarita	18.20
San Clemente	24.39
San Juan Capistrano	18.55
Santa Ana	100.21
Seal Beach	12.24
Stanton	9.48
Tustin	41.59
Villa Park	3.49
Westminster	35.75
Yorba Linda	32.67
<b>1394.38</b>	

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



## 2.3 Congestion Management Program (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 through the effective use of transportation funds, coordinated land use, and development planning practices. 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.

The goals of Orange County's CMP are 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. 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 – 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.
- Capital Improvement Program (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 years – Next submittal is due by June 30, 2017.

City Council/ Board of Supervisors approval: Not Required

### Verification 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.



## 2.4 Expenditure Report

The expenditure report is a detailed financial report submitted by each jurisdiction used to track financial activity as it relates to 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. Negative interest is not an allowable expense.
- Reported Expenditures shall be identified by activity type (i.e. capital, operations, administration, etc.) and funding source for each M2 program and/or project.

Submittal Frequency: Annual – within 6 months of the end of the fiscal year.

The deadline is December 31 for jurisdictions following a state fiscal year (July-June) and March 31 of the next calendar year for jurisdictions following a federal fiscal year (October-September) (i.e. Huntington Beach).

City Council/ Board of Supervisors approval: Required

### Verification Method

The expenditure report signed by the City Finance Director and council resolution attesting to the adoption is required. The M2 expenditure report template, instructions, and resolution are provided in Appendix G.

## 2.5 Local Signal Synchronization Plan (LSSP)

The LSSP<sup>1</sup> is a three-year plan identifying traffic signal synchronization, street routes and traffic signals to be improved in eligible jurisdictions. The Local Traffic Signal Synchronization Plan 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 June 30, 2017.

City Council/ Board of Supervisors approval: ~~Optional~~ Required

### Verification Method

Local jurisdictions must ensure that their LSSP is in conformance with the RTSSMP. LSSPs must be updated every three years starting June 30, 2014. At the minimum, a Public Works Director must sign the Local Signal Synchronization Plan Consistency Review Checklist. City/County council action is ~~required (Appendix E) at the discretion of the local agency~~. A separate document prepared by the OCTA, "Guidelines for the Preparation of Local Signal Synchronization Plans," provides additional detail for agency submittal that can be downloaded from OCTA's Eligibility webpage: <http://www.octa.net/M2Eligibility>

<sup>1</sup> A local match reduction of ten percent (10%) is provided for competitive grant applications submitted through the Regional Capacity Program (M2 - 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 administrative/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 the MOE requirements of Section 6 of Ordinance No. 3 have been satisfied. MOE applies to transportation-related discretionary expenditures such as General Funds by local jurisdictions for maintenance, construction, and other categories.

### 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 monies 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 (OCTC) Annual Report data collection sheets. The established benchmark was reported in constant dollars and was not adjusted for inflation. Annexation of land into an existing jurisdiction does not affect the MOE.

Per the M2 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-years. 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, 2017.

Submittal Frequency: Annual - Next MOE submittal is due June 30, 2016.

City Council/ Board of Supervisors approval: Not Required

### Verification Method

An MOE reporting form must be completed, signed by the jurisdiction's Finance Director and submitted on an annual basis. The form is included in the Guidelines as Appendix I. In addition, excerpts from the jurisdiction's annual budget showing referenced MOE expenditures and dedication of General Funds should be included in the annual submittal to substantiate planned relevant discretionary fund (General Funds) expenditures.

Any California State Constitution Article XIX eligible expenditure may be "counted" in a given local jurisdiction's annual calculation of MOE if the activity is supported (funded) by a local jurisdiction's general fund. This is the same definition used for Gas Tax expenditures. 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.



## Exhibit 2: MOE Benchmark by Local Jurisdiction

Agency	MOE Benchmark
Aliso Viejo	\$ 462,004
Anaheim	\$ 10,058,292
Brea	\$ 719,028
Buena Park	\$ 3,743,072
Costa Mesa	\$ 7,383,205
Cypress	\$ 3,117,765
Dana Point	\$ 1,313,011
Fountain Valley	\$ 1,342,115
Fullerton	\$ 3,785,870
Garden Grove	\$ 3,378,344
Huntington Beach**	\$ 5,607,203
Irvine	\$ 7,050,145
La Habra	\$ 1,529,313
La Palma	\$ 173,004
Laguna Beach	\$ 1,549,454
Laguna Hills	\$ 310,467
Laguna Niguel	\$ 908,566
Laguna Woods	\$ 89,705
Lake Forest	\$ 194,440
Los Alamitos	\$ 162,506
Mission Viejo	\$ 2,538,900
Newport Beach	\$ 10,871,763
Orange	\$ 2,917,858
Placentia**	\$ 655,255
Rancho Santa Margarita	\$ 390,747
San Clemente	\$ 1,135,209
San Juan Capistrano	\$ 435,004
Santa Ana	\$ 7,755,107
Seal Beach	\$ 551,208
Stanton	\$ 245,213
Tustin	\$ 1,455,691
Villa Park	\$ 321,697
Westminster	\$ 1,548,761
Yorba Linda	\$ 2,279,688
Annual Total Orange County	\$ 85,979,610

\*Final Comprehensive Annual Financial Report (CAFR) has not been adopted/released. Draft CAFR or General Fund Revenues has been used to calculate estimated benchmark. Adjustments may be required.



## 2.7 Mitigation Fee Program

The Mitigation Fee Program 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 insure eligibility, each jurisdiction must have a clearly defined mitigation program.

[Submittal Frequency:](#) Odd years - Next Mitigation Fee Program submittal is due by June 30, 2017.\*

\_\_\_\_\_  
\*However, a jurisdiction 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.

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

[Verification Method](#)

The M2 eligibility submittal should include a copy of the nexus study improvement list, a current fee schedule or the process methodology, and the council resolution approving the mitigation fee program. Where mitigation measures, including fair share contributions and construction of direct impact improvements are used in lieu of an AB1600 compliant Nexus Study fee programs, each jurisdiction shall provide a council resolution adopting the mitigation policy.

At such time that a jurisdiction updates their mitigation 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, a mitigation fee program resolution identified in Appendix E must be submitted biennially to reaffirm that council concurs with the existing mitigation fee program. It is the local jurisdictions 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 projects 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 previously committed to transportation projects through payment of fees in a defined program, fair share contribution, community facilities district (CFD) financing, or other dedicated contribution to a specific transportation improvement
- Standard checklist item

[Submittal Frequency:](#) Annual - Next submittal is due by June 30, 2016<sup>7</sup>.

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





### Verification Method

Each jurisdiction must document within the Eligibility Checklist (Appendix D) that there has been no supplanting of developer commitments for transportation projects as outlined in the M2 ordinance.

## **2.9 Pavement Management Plan (PMP)**

A PMP<sup>2</sup> 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 ASTM Standard D6433-11.

Each jurisdiction must biennially adopt and update a PMP consistent with the specific requirements outlined in Ordinance No. 3, and issue, using a common format approved by the OCTA, a report regarding the status of road pavement conditions and implementation of the PMP including, but not limited to, the following elements:

- 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 costs necessary 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 Agency Submittals checklist is included in Chapter 3 of the Countywide Pavement Management Plan Guidelines and is also included for reference with the PMP Certification in Appendix F. The Countywide PMP Guidelines can be downloaded from OCTA's Eligibility webpage: <http://www.octa.net/M2Eligibility>

Submittal Frequency: Biennial – 14 local jurisdictions submit pavement management plan updates in odd years (i.e. June 30, 2017) and 21 local jurisdictions submit pavement management plan updates in even years (i.e. June 30, 2016~~8~~). Refer to Exhibit 3 to determine local jurisdiction's required PMP submittal schedule.

City Council/ Board of Supervisors approval: ~~Not~~ Required

### Verification Method

To establish eligibility, each jurisdiction must complete and submit the following:

- Pavement Management Plan and Certification (Appendix F) signed by Public Works Director or City Engineer.
- Executive summary encompassing a brief overview of their PMP highlighting different issues that have developed between review cycles and provide additional information regarding the projects funded through the program. At a minimum, the Executive Summary should include Pavement Condition Index (PCI) reports, Projected PCI, and Alternative Funding Levels.
- Quality Assurance/Quality Control Plan included in the Countywide Pavement Management Plan Guidelines.





- Backlog by year of unfunded pavement rehabilitation, restoration, and reconstruction needs.
- [Centerline mileage for MPAH, local streets, and total network.](#)
- [Resolution \(Appendix E\)](#)

<sup>2</sup> The Regional Capacity Program (RCP) identified in M2 as 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 Regional Capacity Program (M2 - Project O) if the jurisdiction meets either of the following criteria:

- Has measurable improvement of paved road conditions during the previous reporting period as determined through the countywide pavement management rating standards, or
- Have 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 OCTA Ordinance No. 3, 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	Mitigation Fee Program	Project Reports	Local Signal Plan
Aliso Viejo	June Even	June Odd Years (Next submittal is due by June 30, 2017)	June Odd Years (Next submittal is due by June 30, 2017)	June Odd Years (Next submittal is due by June 30, 2017)*	Within 6 months of project completion	Every 3 years (Next submittal is due June 30, 2017)
Anaheim	June Odd					
Brea	June Odd					
Buena Park	June Even					
Costa Mesa	June Even					
County of Orange	June Odd					
Cypress	June Odd					
Dana Point	June Odd					
Fountain Valley	June Even					
Fullerton	June Even					
Garden Grove	June Even					
Huntington Beach	June Even					
Irvine	June Odd					
Laguna Beach	June Even					
Laguna Hills	June Even					
Laguna Niguel	June Even					
Laguna Woods	June Even					
Lake Forest	June Odd					
La Habra	June Odd					
La Palma	June Even					
Los Alamitos	June Odd					
Mission Viejo	June Even					
Newport Beach	June Odd					
Orange	June Even					
Placentia	June Even					
Rancho Santa Margarita	June Even					
San Clemente	June Odd					
San Juan Capistrano	June Odd					
Santa Ana	June Even					
Seal Beach	June Even					
Stanton	June Odd					
Tustin	June Odd					
Villa Park	June Even					
Westminster	June Even					
Yorba Linda	June Even					

\* A jurisdiction must submit their updated program and revised fee schedule or process methodology when the jurisdiction updates their mitigation program and/or nexus study.



## 2.10 Project Final Report

Each jurisdiction must provide the OCTA a Project Final Report within six months following completion of a capital 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 M2 Ordinance.

City Council/ Board of Supervisors approval: Not Required

### Verification Method

To establish eligibility, a jurisdiction must submit a copy of the CTFP Project Final Report for each capital 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 (administration, maintenance, repair, and other non-project related costs) funded by M2 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 jurisdiction to ensure all funds received from Net Revenues are expended and accounted for within 3 years. The local agency 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

- Agree that Net Revenues for Regional Capacity Program (RCP) projects and/or Regional Traffic Signal Synchronization Program (RTSSP) projects shall be expended or encumbered by end of fiscal year for which Net Revenues are programmed. Refer to the CTFP Guidelines for additional information regarding expenditure deadlines and extension requests.

### Local Fair Share

- Net Revenues received by local jurisdictions through the local fair share program shall be expended or encumbered within three years. An extension may be granted but is limited to a total of five years from date of receipt of funds. Requests for extension must be submitted as part of the semi-annual review process prior to the end of the third year from the date of receipt of funds. Requests for extension must include a plan of expenditure.
- Expired funds including interest earned and related revenues must be returned to the OCTA. These funds shall be returned for redistribution within the same source program.
- Use of Local Fair Share revenues for bonding (including debt service) shall be limited to 25% of the jurisdiction's annual Local Fair Share revenues as defined in Article XIX Motor Vehicle Revenues of the California Constitution unless the Board approves an exception to this policy on a case-by-case basis.



### Interest Derived from Net Revenues

- Interest from any M2 competitive funding program and Local Fair Share must be held in separate accounts.
- Local M2 interest proceeds must be spent on transportation activities consistent with Local Fair Share eligible activities.
- Interest revenues must be expended within 3 years of receipt.
- Interest may be accumulated for substantive projects where necessary, with prior OCTA approval, provided account balance does not exceed aggregate local fair share payments received in the preceding three (3) years of reporting period.
- 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 30, 20167.

City Council/ Board of Supervisors approval: Required if an extension is requested.

#### Verification Method

Each jurisdiction must document within 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 that include local jurisdictions and OCTA. 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 30, 20167.

City Council/ Board of Supervisors approval: Not Required

#### Verification 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 30, 2016.

City Council/ Board of Supervisors approval: Not Required

### Verification 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 (TOD), Transportation Demand Management (TDM) programs, and 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 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 of the M2 Eligibility Guidelines. The applicable eligibility components for a given year are submitted to OCTA by June 30 (with the exception of the expenditure report).

To assist in the initiation of the eligibility process, OCTA hosts eligibility workshops attended by local jurisdictions to prepare for the June 30 submittals. The workshops outline any changes and provide instructions as to the requirements of the current fiscal year's eligibility. 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 jurisdictions fiscal year per M2 ordinance. The City of Huntington Beach follows a federal fiscal year (October 1 to September 30) and that jurisdiction's expenditure report is due by March 31 of each year. All other local jurisdictions submit their expenditure reports annually by December 31. 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 M2 Ordinance. The OCTA Finance department reviews expenditure reports.

### **3.2 Approval Process**

Annual eligibility determinations are based upon satisfactory submittal of the required documentation of eligibility outlined in Ordinance No. 3 and further described in Chapter 2 of these guidelines. The 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 as satisfactory and complete, the applicable submittals must be prepared for review and approval 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 M2 ordinance proposed by the OCTA which changes the funding categories, programs or discrete projects identified for improvements in the Funding Plan
- Review of select documentation establishing eligibility by a jurisdiction including a jurisdiction's Congestion Management Plan, Mitigation Fee Program, Expenditure Report, Local Signal Synchronization Plan, and Pavement Management Plan



- Verification that the OCTA is proceeding in accordance with the M2 Plan and is meeting the performance standards outlined in the M2 Ordinance

The TOC designates the Annual Eligibility Review (AER) subcommittee to review five of the thirteen eligibility requirements listed in the M2 ordinance. The AER subcommittee reviews the Congestion Management Plan, Mitigation Fee Program, Expenditure Report, Local Signal Synchronization Plan, and Pavement Management Plan for each local jurisdiction. The AER subcommittee recommends eligibility determination to the TOC.

In addition, OCTA staff will review items that do not directly require TOC approval and confirm compliance. After TOC and OCTA review all eligibility requirements, OCTA staff will prepare eligibility recommendations for the OCTA Board of Directors (Board). The OCTA Regional Planning and Highways Committee review the item prior to being considered by the full Board. The Board will make final determination whether a local agency 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 No. 3. Article XIX of the California Constitution, provides guidance regarding the use of tax revenues for transportation purposes, and provides a useful definition of eligible transportation planning/implementation activities.

OCTA routinely conducts an audit of local jurisdictions' annual eligibility materials and financial records. Full cooperation is expected in order to complete the process in a timely manner. A finding of non-compliance may be made if either of the following conditions exists:

- Use of M2 funding for non-transportation or non-eligible activities, or
- Failure to meet eligibility requirements

If a determination is made that a local jurisdiction has used M2 funds for ineligible purposes, misspent funds must be fully repaid and the jurisdiction will be deemed ineligible to receive Net Revenues for a period of five (5) years. A finding of ineligibility is determined by the OCTA Board of Directors. Failure to adhere to eligibility compliance components may result in suspension of funds until satisfactory compliance is achieved.

### **4.2 Appeals Process**

Eligibility review and determination is a multi-step process, which relies upon an objective review of information by OCTA staff, the Technical Steering Committee, the Technical Advisory Committee, and the Taxpayer Oversight Committee with final determination made by the OCTA Board of Directors. An appeal of findings may be filed with the Board of Directors for re-consideration.

### **4.3 Re-establishing MPAH Eligibility**

If a Circulation Element is found to be inconsistent with the MPAH and a local jurisdiction is determined ineligible for M2 funds, the local jurisdiction may re-establish eligibility by requesting to undertake a cooperative study with OCTA. The study will be designed to do the following:

- Ascertain the regional transportation system needs
- Make provisions to meet those needs in the local jurisdiction's General Plan
- Re-establish consistency with the MPAH

Any changes to a local jurisdiction's General Plan or the MPAH shall be mutually acceptable to the jurisdiction and OCTA. Until such a study has been completed and an agreement reached on the proposed amendment, the jurisdiction shall be ineligible to apply for and/or receive M2 competitive funds.





## 4.4 For Additional Information

The OCTA M2 Eligibility Guidelines have been developed to assist 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 M2 Eligibility Guidelines:

**May Hout**

Senior Transportation Funding Analyst

(714) 560-5905

[MHout@octa.net](mailto:MHout@octa.net)

Or

**Sam Kaur**

Section Manager, Local Measure M Programs

(714) 560-5673

[SKaur@octa.net](mailto:SKaur@octa.net)



## Appendices

### **Appendix A:** M2 Ordinance

The M2 Ordinance (Ordinance No. 3) can be found on the Eligibility Website:  
<http://www.octa.net/M2Eligibility>

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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 the 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 of Directors 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 (LAFCO) to identify the variables used in the M2 Fair Share 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 M2 Fair Share funds as of the date of incorporation.
- The OCTA will reserve the accrued funds for the new city, pending the determination of eligibility by the OCTA Board within one year of the date of incorporation.
- In order for the new city to receive the reserved accrued funds, OCTA must receive all necessary elements of the M2 eligibility package, complete the necessary review and approval of the package, and the OCTA 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 OCTA Board, the new city will receive its first Fair Share payment including the reserved accrued funds, on the first regular payment cycle following the eligibility determination.
- The first fair share payment will be adjusted to reflect final Fair Share 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 Fair Share funds by the OCTA Board, the reserved accrued funds and interest on the funds, shall be distributed to the eligible 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 OCTA Board and receive its first Fair Share payment on the corresponding regular payment cycle.

## Eligibility for Competitive Funds-New Cities

In addition to the new city eligibility process for Fair Share funds, the OCTA 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 Fair Share funds by OCTA 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 M2 eligibility package for review and approval by the OCTA 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 OCTA 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:

$$\frac{\text{Total MOE benchmark for the county}}{\text{Total county population}} = \text{Per capita expenditure}$$

$$\text{Per capita expenditure} \times \text{city population} = \text{MOE benchmark for the city}$$

## Appeals Process

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

## **Appendix C:** Congestion Management Program Checklist

Appendix C can be found on the Eligibility Website:

<http://www.octa.net/M2Eligibility>



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## APPENDIX C

### Congestion Management Program (CMP)

Jurisdiction:	
---------------	--

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"><li>There are no CMP intersections in your jurisdiction.</li><li>Factoring out statutorily-exempt activities<sup>2</sup>, all CMPHS intersections within your jurisdiction are operating at LOS E (or the baseline level, if worse than E) or better.</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>NOTE: ONLY THOSE AGENCIES THAT CHECKED "NO" FOR QUESTION 1 NEED TO ANSWER THE REMAINING QUESTIONS.</b>				
2.	If any, please list those intersections found to not meet the CMP LOS standards. <ul style="list-style-type: none"><li>_____</li><li>_____</li><li>_____</li></ul>			<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"/>
<b>NOTE: ONLY THOSE AGENCIES THAT CHECKED "NO" FOR QUESTION 3 NEED TO ANSWER THE REMAINING QUESTIONS.</b>				
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 SCAQMD (see the CMP Preparation Manual)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>2</sup>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.



## APPENDIX C

### Congestion Management Program (CMP)

Jurisdiction:

#### 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 CMP 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:

I certify that the information contained in this checklist is true.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



## APPENDIX C

### Congestion Management Program (CMP)

<b>Jurisdiction:</b>	
----------------------	--

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? <sup>3</sup>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>NOTE: ONLY THOSE AGENCIES THAT CHECKED "YES" FOR QUESTION 2 NEED TO ANSWER THE REMAINING QUESTIONS.</b>				
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 agency 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 <a href="http://www.octa.net/pdf/cmpprepremanual.pdf">http://www.octa.net/pdf/cmpprepremanual.pdf</a> )?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:				
I certify that the information contained in this checklist is true.				
Signature: _____ Title: _____				

<sup>3</sup>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.



## APPENDIX C

### Congestion Management Program (CMP)

<b>Jurisdiction:</b>	
----------------------	--

CMP Monitoring Checklist: Capital Improvement Program				
CMP Checklist		YES	NO	N/A
1.	Did you submit a seven-year Capital Improvement Program (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 Web Smart CIP provided by the OCTA used to prepare the CMP CIP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:				
<p>I certify that the information contained in this checklist is true.</p> <p>Signature: _____</p> <p>Title: _____</p>				

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## **Appendix D: Eligibility Checklist**

Appendix D can be found on the Eligibility Website:  
<http://www.octa.net/M2Eligibility>



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# APPENDIX D

## Eligibility Checklist

Jurisdiction:	
---------------	--

Capital Improvement Program (CIP)		YES	N/A
1.	Did you submit your draft Measure M2 seven-year CIP to OCTA by June 30?	<input type="checkbox"/>	<input type="checkbox"/>
	a. Did you utilize the required <a href="#">Web Smart-OCTA CIP database</a> ?	<input type="checkbox"/>	<input type="checkbox"/>
	b. Have you indicated what percentage of funding will come from each source for each of the projects?	<input type="checkbox"/>	<input type="checkbox"/>
	c. Have you listed projects in current year dollars?	<input type="checkbox"/>	<input type="checkbox"/>
	d. Did you include all projects that are partially, fully, or potentially funded by Measure M2 net revenues?	<input type="checkbox"/>	<input type="checkbox"/>
The council approval date* to adopt the final 7-Year CIP is: _____ <small>*Must be prior to July 31</small>			

Maintenance of Effort (MOE)		YES	NO
2.	Did you submit <del>your</del> <a href="#">the</a> MOE certification form (Appendix I) <del>and supporting budget documentation</del> to OCTA by June 30?	<input type="checkbox"/>	<input type="checkbox"/>
	a. Did you <a href="#">provide supporting budget documentation? use the MOE Reporting Form included in the M2 Eligibility Guidelines?</a>	<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 Program (PMP)		YES	N/A
3.	Are you required to submit a PMP update to OCTA for this eligibility cycle? If you are not required to submit a PMP update, check N/A. Refer to Exhibit 3 for local agency PMP submittal schedule.	<input type="checkbox"/>	<input type="checkbox"/>
	a. If yes, did you use the current PMP Certification form (Appendix F)?	<input type="checkbox"/>	<input type="checkbox"/>
	b. If yes, is the <a href="#">adopted</a> PMP consistent with the OCTA Countywide Pavement Management Program?	<input type="checkbox"/>	<input type="checkbox"/>
4.	If you answered "n/a" 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 Master Plan of Arterial Highways (MPAH) Consistency		YES	N/A
5.	Did you submit a resolution demonstrating consistency with the MPAH?	<input type="checkbox"/>	<input type="checkbox"/>
	a. <del>Has there been an update to the Circulation Element since the last reporting period? If yes, include a copy of the latest Circulation Element.</del>	<input type="checkbox"/>	<input type="checkbox"/>
	a. Have you enclosed a figure representing your most current circulation element?	<input type="checkbox"/>	<input type="checkbox"/>

Local Signal Synchronization Plan (LSSP)		YES	N/A
6.	<a href="#">Did you adopt and submit an update to the LSSP as part of the current cycle?</a>	<input type="checkbox"/>	<input type="checkbox"/>
	a. <del>Do you have a</del> <a href="#">Is your current LSSP Local Signal Synchronization Plan that is</a> consistent with the Regional Traffic Signal Synchronization Master Plan?	<input type="checkbox"/>	<input type="checkbox"/>



## APPENDIX D

### Eligibility Checklist

Time Limits for Use of Net Revenues		YES	NO
7.	Has your jurisdiction <del>observed the</del> <u>complied with the three year</u> time limits 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 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 Measure M2 funds?	<input type="checkbox"/>	<input type="checkbox"/>

Mitigation Fee Program		YES	N/A
9.	Does your jurisdiction currently have a defined development impact mitigation fee program in place?	<input type="checkbox"/>	<input type="checkbox"/>
10.	<u>Has your jurisdiction submitted a copy of the current mitigation fee program?</u>	<input type="checkbox"/>	<input type="checkbox"/>
	a. <del>If you answered yes to question 10,</del> Have you included a copy of your current impact fee schedule; or	<input type="checkbox"/>	<input type="checkbox"/>
	b. <del>If you answered yes to question 10,</del> Have you provided OCTA with a copy of your mitigation fee nexus study; or	<input type="checkbox"/>	<input type="checkbox"/>
	c. <del>If you answered yes to question 10,</del> Have you included a copy of your council approved policy; or	<input type="checkbox"/>	<input type="checkbox"/>
	d. <del>If you answered yes to question 10,</del> Have you provided OCTA with a copy of your council resolution approving the mitigation fee program?	<input type="checkbox"/>	<input type="checkbox"/>
	e. <del>Has an update to the mitigation fee program occurred since the last reporting period? If yes, please submit the appropriate documents in 10a through 10d.</del>	<input type="checkbox"/>	<input type="checkbox"/>

Planning Strategies		YES	NO
11.	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"/>
12.	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
13.	Did representatives of your jurisdiction participate in the regional traffic forum(s)?	<input type="checkbox"/>	<input type="checkbox"/>
	If you answered yes, provide date of attendance: _____		

Congestion Management Program (CMP)		YES	N/A
14.	Has your jurisdiction completed the required CMP checklist? (Appendix C)	<input type="checkbox"/>	<input type="checkbox"/>

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **Appendix E: Sample Resolution**

Appendix E can be found on the Eligibility Website:  
<http://www.octa.net/M2Eligibility>

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## [SAMPLE RESOLUTION]

A RESOLUTION OF THE CITY COUNCIL/BOARD OF SUPERVISORS OF THE CITY/COUNTY OF \_\_\_\_\_ CONCERNING THE STATUS AND UPDATE OF THE CIRCULATION ELEMENT, LOCAL SIGNAL SYNCHRONIZATION PLAN, MITIGATION FEE PROGRAM, AND PAVEMENT MANAGEMENT PLAN 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 \_\_\_\_\_ had 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) [2015-16](#) and FY [2016-17](#), 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 [Combined Comprehensive](#) Transportation Funding Programs;

~~WHEREAS, the Regional Traffic Signal Synchronization Program targets over 2000 signalized intersections across Orange County to maintain traffic signal synchronization, improve traffic flow, and reduce congestion across jurisdictions; and~~

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 agency's adopt a Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local agencies' efforts to synchronizing traffic signals across local agencies' boundaries; and

WHEREAS, the Local Signal Synchronization Plan must be updated by June 30, 2017 to continue to be eligible to receive Net Revenues as part of Measure M2;

WHEREAS, the City/County is required to adopt a resolution biennially ~~to adopt a~~ [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;](#)

WHEREAS, the City/County is required to adopt and update a Pavement Management Plan regarding the status of road pavement conditions and implementation of the Pavement Management Plan on a biennial basis; 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 City/County 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 2015-16 and FY 2016-17.

~~c) The City/County has adopted a uniform setback ordinance providing for the preservation of rights-of-way consistent with the MPAH arterial highway classification.~~

~~d) The City/County has adopted provisions for the limitation of access to arterial highways in order to protect the integrity of the system.~~

~~c)~~ 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.

~~d)~~ 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.

~~e)~~ The Local Signal Synchronization Plan includes the traffic signal inventory for all traffic signal synchronization street routes.

~~f)~~ 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.

~~g)~~ The Local Signal Synchronization Plan includes an update on the status and performance of traffic signal synchronization activities.

~~h)~~ 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.

~~i)~~ The City/County reaffirms that Council concurs with the existing Mitigation Fee Program.

~~j)~~ The City/County adopts a Pavement Management Plan and has provided an updated Pavement Management Plan report to Orange County Transportation Authority.

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

**Appendix F: Pavement Management Plan Certification & Agency Submittal Checklist**

Appendix F can be found on the Eligibility Website:

<http://www.octa.net/M2Eligibility>



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## APPENDIX F

### Pavement Management Plan Certification

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The City/County of \_\_\_\_\_ 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 the Pavement Management Plan be in place and maintained to qualify for allocation of revenues generated from renewed Measure M (M2).

The plan was developed by \_\_\_\_\_ \* using \_\_\_\_\_, a pavement management system, conforming to American Society for 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 \_\_\_\_\_, \_\_\_\_\_ for Arterial (MPAH) streets and \_\_\_\_\_, \_\_\_\_\_ for local streets.
- Assessment of pavement condition for all routes in the system, updated biennially. The last field review of pavement condition was completed \_\_\_\_\_, \_\_\_\_\_.
- Percentage of all sections of pavement needing:  
Preventive Maintenance \_\_\_\_\_, Rehabilitation \_\_\_\_\_, Reconstruction \_\_\_\_\_
- Budget needs for preventative maintenance, rehabilitation and/or reconstruction of deficient sections of pavement for:  
Current biennial period \$ \_\_\_\_\_, Following biennial period \$ \_\_\_\_\_
- Funds budgeted or available for Preventative Maintenance, Rehabilitation and/or Reconstruction.  
Current biennial period \$ \_\_\_\_\_, Following biennial period \$ \_\_\_\_\_
- 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:

_____	_____	_____
Name (Print)	Title	Jurisdiction
_____	_____	
Signature	Date	

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# Pavement Management Plan

## Agency Submittal Checklist

A Pavement Management Plan (PMP) 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. Local agencies are required to update their PMP on a biennial basis. MicroPAVER or StreetSaver will be used for countrywide consistency. The software must be consistent with American Standard for Testing and Materials (ASTM) Standard D6433. Local agencies are required to submit a PMP unbound "hard copy" including: (See Chapter 3)

Local agencies must submit the following to OCTA:		Page(s) in PMP	Submitted
PMP Agency Submittal Checklist (See Appendix A)			<input type="checkbox"/>
PMP certification (See Appendix B)			<input type="checkbox"/>
QA/QC plan (See Appendix C and Section 2.4)			<input type="checkbox"/>
Pavement management data files in a form useable by OCTA (See Section 2.8)			<input type="checkbox"/>
Average (weighted by area) Pavement Condition Index for:			
i.	Entire pavement network		<input type="checkbox"/>
ii.	Master Plan of Arterial Highways (MPAH) roadways		<input type="checkbox"/>
iii.	Local streets		<input type="checkbox"/>
Projected PCI under existing funding levels over the next seven years for:			
i.	Entire pavement network		<input type="checkbox"/>
ii.	MPAH roadways		<input type="checkbox"/>
iii.	Local streets		<input type="checkbox"/>
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		<input type="checkbox"/>
ii.	Limits of work		<input type="checkbox"/>
iii.	Lengths, widths		<input type="checkbox"/>
iv.	Pavement Areas:		
	1. Each street		<input type="checkbox"/>
	2. Total area for local streets		<input type="checkbox"/>
	3. Total area for MPAH roadways		<input type="checkbox"/>
	4. Total area for entire public streets network		<input type="checkbox"/>
v.	Functional classification (i.e. MPAH or local street)		<input type="checkbox"/>
vi.	PCI and most recent date of inspection (See Section 2.2)		<input type="checkbox"/>
vii.	Type of treatment		<input type="checkbox"/>
viii.	Cost of treatment		<input type="checkbox"/>
ix.	Year of treatment		<input type="checkbox"/>
Alternative funding levels required to:			
i.	Maintain existing average network PCI		<input type="checkbox"/>
ii.	To improve average network PCI		<input type="checkbox"/>
Backlog by year of unfunded pavement rehabilitation, restoration, reconstruction, and maintenance needs.			<input type="checkbox"/>
Centerline mileage for MPAH, local streets, and total network.			<input type="checkbox"/>
Percentage of total network in each of the five condition categories based on centerline miles.			<input type="checkbox"/>

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**Appendix G: M2 Expenditure Report Template, Instructions & Resolution**

Appendix G can be found on the Eligibility Website:  
<http://www.octa.net/M2Eligibility>

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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](#) ~~(e.g. Measure M2 (M2) fair share, M2 competitive, and transit)~~. To provide for continuity of reporting, the beginning balances of any restricted funds must be in agreement with the ending balances of such funds as shown in the prior year's report.

<u>Project</u>	<u>Description</u>
<u>A-M</u>	<u>Freeway Environmental Mitigation</u>
<u>O</u>	<u>Regional Capacity Program</u>
<u>P</u>	<u>Regional Traffic Signal Synchronization Program</u>
<u>Q</u>	<u>M2 Fair Share</u>
<u>R</u>	<u>High Frequency Metrolink Service</u>
<u>S</u>	<u>Transit Extensions to Metrolink</u>
<u>T</u>	<u>Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</u>
<u>U</u>	<u>Senior Mobility Program or Senior Non-Emergency Medical Program</u>
<u>V</u>	<u>Community Based Transit/Circulators</u>
<u>W</u>	<u>Safe Transit Stops</u>
<u>X</u>	<u>Water Quality Program</u>
<u>Other</u>	<u>Please provide description for other categories</u>

### **Line 13: Balances at Beginning of Fiscal Year - TOTAL**

Sum Lines 1 – 12 [in the "Amount" and "Interest" Column](#)

### **Line 14: Monies Made Available During Fiscal Year**

Report total available monies (revenues) from Schedule 2, Line 13 [in the "Amount" and "Interest" Column](#)

### **Line 15: Total Monies Available**

Sum Lines 13-14 [in the "Amount" and "Interest" Column](#)

### **Line 16: Expenditures During Fiscal Year**

Report total available monies (revenues) from Schedule 2, Line 26 [in the "Amount" and "Interest" Column](#)

### **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 be in agreement with the ending balances of such funds as shown in this year's report (or otherwise reconciled).



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

Description	Line No.	Amount	<a href="#">Interest</a>
<b>Balances at Beginning of Fiscal Year</b>			
<a href="#">A-M</a> <a href="#">Freeway Environmental Mitigation</a>	1		
<a href="#">Q</a> <a href="#">Regional Capacity Program</a>	2		
<a href="#">P</a> <a href="#">Regional Traffic Signal Synchronization Program</a>	3		
<a href="#">Q</a> <a href="#">M2 Fair Share</a>	4		
<a href="#">R</a> <a href="#">High Frequency Metrolink Service</a>	5		
<a href="#">S</a> <a href="#">Transit Extensions to Metrolink</a>	6		
<a href="#">I</a> <a href="#">Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</a>	7		
<a href="#">U</a> <a href="#">Senior Mobility Program or Senior Non-Emergency Medical Program</a>	8		
<a href="#">V</a> <a href="#">Community Based Transit/Circulators</a>	9		
<a href="#">W</a> <a href="#">Safe Transit Stops</a>	10		
<a href="#">X</a> <a href="#">Water Quality Program</a>	11		
Other*	12		
<b>Balances at Beginning of the Fiscal Year (Sum Lines 1 to 12)</b>	13		
Monies Made Available During Fiscal Year	14		
<b>Total Monies Available (Sum Lines 13 &amp; 14)</b>	15		
Expenditures During Fiscal Year	16		
<b>Balances at End of Fiscal Year</b>			
<a href="#">A-M</a> <a href="#">Freeway Environmental Mitigation</a>	17		
<a href="#">Q</a> <a href="#">Regional Capacity Program</a>	18		
<a href="#">P</a> <a href="#">Regional Traffic Signal Synchronization Program</a>	19		
<a href="#">Q</a> <a href="#">M2 Fair Share</a>	20		
<a href="#">R</a> <a href="#">High Frequency Metrolink Service</a>	21		
<a href="#">S</a> <a href="#">Transit Extensions to Metrolink</a>	22		
<a href="#">I</a> <a href="#">Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</a>	23		
<a href="#">U</a> <a href="#">Senior Mobility Program or Senior Non-Emergency Medical Program</a>	24		
<a href="#">V</a> <a href="#">Community Based Transit/Circulators</a>	25		
<a href="#">W</a> <a href="#">Safe Transit Stops</a>	26		
<a href="#">X</a> <a href="#">Water Quality Program</a>	27		
Other*	28		

\* Please provide a specific description

[CTFP](#) — Comprehensive Transportation Funding Programs

## 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**

<u>Project</u>	<u>Description</u>
<u>A-M</u>	<u>Freeway Environmental Mitigation</u>
<u>O</u>	<u>Regional Capacity Program</u>
<u>P</u>	<u>Regional Traffic Signal Synchronization Program</u>
<u>Q</u>	<u>M2 Fair Share</u>
<u>R</u>	<u>High Frequency Metrolink Service</u>
<u>S</u>	<u>Transit Extensions to Metrolink</u>
<u>T</u>	<u>Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</u>
<u>U</u>	<u>Senior Mobility Program or Senior Non-Emergency Medical Program</u>
<u>V</u>	<u>Community Based Transit/Circulators</u>
<u>W</u>	<u>Safe Transit Stops</u>
<u>X</u>	<u>Water Quality Program</u>
<u>Other</u>	<u>Please provide description for other categories</u>

- ~~M2 Fair Share~~
- ~~M2 Fair Share Interest~~
- ~~M2 CTFP~~ — Comprehensive Transportation Funding Program
- ~~M2 CTFP Interest~~ — Comprehensive Transportation Funding Program (Negative interest is not allowable)
- ~~Other M2~~ — Includes Go Local, Senior Mobility Program, Transit, Water Quality, Grade Separations, Regional Gateways to High-Speed Rail
- ~~Other M2 Interest~~ — Includes Go Local, Senior Mobility Program, Transit, Water Quality, Grade Separation, Regional Gateways to High-Speed Rail
- ~~Other~~ — Please provide description for other categories

#### **Line 13: Total Revenues**

Sum Lines 1-12 (Should match Total in Schedule 1, Line 14 in the "Amount" and "Interest" Column)

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

<u>Project</u>	<u>Description</u>
<u>A-M</u>	<u>Freeway Environmental Mitigation</u>
<u>O</u>	<u>Regional Capacity Program</u>
<u>P</u>	<u>Regional Traffic Signal Synchronization Program</u>
<u>Q</u>	<u>M2 Fair Share</u>
<u>R</u>	<u>High Frequency Metrolink Service</u>
<u>S</u>	<u>Transit Extensions to Metrolink</u>
<u>T</u>	<u>Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</u>
<u>U</u>	<u>Senior Mobility Program or Senior Non-Emergency Medical Program</u>
<u>V</u>	<u>Community Based Transit/Circulators</u>
<u>W</u>	<u>Safe Transit Stops</u>
<u>X</u>	<u>Water Quality Program</u>
<u>Other</u>	<u>Please provide description for other categories</u>

- ~~M2 Fair Share~~
- ~~M2 Fair Share Interest~~
- ~~M2 CTFP~~ Comprehensive Transportation Funding Program
- ~~M2 CTFP Interest~~ Comprehensive Transportation Funding Program (Negative interest is not allowable)
- ~~Other M2~~ Includes Go Local, Senior Mobility Program, Transit, Water Quality, Grade Separation, Regional Gateways to High-Speed Rail
- ~~Other M2 Interest~~ Includes Go Local, Senior Mobility Program, Transit, Water Quality, Grade Separation, Regional Gateways to High-Speed Rail
- ~~Other~~ Please provide description for other categories

**Line 26: Total Expenditures**

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

**Line 27: Total Balance**

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

City/County of: \_\_\_\_\_

Schedule 2

**M2 Expenditure Report**  
**Fiscal Year Ended June 30, 20\_\_\_\_**  
**Sources and Uses**

	Description	Line No.	Amount	Interest
	<b>Revenues:</b>			
A-M	<a href="#">Freeway Environmental Mitigation</a>	1		
O	<a href="#">Regional Capacity Program</a>	2		
P	<a href="#">Regional Traffic Signal Synchronization Program</a>	3		
Q	<a href="#">M2 Fair Share</a>	4		
R	<a href="#">High Frequency Metrolink Service</a>	5		
S	<a href="#">Transit Extensions to Metrolink</a>	6		
I	<a href="#">Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</a>	7		
U	<a href="#">Senior Mobility Program or Senior Non-Emergency Medical Program</a>	8		
V	<a href="#">Community Based Transit/Circulators</a>	9		
W	<a href="#">Safe Transit Stops</a>	10		
X	<a href="#">Water Quality Program</a>	11		
	Other*	12		
	<b>TOTAL REVENUES: (Sum Lines 1 to 12)</b>	13	\$	\$
	<b>Expenditures:</b>			
A-M	<a href="#">Freeway Environmental Mitigation</a>	14		
O	<a href="#">Regional Capacity Program</a>	15		
P	<a href="#">Regional Traffic Signal Synchronization Program</a>	16		
Q	<a href="#">M2 Fair Share</a>	17		
R	<a href="#">High Frequency Metrolink Service</a>	18		
S	<a href="#">Transit Extensions to Metrolink</a>	19		
I	<a href="#">Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</a>	20		
U	<a href="#">Senior Mobility Program or Senior Non-Emergency Medical Program</a>	21		
V	<a href="#">Community Based Transit/Circulators</a>	22		
W	<a href="#">Safe Transit Stops</a>	23		
X	<a href="#">Water Quality Program</a>	24		
	Other*	25		
	<b>TOTAL EXPENDITURES: (Sum Lines 14 to 25)</b>	26	\$	\$
	<b>TOTAL BALANCE (Subtract line 26 from 13)</b>	27	\$	\$

\* Please provide a specific description

\*\* Please provide breakdown of "Other M2 Funding". Other M2 Funding includes funding received and/or funds expended by Local Agencies from any other M2 program besides Project O (Regional Capacity Program) and Project Q (Local Fair Share Program):

Revenues				
Project Description	Project	Amount	Interest	Total
<a href="#">Freeway Environmental Mitigation</a>	A-M	\$	\$	\$
<a href="#">Regional Traffic Signal Synchronization Program</a>	P	\$	\$	\$
<a href="#">High Frequency Metrolink Service</a>	R	\$	\$	\$
<a href="#">Transit Extensions to Metrolink</a>	S	\$	\$	\$
<a href="#">Convert Metrolink Station(s) to Regional Gateways that connect Orange County with High-Speed Rail Systems</a>	I	\$	\$	\$
<a href="#">Senior Mobility Program or Senior Non-Emergency Medical Program</a>	U	\$	\$	\$
<a href="#">Community Based Transit/Circulators</a>	V	\$	\$	\$
<a href="#">Safe Transit Stops</a>	W	\$	\$	\$
<a href="#">Water Quality Program</a>	X	\$	\$	\$
	Total:	\$	\$	\$

Expenditures				
Project Description	Project	Amount	Interest	Total
Freeway Environmental Mitigation	A-M	\$	\$	\$
Regional Traffic Signal Synchronization Program	P	\$	\$	\$
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	\$	\$	\$
Senior Mobility Program or Senior Non-Emergency Medical Program	U	\$	\$	\$
Community-Based Transit/Circulators	V	\$	\$	\$
Safe Transit Stops	W	\$	\$	\$
Water Quality Program	X	\$	\$	\$
Total:		\$	\$	\$

## Measure M2 Expenditure Report Template Instructions

### Schedule 3: Summary Statement of Detailed Use of Funds

#### **Line 1: Administration (Indirect & Overhead)**

This line covers transportation-related local agency costs that are identified with a project and are not included as direct charges. The costs listed in this line item represent an equitable share of expenditures for the supervision and management of streets and roads activities not directly allocated to right-of-way, construction, or other categories listed below. This includes, but is not limited to, salaries of project management and support staff.

#### **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 agency 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 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 by reason of 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 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 Lines 11-15

**Line 17: Other**

Please provide description for other categories. Example: transit, Senior Mobility Program, water quality, transit operations such as vehicle leases and other related operating expenses, etc.

**Line 18: Grand Totals**

Sum Lines 1, 10, 16, and 17

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 <sup>2</sup>	Developer / Impact Fee <sup>+</sup>	<u>Q</u>	<u>Q</u> Interest	<u>P</u>	<u>P</u> Interest	<u>Q</u>	<u>Q</u> Interest	<u>X</u>	<u>X</u> Interest	Other M2 <sup>3</sup>	Other M2 Interest	Other*	TOTAL
<b>Administration (Indirect &amp; Overhead)</b>	1														\$
<b>Construction &amp; Right-of-Way</b>															
New Street Construction	2														\$
Street Reconstruction	3														\$
Signals, Safety Devices, & Street Lights	4														\$
Pedestrian Ways & Bike paths	5														\$
Storm Drains	6														\$
Storm Damage	7														\$
<b>Total Construction<sup>1</sup></b>	8														\$
Right of Way Acquisition	9														\$
<b>Total Construction &amp; Right-of-Way</b>	10														\$
<b>Maintenance</b>															
Patching	11														\$
Overlay & Sealing	12														\$
Street Lights & Traffic Signals	13														\$
Storm Damage	14														\$
Other Street Purpose Maintenance	15														\$
<b>Total Maintenance<sup>1</sup></b>	16														\$
<b>Other</b>	17														\$
<b>GRAND TOTALS (Sum Lines 1, 10, 16, 17)</b>	18	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

<sup>1</sup> Includes direct charges for staff time

<sup>2</sup> Local funds used to satisfy maintenance of effort (MOE) requirements

<sup>3</sup>Other M2 includes A-M, R, S, T, U, V, and W

+ Transportation related only

\* Please provide a specific description



## Measure M2 Expenditure Report Template Instructions

### Schedule 4: Summary Statement of [M2](#) Fair Share Project List

List the project titles and brief description (maximum of two sentences) for all projects that utilized any portion of Measure M (M2) local fair share funding. Please include the total amount of [M2](#) fair share funds **only** that were expended.

**M2 Expenditure Report**  
**Fiscal Year Ended June 30, 20\_\_\_\_**  
**M2 Fair Share Project List**

[illegible]

City/County of: \_\_\_\_\_

**Signature Page**

**M2 Expenditure Report  
Fiscal Year Ended June 30, 20\_\_\_\_**

I certify that 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 and all the information attached herein is true and accurate to the best of my knowledge:

\_\_\_\_\_  
Director of Finance (Print Name)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**[EXPENDITURE REPORT RESOLUTION]**

A RESOLUTION OF THE CITY COUNCIL/BOARD OF SUPERVISORS OF THE  
CITY/COUNTY OF CONCERNING THE MEASURE M2 EXPENDITURE REPORT FOR THE  
CITY/COUNTY OF \_\_\_\_\_.

WHEREAS, Local Transportation Authority Ordinance No. 3 requires local jurisdictions to adopt an annual Expenditure Report to account for Net Revenues, developer/traffic impact fees, and funds expended by local jurisdiction that satisfy the Maintenance of Effort requirements; and

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

WHEREAS, the Expenditure Report must be adopted and submitted to the Orange County Transportation Authority 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 Measure M2.

NOW, THEREFORE, BE IT RESOLVED that the City/County of \_\_\_\_\_, does hereby inform OCTA that:

- a) The M2 Expenditure Report is in conformance with the M2 Expenditure Report 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 Measure M2 Expenditure Report to OCTA for the fiscal year ending \_\_\_\_\_.

PASSED, APPROVED AND ADOPTED on the \_\_\_\_\_ day of \_\_\_\_\_, 20167.

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## **Appendix H: Arterial Highway Mileage Change Report**

Appendix H can be found on the Eligibility Website:  
<http://www.octa.net/M2Eligibility>

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## APPENDIX H

## Arterial Highway Change Report

**County/City of:** \_\_\_\_\_

[illegible]



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**Appendix I: Maintenance of Effort Reporting Form**

Appendix I can be found on the Eligibility Website:  
<http://www.octa.net/M2Eligibility>

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# APPENDIX I

## Maintenance of Effort Reporting Form

Jurisdiction: \_\_\_\_\_

### Type of GENERAL FUND Transportation Expenditures:

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

MAINTENANCE	Total Expenditure
Subtotal Maintenance	\$

CONSTRUCTION	Total Expenditure
Subtotal Construction	\$

ADMINISTRATIVE/OTHER	Total Expenditure
Subtotal Administration/Other	\$

Total General Fund Transportation Expenditures	\$
(Less Total MOE Exclusions*)	\$
<b>MOE Expenditures</b>	\$

**MOE Benchmark Requirement** \$

**(Shortfall)/Surplus** \$

Certification:

I hereby certify that the City/County of \_\_\_\_\_ has budgeted and will meet the Maintenance of Effort requirement for Fiscal Year \_\_\_\_\_.

\_\_\_\_\_  
Finance Director Signature

\_\_\_\_\_  
Finance Director  
(Print Name)

\_\_\_\_\_  
Date

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

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## **Appendix J: Acronyms**

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## **APPENDIX J**

### **Acronyms**

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<b>Acronym</b>	<b>Description</b>
AHRP	Arterial Highway Rehabilitation Program
CCI	Construction Cost Index
CEQA	California Environmental Quality Act
CFD	Community Facilities District
CIP	Capital Improvement Program
CMP	Congestion Management Program
CTFP	Comprehensive Transportation Funding Programs
GMP	Growth Management Program
ITS	Intelligent Transportation Systems
LAFCO	Local Agency Formation Commission
LOS	Level of Service
LSSP	Local Signal Synchronization Plan
LTA	Local Transportation Authority
MOE	Maintenance of Effort
MPAH	Master Plan of Arterial Highways
OCCOG	Orange County Council of Governments
PCI	Pavement Condition Index
PMP	Pavement Management Plan
RCP	Regional Capacity Program
RTSSMP	Regional Traffic Signal Synchronization Master Plan
SCAQMD	South Coast Air Quality Management District
TAC	Technical Advisory Committee
TDM	Traffic Demand Management
TOC	Taxpayer Oversight Committee
TSC	Technical Steering Committee



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GUIDELINES FOR THE PREPARATION OF

# LOCAL SIGNAL SYNCHRONIZATION PLANS

2017



ORANGE COUNTY TRANSPORTATION AUTHORITY

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## Chapter 1. Overview

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 eligible local agencies through both a formula distribution and a competitive process. On November 6, 2006, voters approved Measure M2 to continue the ½-cent sales tax for thirty years, beginning in 2011. Project P, the Regional Traffic Signal Synchronization Program (RTSSP), was included as part of Measure M2.

The RTSSP is comprised of a 750-mile regional signal synchronization network with ~~about~~ approximately 2,000 signals. The goals of the program are to improve the flow of traffic on Orange County streets and roads by implementing multi-agency signal synchronization. Local agencies and Caltrans are encouraged to work cooperatively with the Orange County Transportation Authority (OCTA) to synchronize traffic signals throughout Orange County on a corridor basis to improve travel time and reduce stops. Local agencies will maintain local control and responsibility for signals within their jurisdiction ~~and control~~. Any changes to traffic signals, signal timing equipment, or related signal policies (including transit signal priority, transit preemption, or emergency vehicle preemption) are at the full discretion of the responsible local agency.

### 1.1. Measure M2 Eligibility Requirements

#### *1.1.1. Local Signal Synchronization Plan Initial Adoption*

Eligibility requirements included in Measure M2 specify that each local jurisdiction must adopt a local signal synchronization plan (LSSP). For eligibility purposes, each local jurisdiction ~~previously initially~~ adopted a LSSP ~~, which was due by December 31, 2010 in 2010. The previous LSSPs that~~ included the following components:

- Signal synchronization goals
- Traffic signal synchronization street routes
- Traffic signal inventory
- Three-year capital, operations, and maintenance plan

#### *1.1.2. Local Signal Synchronization Plan Update*

Subsequent to the adoption of each 2010 LSSP, the local agencies must maintain and update their respective LSSP for the duration of Measure M2 to remain eligible for funding. In addition to refreshing the section 1.1.1 elements included in the adopted LSSP with current information, the update shall include information on the following:

- Review and revise signal timing, as may be necessary, along traffic signal synchronization street routes and traffic signals based on the signal synchronization assessment.
- Report on the status and performance of signal synchronization activities along the traffic signal synchronization street routes and traffic signals. Jurisdictions may use related efforts that are included as part of the RTSSP Master Plan (Appendix A) to the extent appropriate to fulfill this reporting requirement. In addition, performance results from Project P corridor projects completed since the last update may be included.



For eligibility purposes, this means that a local agency must update an adopted plan by June 30, ~~2014~~ 2017, concurrent with the annual eligibility cycle and subsequently every three years thereafter. For a plan update, city council ~~action is at the discretion of the local agency~~ adoption is required.

The following table outlines the LSSP eligibility requirements and completion dates for the first seven years of Measure M2. Additionally, the table identifies the fiscal years for which the eligibility requirement applies.

Local Signal Synchronization Plan Eligibility Requirement and Completion Date	Applicable Fiscal Years (FY)
<i>Initial Adoption</i> Completed: December 31, 2010	Part of FY 2010-11 <u>as well as all of</u> FY 2011-12 <u>through</u> <del>FY 2012-13</del> FY 2013-14
<i>3-Year Update</i> Completion Date: June 30, 2014	FY 2014-15 <u>through</u> <del>FY 2015-16</del> FY 2016-17
<i>3-Year Update</i> Completion Date: June 30, 2017	FY 2017-18 <u>through</u> <del>FY 2018-19</del> FY 2019-20
<u><i>3-Year Update</i></u> <u>Completion Date: June 30, 2020</u>	<u>FY 2020-21 through FY 2022-23</u>

## 1.2. Local Match Reduction

By implementing, maintaining, and operating an LSSP in conformance with the RTSSP Master Plan, a local agency benefits through a local match reduction of 10 percent of eligible costs as part of the Regional Capacity Program (Project O) competitive grant program.

## 1.3. ~~Background~~ Purpose and Objectives of LSSP

LSSPs provide a tool to succinctly report local agency plans, goals and objectives regarding signal operations. Budgetary needs and system performance metrics are included to help communicate overall system operations and investment effectiveness. The primary goal of these guidelines is to ensure that local agencies have a clear understanding of the information required to prepare an LSSP. Submittal of these plans as part of the M2 Eligibility process enables OCTA verification of consistency with the RTSSP Master Plan.

## ~~1.4. Procedures Manual Overview~~

This manual provides guidelines and procedures necessary for Orange County agencies to develop and maintain their LSSP in conformance with the criteria stated in the Measure M2 Ordinance No. 3. The guidelines outline the components of the LSSP and the required documents to fulfill the signal synchronization portion of the Measure M2 eligibility process, including a "Consistency Review Checklist" in Appendix B.

## Chapter 2. Local Signal Synchronization Plan Guidelines

The LSSP guidelines are discussed under the following categories:

- Signal synchronization goals
- Traffic signal synchronization street routes
- Traffic signal inventory
- Three-year capital, operations, and maintenance plan
- Signal synchronization timing review, revision, and assessment

### 2.1. Signal Synchronization Goals

The Measure M2 RTSSP is envisioned as a multi-agency, corridor-based approach that optimizes the performance of traffic signals based on existing traffic patterns. The approach acknowledges local agency responsibility and control of signal timing, and works with those agencies to develop acceptable synchronization timing. Concurrence with these broad goals shall be provided. Information on how traffic signals and street routes may be coordinated across jurisdictional boundaries shall be described.

The LSSP should provide sufficient information to describe the role of existing and planned synchronized signals and coordinated corridors within the city ensuring an efficient and effective transportation circulation system. Supporting information including compatible traffic signal timing technical parameters and communication with other agencies may be included. Additional information including existing traffic patterns and time periods when synchronization is implemented (peak periods, midday, and weekends) may be expanded upon as necessary.

### 2.2. Traffic Signal Synchronization Street Routes

At minimum, all street routes included in the RTSSP located within the local agency boundaries must be identified by the LSSP, regardless of implementation status, ownership and operating responsibility. Reductions below that level will result in the LSSP being inconsistent with the RTSSP Master Plan and therefore not meet M2 eligibility requirements. Local agencies have the option to include additional streets not part of the Master Plan. This information will be useful for cities and OCTA to coordinate future projects with neighboring jurisdictions and aid in development of funding strategies. OCTA will provide maps with the Master Plan of Arterial Highways (MPAH) network identified for each local agency to facilitate this process.

### 2.3. Traffic Signal Inventory

Traffic signals that are part of the local agency signal synchronization routes identified in section 2.2 shall be inventoried in the LSSP, regardless of ownership and operating responsibility. The inventory is designed to help improve information flow to enhance signal coordination between agencies. Along with the signal inventory, cycle length information by time period shall be provided. ~~OCTA will facilitate the process of compiling the traffic signal and cycle length data for use by providing a web-based viewing tool for use by local agencies.~~ Maintenance responsibility for shared signals should be indicated. Equipment status may be included to identify signals that meet current technology requirements, as well as those planned for upgrade and, as a result, are candidates for replacement when feasible.

## 2.4. Three-year Capital, Operations, and Maintenance Plan

Implementing, maintaining and updating signal synchronization includes initial and periodic capital equipment investment and periodic timing plan updates. The LSSP identifies specific goals, routes and equipment required to ensure network operability with maximum traffic management efficiency. A planning level budget estimate shall be presented reflecting expenditures required to fully implement near term (three year) and long-term (beyond three years) synchronization program. ~~This~~ These scenarios ~~that~~ should be presented without regard to available funds (unconstrained scenario). The 3-year budget estimate shall be provided by fiscal year and separated into capital, operations, and maintenance elements. This unconstrained scenario should be presented with candidate signal synchronization projects for planning purposes. These projects may be submitted as part of future Project P calls for projects.

A separate three-year budget estimate based upon available funding (constrained scenario) using resources the local agency will commit to signal synchronization efforts shall also be provided. Anticipated monies ~~to be~~ not yet awarded as part of competitive Project P should not be included in this constrained plan. This budget estimate shall be provided by fiscal year and separated into capital, operations, and maintenance elements.

The following definitions are provided to help meet the intent of the three-year plan. Capital should include traffic signal infrastructure (e.g., detection and traffic controllers) and communication infrastructure (e.g., Ethernet and software for system traffic control) improvements necessary to achieve signal synchronization. Operations should consist of the development, on-going review/monitoring, and fine-tuning of synchronized signal timing. Finally, maintenance should comprise of the upkeep of traffic signal and communication infrastructure related to signal synchronization. Routine signal maintenance such as replacing signal heads, bulbs, and poles should not be included. The inclusion of other costs not listed here shall be at the discretion of the local agency.

## 2.5. Signal Synchronization Timing Review, Revision, and Assessment

~~[NOTE: THIS VERSION OF THE GUIDELINES COMBINES PREVIOUS SECTIONS 2.5 AND 2.6 INTO A SINGLE SECTION 2.5.]~~

This section shall show the status of required signal synchronization timing reviews along the agency's identified signal synchronization routes. Timing revisions should be noted; if additional information such as a "before and after study" is available, it should be provided. Qualitative descriptions of the review process may also be provided if desired. In addition, specific details may be provided on the signal timing revisions such as cycle length changes.

A signal synchronization assessment shall be provided by each local agency. This assessment will report on the performance of synchronization activities along the signal synchronization street routes and traffic signals. The assessment shall be prepared based on overall performance criteria that may include average speeds, green lights to red lights, and stops per mile. Jurisdictions may collect assessment data themselves or use the assessment information collected by OCTA.

## Chapter 3. Agency Submittals

This chapter summarizes for submittal purposes the information required to fulfill the LSSP requirements. This information has been described more fully previously in this document. As a summary, local agencies must submit the following to OCTA:

- Local Signal Synchronization Plan which includes the following:
  - Signal synchronization goals
    - Concurrence with the goals: corridor-based, multi-agency, existing traffic patterns, and local traffic signal timing and operation responsibility
  - Traffic signal synchronization street routes
    - Regional signal synchronization network from the Regional Traffic Signal Synchronization Master Plan
    - Relationship to Master Plan of Arterial Highways
    - Additional local streets, if desired
  - Traffic signal inventory for traffic signal synchronization street routes
    - Traffic signals
    - Cycle length data by time period
  - Three-year plan showing capital, operations, and maintenance costs
    - Unconstrained scenario with candidate projects
    - Constrained scenario
  - Signal synchronization review, revision, and assessment
    - Note timing reviews and updates underway and those completed since the 2014 LSSP Update
    - Identify revisions
    - Provide performance assessment
- Local Signal Synchronization Plan Consistency Review Checklist (Appendix B)

## Appendices

- A. Regional Traffic Signal Synchronization Master Plan
- B. Local Signal Synchronization Plan Consistency Review Checklist



## **Appendix A:** Regional Traffic Signal Synchronization Master Plan

## **Appendix A: Regional Traffic Signal Synchronization Master Plan**

### **Introduction**

The Regional Traffic Signal Synchronization Program is comprised of a 750-mile regional signal synchronization network with about 2,000 signals. The goals of the program are to improve the flow of traffic on Orange County streets and roads by implementing multi-agency signal synchronization. Local agencies and Caltrans are encouraged to work cooperatively with the Orange County Transportation Authority (OCTA) to synchronize traffic signals throughout Orange County on a corridor basis to improve travel time and reduce stops. Local agencies will maintain local control and responsibility for signals within their jurisdiction and control. Any changes to traffic signals, signal timing equipment, or related signal policies (including transit signal priority, transit preemption, or emergency vehicle preemption) are at the full discretion of the responsible local agency.

### **Regional Traffic Signal Synchronization Master Plan Components**

To ensure that this program is successful, this Regional Traffic Signal Synchronization Master Plan has been developed through local agency discussions, Board of Director guidance and Measure M2 requirements. The Regional Traffic Signal Synchronization Program is composed of the following:

1. Regional signal synchronization network
2. Priority corridors for accelerated signal synchronization
3. Traffic forums
4. Model agreements (presenting roles and responsibilities)
5. Signal synchronization regional assessment

In defining these five elements of the Regional Traffic Signal Synchronization Master Plan, the foundation is set for funding and implementing the competitive Regional Traffic Signal Synchronization Program. The program focuses on higher volume priority corridors for an accelerated signal synchronization effort. It incorporates traffic forums to help implement and maintain signal synchronization along corridors. Model agreements define the roles and responsibilities for local agencies and OCTA resulting in competitively funded projects that successfully meet the goals of the Regional Traffic Signal Synchronization Program.

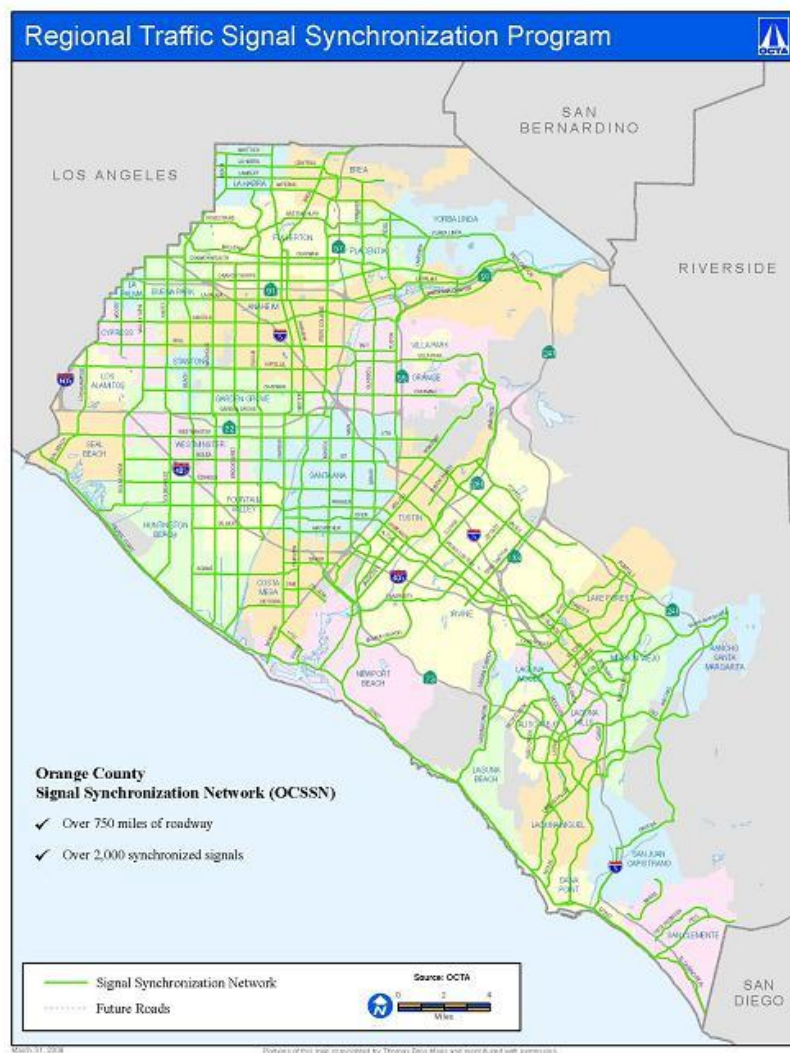
Finally, to ensure compliance with the M2 Ordinance and the promises made to voters to benefit the public from this effort, OCTA will include an element for accountability purposes that will occur through a signal synchronization regional assessment prepared by OCTA every three years. This effort will evaluate performance of the regional signal synchronization network, and identify areas for future improvement. Each of these elements is further discussed below.

## Regional Signal Synchronization Network

The regional signal synchronization network (see below) was defined in the Measure M2 Ordinance No. 3. It is a 750-mile network consisting of approximately 2000 signalized intersections. It is a subset of the Master Plan of Arterial Highways. The Regional Traffic Signal Synchronization Master Plan is designated as an element of the Master Plan of Arterial Highways. Specifically, Measure M2 Ordinance No. 3 includes the following definition of the Master Plan of Arterial Highways:

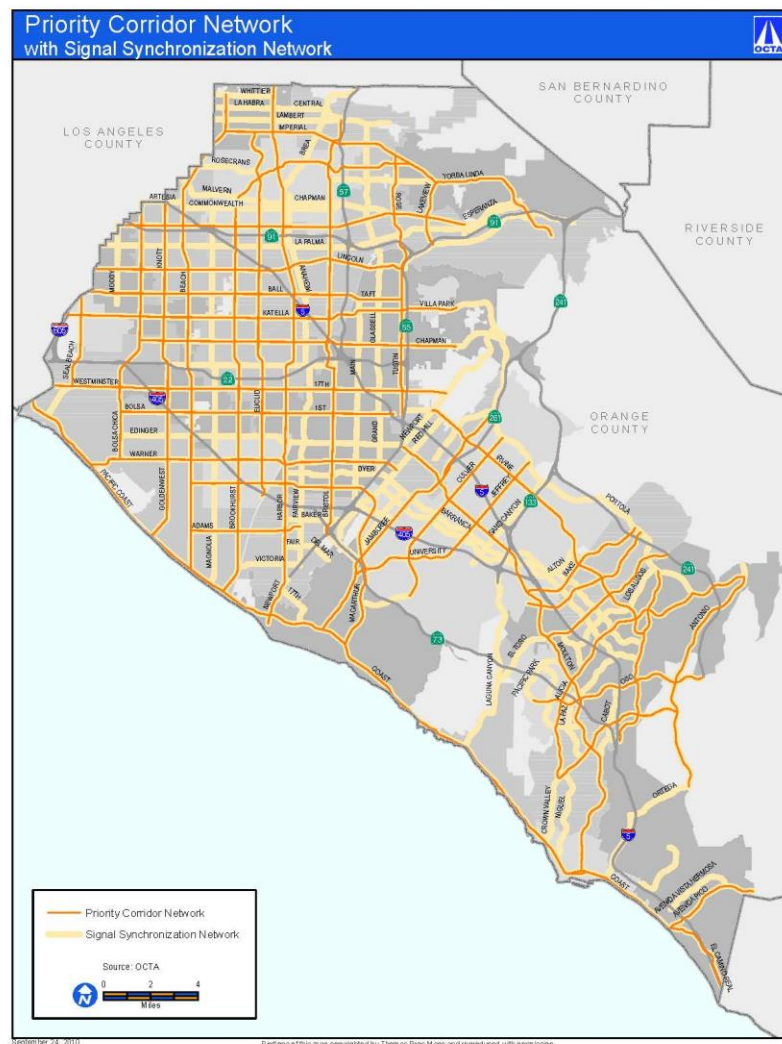
"A countywide transportation plan administered by the Authority defining the ultimate number of through lanes for arterial streets, and designating the traffic signal synchronization street routes in Orange County."

OCTA has a well-defined process for changes to the Master Plan of Arterial. A procedure for updating the 750-mile signal network will be defined in the future and included in the Guidelines for the Master Plan of Arterial Highways. This would allow documentation and approval of changes to the regional signal synchronization network.



## Priority Corridors for Signal Synchronization

Focusing a significant portion of Project P resources to a core set of priority corridors is a main component of the Regional Traffic Signal Synchronization Master Plan. This focused effort will result in a high level of performance along key corridors given the limited resources that are part of the Regional Traffic Signal Synchronization Program. These priority corridors were developed in consultation with and the assistance of the local agencies. They are based on the significance of each route, the traffic volumes, and geographic traffic patterns.



Under this focused effort, signalized intersections along each corridor will be upgraded to provide state of the practice intersection control and associated communications. Optimized timing plans will be developed and implemented along each corridor, aiding movement of the existing traffic patterns. This approach is considered essential to producing an optimized system as early as possible.

The map provides the locations of approximately 36 priority corridors identified along the regional signal synchronization network. These priority corridors reflect key locations for signal synchronization along the signal network. As the Regional Traffic Signal Synchronization Master Plan is implemented through Project P funds, changes to the priority corridors may be made based on results of the regional assessment subject to OCTA's Board of Directors approval.

Priority corridors ensure implementation of optimized signal timing in a systematic manner. These priority corridors will allow the Regional Traffic Signal Synchronization Program to quickly and continually meet its stated purpose of improving the flow of traffic by developing and implementing signal synchronization that cross jurisdictional boundaries. Most importantly, a priority corridor strategy will facilitate consistent operating speeds along key corridors and provide a good level of public perception.

## **Traffic Forums**

Project P is a competitive program designed to implement signal synchronization across multiple jurisdictions. Traffic forums will facilitate the completion of traffic signal synchronization projects. Traffic forums will be working group sessions that include local agencies, the California Department of Transportation (Caltrans), and OCTA. The interaction between cities, Caltrans, and OCTA will help coordinate multiple signal synchronization projects funded through the Regional Traffic Signal Synchronization Program. It will also provide a venue to project participants to express and address concerns.

## **Model Agreements**

The Regional Traffic Signal Synchronization Master Plan includes model agreement terms that set expectations for roles and responsibilities for the implementation of signal synchronization on a project basis. These agreements would be executed following award of Project P funds through a competitive process. It is anticipated that multiple agreements would be developed based on the number of projects funded as part of Project P. A more detailed version of the agreement will be developed and include all local agencies that are identified in the competitive application as well as OCTA.

The model agreement terms help guide the respective roles and responsibilities for the lead agencies, participating agencies, and OCTA. Two versions of the proposed agreements are presented. Option 1 allows the local agencies to implement the synchronized corridors using Project P and local funds while Option 2 authorizes OCTA to implement the synchronized corridors on behalf of the local agencies. The default is Option 1, and local agencies will be required to formally request Option 2.

## **Signal Synchronization Regional Assessment**

To keep the public informed of ongoing signal synchronization efforts, OCTA will prepare a signal synchronization regional assessment every three years. This effort will evaluate status performance of synchronization across agencies along the signal network and identify segments for improvement. An assessment will be prepared based on overall performance for each corridor in the Regional Traffic Signal Synchronization Master Plan; and that assessment will be described using average speed, stops per mile, and the ratio of green signals to red signals. The regional assessment will be presented to the OCTA Board of Directors, provided

to the local agencies, and posted on the internet for review and comment by the public. Results may be used in calls for projects for Project P and changes to the priority corridors.

## **Summary**

Measure M2 Ordinance No. 3 requires that OCTA develop a Regional Traffic Signal Synchronization Master Plan for cross-jurisdictional traffic signal synchronization. Combined with input from local agencies and OCTA's Board of Directors, the Regional Traffic Signal Synchronization Program is described by the following five components:

1. Regional signal synchronization network – provides the basis for signal synchronization
2. Priority corridors – identifies key corridors for accelerated signal synchronization
3. Traffic forums – working group sessions to facilitate continued signal synchronization
4. Model agreements – define roles and responsibilities for signal synchronization
5. Signal synchronization regional assessment – provides triennial evaluation of regional signal synchronization

These five elements of the Regional Traffic Signal Synchronization Program define the process implementing the competitive Regional Traffic Signal Synchronization Program.

## **Exhibits**

- A. Local Agency Lead Model Agreement Terms – Option 1
- B. OCTA Lead Model Agreement Terms – Option 2

**Exhibit A: Local Agency Lead Model Agreement Terms - Option 1****RESPONSIBILITIES OF THE ORANGE COUNTY TRANSPORTATION AUTHORITY:**

The Orange County Transportation Authority agrees to the following responsibilities for the project:

- To provide Project P funds for the project and designated to the lead agency
- To perform outreach activities for the project to communicate major project milestones and results
- To provide oversight in order to maintain inter-jurisdictional traffic signal operational integrity between existing and new projects and operations
- To provide project audits for allowable expenditures and exceptions

**RESPONSIBILITIES OF DESIGNATED LEAD AGENCY:**

Lead agency agrees to the following responsibilities for implementation and funding for the project:

- To manage, procure, and implement the project consistent with the agreed scope of work, schedule, and key milestones
- To interface with the Orange County Transportation Authority and coordinate outreach for the project
- To collect manual intersection movement and automated machine traffic counts.
- To develop new timing plans optimized for signal synchronization
- To provide updated timing plans and traffic count data to the Orange County Transportation Authority and agencies
- To prepare "before" and "after" studies for the project. These studies shall be provided to the agencies and the Orange County Transportation Authority for comment
- To provide the Orange County Transportation Authority with a Project Final Report for the project as required by Measure M2 Ordinance No. 3, Section (B)(III)(9), and further described in Measure M2 Eligibility Guidelines separately prepared and adopted by the Orange County Transportation Authority

**RESPONSIBILITIES OF ALL PROJECT AGENCIES:**

ALL project agencies agree to the following responsibilities for implementation and funding of the project:

- Provide a technical representative from each agency to meet and participate as a member of the project team
- To designate the lead agency for the project for receipt of Project P funds and related matching funds
- To authorize the lead agency to manage, procure, and implement all aspects of the project

- To provide local match or in-kind services for the project in accordance with the 20 percent requirement as identified in the scope of work
- To provide lead agency and the Orange County Transportation Authority all current intersection, local field master, and/or central control system timing plans and related data upon request
- To provide plans, specifications, and estimates to the Orange County Transportation Authority and lead agency or its representative upon request
- To give project related signal and telecommunications equipment a high maintenance priority
- To take reasonable steps to keep signal control systems, inter-tie, detection systems and related equipment in proper working order
- To maintain and repair their own signal control systems inter-tie, detection systems and related equipment located within each of their respective jurisdiction
- To provide all plan check, permit, and construction inspection functions for facilities within their ownership or control
- To provide on-site support, if needed, for timing plan changes and the construction and/or installation of traffic control elements as specified in the scope of work
- To authorize an agency traffic engineer or other designee to make changes or adjustments to the signal timing plans, when required
- To perform the changes required at central or field control locations and/or intersection controller assemblies



## **Exhibit B: The Orange County Transportation Authority Lead Model Agreement Terms - Option 2**

### **RESPONSIBILITIES OF THE ORANGE COUNTY TRANSPORTATION AUTHORITY:**

The Orange County Transportation Authority agrees to the following responsibilities for the project:

- To manage, procure, and implement the project consistent with the agreed budget, scope of work, schedule, and key milestones
- To provide Project P funds for the project
- To interface with the agencies and coordinate outreach for the project
- To collect manual intersection movement and automated machine traffic counts
- To develop new timing plans optimized for signal synchronization
- To provide new timing plans and turning movements to the agencies
- To prepare "before" and "after" studies for the project. These studies shall be provided to the agencies for comment
- To perform outreach activities for the project to communicate major project milestones and results
- To provide project oversight in order to maintain inter-jurisdictional traffic signal operational integrity between existing/legacy and new projects and operations
- To provide project audits for allowable expenditures and exceptions
- To prepare a Project Final Report for each project as required by Measure M2 Ordinance No. 3, Section (B)(III)(9), and further described in Measure M2 Eligibility Guidelines separately prepared and adopted by OCTA

### **RESPONSIBILITIES OF AGENCIES:**

Agencies agree to the following responsibilities for implementation and funding of project:

- Provide a technical representative from each agency to meet and participate as a member of the project team
- To designate OCTA as lead agency for the project for receipt of Project P funds and related matching funds
- To provide local match or in-kind services for the project in accordance with the 20 percent requirement as identified in the scope of work
- To authorize OCTA to manage, procure, and implement all aspects of the project
- To provide OCTA all current intersection, local field master, and/or central control system timing plans and related data upon request
- To give project related signal and telecommunications equipment a high maintenance priority
- To take reasonable steps to keep signal control systems, inter-tie, detection systems and related equipment in proper working

- To provide all plan check, permit, and construction inspection functions for facilities within their ownership or control
- To maintain and repair their own signal control systems inter-tie, detection systems and related equipment located within each of their respective jurisdiction
- To provide on-site support, if needed, for timing plan changes and the construction and/or installation of traffic control elements as specified in the project scope of work
- To authorize an agency traffic engineer or other designee to make changes or adjustments to the signal timing plans, when required
- To perform the changes required at central or field control locations and/or intersection controller assemblies

## **Appendix B:** Local Signal Synchronization Plan Consistency Review Checklist

**Appendix B: Local Signal Synchronization Plan Consistency Review Checklist**

The Local Agency Name: \_\_\_\_\_

Date: \_\_\_\_\_

Local agencies must submit a copy of the updated Local Signal Synchronization Plan, a completed checklist, and any supporting documentation. Complete the table below.

Local Agency Statement	Page(s) #s in LSSP	<del>Yes</del> <u>No</u> <u>Provided or</u> <u>N/A</u>
1. Signal synchronization goals of the agency are consistent with those outlined as part of the Regional Traffic Signal Synchronization Master Plan. Include information on how the traffic signal synchronization street routes and traffic signals may be coordinated with traffic signals on the street routes in adjoining jurisdictions.		
2. Traffic signal synchronization street routes are identified, including all corridors along the regional signal synchronization network located within the local agency.		
3. Traffic signal inventory for all traffic signal synchronization street routes.		
4. Three-year plan separately showing costs, available funding, and phasing for capital, operations, and maintenance of signal synchronization along the traffic signal synchronization street routes and traffic signals.		
5. Signal synchronization review, revision, and assessment of synchronization activities along the traffic signal synchronization street routes and traffic signals.		


I certify that the above statements are true to the best of my knowledge.

\_\_\_\_\_  
Name (Print)\_\_\_\_\_  
Signature\_\_\_\_\_  
Date



***April 3, 2017***

**To:** Regional Planning and Highways Committee

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

**Subject:** Agreement for Regional Modeling-Traffic Operations On-Call Support Staffing

### ***Overview***

Consultant support staffing for traffic engineering services is needed to support the implementation of the Measure M2 Regional Traffic Signal Synchronization Program over the next three years. Proposals have been received and evaluated in accordance with the Orange County Transportation Authority's procurement procedures for professional and technical services. Approval is requested to execute a new agreement for these services.

### ***Recommendations***

- A. Approve the selection of W. G. Zimmerman Engineering, Inc., as the firm to provide on-call support staffing on an as-needed basis for regional modeling-traffic operations.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-6-1493 between the Orange County Transportation Authority and W. G. Zimmerman Engineering, Inc., in the amount of \$400,000, for a two-year initial term through April 30, 2019, with one, two-year option term to provide on-call support staffing on an as-needed basis for regional modeling-traffic operations.

### ***Discussion***

The Orange County Transportation Authority (OCTA) has been designated by the local agencies to administer and lead over 20 regionally significant traffic signal synchronization projects. These 20 projects are currently underway or in early development.

Staff has limited resources to provide this service to local agencies in support of the Regional Traffic Signal Synchronization Program (RTSSP) and requires assistance from an on-call consultant. The contracted support staff, which includes two on-site engineers and off-site support staff, will provide OCTA with adequate coverage and the ability to engage and deliver simultaneous traffic signal synchronization projects to meet the delivery schedules and to assist staff in day-to-day tasks required as part of the signal synchronization projects.

### ***Procurement Approach***

This procurement was handled in accordance with OCTA's Board of Directors (Board)-approved procedures for professional and technical services. Various factors are considered in an award for professional and technical services. The award is recommended to the firm offering the most comprehensive overall proposal considering such factors as staffing and project organization, prior experience with similar projects, work plan, as well as cost and price.

On November 22, 2016, the Request for Proposals (RFP) 6-1493 was issued electronically on CAMM NET. The project was advertised in a newspaper of general circulation on November 22 and 29, 2016. A pre-proposal conference took place on November 29, 2016, with eight attendees representing six firms. Addendum No. 1 was issued to provide a copy of the pre-proposal registration sheet and presentation.

On December 20, 2016, two proposals were received. An evaluation committee comprised of OCTA staff from the Contracts Administration and Materials Management, Strategic Planning, and Transportation Planning departments, as well as external representatives from the cities of Anaheim and Lake Forest met to review all proposals received.

The proposals were evaluated based on the following evaluation criteria and weights.

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

Several factors were considered in developing the criteria weights. Staffing and project organization, as well as work plan were each weighted at 30 percent. The proposed project team needed to demonstrate previous experience in all areas specified in the scope of work, stability with the firm, and sufficient allocation of resources to perform the work. The work plan was also of equal importance as the proposing firm had to demonstrate its understanding of the project

requirements, outline its technical approach to managing the signal synchronization projects with adequate support, and completing traffic-related assignments. The qualifications of the firm were weighted at 20 percent, as the firm must have experience working on similar signal synchronization projects. Cost was weighted at 20 percent to ensure OCTA receives competitive pricing.

On January 17, 2017, the evaluation committee reviewed the proposals received based on the evaluation criteria and conducted interviews with both firms listed below.

Firm and Location

KOA Corporation (KOA)  
Orange, California

W. G. Zimmerman Engineering, Inc. (WGZE)  
Huntington Beach, California

The interviews consisted of a presentation, which focused on the firms' approaches to providing support staffing for regional modeling-traffic operations. The firms' project managers and key team members had an opportunity to present qualifications and respond to the evaluation committee's questions. Questions were asked relative to the RTSSP projects and requirements, experience with transportation software modeling programs, as well as specific clarification questions related to their proposal. After the interviews, the evaluation committee met to complete the evaluation.

At the conclusion of the interviews, firms were requested to submit a best and final offer (BAFO) to provide more competitive pricing as the firms' proposed hourly rates were higher than the rates OCTA currently pays for these services. Both firms made adjustments to their hourly rates.

After considering the responses to the questions asked during the interviews and the information provided in the BAFOs, the evaluation committee reviewed the preliminary ranking and made adjustments to individual scores. However, the overall ranking of the firms did not change as a result of the interviews and BAFOs.

Based on the evaluation of the written proposals, information obtained from the interviews, and BAFOs, the evaluation committee recommends WGZE for consideration of the award. The following is a brief summary of the proposal evaluation results.

---

Qualifications of the Firm

Both firms are qualified and demonstrated experience working on traffic signal synchronization projects.

WGZE is the incumbent firm and has been providing support staffing to OCTA since 2012. The firm has been providing traffic, transportation, and civil engineering services since 1995. The firm is located in the City of Huntington Beach and has 11 employees. WGZE's past work is primarily with public agencies in Southern California, such as the cities of Signal Hill and Mission Viejo, the County of Los Angeles, as well as OCTA. WGZE demonstrated familiarity with OCTA's signal synchronization program and process including funding guidelines, Measure M2 (M2) application reviews, issuing cooperative agreements and contract task orders, as well as agency coordination. The firm proposed to utilize the same subcontractor, Land CM Corp. (Land CM), to provide project management support. Land CM is experienced in managing projects in compliance with M2, state, and federal funding requirements.

KOA was founded in 1987 and provides traffic engineering, transportation planning, and construction management services. Although the firm described relevant experience as it has worked on various traffic signal synchronization-related projects with public agencies, such as OCTA, the cities of Buena Park and Long Beach, KOA lacked familiarity with OCTA's annual Comprehensive Transportation Funding Program (CTFP) Guidelines and experience providing on-site staff support similar in nature to that requested for this project.

Staffing and Project Organization

WGZE proposed two on-site engineers that have an average of three years of experience and have been providing the same support services to OCTA, which includes developing a document control and file management system, providing support in developing corridor projects funded through M2, interagency coordination, and assisting with the execution of cooperative agreements and contract task orders. WGZE proposed the required number of on-site personnel as specified in the scope of work. The proposed junior engineer to provide Roadway Operations and Analysis Database System (ROADS) software support has three years of experience and is familiar with handling ROADS data requests, importing and exporting data from ROADS, and using the ROADS web interface. The project manager has 30 years of experience in project management, traffic signal design, and corridor traffic signal timing.



WGZE's proposed project team demonstrated a broad range of experience and proposed sufficient staff support to OCTA. During the interview, the project team discussed its understanding of RTSSP proficiency with transportation software modeling programs, and OCTA's role as the lead agency. The team provided thorough responses, which assured the evaluation committee of the project team's knowledge and expertise.

KOA proposed an experienced project team. Although two on-site staff are required, the firm proposed only one on-site engineer. The individual has four years of experience, which includes signal design and synchronization projects, planning studies, and funding applications. The same individual is also proposed to provide ROADS support. The proposed project manager has 24 years of transportation engineering and planning experience, and has worked on multiple OCTA projects. During the interview, the project team demonstrated its knowledge related to traffic signal synchronization projects and transportation software modeling programs, but demonstrated limited knowledge of the annual CTFP Guidelines, which is an important part of the RTSSP projects.

#### Work Plan

WGZE presented a comprehensive work plan that addressed all elements of the scope of work. The firm demonstrated a clear understanding of the project requirements and discussed its approach to meeting those objectives. The firm described its management approach, which includes holding bi-monthly project meetings, maintaining a project schedule, monitoring the budget, and providing quality assurance. The on-site staff will provide the traffic engineering support, including assisting local agencies with project requirements, managing project-related contracts, and administering database management. WGZE also discussed staff's responsibilities in providing civil and traffic design services as needed, such as maintaining the ROADS database, performing field inspections related to signal design, construction, and operations, and using transportation software modeling programs like VISTRO, Synchro, and Tru-Traffic.

KOA's work plan demonstrated an understanding of the project requirements. The firm discussed the tasks to be performed by the on-site engineer, its project management approach, and services to be provided by professional and engineering staff. The firm also proposed applying automated tools developed to streamline tasks for the various software programs, such as Synchro, ArcGIS, and Excel. However, the evaluation committee had concerns regarding the on-site engineer's ability to complete all tasks that should be allocated among three individuals, as identified in the scope of work.

Cost and Price

Pricing scores were based on a formula that assigns the highest score to the firm with the lowest weighted average hourly rate, and scores the other proposals' weighted average hourly rates based on their relation to the lowest weighted average hourly rate. WGZE proposed a lower weighted average hourly rate and scored higher than KOA. However, KOA's weighted average hourly rate was competitive.

Procurement Summary

Based on the evaluation of the written proposals, the firms' qualifications, as well as information obtained from the interviews and BAFOs, the evaluation committee recommends the selection of WGZE as the top-ranked firm to provide support staffing for regional modeling-traffic operations. WGZE delivered a comprehensive proposal and an interview that was responsive to the requirements of the RFP.

Fiscal Impact

This project was approved in OCTA's Fiscal Year 2016-17 Budget, Planning Division, Accounts 0017-7519-SP001-P33 and 0017-7519-SP001-P2U, and is funded through the Orange County Local Transportation Authority.

***Summary***

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Agreement No. C-6-1493 between OCTA and WGZE, in the amount of \$400,000, for a two-year initial term, effective through April 30, 2019, with a one two-year option term, to provide on-call support staffing in support of OCTA-led signal synchronization projects.

***Attachments***

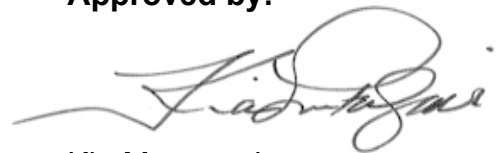
- A. Review of Proposals - Request for Proposals 6-1493 Regional Modeling - Traffic Operations Support Staffing
- B. Proposal Evaluation Criteria Matrix - Request for Proposals 6-1493 Regional Modeling - Traffic Operations Support Staffing
- C. Contract History for the Past Two Years - Request for Proposals 6-1493 - Regional Modeling - Traffic Operations Support Staffing

**Prepared by:**



Ronald Keith  
Project Manager III  
Regional Modeling, Traffic Operations  
(714) 560-5990

**Approved by:**



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



Virginia Abadessa  
Director, Contracts Administration and  
Materials Management  
(714) 560-5623

**Review of Proposals**  
**Request for Proposals 6-1493 Regional Modeling-Traffic Operations Support Staffing**

Two Firms Proposed, Two Firms were Interviewed, One Firm is being Recommended

Presented to Regional Planning and Highways Committee on April 3, 2017

Overall Ranking	Proposal Score	Firm and Location	Sub-Contractors	Evaluation Committee Comments	Weighted Average Hourly Rate
1	92.8	<b>W. G. Zimmerman Engineering, Inc.</b> Huntington Beach, California	Land CM Corp.	Highest-ranked firm overall - strong proposal. Excellent qualifications and extensive applicable traffic signal synchronization experience. Proposed the same project team as current contract. Proposed two on-site engineers. Proposed project team has broad range of experience and sufficient staff support. Detailed approach for providing support staff to regional modeling - traffic operations. Demonstrated a clear understanding of the project requirements. Discussed staff's responsibilities. Presented well and answered questions thoroughly during the interview. Excellent references with positive comments. Proposed lower weighted average hourly rate.	\$104
2	73.4	<b>KOA Corporation</b> Orange, California	None	Excellent proposal. Great qualifications with traffic signal synchronization experience. Previously assisted OCTA with ROADS support. Proposed a knowledgeable and experienced project team. Proposed one engineer to complete on-site tasks and provide ROADS support. Understood project objectives and discussed approach. Developed automated tools to streamline tasks for traffic-related software programs. Positive feedback from references. Proposed competitive weighted average hourly rate.	\$126

**Evaluation Panel:**

Internal:

Contracts Administration and Materials Management (1)  
Strategic Planning (1)  
Transportation Planning (1)

External:

City of Anaheim (1)  
City of Lake Forest (1)

**Proposal Criteria**

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

**Weight Factors**

20 percent  
30 percent  
30 percent  
20 percent

OCTA - Orange County Transportation Authority

ROADS - Roadway Operations and Analysis Database System

**PROPOSAL EVALUATION CRITERIA MATRIX****Request for Proposals 6-1493 Regional Modeling - Traffic Operations Support Staffing**

<b>W. G. Zimmerman Engineering, Inc.</b>							
<b>Evaluator Number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Weights</b>	<b>Overall Score</b>
<b>Qualifications of Firm</b>	<b>5.0</b>	<b>5.0</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>4</b>	<b>18.8</b>
<b>Staffing/Project Organization</b>	<b>4.5</b>	<b>4.5</b>	<b>4.0</b>	<b>4.5</b>	<b>4.0</b>	<b>6</b>	<b>25.8</b>
<b>Work Plan</b>	<b>5.0</b>	<b>5.0</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>6</b>	<b>28.2</b>
<b>Cost and Price</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>4</b>	<b>20.0</b>
<b>Overall Score</b>	<b>97.0</b>	<b>97.0</b>	<b>89.0</b>	<b>92.0</b>	<b>89.0</b>		<b>92.8</b>

<b>KOA Corporation</b>							
<b>Evaluator Number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Weights</b>	<b>Overall Score</b>
<b>Qualifications of Firm</b>	<b>4.0</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>4</b>	<b>14.4</b>
<b>Staffing/Project Organization</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>3.0</b>	<b>3.0</b>	<b>6</b>	<b>21.6</b>
<b>Work Plan</b>	<b>4.0</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.0</b>	<b>6</b>	<b>21.0</b>
<b>Cost and Price</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>4</b>	<b>16.4</b>
<b>Overall Score</b>	<b>80.4</b>	<b>75.4</b>	<b>75.4</b>	<b>69.4</b>	<b>66.4</b>		<b>73.4</b>

**Contract History for the Past Two Years**  
**Request for Proposals 6-1493 - Regional Modeling-Traffic Operations Support Staffing**


Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
<b>W. G. Zimmerman Engineering, Inc.</b>						
Contract Type: Time-and-Expense	C-4-1581	Consultant Services for Comprehensive Transportation Funding Program Final Report and Field Review	September 25, 2014	September 10, 2017		\$ 117,500
Subconsultants: None						
Contract Type: Time-and-Expense	C-5-3412	Regional Modeling - Traffic Operations Support Staffing	August 10, 2015	July 31, 2017		\$ 325,000
Subconsultants:						
Land CM Corp.						
Contract Type: Time-and-Expense	C-5-3275	Roadway Operations and Analysis Database System Request Assistance and Maintenance	May 14, 2015	March 31, 2017		\$ 50,000
Subconsultants: None						
Contract Type: Time-and-Expense	C-3-2100	Consultant Services to Support Regional Modeling Traffic Operations Projects	February 13, 2014	February 10, 2017		\$ 249,000
Subconsultants:						
Land CM Corp.						
Contract Type: Time-and-Expense	C-2-1431	Consultant Services for Regional Modeling Traffic Operations	July 27, 2012	August 31, 2015		\$ 287,454
Subconsultants:						
Land CM Corp.						
Contract Type: Time-and-Expense	C-2-1365	Streets and Roads Projects - Field Verifications and Final Report Review Services	August 21, 2012	June 30, 2015		\$ 149,500
Subconsultants: None						
<b>Sub Total</b>						<b>\$ 1,178,454</b>
<b>KOA Corporation</b>						
Contract Type: Time-and-Expense	C-3-1521	On-Call Transportation Planning Support Service:	September 3, 2013	June 30, 2017		\$ 600,000
Subconsultants:						
CH2M Hill						
KTU+A						
Ave Solutions LLC						
Contract Type: Firm-Fixed	C-3-2142	Consultant Services for Orange County Intersection Assessment Study	February 26, 2014	August 31, 2015		\$ 148,180
Subconsultants:						
National Data and Surveying Service						
Contract Type: Firm-Fixed	C-3-1732	Bikeways Strategy and Feasibility Studies for Supervisorial District 5	August 28, 2013	June 30, 2015		\$ 296,060
Subconsultants:						
KTU+A						
<b>Sub Total</b>						<b>\$ 1,044,240</b>

ATTACHMENT C



**April 3, 2017**

**To:** Regional Planning and Highways Committee

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

**Subject:** Three-Year Agreement with the Center for Demographic Research at California State University, Fullerton from Fiscal Year 2017-18 to Fiscal Year 2019-20

### **Overview**

Orange County's demographic projections are developed with the Center for Demographic Research at California State University, Fullerton. A recommendation to continue this effort through a multi-agency funding agreement is provided for review and approval.

### **Recommendation**

Authorize the Chief Executive Officer to negotiate and execute a three-year agreement through fiscal year 2019-20, in an amount not to exceed \$282,006, with the Center for Demographic Research at California State University, Fullerton.

### **Background**

Since 1996, the Orange County Transportation Authority (OCTA) and other agencies have jointly funded the Center for Demographic Research (CDR) at California State University, Fullerton for the preparation of demographic projections for use in various planning activities. Agencies use the demographic projections prepared by CDR as input into the Southern California Association of Government's (SCAG's) Regional Transportation Plan process, infrastructure planning, and travel-demand forecasting.

CDR is sponsored by OCTA, the County of Orange, Orange County Council of Governments, Transportation Corridor Agencies, Orange County Sanitation District, Municipal Water District of Orange County, Orange County Water District, SCAG, and the Orange County Local Agency Formation Commission.

The proposed agreement would extend the services provided by CDR through fiscal year (FY) 2019-20, and was developed jointly by all the sponsor representatives.

### ***Discussion***

The proposed three-year agreement would extend the professional services provided by CDR through FY 2019-20. As part of the agreement, CDR will develop the 2018 Orange County Projections (OCP), which are baseline and future projections for Orange County, including population, housing, and employment. The population, housing, and employment variables will be expanded to 14 travel-demand forecasting variables covering almost 2,000 traffic analysis zones for input into travel forecasting models, including the Orange County Transportation Analysis Model. Further, the 2018 OCP will be used in the development of the Orange County growth forecast for the 2020 SCAG Regional Transportation Plan/Sustainable Communities Strategy and OCTA's development of its next Long-Range Transportation Plan. Each local agency is directly involved in demographic data development with CDR, and this "bottom up" approach has worked well in addressing issues early in the process. The agreement also supports other important CDR activities, including the preparation of the annual Orange County Progress Report.

The proposed three-year agreement with CDR and other agencies continues this cooperative effort for FY 2017-18 to 2019-20. OCTA's financial commitment for this agreement would be \$282,006. The proposed agreement reflects cost increases from previous years due to scheduled minimum wage and other increases, and updated healthcare costs in addition to delivery of the work program. Funding for this agreement shall be included in the OCTA FY 2017-18 Budget, Planning Division, Account No. 0017-7519-M0201-F5F.

### ***Summary***

A recommendation for a proposed agreement with the Center for Demographic Research at California State University, Fullerton is presented for review and approval. With approval, staff will finalize and execute the agreement covering 2018 Orange County Projections demographic forecasting activities.



***Attachment***

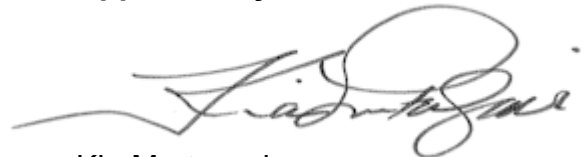
- A. Memorandum of Understanding by and between Orange County Interests and CSU Auxiliary Services Corporation for the Continued Operation of The Center For Demographic Research At California State University, Fullerton

**Prepared by:**



Anup Kulkarni  
Section Manager, Regional Modeling  
(714) 560-5867

**Approved by:**



Kia Mortazavi  
Executive Director, Development  
(714) 560-5471

**MEMORANDUM OF UNDERSTANDING**  
**by and between**  
**ORANGE COUNTY INTERESTS**  
**and**  
**CSU FULLERTON AUXILIARY SERVICES CORPORATION**  
**for the**  
**CONTINUED OPERATION OF THE CENTER FOR DEMOGRAPHIC RESEARCH**  
**AT CALIFORNIA STATE UNIVERSITY, FULLERTON**

This Memorandum of Understanding (“MOU”) is entered into between the County of Orange, Transportation Corridor Agencies, Orange County Sanitation District, Orange County Transportation Authority, Municipal Water District of Orange County, Orange County Water District, Orange County Council of Governments, and Southern California Association of Governments (“SPONSORS”); the Orange County Local Agency Formation Commission (“CONTRIBUTING PARTNERS”) and the CSU Fullerton Auxiliary Services Corporation, (“ASC”), which is a 501 (c)3 California corporation organized under California law as an auxiliary organization of California State University, Fullerton (“CSUF”). This MOU is for the development of demographic data and related support products. Obligations and rights specified for CSUF in the MOU shall be exercised by the ASC.

**WHEREAS**, the development of demographic and related information for Orange County is a vital data source used for a wide range of local, subregional and regional applications, including, transportation infrastructure planning, facilities planning and timing, development of fee programs, bond revenue stream analysis, general planning and other applications; and

**WHEREAS**, a number of primary users of data in Orange County have recognized the benefit of having a local area expertise in developing demographic projections and associated products; and

**WHEREAS**, these SPONSORS, CONTRIBUTING PARTNERS, and California State University, Fullerton agree on the importance of having a single entity in Orange County developing demographic products and providing such products to data users; and

**WHEREAS**, these agencies also desire to establish a long-term process which allows each individual agency participation in the development and review of demographic products; and

**WHEREAS**, the Center for Demographic Research (“CDR”) located at CSUF provides an opportunity to place demographic activities in a setting that accomplishes SPONSORS’ and CONTRIBUTING PARTNERS’ objectives and provides augmented educational opportunities for CSUF; and

**WHEREAS**, CSUF will be listed as a “SPONSOR” based upon their financial contribution as outlined in the budget in Attachment 1 and in-kind contributions for the balance of the remaining Sponsor seat; and

**WHEREAS**, the SPONSORS and CSUF have worked cooperatively in supporting and organizing the Center for Demographic Research for eighteen years and wish to continue their cooperation; and

**WHEREAS**, the CONTRIBUTING PARTNERS wish to participate in supporting the Center for Demographic Research beginning in Fiscal Year 2017/2018; and

**NOW, THEREFORE, IT IS RESOLVED** that the **SPONSORS, CONTRIBUTING PARTNERS**, and the **ASC** agree as follows:

I. The SPONSORS and CONTRIBUTING PARTNERS will fund the CDR for the next three years, subject to an annual review and two one-year options by the SPONSORS and CONTRIBUTING PARTNERS, for an annual total fee as set forth in Item IV below and Attachment 1.

II. Process and Structure

A. Orange County Projections

The Orange County Council of Governments (“OCCOG”) will be responsible for the approval of the Orange County Projections at the Regional Statistical Area level and subsequent to that action the County of Orange will approve the Orange County Projections. The OCCOG will work with CDR staff to integrate the Orange County Projections as approved into the Southern California Association of Governments (“SCAG”) Regional Growth Forecast. Sponsors will make good faith efforts to use the Orange County Projections data in all future forecasting and planning efforts.

B. Management Oversight

The Management Oversight Committee (“MOC”) shall meet at least four (4) times each year to (1) consider policy matters associated with the operations of the Center for Demographic Research, (2) review products status and activities which are part of the core Work Program, (3) review the Center for Demographic Research’s financial status and status of annual MOU signatures, (4) set CDR budget and modify staff salaries funded by this MOU (5) consider requests from additional agencies wishing to become sponsors or contributing partners, (6) modify budget and work program upon addition or termination of a sponsor or contributing partner, (7) address other matters vital to the function of the Center for Demographic Research, and (8) undertake additional tasks as requested by the SPONSORS.

The Management Oversight Committee will be comprised of staff representing the SPONSORS, CONTRIBUTING PARTNERS and CSUF. Each SPONSOR will have one voting member of equal standing on the Management Oversight Committee including one member jointly representing the Municipal Water District of Orange County and the Orange County Water District; each CONTRIBUTING PARTNER will have one non-voting Ex-Officio member. The designees from each

SPONSOR, CONTRIBUTING PARTNER, and the university shall be named by July 1 of each year. An organization may also designate an individual(s) to serve as an alternate member of the Management Oversight Committee. The committee chair and vice-chair will be elected for a three-year term.

C. Technical Oversight:

The Technical Advisory Committee (“TAC”) provides technical guidance and input into the development of each product produced under this MOU before they are reviewed by the Management Oversight Committee. The Technical Advisory Committee advises the Director of the Center for Demographic Research, as well as reports to the Management Oversight Committee. The Committee will include one voting representative from each SPONSOR including a member representing the Municipal Water District of Orange County and the Orange County Water District; each CONTRIBUTING PARTNER will have one non-voting Ex-Officio member. University participation on the Technical Advisory Committee will include at least one voting member from CSUF, and one voting member each from the University of California, Irvine and Chapman University. The Director of the Center for Demographic Research will coordinate with research centers at these universities to ensure data consistency. The designees from each SPONSOR, CONTRIBUTING PARTNER, and agency shall be named by July 1 of each year. The committee chair and vice-chair will be elected for a three-year term.

The Technical Advisory Committee shall schedule at least four (4) meetings each year. It will (1) provide a report to the Management Oversight Committee summarizing its meetings, (2) provide advice on the approach, techniques, data sources and methods used to develop new products, (3) facilitate the acquisition of data necessary to produce products, (4) provide suggestions on the interpretation and analysis incorporated into deliverables, (5) provide input on assumptions for the development of the growth projections, (6) provide review of deliverables prior to approval by the Management Oversight Committee and (7) undertake other tasks as identified by the Management Oversight Committee.

D. Transportation Modeling Data

The Orange County Transportation Authority (“OCTA”) will be responsible for the approval of all transportation modeling variables used in the Orange County Transportation Analysis Model (“OCTAM”) at the Traffic Analysis Zone level. The transportation modeling variables shall be consistent with the Orange County Projections, as approved by the Orange County Council of Governments and the County of Orange at the Regional Statistical Area Level. The OCTA and SCAG will exercise user agreements for their consultants to access the transportation modeling variables.

### III. Duration and Terminations

This agreement will become effective upon execution and ends on June 30, 2020. A review of the performance of the Center for Demographic Research in meeting its obligations under this MOU will be conducted by the Management Oversight Committee throughout the term July 2017 through June 2020. This MOU may be extended and/or amended by mutual agreement of all signatories.

A party may terminate its participation under this MOU by giving each of the other parties sixty (60) days written notice thereof. Upon said notice of termination, the SPONSOR or CONTRIBUTING PARTNER terminating its participation shall pay the balance of fees owed by the SPONSOR or CONTRIBUTING PARTNER for that given fiscal year. Each fiscal year, the SPONSORS and CONTRIBUTING PARTNERS shall review and approve in writing the MOU, work program, and funding arrangement. Such written approval shall constitute a SPONSOR'S or CONTRIBUTING PARTNER'S agreement to participate in this Agreement. In the event that ASC wishes to terminate its participation, it shall reimburse the SPONSORS and CONTRIBUTING PARTNERS any advance payments, less an amount to cover expenses related to work in progress and less costs reasonably necessary to effect such termination. If a party wishes to withdraw from the agreement, said notice shall be affected by delivery of such notice in person or by depositing said notice in the United States mail, registered or certified mail, return receipt required, postage prepaid.

### IV. Funding and Schedule

Respective fees shall be as follows for the following fiscal year:

<b>Payment Schedule for 2017-2020</b>	<b>2017-2018</b>	<b>2018-2019</b>	<b>2019-2020</b>	<b>Three Year Total</b>
Orange County Transportation Authority	\$87,605.14	\$94,088.52	\$100,311.60	\$282,005.26
County of Orange	\$87,605.14	\$94,088.52	\$100,311.60	\$282,005.26
Orange County Council of Governments	\$87,605.14	\$94,088.52	\$100,311.60	\$282,005.26
Orange County Sanitation District	\$87,605.14	\$94,088.52	\$100,311.60	\$282,005.26
Transportation Corridor Agencies	\$87,605.14	\$94,088.52	\$100,311.60	\$282,005.26
Southern California Association of Governments	\$87,605.14	\$94,088.52	\$100,311.60	\$282,005.26
Municipal Water District of Orange County	\$43,802.57	\$47,044.26	\$50,155.80	\$141,002.63
Orange County Water District	\$43,802.57	\$47,044.26	\$50,155.80	\$141,002.63
Orange County Local Agency Formation Commission	\$16,000.00	\$16,000.00	\$16,000.00	\$48,000.00
<b>TOTAL</b>	<b>\$629,235.98</b>	<b>\$674,619.64</b>	<b>\$718,181.20</b>	<b>\$2,022,036.82</b>

Payments shall be made in accordance with invoicing policies of the ASC according to the schedule below. SPONSORS and CONTRIBUTING PARTNERS will be invoiced at the beginning of each quarter. Quarterly payments equal to 25% of the annual fees shall follow invoices submitted according to the calendar below:

Fiscal Year 2017/2018:	July 2017, October 2017, January 2018, April 2018
Fiscal Year 2018/2019:	July 2018, October 2018, January 2019, April 2019
Fiscal Year 2019/2020:	July 2019, October 2019, January 2020, April 2020

SPONSORS and CONTRIBUTING PARTNERS shall pay one-quarter of their annual fees upon receipt of said invoices or may prepay for an entire fiscal year. Prepayment does not imply a discounted rate.

V. Administrative Representatives

A. The Principal Investigator for the operations and management of the Center for Demographic Research and the conduct of this MOU is Deborah Diep, Director. The Assistant Director, Scott Martin, will serve as the Principal Investigator in the Director's absence. They are authorized to negotiate supplemental services with the SPONSORS, CONTRIBUTING PARTNERS, and Non-sponsors as noted in Section VII. Denise Bell, Director, ASC Office of Sponsored Programs, is designated as the administrative representative for the ASC. Should the Principal Investigators become unavailable for any reason, no other Principal Investigator shall be chosen by CSUF or the ASC without the approval of the SPONSORS. Furthermore, the ASC agrees that the Management Oversight Committee shall make the recommendation on the selection of the Director or interim Director of the Center for Demographic Research and no Director or interim Director shall be appointed without approval of the Management Oversight Committee. The Management Oversight Committee will serve as the search committee if a search committee for the Director is required by the ASC.

B. Equipment and furniture purchased by ASC under the terms of this MOU shall remain the property of the SPONSORS. In the event that the Center for Demographic Research is disbanded, the equipment remains the property of the SPONSORS and the Management Oversight Committee shall determine its disposition.

C. Databases and applications developed and maintained for the Center for Demographic Research purposes shall remain under control of the SPONSORS. In the event that Center for Demographic Research is relocated from CSUF, all Center for Demographic Research functions and designations shall accompany the Center for Demographic Research.

VI. Additional Sponsorships and Revenues

Other agencies and entities can become sponsors or contributing partners of the Center for Demographic Research with unanimous agreement among the SPONSORS as determined by a vote of the Management Oversight Committee. Adjustments in sponsor fees found necessary resulting from the addition of sponsors shall be determined by the

Management Oversight Committee with consultation from the Center for Demographic Research Principal Investigators.

The disposition of additional revenues generated through additional sponsors, and the sale of products and services to non-sponsors shall be determined by the Management Oversight Committee. The additional funds shall be prorated according to the respective sponsor fee. SPONSORS shall have the option of expending their share of the additional funds on CDR activities, products or equipment or having the funds returned to the SPONSORS at the end of the fiscal year.

## VII. Products and Deliverables

- A. The Center for Demographic Research will produce the identified core Demographic Products and Services as described in Attachment 2 and listed in Attachment 3. Each SPONSOR will receive ten (10) copies in printed form and one (1) copy of estimates and projections in electronic form.
- B. The SPONSORS and CONTRIBUTING PARTNERS have the right to request supplemental products and support services from the Center for Demographic Research through a purchase order. Projects above the amount of \$25,000 shall be approved by the ASC. Such purchases may be entered into if the SPONSOR or CONTRIBUTING PARTNER agrees to pay ASC all additional costs resulting from the additional products or services, including an indirect cost of 26%, and if the activities do not interfere with the normal functioning of the CDR. If requests for additional products or services require interference with the normal functioning of the CDR as determined by the Management Oversight Committee or additional resources from the CDR's basic budget the proposal for such products and services will be forwarded to the Management Oversight Committee for their advice and consent prior to finalization of the agreement. In all cases, supplemental work for SPONSORS and CONTRIBUTING PARTNERS shall be assessed indirect costs of 26%.
- C. Non-sponsors can contract with the Center for Demographic Research through the ASC for its services or obtain supplemental products and support services from the Center for Demographic Research through a Non-sponsor purchase order. A list of these projects will be submitted to the MOC on a quarterly basis. If the Director assesses a proposed project contains a conflict of interest, conflict of time commitment, or interference with the normal functioning of CDR, the Management Oversight Committee will be informed of the request for services and will review it for any potential conflicts. The Director shall notify the Management Oversight Committee of any such proposed agreement and provide the committee with draft text and budget, before the intended start of work. The Management Oversight Committee shall review the proposed project for possible conflicts of interests, conflicts of time commitment, and budgetary adequacy. The Management Oversight Committee may at its discretion impose a surcharge of funds to be used at its discretion. Action on these matters may be taken only with the concurrence of

a majority of the members of the Management Oversight Committee and all such supplemental work for Non-sponsors shall be assessed normal indirect costs of 26%.

- D. Use of revenues generated by the sale of products produced by the Center for Demographic Research shall be determined by the Management Oversight Committee. A quarterly report on product sales will be presented to the Management Oversight Committee.
- E. Additional projects should not adversely affect the schedule of deliverables unless otherwise agreed to by the Management Oversight Committee.

#### VIII. Sponsorship

This Agreement shall be signed by all SPONSORS and CONTRIBUTING PARTNERS by June 30, 2017 with the exception of the Southern California Association of Governments. The Southern California Association of Governments shall sign this Agreement by September 30, 2017. If all SPONSORS and CONTRIBUTING PARTNERS listed in Section XVIII do not sign by September 30, 2017, the work program and budget will be modified to reflect the committed funding. If any SPONSOR or CONTRIBUTING PARTNER does not sign this Agreement, the funding amounts of the remaining SPONSORS and CONTRIBUTING PARTNERS will not change. The remaining SPONSORS and CONTRIBUTING PARTNERS are not required to make up the difference in the reduced budget. Any SPONSOR or CONTRIBUTING PARTNER listed as an ORANGE COUNTY INTEREST that does not sign this Agreement forfeits all rights, services, and privileges as a CDR SPONSOR or CONTRIBUTING PARTNER unless otherwise negotiated. A formal status report on execution will be delivered at each Management Oversight Committee meeting until all SPONSORS and CONTRIBUTING PARTNERS sign this Agreement.

#### IX. Liability and Insurance

Each party to this MOU hereby assumes any and all risks for personal injury and property damage attributable to the negligent acts or omissions of that party and the officers, employees, and agents thereof. ASC warrants that it has adequate Worker's Compensation Insurance and liability insurance for its own employees. The ASC, the SPONSORS (the County of Orange, Transportation Corridor Agencies, Orange County Sanitation District, Orange County Transportation Authority, Municipal Water District of Orange County, Orange County Water District, Orange County Council of Governments, and Southern California Association of Governments), and the CONTRIBUTING PARTNERS (the Orange County Local Agency Formation Commission) agree to indemnify and hold each other, their respective officers, employees, students, agents, harmless from and against all liability, loss, expense (including reasonable attorney's fees), or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorney's fees, or claims for injury or damages are caused by or result



from negligent or intentional acts or omissions of the indemnifying party, its officers, employees, students or agents.

X. Independent Contractor

In the performance of all services and obligations under this agreement, SPONSORS, CONTRIBUTING PARTNERS, and ASC shall act as independent contractors. None shall be considered an employee or agent of the other.

XI. Use of Names

SPONSORS and CONTRIBUTING PARTNERS agree not to use the names of the ASC or CSUF in any commercial connection with work performed under this Agreement without prior written permission from the ASC. SPONSORS and CONTRIBUTING PARTNERS may use said names in ordinary internal business reports concerning this Agreement and may use the names of the Center for Demographic Research and the Principal Investigators in non-commercial publicity announcing the results of the project.

ASC agrees not to use the names of SPONSORS and/or CONTRIBUTING PARTNERS in any commercial connection with this work without prior written permission from SPONSORS and/or CONTRIBUTING PARTNERS. ASC may use SPONSORS' and/or CONTRIBUTING PARTNERS' name in ordinary internal business reports concerning this agreement and in non-commercial publicity announcing the awarding of the contract.

The provisions of this Section of the Agreement shall survive for two (2) years beyond any termination date specified in Section III or any extension thereof.

XII. Force Majeure

SPONSORS, CONTRIBUTING PARTNERS, and ASC shall not be liable or deemed to be in default for any delay or failure in performance under this Agreement or interruption of services resulting, directly or indirectly, from acts of God, civil or military authority, acts of public enemy, strikes, labor disputes, or any similar cause beyond the reasonable control of SPONSORS, CONTRIBUTING PARTNERS, or ASC, provided the affected party notifies the other party of the delay in writing within ten days of the onset of the delay.

XIII. Assignment

This Agreement shall inure to the benefit of and be binding upon and enforceable by the parties and their successors and permitted assigns. However, neither party may assign any of its rights or obligations under this Agreement without the prior written consent of the other.

#### XIV. Modification and Waiver

None of the terms of the Agreement may be waived or modified except by an express agreement in writing signed by SPONSORS, CONTRIBUTING PARTNERS, and ASC. Modifications not documented in writing cannot be enforced. The failure or delay of either party in enforcing any of its rights under this Agreement shall not be deemed a continuing waiver or a modification by such party of such right.

#### XV. Governing Law

The validity and interpretation of this Agreement shall be governed by the laws of the State of California.

#### XVI. Federal Statutes Relating to Nondiscrimination

ASC will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S. C. sections 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S. C. section 794), which prohibits discrimination on the basis of handicaps; (d) Age discrimination Act of 1975, as amended (42 U.S.C. sections 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970 (P.O. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) sections 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-d and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. section 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (I) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirement of any other federal nondiscrimination statute(s) which may apply to the application.

#### XVII. Notices

Notices under this agreement shall be considered to be given if delivered by first class mail to the following addresses:

For SPONSORS:

Carolyn McInerney  
County of Orange  
10 Civic Center Plaza, 3rd Floor  
Santa Ana, CA 92701

Marnie O'Brien Primmer  
Orange County Council of Governments  
c/o Marika Poynter, Irvine Planning Department  
One Civic Center Plaza  
Irvine, CA 92623-9575

James D. Herberg  
Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92738-8127

Kurt Brotcke  
Orange County Transportation Authority  
550 S. Main Street  
2nd Floor, Suite 220  
Orange, CA 92613-1584

Hasan Ikhata  
Southern California Association of Governments  
c/o Joann Africa, SCAG Counsel  
818 West Seventh Street, 12<sup>th</sup> Floor  
Los Angeles, CA 90017-3435

Valarie McFall  
Transportation Corridor Agencies  
125 Pacifica, Suite 100  
Irvine, CA 92618-3304

Robert Hunter  
Municipal Water District of Orange County  
18700 Ward Street  
Fountain Valley, CA 92728

Michael R. Markus  
Orange County Water District  
18700 Ward Street  
Fountain Valley, CA 92728-8300

**For CONTRIBUTING PARTNERS:**

Carolyn Emery  
Orange County Local Agency Formation Commission  
2677 N. Main Street, Suite 1050  
Santa Ana, CA 92705

For CSU FULLERTON AUXILIARY SERVICES CORPORATION

Denise Bell, Director, Sponsored Programs  
CSU Fullerton Auxiliary Services Corporation  
1121 N. State College Blvd.  
Fullerton, CA 92831-3014

XVIII. Execution

**IN WITNESS THEREOF**, the SPONSORS, CONTRIBUTING PARTNERS, and the ASC have executed this Agreement on the date first herein written. This Agreement is to be signed in counter parts.

**For the CSU Fullerton Auxiliary Services Corporation:**

\_\_\_\_\_  
Frank Mumford, Executive Director

\_\_\_\_\_  
Date

**For the County of Orange:**

\_\_\_\_\_  
Frank Kim, County Executive Officer

\_\_\_\_\_  
Date

**For the Orange County Council of Governments:**

\_\_\_\_\_  
Marnie O'Brien Primmer, Executive Director

\_\_\_\_\_  
Date

**For the Orange County Sanitation District:**

\_\_\_\_\_  
James D. Herberg, General Manager

\_\_\_\_\_  
Date

**For the Orange County Transportation Authority:**

\_\_\_\_\_  
Darrell Johnson, Chief Executive Officer

\_\_\_\_\_  
Date

**For the Southern California Association of Governments:**

\_\_\_\_\_  
Hasan Ikhata, Executive Director

\_\_\_\_\_  
Date

**For the Foothill/Eastern Transportation Corridor Agency:**

\_\_\_\_\_  
Michael Kraman, Chief Executive Officer

\_\_\_\_\_  
Date

**For the San Joaquin Hills Transportation Corridor Agency:**

\_\_\_\_\_  
Michael Kraman, Chief Executive Officer

\_\_\_\_\_  
Date

**For the Municipal Water District of Orange County:**

\_\_\_\_\_  
Wayne Osborne, President of the Board

\_\_\_\_\_  
Date

\_\_\_\_\_  
Robert Hunter, General Manager

\_\_\_\_\_  
Date

**For the Orange County Water District:**

\_\_\_\_\_  
Denis R. Bilodeau, P.E., President

\_\_\_\_\_  
Date

\_\_\_\_\_  
Michael R. Markus, General Manager

\_\_\_\_\_  
Date

**For the Orange County Local Agency Formation Commission:**

\_\_\_\_\_  
Derek J. McGregor, Chair

\_\_\_\_\_  
Date

**For the California State University, Fullerton:**

\_\_\_\_\_  
Danny C. Kim, Vice President for  
Administration & Finance/CFO

\_\_\_\_\_  
Date

**Attachment 1: Center for Demographic Research  
Annual Budget: July 1, 2017 through June 30, 2020**

	2017-18	2018-19	2019-20	
Salaries	\$342,204.62	\$363,939.40	\$391,849.90	
Benefits	\$157,727.36	\$167,011.24	\$178,673.30	
Supplies	\$7,000.00	\$7,000.00	\$7,000.00	
Printing & Publications	\$4,000.00	\$9,000.00	\$4,000.00	
Meetings, Mileage, & Training	\$1,000.00	\$1,000.00	\$1,000.00	
Equipment	\$500.00	\$500.00	\$500.00	
<b>Expenses</b>	<b>\$512,431.98</b>	<b>\$548,450.64</b>	<b>\$583,023.20</b>	
26% Indirect Cost (IDC) / Overhead	\$133,233.00	\$142,598.00	\$151,587.00	
Office space rent (office space rent is exempt from overhead)	\$79,216.32	\$79,216.32	\$80,784.96	
<b>Gross Total</b>	<b>\$724,881.30</b>	<b>\$770,264.96</b>	<b>\$815,395.16</b>	
University will contribute: 100% of office space rent	\$79,216.32	\$79,216.32	\$80,784.96	
HSS Dean will contribute \$16,429 to Administrative Asst salary	\$16,429.00	\$16,429.00	\$16,429.00	
<b>Monetary Subtotal</b>	<b>\$95,645.32</b>	<b>\$95,645.32</b>	<b>\$97,213.96</b>	
<b>NET CDR BUDGET TOTAL</b>	<b>\$629,235.98</b>	<b>\$674,619.64</b>	<b>\$718,181.20</b>	
<b>Number of Seats</b>				
OCTA	1	\$87,605.14	\$94,088.52	\$100,311.60
COUNTY	1	\$87,605.14	\$94,088.52	\$100,311.60
OCCOG	1	\$87,605.14	\$94,088.52	\$100,311.60
OCSD	1	\$87,605.14	\$94,088.52	\$100,311.60
TCA	1	\$87,605.14	\$94,088.52	\$100,311.60
SCAG	1	\$87,605.14	\$94,088.52	\$100,311.60
MWDOC	0.5	\$43,802.57	\$47,044.26	\$50,155.80
OCWD	0.5	\$43,802.57	\$47,044.26	\$50,155.80
CSUF	1	see above	see above	see above
CONTRIBUTING PARTNER: LAFCO		\$16,000.00	\$16,000.00	\$16,000.00
<b>TOTAL</b>	<b>8</b>	<b>\$629,235.98</b>	<b>\$674,619.64</b>	<b>\$718,181.20</b>
Cost per Sponsorship Seat= Net Budget / 7 remaining seats		\$87,605.14	\$94,088.52	\$100,311.60
(Note: New IDC Return Program returns 10% of IDC collected to CDR project. This has been earmarked for a part time GIS Tech/Research Assistant.)				
		\$13,323	\$14,260	\$15,159

## **Attachment 2**

### **Proposed CDR 2017-2020 Services and Products**

#### **REPORTS**

##### **Orange County Progress Report**

Produce an annual Orange County Progress Report. This document presents a unified and a comprehensive picture of Orange County and its 34 cities including its economic health, its demographic status and trends, and other information of interest to those who might wish to relocate to Orange County, do business in the County, or otherwise have an interest in the economic and demographic status and future of Orange County.

##### **Orange County Projections**

Complete OCP-2018 dataset and adoption. Following the adoption of **OCP-2018**, produce a report containing assumptions, tables, charts, maps, and methodology. Preparation and development of **OCP-2022** will begin during this three-year MOU. The OCP dataset contains population, housing, and employment projections by 2010 census tract, jurisdiction, Community Analysis Area, and Regional Statistical Area for a 25-year period. This iteration will incorporate agency boundaries for MWDOC, OCSD, & OCWD.

##### **Orange County Facts and Figures**

Update quarterly the Orange County Facts and Figures. This document focuses on the most frequently asked questions about Orange County demographics and related information.

##### **Boundary and Annexation Report**

Working with information provided by OC LAFCO, CDR staff will produce an annual report of the jurisdictional boundary changes. This multi-page report will contain a map of the year to year boundary changes and a table listing the area change and specific annexations and incorporations for each calendar year. Detailed annexation and vicinity maps from OC LAFCO's approved changes of organization documents will also be included in the report. For ease of reference and to make the information publically available, the report will be posted on OC LAFCO's website.

#### **PUBLIC INFORMATION SERVICES**

##### **Provide Public Information on Orange County Demographics as Requested**

Provide information in response to numerous requests made by government agencies, elected officials, private companies, non-profit organizations, schools, students, and citizens regarding demographic and related information about Orange County.

##### **Maintain CDR Homepage**

Update the information currently on the CDR homepage on a regular basis and expand as information becomes available.

### **Provide Information and Analysis to News Media**

Provide information, description, interviews, and analysis of demographics to news media to assist them in doing stories where demographics is the focus.

### **Update RHNA Allocations**

Develop allocations of 2012 RHNA for annexations and incorporations as requested. Provide data support to local jurisdictions and SCAG during development of the 2020 RHNA. Monitor RHNA development process to ensure Orange County data is incorporated.

### **Process Decennial Census and American Community Survey Data**

Process Bureau of Census data as it pertains to development of the Orange County Projections and at the request of CDR Sponsors.

## **DATA BASES**

### **Housing Inventory System**

The Housing Inventory System (HIS) is a data system that includes all changes to each jurisdiction's housing stock. Data is collected at the address level and converted into a GIS database by geocoding. After geocoding, quality analysis efforts include tying activity to parcels. Depending on the jurisdiction, different documents are used to record added units including certificates of use and occupancy, utility release log, or building final documents. Demolitions and conversions are recorded through other recordation. Changes to the mobile home inventory will be verified with HCD. This project will be expanded to include an annual review and sign off process by each jurisdiction of their geocoded data to ensure accuracy. HIS will be expanded to include new types of accessory dwelling units per recent legislation (AB 2501, AB 2299 and SB 1069).

### **Census Data by Partial TAZ**

Update the correspondence tables of 2010 Census blocks to the TAZs after release of Census Bureau data and GIS shapefiles. As the various census files become available, transportation modeling variables and other key variables useful for projecting the modeling variables will be aggregated to TAZ.

### **Calibrate Age Cohort Component, Shift-Share and Headship Rate Models**

Based on data from the Census Bureau, DOF, and EDD data, calibrate the models used to project county-wide population, housing and employment.

### **Master Polygon File**

Update master polygon file based on the 2010 Census block file for use in development of OCP dataset and annual population and housing unit estimates. Allocate Census block data to TAZ, CAA, RSA, MWDOC, OCSD, and OCWD. Working with information from OC LAFCO, the master polygon file will be updated annually to include changes to agency boundaries: jurisdiction, MWDOC, OCSD, and OCWD.



### **Population and Housing Estimates by TAZ (OCP)**

Estimates of population and housing by unit type will be developed using the 2010 Census and American Community Survey data at the split TAZ. From 2014 onwards, housing unit changes will be geocoded and aggregated to the TAZ. Annual estimates of population and housing will be produced by TAZ for maintenance of the OCP base file.

### **Annual Population and Housing Estimates by Partial Census Tract and Sponsor Agency**

Estimates of population and housing units developed using the 2010 Census for each of the special district sponsors will be updated annually. From 2014 onwards, annual estimates (January 1) of population and housing will be produced by partial census tract and for each of the special district sponsor agencies: MWDOC, OCSD, and OCWD.

### **Project Total County Population, Housing, and Employment**

Draft assumptions for OCP-2018 will be developed and reviewed by the CDR TAC. These will then be incorporated into the macro level models used to project population, housing, and employment. The resulting projections will be reviewed by the CDR TAC and MOC and then brought to the OCCOG TAC and Board for approval as the controls totals for OCP-2018.

### **Projected Population, Housing and Employment by TAZ (OCP)**

Preparation and development of OCP-2022 will begin during this MOU cycle. Countywide population, housing, and employment for years 2020 through 2045 will be allocated to Traffic Analysis Zones split by jurisdictions. Following the allocation, extensive review and refinement will occur to assure the accuracy of the projections.

### **Secondary Variables by TAZ (OCTAM)**

The basic projected population, housing, and employment from OCP-2014 will be expanded to the 14 OCTAM variables. These variables will include resident population, group quarters population, employed residents, median income, occupied single family dwelling units, occupied multiple family dwelling units, household size, retail employment, service employment, K-12 public school employment, all other employment, school enrollment, university enrollment, and area. Data for the projection years will be updated in the next MOU cycle. Preparation of the base year OCTAM data for OCP-2018 will begin in this MOU cycle.

### **Consolidated Boundary and Annexation Program (CBAS)**

CDR staff will report annual jurisdictional boundary and feature changes through a new, voluntary program of the U.S. Census Bureau that allows for a consolidated annual review of jurisdiction boundaries. This review will be done using the official County Surveyor/OC LAFCO jurisdiction GIS boundary file. Orange County jurisdictions will be able to opt in or out of this CDR service annually. CDR will notify each participating jurisdiction and OC LAFCO of the outcome of the BAS review, i.e. whether there were any areas where jurisdiction boundaries needed to be corrected.

## **COMMITTEES**

### **Participate in Sponsor Technical Advisory Committees as Requested**

Participate in appropriate Sponsor technical advisory committees including, OCCOG TAC, County's Demographic Steering Committee, OCTA's Modeling TAC, Orange County Sanitation District's Planning Advisory Committee, Water Use Efficiency Project Advisory Committee, and SCAG's Technical Working Group and Scenario Planning Model Working Group.

### **Coordinate with SCAG and SCAG Committees**

This service revolves around the incorporation of OCP into the SCAG growth forecast. This service includes participation in SCAG expert panels and workshops to develop assumptions for their population and employment projections; monitoring the discussions relevant to the development of SCAG's growth forecast at SCAG policy committees and subregional coordinator meetings; and coordinating with relevant SCAG staff on this issue.

### **Coordinate with University Research Centers**

CDR staff will coordinate with UCI and Chapman University research centers to ensure consistency between the CDR's forecast and estimates and those produced by these institutes.

### **2017-2020 LAFCO FUNDED PROJECT: Sphere of Influence Estimates**

CDR will update its master polygon file on an annual basis with changes to the sphere of influence (SOI) boundaries. CDR will produce annual estimate of January 1 population and housing for each of the SOI polygons upon completion of the annual Housing Inventory System to maintain this information in preparation for the 2018-2022 OC LAFCO municipal service review cycle.

**Boundary and Annexation Report:** Working with OC LAFCO over the three-year MOU cycle, CDR will attempt to build a historical reference collection of these reports going back to 2000 as information is available.

## **NEW PROJECTS & SERVICES**

### **Housing Activity Report**

Using information from the Housing Inventory System (HIS), CDR staff will produce an annual report on the housing construction and demolition activity by jurisdiction. Information will be released in aggregate form at the jurisdiction level in a PDF.

### **State Data Center Affiliate**

The CDR will serve as a State Data Center Affiliate to the Demographic Research Unit of the California Department of Finance. As an Affiliate, CDR will assist the SDC and Orange County in disseminating census data and improving public access to census data products consistent with services CDR already provides.

### **2020 Decennial Census Geographic Support**

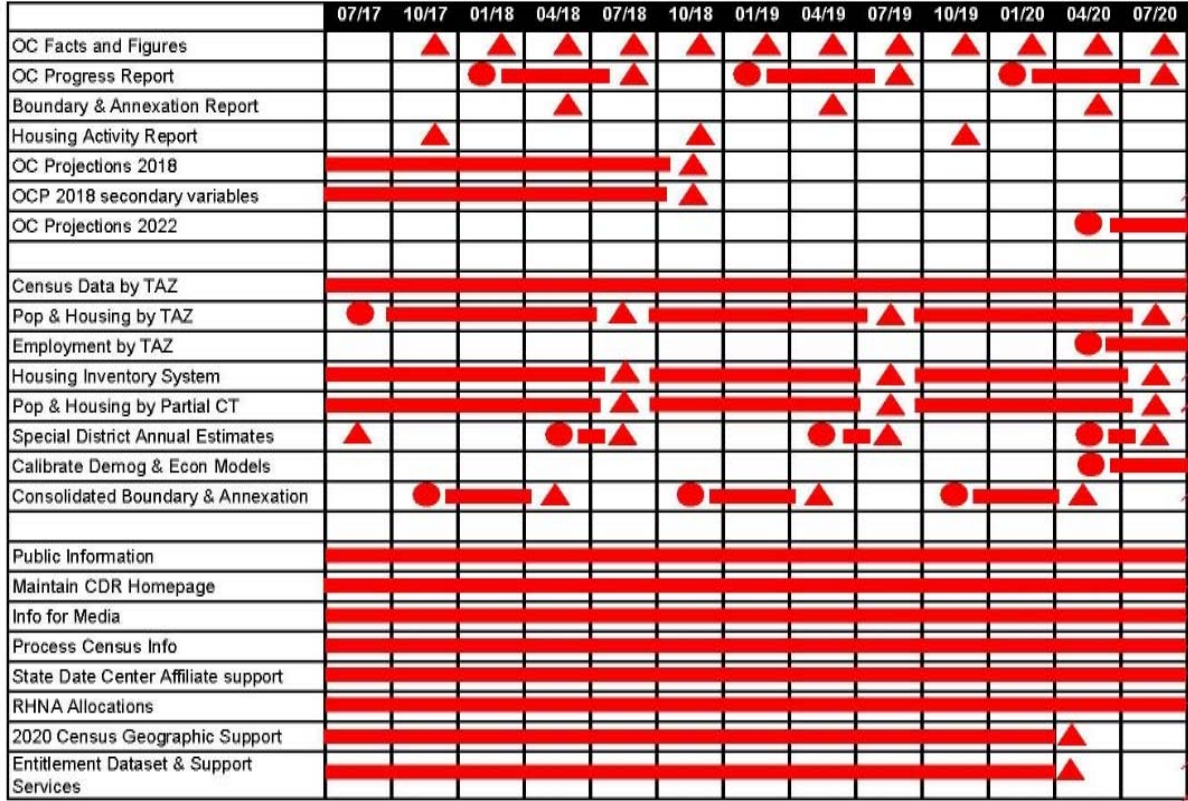
The CDR will participate in the geographic program updates leading up to the 2020 Decennial Census. These will include programs such as the Participant Statistical Area Program (PSAP) to update block group, census tract, and CDP boundaries.

### **Entitlement Dataset & Support Services**

Provide support to Orange County jurisdictions in the development of the entitlements database and other data requested by SCAG during the development of the 2020 RTP/SCS. Monitor development process to ensure Orange County data is incorporated.

### Attachment 3

Proposed Draft Work Program 7/2017 - 6/2020




● Startup  
▲ Milestone/Completion



***April 3, 2017***

**To:** Regional Planning and Highways Committee

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

**Subject:** Guidance for Administration of the Orange County Master Plan of Arterial Highways Related to Complete Streets

### ***Overview***

In September 2016, Orange County Transportation Authority staff convened an ad hoc committee comprised of volunteer members from the Technical Advisory Committee (and/or their designees) to discuss complete streets implementation and the Master Plan of Arterial Highways. The proposed revisions expand allowances for traffic calming measures on Master Plan of Arterial Highways facilities and clarify which types of traffic calming measures are permitted.

### ***Recommendation***

Approve proposed revisions to the Guidance for Administration of the Orange County Master Plan of Arterial Highways.

### ***Background***

The Guidance for Administration of the Orange County Master Plan of Arterial Highways (MPAH) (Guidance) was initially developed to provide local jurisdictions and the Orange County Transportation Authority (OCTA) with a common set of policies and procedures for the administration of the MPAH (Attachment A). Revisions have been made over the years to ensure that the Guidance is compliant with state and federal policies.

In 2011, the OCTA Technical Advisory Committee (TAC) initiated an update to the Guidance to incorporate complete streets concepts and support the needs of all road users for safe and convenient travel. Staff recently worked with the TAC again to develop additional revisions regarding the use of traffic calming measures on MPAH facilities. Traffic calming measures are mainly physical treatments that are intended to manage traffic speeds and/or volumes. They are often used on roadways to address issues with speeding and to improve conditions for people walking and biking.

***Discussion***

Currently, the Guidance allows the use of traffic calming measures on collectors and divided collectors when it can be demonstrated that the proposed measure(s) would not impact capacity and the level of service (cited on page 23 of the Guidance). Traffic calming measures are not allowed on other MPAH facilities classified as secondary and higher. The range of MPAH facilities is described in the table below.

MPAH Classification	Description
Collector	2 lane, undivided Accommodates 7,500 to 10,000 ADT
Divided Collector	2 lane, divided Accommodates 9,000 to 15,000 ADT
Secondary	4 lane, undivided Accommodates 10,000 to 20,000 ADT
Primary	4 lane, divided Accommodates 20,000 to 30,000 ADT
Major	6 lane, divided Accommodates 30,000 to 45,000 ADT
Principal	8 lane, divided Accommodates 45,000 to 60,000 ADT

ADT – average daily traffic

To better recognize and accommodate the potential safety and mobility benefits of traffic calming measures, changes to the Guidance are proposed to expand allowances for certain types of traffic calming on all MPAH facilities, subject to certain restrictions. Additional changes are proposed to better define traffic calming measures and clarify which types of traffic calming measures are either permitted or prohibited.

These revisions were developed in partnership with OCTA's TAC. Between September and November 2016, OCTA staff met three times with the TAC Ad Hoc Committee (Committee) to discuss the MPAH Traffic Calming Policy. The Committee was comprised of TAC members (and/or staff designees) from the cities listed below.

- Anaheim
- Costa Mesa
- Fountain Valley
- Laguna Niguel
- Santa Ana

- San Clemente
- Tustin
- Westminster

Based on Committee discussions, recommended policy revisions were brought to the full TAC on February 22, 2017. The TAC approved the proposed policy revisions, as detailed in Attachment B.

With the proposed revisions, vertical and horizontal speed control measures (identified on page 25 of Attachment B) would be permitted on MPAH Collector and Divided Collector arterials. The primary purpose of these measures is to manage travel speeds. They are not expected to substantially impact regional capacities on lower-volume MPAH facilities. Consequently, implementation of these measures would no longer require detailed traffic analyses. In addition, horizontal speed control measures are also proposed to be conditionally permitted on other higher-level MPAH facilities, provided it can be documented that the implementation of such measures will not be a detriment to regional mobility.

Volume control measures, which discourage and/or eliminate through traffic, are proposed to remain prohibited on all MPAH facilities. Some examples of these measures include street closures, diverters, forced turn islands, etc. Local jurisdictions maintain the option to pursue deletion of a facility from the MPAH, in order to install volume control measures on currently designated MPAH facilities, as they desire. However, such an action would still remain subject to the MPAH cooperative study process and the inter-jurisdictional consensus policy, if applicable.

### ***Summary***

Revisions are proposed to the Guidance to support the growing interest in complete streets implementation and sustainable communities. These revisions allow for increased flexibility for the application of traffic calming measures. They also are intended to clarify which types of traffic calming measures are permitted, conditional, and prohibited on MPAH facilities.

***Attachments***

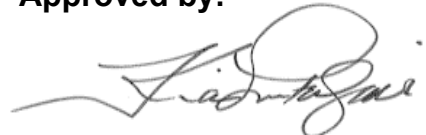
- A. Guidance for Administration of the Orange County Master Plan of Arterial Highways
- B. Redlined - Proposed Revisions to the Guidance for the Administration of the Master Plan of Arterial Highways

**Prepared by:**



Carolyn Mamaradlo  
Senior Transportation Analyst  
(714) 560-5478

**Approved by:**



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



**Guidance for Administration  
of the Orange County  
Master Plan of Arterial Highways**



Effective Date: October 22, 2012  
Effective Date of MPAH Map: October 7, 2011

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## INTRODUCTION<sup>1</sup>

The Master Plan of Arterial Highways (MPAH) was established in 1956 to ensure that a regional arterial highway network would be planned, developed, and preserved, in order to supplement the County's developing freeway system. This vision has withstood the test of time, and is consistent with the U.S. Department of Transportation's view today "that multi-agency collaboration is a critical element in developing 21<sup>st</sup> century solutions for 21<sup>st</sup> century transportation challenges, such as reducing traffic congestion."<sup>2</sup>

The MPAH has often been looked to as a model of coordinated planning, requiring the cities of Orange County (cities) and the County of Orange (County) to work cooperatively in implementing a regional transportation system. The MPAH map is a critical element of overall transportation planning and operations in Orange County, because it defines a countywide circulation system in response to existing and planned land uses. As the administrator of the MPAH, the Orange County Transportation Authority (OCTA) is responsible for maintaining the integrity of the MPAH system through its coordination with cities and the County and determinations of cities' and County consistency with the MPAH map.<sup>3</sup> In order to be eligible for all Measure M2 Net Revenues as well as programs—including the Orange County Comprehensive Transportation Funding Program (CTFP), a jurisdictions' General Plan circulation element must be consistent with the MPAH. For these purposes, "consistency" means that local general plans maintain an equivalent number of minimum through lanes on each arterial highway shown on the MPAH. OCTA, however, does not have land use authority. A local agency may freely determine whether to maintain consistency with the MPAH.

Because OCTA now administers the MPAH, it is no longer a part of the County's General Plan document. However, in order to provide a mechanism to communicate MPAH policies and procedures, this *Guidance for the Administration of the Master Plan of Arterial Highways (Guidance)* has been updated from its original 1995 version, to assist OCTA, cities, and the County in maintaining the MPAH as a vital component of transportation planning in Orange County. Much of the text used in this updated version of the *Guidance* is based on or reflects previous planning documents which have supported OCTA administration of the MPAH since the early 1990s.<sup>4</sup>

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<sup>1</sup> This Guidance Update becomes effective upon adoption by the Board. In addition to applying prospectively, this Guidance Update also applies to any proposed MPAH amendment pending at the time the Guidance Update was adopted.

<sup>2</sup> FHWA Executive Director Jeffrey Paniati, MOVING THE AMERICAN ECONOMY, February 28, 2008.

<sup>3</sup> OCTA assumed MPAH administrative responsibility in 1995, through a transfer agreement with the County of Orange. The MPAH was formerly a part of the County of Orange Advance Planning Program (General Plan) Transportation Element, with administration by the Orange County Environmental Management Agency Transportation Planning Division. The County had been responsible for the MPAH since its 1956 inception.

## 1.0 OVERVIEW

Measure M2 Ordinance 3, dated July 24, 2006, defines the MPAH as a:

“Countywide transportation plan administered by the Authority defining the ultimate number of through lanes of arterial streets, and designating the traffic signal synchronization street routes in Orange County.”

Further, the Orange County MPAH map establishes a system of countywide arterial highways, and is a key factor in defining Orange County's long-range transportation planning and policy objectives. The MPAH map is depicted in **Appendix 1**. OCTA's role as the administrator of the MPAH is to coordinate with cities and the County to develop a consensus-based, consistent, and inter-community arterial highway system that effectively balances regional mobility and local access for existing and future land uses.

### 1.1 BACKGROUND

The MPAH was first adopted by the County in 1956. The MPAH became the cornerstone of the first County Circulation Element initially adopted in 1974. Since that time, the MPAH has been amended on a regular basis, generally in response to land use policy changes within both incorporated and unincorporated areas of the County. These policy changes have routinely been reviewed for impacts on the vehicular-serving arterial highway system in order to maintain a balance between land use and transportation plans, and to achieve the MPAH Goals and Policies documented in Chapter 2.0.

Since 1956 the MPAH map has depicted a network of major thoroughfares comprising freeways<sup>5</sup>, transportation corridors, and arterial highway classifications. Arterial highway classifications have historically included Principal, Major, Primary, Secondary, Collector, and Smart Street facilities.

In order to be more reflective of current planning realities, this *Guidance* update expands the classification system with additional arterial highway classifications and special designations available for the MPAH, if supported by appropriate traffic documentation, and approved by the OCTA Board of Directors (Board). These expanded classifications/special designations include Divided Collectors, Right of Way Reserve, Asymmetric Lanes, Landmark Streets, and Multimodal Transportation Arterials.

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<sup>4</sup> County of Orange Transportation Element (April, 1994); Measure M1 Growth Management Program Preparation Manual (February, 1993); MPAH Strategic Plan (2002); Renewed Measure M (M2) Transportation Ordinance and Investment Plan (July, 2006); Congestion Management Program (December 2009); OCTA Comprehensive Transportation Funding Program 2010 Guidelines (February, 2011).

<sup>5</sup> **Note:** State/Interstate freeway facilities are depicted on the MPAH map for reference purposes.

The MPAH network also plays a major role in regional travel by connecting to and complementing the County's freeways and multi-modal transportation corridors. It also provides travel time incentives through the traffic signal synchronization program, to retain through traffic on the MPAH system and discourage cut-through traffic onto the local street network. The Principal, Major, Primary, and Smart Street arterial classifications predominantly serve long distance through travel, and typically have an automobile emphasis. These arterials in some cases may be supplemented in "person-trip" capacity by inclusion of High Frequency Transit service and/or by Master Plan of Bikeway facilities, where multimodal emphases are appropriate.

Secondary, Divided Collector, and Collector arterial highways function as collectors funneling traffic from local streets to Primary, Major, and Principal arterials. These arterials in some cases may be supplemented in "person-trip" capacity, by Master Plan of Bikeway facilities, where appropriate.

The overall network of thoroughfares is generally designed to accommodate existing and projected traffic, with potential consideration for alternative modes as appropriate. The MPAH classifications are a statement of policy intended to reserve adequate rights of way for future improvements. Recommended design guidelines and criteria for each arterial classification are described in Chapter 3.0.

## **1.2 PURPOSE**

The MPAH depicts a countywide roadway network intended to ensure coordinated transportation system development among local jurisdictions in Orange County. The main purpose of the MPAH is to describe an arterial highway system that effectively serves existing and adopted future land uses in both incorporated and unincorporated areas of Orange County. Extensive coordination with the transportation and land use planning and implementation processes conducted by the cities, the County, and adjacent jurisdictions is essential for the MPAH to provide its intended service for goods movement and for travelers across all modes. Given existing right of way limitations, the MPAH also encourages recognition of operations techniques, primarily signal synchronization, within the MPAH planning process. Recognition of this component of the arterial highway network is to emphasize that operational strategies work best as part of a systematic, region wide application of programs and projects aimed at improving system wide efficiency. The Traffic Light Signal Synchronization Program (TLSSP) network is included in **Appendix 2**<sup>6</sup>.

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<sup>6</sup> **Note:** The TLSSP network is a component of the MPAH. However, updates to the TLSSP Master Plan are administered through periodic updates to the TLSSP Master Plan and not as part of MPAH amendment processes.

### **1.3 MPAH CONSISTENCY CONCEPT**

As the administrator of the MPAH, OCTA is responsible for maintaining the integrity of the MPAH map through coordination with cities and the County, including determination of cities and County consistency with the MPAH map. Consistency with the MPAH is essential to the integrity of a functional regional highway network. It ensures that cities and the County implement their share of the regional transportation network using similar standards and assumptions. OCTA, however, does not have land use authority. Local jurisdictions are free to determine that they do not wish to maintain consistency with the MPAH. Consistency with the MPAH is a prerequisite, however, for local agencies to be eligible for all Measure M2 Net Revenues as well as programs—including the Orange County CTFP.

To aid in establishing consistency among plans, all jurisdictions are encouraged to use common land use assumptions and travel demand projections. OCTA facilitates the use of these common assumptions through administration of the Orange County Transportation Analysis Model (OCTAM)<sup>7</sup>.

Streets that serve predominantly as local collectors are generally not shown on the MPAH because they do not contribute to regional circulation. Such roads, however, may be locally significant and, therefore, may be reflected on a local agency's Circulation Element. Local agency plans reflecting such arterials are not considered inconsistent with the MPAH for purposes of Measure M2 Net Revenues as well as programs—including the CTFP eligibility because a local agency's General Plan is expected to include more detail about local needs. However, those collector arterials that are currently shown on the MPAH represent vital components of the circulation system. Local agency plans are expected to include these roadways as well as the other roadway classifications included on the MPAH in order to be eligible for Measure M2 Net Revenues as well as programs—including the CTFP.

The cities' and County Circulation Elements are reviewed for consistency every two years. The goal is to encourage compatible networks that demonstrate adequate carrying capacity of the circulation system, and to detect possible inconsistencies resulting from General Plan amendments. The MPAH amendment process is defined in Chapter 4.0. The consistency review process is described in Chapter 5.0<sup>8</sup>.

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<sup>7</sup> OCTAM, like the MPAH, was previously maintained by the County of Orange.

<sup>8</sup> It is important to note that the MPAH represents a capacity minimum for countywide regional mobility. As such, jurisdictions, on their General Plan circulation elements, may depict facilities with higher capacity classifications than those identified on the MPAH.

## **2.0 GOALS AND POLICIES**

The following goals and policies are intended to serve as recommended countywide guidelines and to provide direction to local agencies that opt to implement the MPAH. A goal is a general expression of countywide values and sets the long range vision for the relationship among transportation and land use. A policy is a specific statement that facilitates decision making regarding issues, process, and constraints.

### ***1. Goal: Provide a Countywide Circulation (Arterial Highway) System to Accommodate Regional Travel Demand***

#### **Policies:**

- 1.1 OCTA will review the circulation plans of the cities and the County bi-annually to determine consistency with the MPAH in order to determine eligibility for Measure M2 Net Revenues as well as programs—including the CTFP.
- 1.2 OCTA will coordinate with various regional agencies (i.e., Caltrans (State), the Southern California Association of Governments (SCAG), the Transportation Corridor Agencies, etc.) on various studies relating to freeway, toll way and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated regional circulation system.
- 1.3 OCTA will coordinate planning of the arterial highway system cooperatively with cities, the County, SCAG, neighboring counties and neighboring cities in adjacent counties to works towards the consistency of regional transportation networks.

### ***2. Goal: Provide an Arterial Highway System that Supports Land Use Policies of the County and Cities***

#### **Policies:**

- 2.1 The MPAH will encourage a coordinated arterial highway system that is in balance with the General Plan Land Use Elements of the cities and County.
- 2.2 The MPAH will encourage an arterial highway system designed to serve as part of a balanced transportation system (auto, rail, transit, bus, truck, bicycle, pedestrian, etc.).
- 2.3 OCTA will encourage local jurisdictions to consider and evaluate all mobility needs when requesting modifications to the MPAH<sup>9</sup>.
- 2.4 OCTA will encourage and assist all local jurisdictions to adopt comprehensive traffic improvements, phasing and financing plans, in order to assist in countywide implementation of the MPAH.

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<sup>9</sup> Policy approved OCTA Board on April 11, 2011.

- 2.5 OCTA will work with the cities and County through the Orange County CTFP to implement the MPAH and foster interagency cooperation toward anticipating and effectively meeting the regional transportation needs of Orange County.
- 2.6 OCTA will monitor local agencies to ensure that the arterial highway system is implemented in a manner that supports the implementation of adopted overall land use policies and that is consistent with financing capabilities.
- 2.7 OCTA prefers the use of analytical methods, in conformance with the Congestion Management Program (CMP), to aid in transportation planning and impact evaluation and encourage the development and utilization of sub-area models to address detailed transportation issues.

For amendments contemplating Complete Streets implementation, multi-modal analysis of peak period person-trip capacity can potentially be accommodated as an acceptable form of analysis, so long as it is:

- consistent with the latest peer-reviewed and professionally accepted state of practice;
  - includes ongoing commitment and performance measurement to enable effective ongoing utilization of Complete Streets capacity enhancements such as transit and bike facilities;
  - use is approved by OCTA prior to conducting MPAH related analyses; and satisfies OCTA's need for technical justification in support of an MPAH amendment.
- 2.8 OCTA will use the most recently adopted Orange County Projections (OCP) forecasts for projections of future year population, housing, and employment.
- 2.9 OCTA will use the Orange County Transportation Analysis Model (OCTAM) forecasts as the regional traffic forecasts for vehicle and transit ridership along the MPAH, and require local agencies to use OCTAM as a basis for data required in local and sub-area studies conducted by local agencies. The OCTAM must be consistent with SCAG's regional model as required by the CMP.
- 2.10 OCTA will provide guidance for the development of subarea traffic models used by local jurisdictions to determine the quantitative impacts of land use decisions on the circulation system, so as to be consistent with the OCTAM.
- 2.11 OCTA will establish roadway classification definitions based on the number of through lanes.
- 2.12 OCTA will review and potentially revise this Guidance document upon major updates to the Highway Capacity Manual (HCM), as necessary.



2.13 OCTA will adhere to the recommended processes identified in these Guidelines. However, the OCTA Board has discretion to amend, modify, and/or waive components of these Guidelines, as may be determined by the OCTA Board to be appropriate to address unique concerns<sup>10</sup>.

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<sup>10</sup> These concerns may include, without limitation, documentation of impasse with respect to achieving consensus on a proposed amendment; documentation of severe environmental impacts; regional mobility concerns; or significant and sustained public opposition.

### 3.0 ROADWAY CLASSIFICATIONS

Arterial highways are shown on the MPAH map in the following two forms:

- established alignments depicted by solid lines on the map, including existing highways where the centerline is the precise centerline, and future highways where the Board of Supervisors, a City Council, or the subdivision process has established a precise alignment; and
- conceptually proposed alignments, defined by intermittent lines indicating future facilities whose precise alignment has not yet been determined.

Arterial highways have been divided into eight (8) classifications to address travel demand in terms of number of through lanes, and to aid in setting consistent design standards countywide for various highway types.

Planning criteria used for determining arterial highway classifications are provided in **Appendix 3**. Consistency in the number of through lanes is the key objective of the MPAH to ensure compatibility across jurisdictional boundaries. A matrix showing the MPAH's nomenclature for arterial highways along with local jurisdictional functionally equivalent designations (as compared to MPAH classifications) in cities is contained in **Appendix 4**.

The basic cross sections for arterial highways are illustrated in **Appendix 5** and are referenced below under each classification. These cross sections are based on the arterial highway design standards for MPAH roadways contained in the County of Orange Highway Design Manual. In addition, special intersection approaches for Principal, Major, Primary, and Secondary arterials have been identified to help address congestion problems. These cross sections are provided as a guideline for arterial highway right-of-way requirements.

The "Maximum Feasible Intersection" (MFI) is a guideline for intersection enhancement that is compatible with vehicle travel demand requirements and operational capabilities of the highway system. Additional right of way beyond the typical sections shown in **Appendix 5** may be required to implement the MFI. In local agency review and approval of subdivisions, the objective shall be to reserve adequate right of way to permit future implementation of the MFI as warranted. The MFI for each classification is defined in the classification description.

## **Arterial Classifications**

The typical sections depicted on Charts 1-I through 1-5 in **Appendix 5** are simplified diagrams based upon adopted Orange County Standard Plans and are provided as a general guideline for arterial highway right-of-way requirements<sup>11</sup>. Additional right of way beyond the typical sections may be required for any classification when an arterial highway coincides with an adopted route for an additional public facility (e.g., special transit facilities, bikeways, wider landscaped parkways, wider sidewalks, or riding and hiking trails), or a scenic highway.

### **3.1 TRANSPORTATION CORRIDOR**

A Transportation Corridor is a limited-access multi-modal facility of six to 10 lanes, depending on projected traffic volumes, and a median of sufficient width to accommodate future modal options such as fixed rail or high occupancy vehicles. Three designated corridors are the Foothill Corridor (SR-241), the San Joaquin Hills Corridors (SR-73), and the Eastern Corridor (SR-231/SR-261). These facilities were approved as Federal toll road pilot projects in the Surface Transportation and Uniform Relocation Assistance Act passed by Congress in 1987. Additionally, these corridors were authorized by State legislation as the State's first toll roads and will remain as pilot "toll" facilities until the bonding is paid. These corridors are operated by demand management to ensure efficient levels of operation, and tolls are the implementation mechanism to maintain free flow.



### **3.2 PRINCIPAL ARTERIAL**

A Principal arterial is an eight-lane divided (raised or painted) roadway, with a typical right of way width of 144 feet (Chart 1-1 in **Appendix 5**). A Principal arterial may be designed with emphasis for automobile, goods movement, and/or transit, and is designed to accommodate approximately 60,000 vehicle trips per day at Level of Service 'C'. Major arterials carry a large volume of regional through traffic not handled by the freeway system.

The standard MFI for a Principal arterial may consist of four through lanes, two left-turn lanes and a dedicated right-turn lane. An optional free right-right-turn lane may be allowed if warranted by traffic demand. Alternative geometries, such as a grade separation, median pedestrian refuge areas, transit signal priority and/or bus queue jumps along segments with High Frequency Transit Routes, or other special treatment, may be considered for approval by OCTA if they are determined to be operationally equivalent to the standard MFI.

<sup>11</sup> **Note:** City right of way design standards may vary.

### **3.3 MAJOR ARTERIAL**

A Major arterial highway is a six-lane divided (raised or painted) roadway, with a typical right of way width of 120 feet (Chart 1-2 in **Appendix 5**). A Major arterial may be designed with emphasis for automobile, goods movement, and/or transit, and is designed to accommodate approximately 45,000 vehicle trips per day at Level of Service 'C'. Major arterials carry a large volume of regional through traffic not handled by the freeway system.

The standard MFI for a Major arterial may consist of three through lanes, two left turn lanes and a dedicated right turn lane. An optional free right-turn lane may be allowed if warranted by traffic demand. Alternative geometries such as a grade separation, median pedestrian refuge areas, transit signal priority and/or bus queue jumps along segments with High Frequency Transit Routes, or other special treatment may be considered for approval by OCTA if they are determined to be operationally equivalent to the standard MFI.

### **3.4 PRIMARY ARTERIAL**

A Primary arterial highway is a four-lane divided (raised or painted median) roadway, with a typical right of way width of 100 feet (Chart 1-3 in **Appendix 5**). A Primary arterial may be designed with emphasis for automobile, goods movement, transit, and/or bicycle, and is designed to accommodate approximately 30,000 vehicle trips per day at Level of Service 'C'. A Primary arterial's function is similar to that of a Major arterial. The principal difference between the two classifications is capacity.

The standard MFI for a Primary arterial may consist of two through lanes, one left turn lane and a dedicated right turn lane. An additional left-turn lane or optional free right turn lane may be allowed if warranted by traffic demand. Alternative geometries such as a grade separation, median pedestrian refuge areas, transit signal priority and/or bus queue jumps along segments with High Frequency Transit Routes, or other special treatment may be considered for approval by OCTA if they are determined to be operationally equivalent to the standard MFI.

### **3.5 SECONDARY ARTERIAL**

A Secondary arterial highway is a four-lane undivided (no median) roadway, with a typical right of way width of 80 feet (Chart 1-4 in **Appendix 5**). A Secondary arterial may be designed with emphasis for automobile and/or bicycle, and is designed to accommodate approximately 20,000 vehicle trips per day at Level of Service 'C'. A Secondary arterial serves as a collector, distributing traffic between local streets and Principal, Major, and Primary arterials. Although some secondary arterials serve as through routes, most provide more direct access to surrounding land uses.

The standard MFI for a Secondary arterial may consist of two through lanes, one left turn lane and an optional right-turn-only lane. An optional free right turn lane may be allowed if warranted by traffic demand. Alternative geometries or other special treatment may be considered for approval by OCTA if they are determined to be operationally equivalent to the standard MFI.

### **3.6 DIVIDED COLLECTOR ARTERIAL**

A Divided Collector arterial highway is a Secondary Arterial with a reallocation of pavement width to emphasize bicycle and pedestrian use<sup>12</sup> (Chart 1-5 in **Appendix 5**). It provides one bicycle lane per direction, one through vehicle lane per direction, and a continuous two-way left turn lane. It is designed to accommodate approximately 15,000 vehicles per day at Level of Service 'C'.

The MFI for a Divided Collector arterial may consist of one through lane, one left turn lane, and an optional right-turn-only lane. Alternative geometrics or other special treatment may be considered for approval by OCTA if they are determined to be operationally equivalent to the standard MFI.

### **3.7 COLLECTOR ARTERIAL**

A Collector arterial highway (formerly designated as a "Commuter" arterial) is a two lane undivided (no median), unrestricted access roadway, with a typical right of way width of 56 feet (Chart 1-5 in **Appendix 5**). A Collector arterial is provided to accommodate up to approximately 10,000 vehicle trips per day at Level of Service 'C'. Collector arterial differs from a local collector street in its ability to handle through traffic movements between two arterials. It is shown on the MPAH because it provides network continuity, or may serve through traffic demand where projected volumes do not warrant a Secondary. As such, it is included on the MPAH only when it is generally of regional significance and meets the threshold criteria defined above.

### **3.8 RIGHT OF WAY RESERVE**

For facilities where there is lack of consensus amongst affected jurisdictions, as to whether or not a facility should remain on the MPAH, the Right of Way (ROW) Reserve classification is provided.

When a facility is classified as ROW Reserve the roadway will be depicted on the MPAH as ROW Reserve status for a fixed period of time<sup>13</sup>, thus ensuring the preservation of the ROW, until an ultimate decision is made. However, ROW reserve precludes assuming the facility in traffic or land use planning models, during the reserve period.

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<sup>12</sup> Typical right of way width and roadway width from curb to curb would generally be consistent with that of a Secondary arterial.

<sup>13</sup> **Note:** The fixed period of time would be determined when an application to place a facility in ROW reserve is made.

Designation of ROW reserve status requires an MPAH traffic study (consistent with the process identified in Chapter 4.0). The traffic study will generally need to document that placing the facility in ROW reserve status will not significantly impact the rest of the MPAH or neighboring jurisdictions during the span of the ROW Reserve period. Impacts and mitigations may be suggested during the ROW reserve period if significant impacts are identified in the traffic study.

### **3.9 SPECIAL DESIGNATIONS**

Consistent with legislative initiatives such as Senate Bill (SB) 375 and Assembly Bill (AB) 1358, and consistent with OCTA's Long Range Transportation Plan (LRTP) goals of expanding travel options across all modes and improving travel times for all forms of transportation, there is a need for the MPAH to provide flexibility in assisting jurisdictions to provide greater travel options for all modes.

As a result, the following MPAH arterial highway special designations are available contingent upon reclassification request by jurisdictions, appropriate technical documentation, and OCTA Board approval.

#### **3.9.1 Landmark Streets**

For MPAH facilities that are physically precluded from being widened, by virtue of their immediate proximity to numerous contiguous parcels located in historic corridors, a Landmark Streets designation is provided. This designation would allow jurisdictions to retain Landmark Streets on the MPAH at existing lower classifications, once downgraded through the MPAH Amendment process, and ensure that qualifying facilities would generally not be upgraded in the future, due to their historic nature.

Qualification for this designation would also be contingent upon the following criteria:

- Immediately adjacent parcels would need to be on a historic register, including but not limited to The California List of Historic Landmarks ([http://ohp.parks.ca.gov/?page\\_id=21445](http://ohp.parks.ca.gov/?page_id=21445)) or the National Register of Historic Places ([http://ohp.parks.ca.gov/?page\\_id=214450](http://ohp.parks.ca.gov/?page_id=214450)).

#### **3.9.2 Multi-Modal Transportation Arterial**

A Multi-Modal Transportation Arterial is a four to eight-lane arterial facility, with emphasis on high-frequency bus service (i.e., either shared lane or bus only lane service, with minimum 15 minute headways during peak periods) and/or rail service (i.e., fixed rail within the MPAH facility as either a shared lane or rail only lane), in addition to serving automobile traffic.

MPAH facilities qualifying for the Multi-Modal Transportation Arterial designation require the following components in order to be considered by OCTA for approval.

- Transit service would need to be implemented in the near-term.
- Transit service would need to have credible commitments to ongoing operations and maintenance at minimum headways.
- Transit service would need to have credible ridership projections that are subject to OCTA approval and productivity standards.
- Transit service must be identified in a financially constrained planning document, primarily the OCTA Long Range Transportation Plan (LRTP).
  - For bus service, the facility would need to be identified in OCTA's LRTP-High Frequency Bus Corridors and Planned BRT Routes, as shown in **Appendix 6**.

### 3.9.3 Smart Streets

The MPAH also recognizes Smart Streets as arterials with enhanced traffic-carrying capacity. These augmentations in capacity are achieved by a variety of measures, including, but not limited to:

- Preferential and acceptably maintained traffic signal timing and synchronization
- Prohibition of on-street parking
- Intersection grade separations of critical through and/or turn movements
- Addition of at-grade through or turn lanes at intersections
- Access limitation to right turns only, or no access (street and/or driveways)
- Access consolidation
- Frontage roads
- Pedestrian grade separations
- Other elements that may be documented to be useful

The intent of these measures is to minimize conflicts with cross traffic. These measures improve traffic carrying capacity and facilitate improved traffic flow along an arterial. Hence, the terms "High Flow Arterial, "Continuous Flow Boulevard, "or "Signal Synchronization Corridors" can also be used to describe a "Smart Street." This designation is intended to represent a roadway of a Primary, Major or a Principal arterial classification.

#### 3.9.4 Asymmetric Lanes

Capacity augmentation may be needed that creates more lanes in one direction than the other (asymmetric lanes) along some Smart Streets, Principal, Major and/or Primary arterials. The most typical application would be for arterial segments adjacent to major freeway interchanges and/or where area land uses result in a more peaked demand in one of the peak periods. Where such demand creates the need for an added lane to accommodate the peak surge of traffic, the addition of through lane(s) in one (asymmetric) rather than both directions of travel may be considered. This would require supporting peak period analyses.

### **3.10 SPECIAL CONSIDERATIONS**

Across all Arterial Classifications and Special Designations defined above, special considerations may arise that require MPAH guidance. Some of these considerations are detailed below.

#### 3.10.1 Intersection Condition

Intersection performance is the most critical factor in determining vehicular traffic conditions along arterials. Intersection conditions should be considered in the planning process to reduce congestion via improved traffic flow conditions on the arterial highway system.

#### 3.10.2 Arterial Continuity

Arterials should be continuous between two connecting arterials. However, the classification may vary between the connecting arterials if actual and projected traffic volumes vary significantly and support different classifications<sup>14</sup>.

#### 3.10.3 Transitions Between Two Classifications

A transition in arterial classification of a roadway from one side of an intersection to the other should be made by transitioning the higher classification to the lower classification over a specified section beyond the intersection where feasible. Specifications for the required transition length are contained in the Caltrans Highway Design Manual.

#### 3.10.4 Other Facilities and Considerations

State/Interstate freeways are shown on the MPAH map for reference. Although maintained and operated by Caltrans, these facilities are an integral part of the countywide transportation system. Coordination among Caltrans, TCA, OCTA, cities and the County concerning planning and improvements to these facilities is essential to meeting regional traffic needs.

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<sup>14</sup> Policy approved OCTA Board on April 13, 1998.



#### 4.0 MPAH AMENDMENT POLICIES<sup>15</sup>

1. A roadway on the MPAH that has been unilaterally removed from or downgraded on the local agency's Circulation Element, and/or does not meet the capacity criteria, will result in the local agency becoming ineligible to participate in Measure M2 Net Revenues as well as programs—including the Orange County CTFP.
2. Amendments to the MPAH should not result in significant adverse impacts to the MPAH system (in terms of capacity and level of service), and this should be documented prior to consideration of the proposed changes.
3. MPAH deletions and downgrades may be allowed if the increased traffic volume in the affected agencies does not result in the unmitigated peak hour intersection level of service<sup>16</sup> (LOS) "D" or the General Plan standard adopted by the respective agency<sup>17</sup>.
4. OCTA staff shall attempt to achieve consensus by the affected agencies<sup>18</sup> on a proposed amendment, which may include an agency(ies) that does not agree with the proposed amendment. Thereafter, OCTA staff will initiate the formal amendment approval process (i.e. processing the amendment request through appropriate OCTA Board Committee and the Board of Directors (Board)).

OCTA staff may request OCTA Board conditionally approve the proposed amendment, with the proposed amendment only becoming final upon OCTA receiving appropriate documentation that the agency(ies) specified by the Board as part of the conditional approval have complied with the requirements of the California Environmental Quality Act (CEQA) and have amended their respective general plans.

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<sup>15</sup> It should be noted that the agency that proposes an amendment to the MPAH will be responsible for acting as the Lead Agency to fund and prepare any cooperative study that may be required for the proposed amendment. For example, local agencies will be required to bear the costs of preparing any cooperative study that may be required for MPAH amendments they propose. Likewise, OCTA will bear the cost for any cooperative study that may be required for MPAH amendments proposed by OCTA. OCTA will provide technical assistance (staff and modeling support) for MPAH amendments proposed by local agencies as mutually agreed by both parties during an initial staff conference.

<sup>16</sup> Level of Service (LOS) is to be calculated using the methodology in the latest Congestion Management Program (CMP) Intersection Capacity Utilization (ICU) standard. Use of other analytical methods can potentially be considered in unique or special cases so long as these methods are consistent with the latest peer-reviewed and professionally accepted state of practice; approved by OCTA prior to use in MPAH amendment processes, and satisfy OCTA's need for technical justification in support of an MPAH amendment.

<sup>17</sup> Policy approved by OCTA Board on April 13, 1998.

<sup>18</sup> An affected agency is a neighboring agency or any agency where an appreciable impact (such as a change in the Level of Service or an increase in the ICU value of 0.01) is likely to occur due to the proposed deletion or downgrade.

If impacts to the MPAH system are identified as a result of the proposed amendment, approval of the amendment may also be subject to execution of a Memorandum of Understanding (MOU) between OCTA and affected agency(ies), specifying roles and responsibilities for implementation of any identified mitigation.

5. Immediately following the OCTA Board's conditional approval of the proposed amendment OCTA staff will file a Notice of Exemption (NOE) from CEQA in support of the Board's action to conditionally amend the MPAH.
6. Once OCTA has received documentation that the specified agencies have completed appropriate CEQA processes and formally approved changes to their respective General Plan Circulation Element(s), the MPAH map will be updated accordingly. If the originally proposed MPAH amendment is modified as a result of the CEQA and/or General Plan amendment processes, the modified MPAH amendment shall be returned to the Board for approval.

#### **4.1 MPAH AMENDMENT PROCESS**

1. *Proposal to Amend the MPAH*

To initiate the MPAH amendment process, a local agency must submit a written request to OCTA describing the amendment requested, and provide appropriate documentation to support the basis for the request. A copy of the request should be submitted concurrently to the City Managers/Public Works Directors of affected jurisdictions (or the Director of Orange County Public Works, where an unincorporated portion of the County is involved), if impacted by the amendment request.

## 2. Local Agency/OCTA Staff Conference

Upon receiving an MPAH amendment request:

OCTA will convene a staff conference with the agency(ies) requesting the amendment, including representatives from affected agencies, if determined necessary by OCTA, based on the potential impact of the proposed amendment. The staff conference will determine whether there is mutual agreement on the proposed amendment.

"Mutual agreement" is defined as OCTA and affected agencies concurring with the technical merits of the proposed amendment, and that it is consistent with OCTA's adopted MPAH Guidelines.

If there is mutual agreement, OCTA will provide a response to this effect, stating its intent to process an amendment request through the appropriate OCTA Board Committee and Board of Directors for conditional approval.

OCTA desires and makes every attempt to achieve mutual agreement by affected agencies on MPAH amendments. However, in the event that mutual agreement cannot be achieved, OCTA staff may attempt to achieve consensus by affected agencies through a cooperative study process.

OCTA has determined that the following types of amendments are administrative in nature, and **would not** require a cooperative study:

A. Changes of a roadway alignment from "Conceptually Proposed" to "Established Alignment."

B. Changes in roadway alignment where the new alignment still serves the roadway's basic intent.

### 3. Cooperative Study Process

#### A. Overview

If OCTA staff determines that the MPAH Cooperative Study Process is desirable, it may proceed as follows. The lead agency and OCTA will execute a cooperative study agreement, if determined necessary based upon potential funding commitments. The Lead agency, in consultation with OCTA, will determine whether other agencies should be involved in the technical study, and develop a plan for building consensus for the proposed amendment. The Lead agency then prepares and presents technical data to OCTA and other potentially impacted agencies. For amendments involving the TAC,<sup>19</sup> the TAC may take a position on the proposed MPAH amendment (i.e., recommend approval or denial). The OCTA staff would then forward its recommendation to the appropriate OCTA Board Committee.<sup>20</sup> The appropriate OCTA Board Committee would take a position on the proposed MPAH amendment, and forward that recommendation to the OCTA Board. The Board then acts on the proposed MPAH amendment.

#### B. Cooperative Study Process and Agreement

To initiate the Cooperative Study process, the sponsoring agency shall develop a scope of work, to be reviewed and approved by OCTA staff and other participating agencies. If the study effort will be jointly funded by agencies other than a lead agency, a Cooperative Study Agreement will be required. The Cooperative Study Agreement with OCTA, will need to be approved by the governing bodies of participating agencies. Agreements for cooperative studies addressing regional or sub-regional issues may involve more than one local agency.

The Cooperative Study Agreement will define the roles and responsibilities of each agency, including funding and preparation of the study, the study schedule, and work program. The parties to the agreement shall determine a reasonable schedule for the cooperative study, and shall commit to that schedule as part of the agreement. The agreement will include a provision for time extensions by mutual consent.

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<sup>19</sup> In some cases, proposed MPAH amendment concerns are more localized, and involvement of the TAC may not be appropriate. In these cases, OCTA reserves the right to advance a proposed MPAH amendment directly through the appropriate OCTA Board Committee and Board.

<sup>20</sup> In the event that it is determined that TAC involvement is not necessary, for the proposed MPAH amendment, the proposed MPAH amendment may be advanced directly to the appropriate OCTA Board Committee and subsequently the Board.

In order to avoid duplication of planning efforts, if a lead agency's request to amend the MPAH is based on an Environmental Impact Report (EIR), and the EIR contains sufficient technical data to justify the amendment, then the traffic study for the EIR may be substituted for the Cooperative Study. However, for the lead agency to be able to use this alternative process, other affected agencies must be included in the development of the traffic study. The traffic analysis should also include a separate comparison of the existing MPAH versus the proposed change to the MPAH, and also identify impacts and mitigation associated with the change to the MPAH (as opposed to impacts and mitigation associated with the project evaluated by the EIR).

### C. Cooperative Study Work Program

The Cooperative Study Work Program may include, but not be limited to, the following elements:

- Initial scoping sessions.
- Methodology/technical analysis framework, including:
  - Defining and obtaining consensus on analysis area (i.e., the area that could be affected by the amendment)
  - Defining and obtaining consensus on appropriate analytical tools (i.e., OCTAM model, local agency sub-area model, other "unique" consideration factors)<sup>21</sup>
  - Confirming applicable level of service standards and methodology for determining LOS
  - Identifying special factors to be considered in the analysis and LOS evaluation (e.g., lack of cross-streets and/or access rights to prohibit driveways may allow for higher volume of traffic on an arterial, adjoining land uses, presence of wetlands or other sensitive natural resources, immediate proximity to historic structures, high frequency transit service ridership, complete streets components, bikeway facilities, etc.)
- Final scoping sessions to review and obtain consensus on study results.
- If mitigation is required, develop consensus on mitigation plan/implementation framework<sup>22</sup>.
- TAC meetings for Cooperative Studies with TAC involvement (where appropriate).
- Once consensus is achieved, OCTA will initiate the formal amendment approval process.

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<sup>21</sup> **Note:** If unique consideration factors such as multi-modal levels of service are anticipated to be utilized in support of an MPAH amendment request, they need to be approved in advance by both OCTA staff and immediately adjacent jurisdictions, if impacted. They may also need to be consistent with the latest peer-review and professionally accepted state of practice, and satisfy OCTA's need for technical justification in support of an MPAH amendment.

<sup>22</sup> This is typically done through execution of a Memorandum of Understanding.

4. Local Agency General Plan Amendment (Including Environmental Documentation)

Local agencies must prepare CEQA documentation to ensure proper disclosure of any environmental impacts associated with the proposed amendment as well as ensuring consistency with other General Plan elements. Following approval of the General Plan amendment and CEQA document by the local agency governing body, the MPAH map will be updated accordingly. If the originally proposed MPAH amendment is modified as a result of CEQA and/or General Plan amendment processes, the modified MPAH amendment shall be returned to the Board for approval.

5. Timing of OCTA Board Approval of the MPAH Amendment

Since the MPAH is not a General Plan, the MPAH may be amended more frequently than the four times per year allowed under the State of California General Plan Guidelines. However, to efficiently utilize OCTA staff and Board resources, OCTA maintains the policy of amending the MPAH no more than four times each year (once each quarter). Exceptions may be made on a case by case basis, where a local agency demonstrates a compelling need to have an amendment approved by OCTA prior to the next regularly scheduled OCTA Board consideration of an MPAH amendment.

## **5.0 MPAH CONSISTENCY REVIEW PROCESS**

For a local agency to be eligible for participation in Measure M2 Net Revenues as well as programs—including the CTFP, the agency's General Plan circulation element must be consistent with the MPAH. MPAH consistency policies are described below, followed by a description of the procedural steps OCTA will utilize in reviewing MPAH consistency. The MPAH consistency policies are based on the "Renewed Measure M Eligibility Guidelines" Section 3.4 dated (April, 2011), and included in this *MPAH Guidance* as **Appendix 7**.

### **5.1 MPAH CONSISTENCY POLICIES**

1. For an agency's Circulation Element to be consistent with the MPAH, it shall have the minimum planned carrying capacity equivalent to the MPAH for all MPAH links within the agency's jurisdiction. "Planned carrying capacity" shall be measured by the number of through lanes on each arterial highway as shown on the local Circulation Element.
2. Agencies are not considered inconsistent as a result of existing capacity limitations on arterials not yet constructed to the ultimate capacity shown on the MPAH.
3. Every two years each local agency must submit a resolution adopted by the governing body attesting that no unilateral reduction in lanes has been made on any MPAH arterial.
4. A roadway on the MPAH that has been unilaterally removed from or downgraded on the local agency's circulation element and/or does not meet the minimum capacity criteria may result in the local agency becoming ineligible to participate in Measure M2 Net Revenues as well as programs—including the CTFP. A local agency's eligibility status may be reinstated upon completion of a cooperative study to resolve the inconsistency. Additionally, the local agency can also re-establish eligibility upon restoring its Circulation Element to its previous state of MPAH consistency.
5. A local agency that unilaterally reduces the number of existing and/or planned through lanes on an MPAH arterial built to its ultimate configuration to less than the ultimate capacity shown on the MPAH shall be inconsistent with the MPAH from the date the governing body action is taken. Unilateral action shall mean physical actions such as striping, signing, or physical restrictions executed by the local agency.

6. A temporary reduction of existing through lanes is permitted if, prior to taking this action, a local agency can demonstrate to OCTA that such action is temporary and can be justified for operational reasons and the agency enters into a binding agreement to restore capacity upon demand by OCTA. OCTA may also determine that the local agency remain eligible on a conditional basis. If the local agency is found ineligible, it shall regain eligibility upon physical restoration of the arterial to its original state, consistent with the MPAH.
7. Traffic calming measures shall not be used on arterials classified as Secondary and above on the MPAH. Traffic calming measures may be allowed only on Divided Collectors and Collectors, where it can be demonstrated the calming measures will not reduce vehicle carrying capacity below the actual and projected traffic volumes for the segment and the increased traffic volume on affected MPAH facilities does not result in an intersection level of service (LOS) worse than LOS “D” or the General Plan standard adopted by the affected jurisdiction.<sup>23</sup>
8. To be eligible for Measure M2 “fair share” funds, a local agency must adopt a General Plan Circulation Element that does not preclude implementation of the MPAH.
9. A local agency shall be considered conditionally consistent if it requests a change to the MPAH and enters into a Cooperative Study to analyze the request. No change shall be made to the local agency's Circulation Element until after the Cooperative Study is complete and agreement is reached on the proposed amendment.

## **5.2 MPAH CONSISTENCY REVIEW PROCEDURES**

1. On June 30 of every odd year, a local agency wishing to establish eligibility for Measure M2 Net Revenues as well as programs—including the CTFP shall submit to the OCTA Manager of Local Programming the following:
  - A. A resolution in a format consistent with **Appendix 8** adopted by the governing body of the local agency.
  - B. A copy of the local agency's current Circulation Element that shows all arterial highways and their individual arterial designations. Any proposed changes and/or requests for changes to the MPAH should also be included.
2. OCTA shall review the materials submitted, and determine whether the local agency Circulation Elements are consistent with the MPAH, meaning they have a minimum planned carrying capacity equivalent to the MPAH for all MPAH links within the local agency's jurisdiction.

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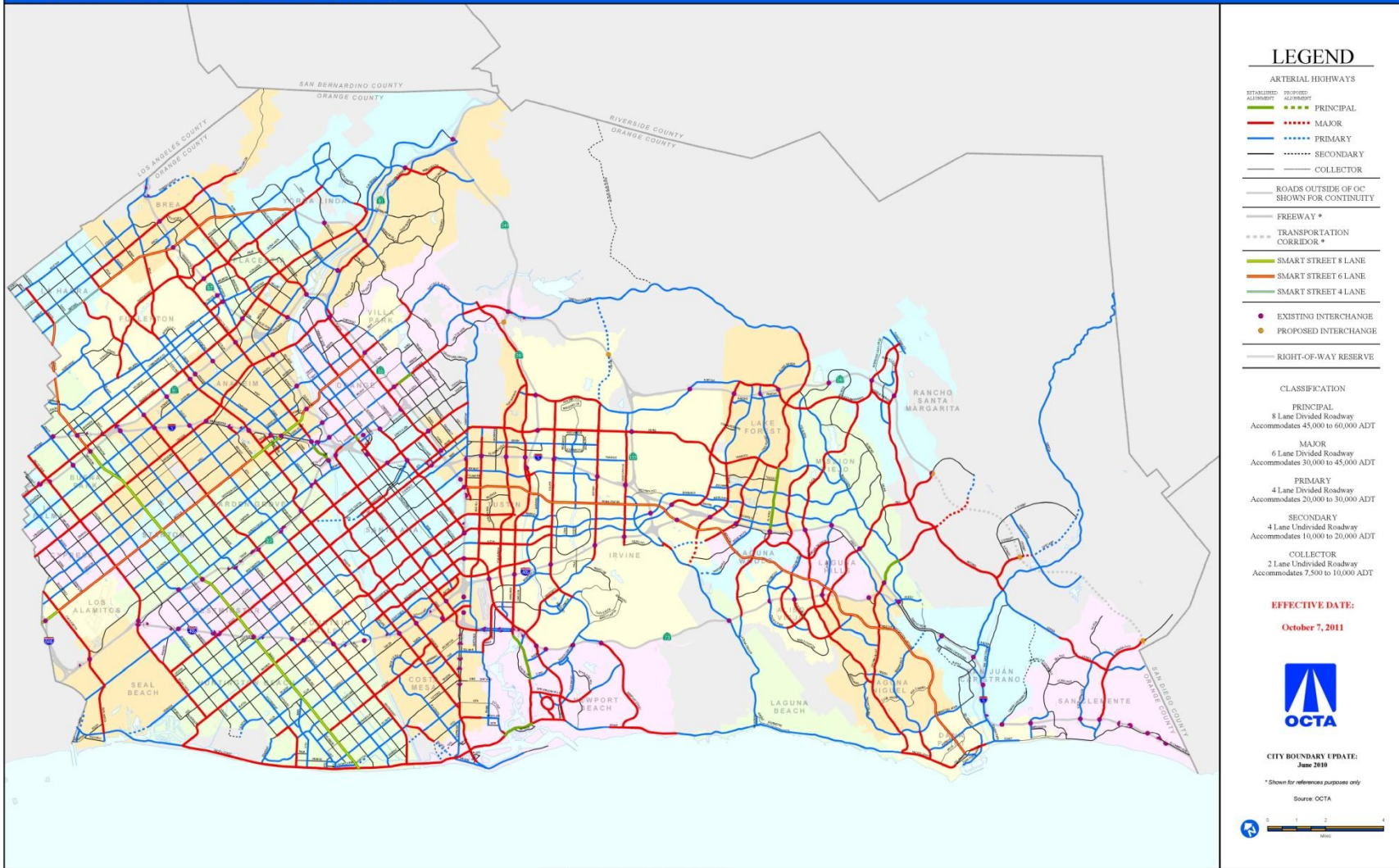
<sup>23</sup> Policy approved by OCTA Board on April 13, 1998.



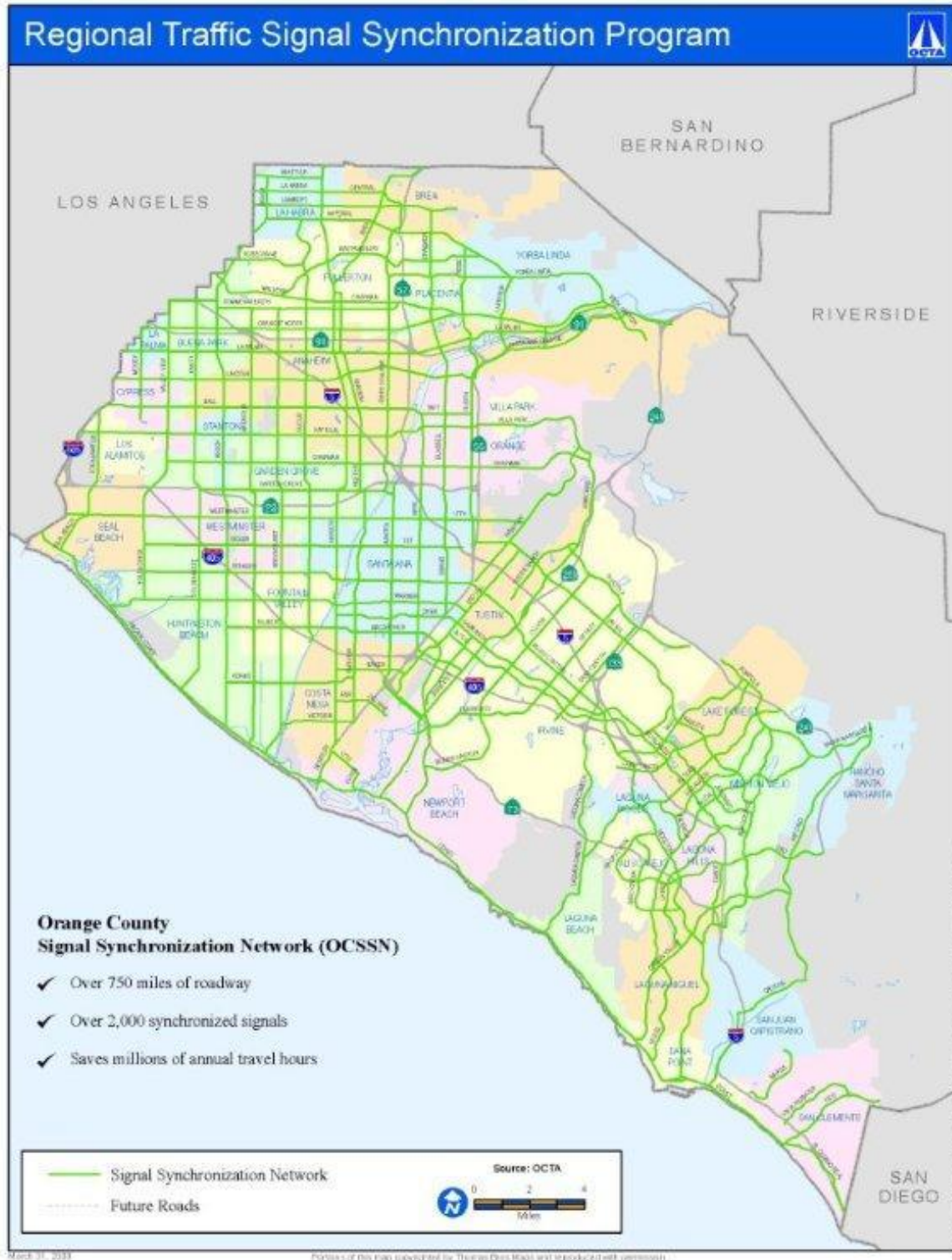
3. Upon completion of the review, OCTA shall prepare a report to OCTA Board for approval, including recommendations on consistency findings and funding eligibility determinations.

# APPENDIX 1 MASTER PLAN OF ARTERIAL HIGHWAYS MAP

## Master Plan of Arterial Highways



## APPENDIX 2 REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM



### **APPENDIX 3 PLANNING CRITERIA FOR DETERMINING ARTERIAL HIGHWAY CLASSIFICATIONS**

(Sources: 2010 Highway Capacity Manual; County of Orange, Advance Planning Program, Transportation Element, Appendix 4; April, 1994)

#### **PLANNING CRITERIA FOR DETERMINING ARTERIAL HIGHWAY CLASSIFICATIONS**

In order to evaluate the arterial classifications needed to serve current and future traffic conditions, certain criteria and assumptions are made regarding roadway capacities. The concept of capacity, and the relationship between capacity and traffic volumes is expressed by means of "levels of service" (LOS). These recognize that, while there is an absolute limit to the amount of traffic that can travel through a given corridor (the "capacity"), conditions rapidly deteriorate as traffic reaches that level. As traffic approaches capacity, congested conditions are experienced. There is general instability in the traffic flow whereby small disruptions can cause considerable fluctuations in speeds and delays. Planning level analyses are intended to provide an estimate of the LOS for either a proposed facility or an existing facility in a future year. This level of analysis may also be used to size the overall geometrics of a proposed facility. The level of precision inherent in planning analyses is typically lower than for operational analyses.

Levels of Service (LOS) are Performance Measures used to define categories, 'A' through 'F'. Beyond LOS 'E', capacity has been exceeded, and arriving traffic will exceed the ability of a given street to accommodate it. A description of the meaning of the six Levels of Service follows: <sup>24</sup>

- LOS A describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
- LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
- LOS C describes stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.

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<sup>24</sup> HCM 2010 Volume 3 / Interrupted Flow (Transportation Research Board of the National Academies), p. 16-7.





These roadway capacities are approximate figures only, for use at the General Plan level. They are affected by such factors as intersections (numbers, spacing & configuration), degree of access control, roadway grades, design geometries (horizontal & vertical alignment standards), sight distance, level of truck and bus traffic, and level of pedestrian and bicycle traffic. Average daily traffic (ADT) has historically been used by the County as a long range planning tool to assist in determining arterial highway classification (number of through lanes) needed to meet traffic demand.

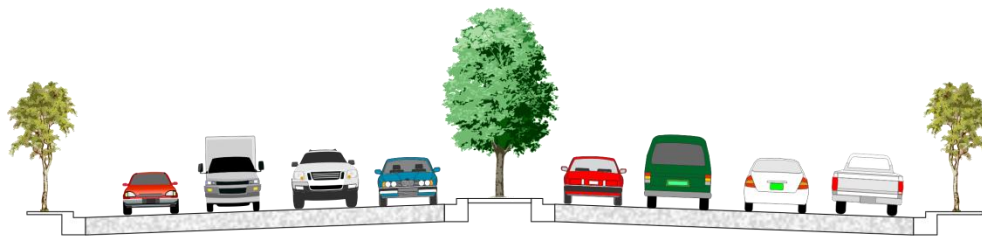
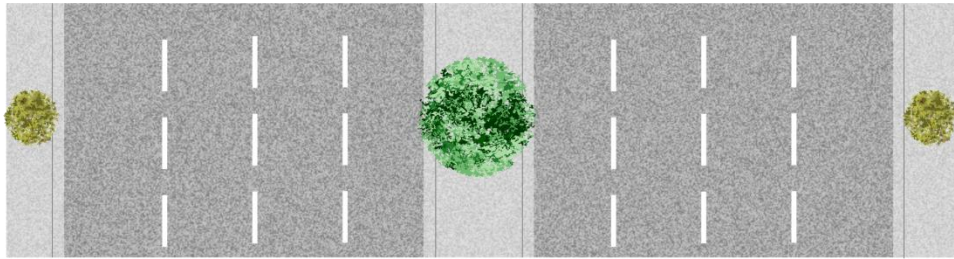
## **APPENDIX 4 CITY/COUNTY NOMENCLATURE FOR ARTERIAL HIGHWAYS**

TAC members are requested to submit this information for ROW widths and ADT capacity assumptions used for each Arterial classification.

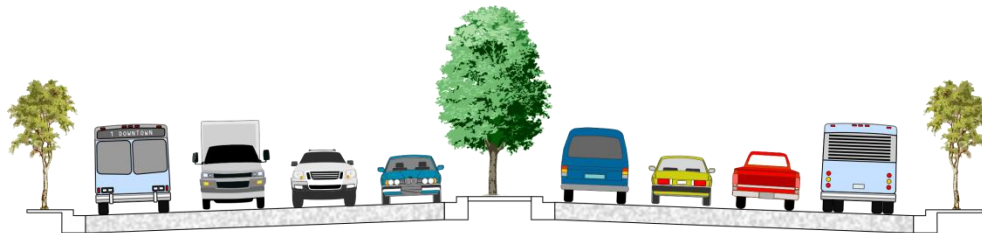
## APPENDIX 5 MPAH CROSS SECTIONS

Complete Streets components on arterial cross-sections are evolving and it may be necessary to revisit ROW widths, cross-sections, operational and capacity assumptions as relevant information on best practices becomes available. Note: emphasis designations provide recognition of multi-modalism on MPAH facilities.

Chart 1-1 Principal Arterials



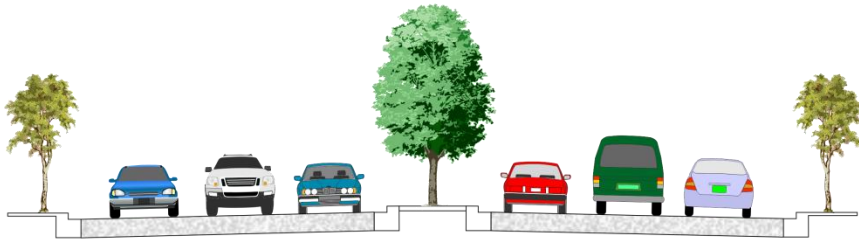
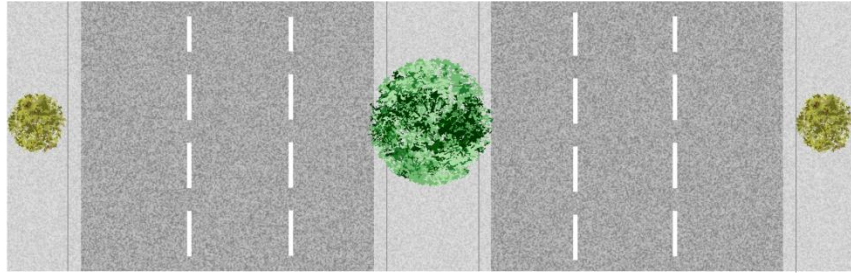
PRINCIPAL  
144 FT  
(8 LANES, DIVIDED)  
VEHICLE EMPHASIS



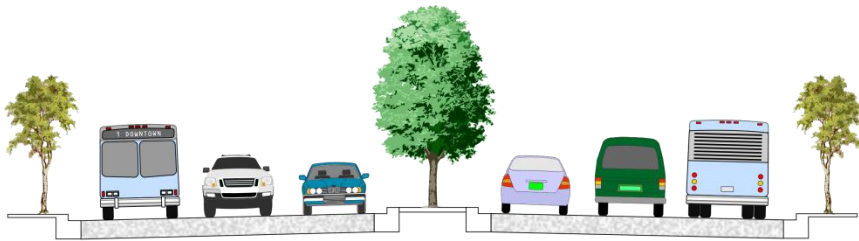
PRINCIPAL  
144 FT  
(8 LANES, DIVIDED)  
TRANSIT EMPHASIS



## Chart 1-2 Major Arterials

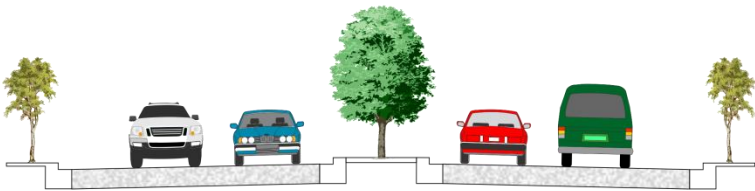
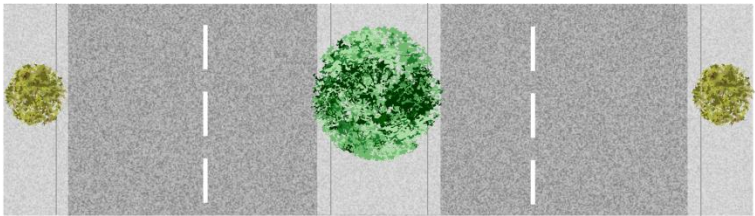


MAJOR  
120FT  
(6 LANES, DIVIDED)  
VEHICLE EMPHASIS

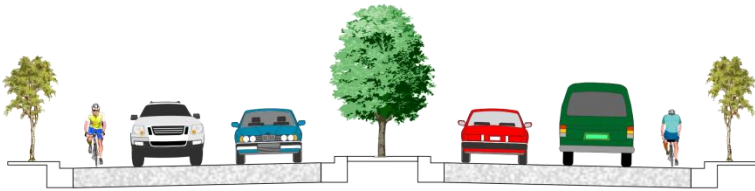
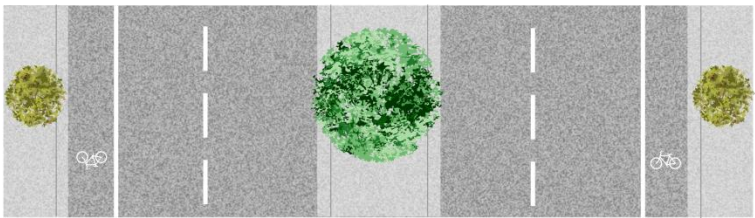


MAJOR  
120FT  
(6 LANES, DIVIDED)  
TRANSIT EMPHASIS

Chart 1-3 Primary Arterials

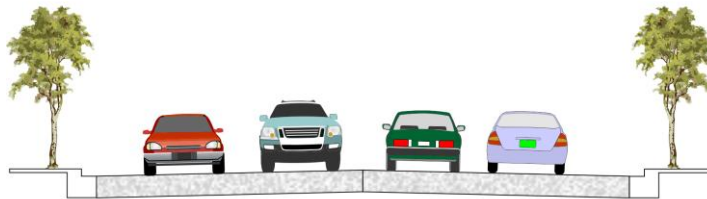
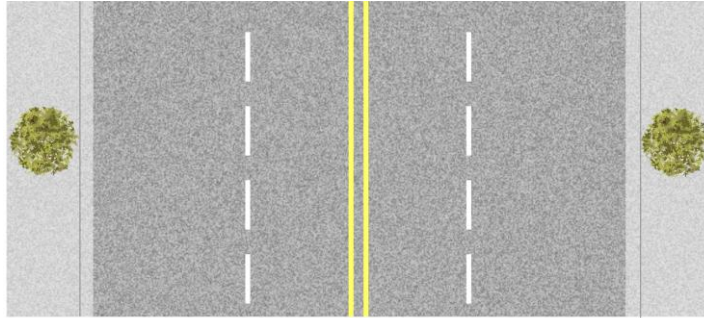


PRIMARY  
100 FT  
(4 LANES, DIVIDED)  
VEHICLE EMPHASIS

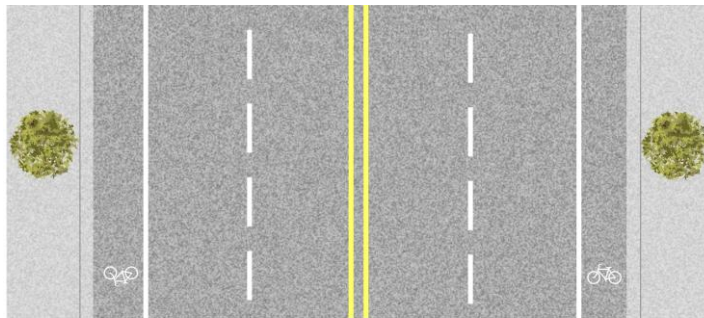


PRIMARY  
100 FT  
(4 LANES, DIVIDED)  
BICYCLE EMPHASIS

Chart 1-4 Secondary Arterials

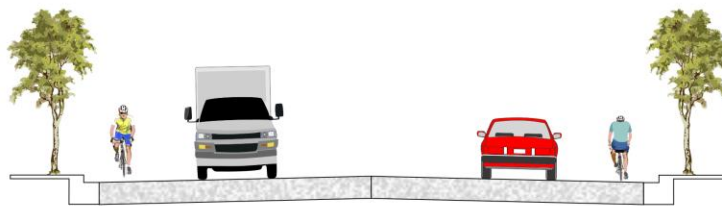
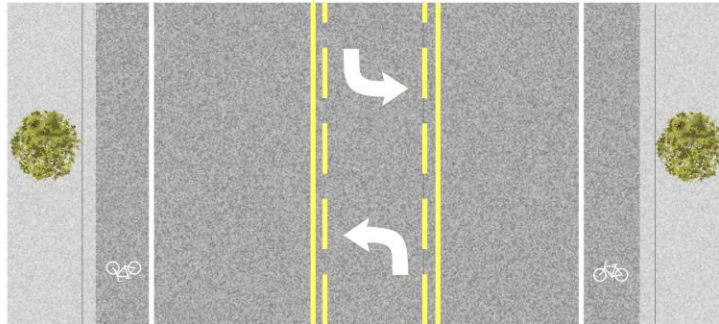


SECONDARY  
80 FT  
(4 LANES, UNDIVIDED)  
VEHICLE EMPHASIS

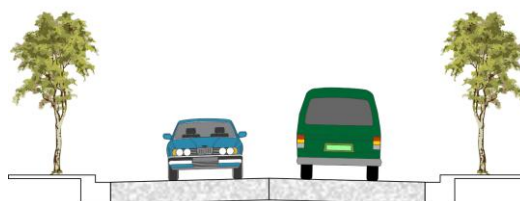
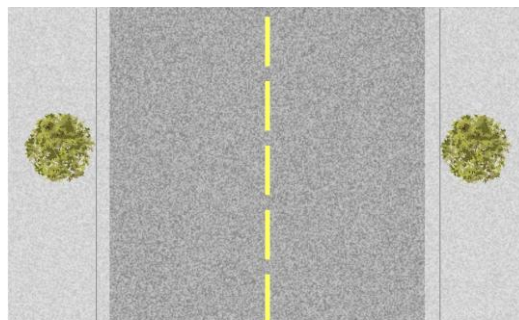


SECONDARY  
80 FT  
(4 LANES, UNDIVIDED)  
BICYCLE EMPHASIS

Chart 1-5 Collector Arterials



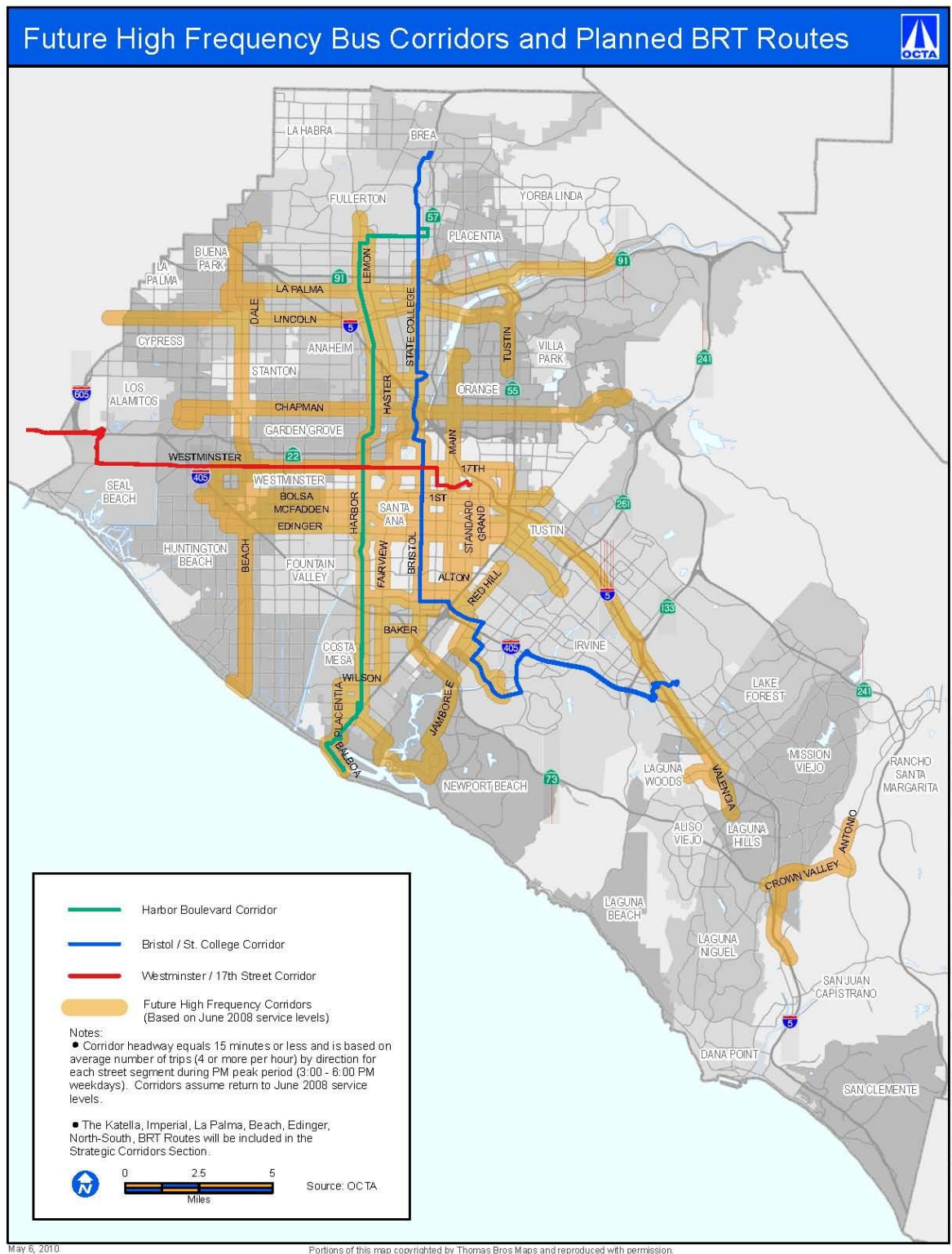
DIVIDED COLLECTOR  
80 FT  
(2 LANES, DIVIDED)



COLLECTOR  
56 FT  
(2 LANES, UNDIVIDED)



## APPENDIX 6 FUTURE HIGH FREQUENCY BUS CORRIDORS AND PLANNED BRT ROUTES<sup>25</sup>



<sup>25</sup> Subject to revision based upon adopted LRTP.

## APPENDIX 7 MEASURE M2 REGIONAL FUNDING PROGRAM CONSISTENCY AND ELIGIBILITY CRITERIA

### III. REQUIREMENTS FOR ELIGIBLE JURISDICTIONS.

A. In order to be eligible to receive Net Revenues, a jurisdiction shall satisfy and continue to satisfy the following requirements.

1. Congestion Management Program. Comply with the conditions and requirements of the Orange County Congestion Management Program (CMP) pursuant to the provisions of Government Code Section 65089.

2. Mitigation Fee Program. Assess traffic impacts of new development and require new development to pay a fair share of necessary transportation improvements attributable to the new development.

3. Circulation Element. Adopt and maintain a Circulation Element of the jurisdiction's General Plan consistent with the MPAH.

4. Capital Improvement Program. Adopt and update biennially a six-year Capital Improvement Program (CIP). The CIP shall include all capital transportation projects, including projects funded by Net Revenues, and shall include transportation projects required to demonstrate compliance with signal synchronization and pavement management requirements.

5. Traffic Forums.

Participate in Traffic Forums to facilitate the planning of traffic signal synchronization programs and projects. Eligible Jurisdictions and Caltrans, in participation with the County of Orange and the Orange County Division of League of Cities, will establish the boundaries for Traffic Forums. The following will be considered when establishing boundaries:

- a. Regional traffic routes and traffic patterns;
- b. Inter-jurisdictional coordination efforts; and
- c. Total number of Traffic Forums.

6. Local Traffic Signal Synchronization Plan. Adopt and maintain a Local Traffic Signal Synchronization Plan which shall identify traffic signal synchronization street routes and traffic signals; include a three-year plan showing costs, available funding

1 and phasing of capital, operations and maintenance of the street routes and traffic signals;  
2 and include information on how the street routes and traffic signals may be synchronized  
3 with traffic signals on the street routes in adjoining jurisdictions. The Local Traffic Signal  
4 Synchronization Plan shall be consistent with the Traffic Signal Synchronization Master  
5 Plan.

6                   7.     Pavement Management Plan. Adopt and update biennially a  
7 Pavement Management Plan, and issue, using a common format approved by the  
8 Authority, a report every two years regarding the status of road pavement conditions and  
9 implementation of the Pavement Management Plan.

10                   a.     Authority, in consultation with the Eligible Jurisdictions,  
11 shall define a countywide management method to inventory, analyze and evaluate road  
12 pavement conditions, and a common method to measure improvement of road pavement  
13 conditions.

14                   b.     The Pavement Management Plan shall be based on:  
15 either the Authority's countywide pavement management method or a comparable  
16 management method approved by the Authority, and the Authority's method to measure  
17 improvement of road pavement conditions.

18                   c.     The Pavement Management Plan shall include:

19                             (i)     Current status of pavement on roads;

20                             (ii)    A six-year plan for road maintenance and  
21 rehabilitation, including projects and funding;

22                             (iii)   The projected road pavement conditions resulting  
23 from the maintenance and rehabilitation plan; and

24                             (iv)   Alternative strategies and costs necessary to  
25 improve road pavement conditions.

26                   8.     Expenditure Report. Adopt an annual Expenditure Report to  
27 account for Net Revenues, developer/traffic impact fees, and funds expended by the  
28 Eligible Jurisdiction which satisfy the Maintenance of Effort requirements. The Expenditure

1 Report shall be submitted by the end of six (6) months following the end of the jurisdiction's  
2 fiscal year and include the following:

- 3 a. All Net Revenue fund balances and interest earned.  
4 b. Expenditures identified by type (i.e., capital, operations,  
5 administration, etc.), and program or project .

6 9. Project Final Report. Provide Authority with a Project Final  
7 Report within six months following completion of a project funded with Net Revenues.

8 10. Time Limits for Use of Net Revenues.

9 a. Agree that Net Revenues for Regional Capacity Program  
10 projects and Regional Traffic Signal Synchronization Program projects shall be expended  
11 or encumbered no later than the end of the fiscal year for which the Net Revenues are  
12 programmed. A request for extension of the encumbrance deadline for no more than  
13 twenty-four months may be submitted to the Authority no less than ninety days prior to the  
14 deadline. The Authority may approve one or more requests for extension of the  
15 encumbrance deadline.

16 b. Agree that Net Revenues allocated for any program or  
17 project, other than a Regional Capacity Program project or a Regional Traffic Signal  
18 Synchronization Program project, shall be expended or encumbered within three years of  
19 receipt. The Authority may grant an extension to the three-year limit, but extensions shall  
20 not be granted beyond a total of five years from the date of the initial funding allocation.

21 c. In the event the time limits for use of Net Revenues are  
22 not satisfied then any retained Net Revenues that were allocated to an Eligible Jurisdiction  
23 and interest earned thereon shall be returned to the Authority and these Net Revenues and  
24 interest earned thereon shall be available for allocation to any project within the same  
25 source program.

26 11. Maintenance of Effort. Annual certification that the Maintenance  
27 of Effort requirements of Section 6 of the Ordinance have been satisfied.

28 12. No Supplanting of Funds. Agree that Net Revenues shall not be



1 used to supplant developer funding which has been or will be committed for any  
2 transportation project.

3 13. Consider, as part of the Eligible Jurisdiction's General Plan, land  
4 use planning strategies that accommodate transit and non-motorized transportation.

5 B. Determination of Non-Eligibility

6 A determination of non-eligibility of a jurisdiction shall be made only  
7 after a hearing has been conducted and a determination has been made by the Authority's  
8 Board of Directors that the jurisdiction is not an Eligible Jurisdiction as provided  
9 hereinabove.

10 IV. ALLOCATION OF NET REVENUES; GENERAL PROVISIONS.

11 A. Subject to the provisions of the Ordinance, including Section II above,  
12 use of the Revenues shall be as follows:

13 1. First, the Authority shall pay the State Board of Equalization for  
14 the services and functions;

15 2. Second, the Authority shall pay the administration expenses of  
16 the Authority;

17 3. Third, the Authority shall satisfy the annual allocation  
18 requirement of two percent (2%) of Revenues for Environmental Cleanup; and

19 4. Fourth, the Authority shall satisfy the debt service requirements  
20 of all bonds issued pursuant to the Ordinance that are not satisfied out of separate  
21 allocations.

22 B. After providing for the use of Revenues described in Section A above,  
23 and subject to the averaging provisions of Section D below, the Authority shall allocate the  
24 Net Revenues as follows:

25 1. Forty-three percent (43%) for Freeway Projects;

26 2. Thirty-two percent (32%) for Street and Road Projects; and

27 3. Twenty-five percent (25%) for Transit Projects.

28 C. The allocation of thirty-two percent (32%) of the Net Revenues for

## COMPREHENSIVE TRANSPORTATION FUNDING PROGRAM (CTFP) AND ELIGIBILITY CRITERIA

### CONSISTENCY DEFINITION

Consistency with the Master Plan of Arterial Highways (MPAH) is the primary criterion for determining city and county commitment to maintaining the integrity of the regional transportation system. For agencies circulation element to be consistent with the MPAH, for purposes of Measure M2 Net Revenues as well as programs—including CTFP eligibility, it shall have an equivalent planned traffic-carrying capacity for all MPAH links within the city's jurisdiction.

“Planned capacity” shall be measured by the number of through lanes on each arterial highway as shown on the local circulation element. Agencies shall not be inconsistent as a result of existing capacity limitations on arterials which are not yet constructed to the circulation element designation. However, any agencies which unilaterally reduce the number of through lanes on MPAH arterial highways on their circulation elements to less than shown on MPAH without OCTA Board approval shall be inconsistent with the MPAH on the date city council action is taken and is ineligible for Measure M2 Net Revenues as well as programs—including CTFP until consistency is re-established.

### PROGRAM ELIGIBILITY

#### Local Agency Responsibility

Eligibility requirements shall be verified annually as follows:

1. For Renewed Measure M "Local Fair Share Program ("fairshare") funds, cities shall adopt a General Plan circulation element that is consistent with the MPAH and shall take no action to preclude implementation of the MPAH.
2. For all competitive regional funding programs cities shall adopt:
  - a. a General Plan Circulation Element which is consistent with the MPAH; and
  - b. a City Council resolution attesting that no unilateral reduction in lanes has been made on any MPAH arterials.

#### Biennial Review Process

Every other year, OCTA shall determine if agencies circulation elements provide equal numbers of through lanes for each highway shown on the MPAH. OCTA shall also ensure that local agencies have not unilaterally reduced the number of lanes on any existing arterial highway (effective April 1, 2011).

## Approval Process

Upon completion of the Eligibility Review, recommendations shall be reviewed and formally approved by OCTA and the Board.

### RE-ESTABLISHING PROGRAM ELIGIBILITY

Once a city has been determined to be ineligible for Measure M2 Net Revenues as well as programs—including the CTFP, it may seek to re-establish eligibility by requesting a cooperative study be undertaken with OCTA. The study will be designed to do the following:

- 1) ascertain the regional transportation system need;
- 2) make provisions to meet those needs in the city General Plan; and
- 3) re-establish consistency with the MPAH.

Any changes to the agencies' General Plan or the MPAH shall be mutually acceptable to the city and OCTA. Until such a study has been completed, agencies shall be ineligible to receive applicable funds.

### MUTUAL CHANGES TO CIRCULATION ELEMENT AND MPAH

Agencies may mutually revise their respective circulation elements through the cooperative process outlined previously. Agencies shall continue to be eligible to receive funds while the cooperative study process is underway, so long as their general plans remain unchanged until such time as the cooperative study process is complete.

## **APPENDIX 8 SAMPLE RESOLUTION**

### **SAMPLE RESOLUTION A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CONCERNING THE STATUS OF THE CIRCULATION ELEMENT FOR THE CITY OF**

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

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

WHEREAS, the City has adopted a resolution informing the Orange County Transportation Authority (OCTA) that the City's Circulation Element is in conformance with the County's Master Plan of Arterial Highways and whether any changes to any arterial highways of said Circulation Element have been adopted by the City during Fiscal Year 20\_\_-\_\_, and

WHEREAS, the City is required to send annually to the OCTA all recommended changes to the City Circulation Element and the County Master Plan of Arterial Highways for the purpose of re-qualifying for participation in the Arterial Highway Financing Program and Measure M's Streets and Roads Programs.

NOW, THEREFORE, BE IT RESOLVED that the City of , does hereby inform the OCTA that:

- a) The arterial highway portion of the City Circulation Element of the City is in conformance with the County Master Plan of Arterial Highways.
- b) The City attests that no unilateral reduction in through lanes has been made on any MPAH arterials during Fiscal Year 20\_\_-\_\_.
- c) The City has adopted a uniform setback ordinance providing for the preservation of rights-of-way consistent with the MPAH arterial highway classification.
- d) The City has adopted provisions for the limitation of access to arterial highways in order to protect the integrity of the system.

## 2.0 GOALS AND POLICIES

The following goals and policies are intended to serve as recommended countywide guidelines and to provide direction to local agencies that opt to implement the MPAH. A goal is a general expression of countywide values and sets the long range vision for the relationship among transportation and land use. A policy is a specific statement that facilitates decision making regarding issues, process, and constraints.

### ***1. Goal: Provide a Countywide Circulation (Arterial Highway) System to Accommodate Regional Travel Demand***

#### **Policies:**

1.1 OCTA will review the circulation plans of the cities and the County bi-annually to determine consistency with the MPAH in order to determine eligibility for Measure M2 Net-net Revenues-revenues as well as programs—including the CTFP.

1.2 OCTA will coordinate with various regional agencies (i.e., Caltrans (State), the Southern California Association of Governments (SCAG), the Transportation Corridor Agencies, etc.) on various studies relating to freeway, toll way and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated regional circulation system.

1.3 OCTA will coordinate planning of the arterial highway system cooperatively with cities, the County, SCAG, neighboring counties and neighboring cities in adjacent counties to works towards the consistency of regional transportation networks.

1.4 OCTA will coordinate with local agencies on their respective safety efforts, to encourage a balanced approach to providing for regional travel demand and addressing the needs of all users of the road.

### ***2. Goal: Provide an Arterial Highway System that Supports Land Use Policies of the County and Cities***

#### **Policies:**

2.1 The MPAH will encourage a coordinated arterial highway system that is in balance with the General Plan Land Use Elements of the cities and County.

2.2 The MPAH will encourage an arterial highway system designed to serve as part of a balanced transportation system (auto, rail, transit, bus, truck, bicycle, pedestrian, etc.).

2.3 OCTA will encourage local jurisdictions to consider and evaluate all mobility needs when requesting modifications to the MPAH<sup>9</sup>.

<sup>9</sup> Policy approved OCTA Board on April 11, 2011.

- 2.4 OCTA will encourage and assist all local jurisdictions to adopt comprehensive traffic transportation improvements, phasing and financing plans, in order to assist in countywide implementation of the MPAH.
- 2.5 OCTA will work with the cities and County through the Orange County CTFP to implement the MPAH and foster interagency cooperation toward anticipating and effectively meeting the regional transportation needs of Orange County.
- 2.6 OCTA will monitor local agencies to ensure that the arterial highway system is implemented in a manner that supports the implementation of adopted overall land use policies and that is consistent with financing capabilities.
- 2.7 OCTA prefers the use of analytical methods, in conformance with the Congestion Management Program (CMP), to aid in transportation planning and impact evaluation and encourage the development and utilization of sub-area models to address detailed transportation issues.

For amendments contemplating Complete Streets implementation, multi-modal analysis of peak period person-trip capacity can potentially be accommodated as an acceptable form of analysis, so long as it ~~is~~:

- is consistent with the latest peer-reviewed and professionally accepted state of practice;
  - includes ongoing commitment and performance measurement to enable effective ongoing utilization of Complete Streets capacity enhancements such as transit and bike facilities;
  - ~~use~~ is approved by OCTA prior to conducting MPAH related analyses; and satisfies OCTA's need for technical justification in support of an MPAH amendment.
- 2.8 OCTA will use the most recently adopted Orange County Projections (OCP) forecasts for projections of future year population, housing, and employment.
- 2.9 OCTA will use the Orange County Transportation Analysis Model (OCTAM) forecasts as the regional traffic forecasts for vehicle and transit ridership along the MPAH, and require local agencies to use OCTAM as a basis for data required in local and VXE area studies conducted by local agencies. The OCTAM must be consistent with SCAG's regional model as required by the CMP.
- 2.10 OCTA will provide guidance for the development of subarea traffic models used by local jurisdictions to determine the quantitative impacts of land use decisions on the circulation system, so as to be consistent with the OCTAM.
- 2.11 OCTA will establish roadway classification definitions based on the number of through lanes.

2.12 OCTA will review and potentially revise this Guidance document upon major updates to the Highway Capacity Manual (HCM), as necessary.

2.13 OCTA will adhere to the recommended processes identified in these Guidelines. However, the OCTA Board has discretion to amend, modify, and/or waive components of these Guidelines, as may be determined by the OCTA Board to be appropriate to address unique concerns<sup>10</sup>.

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<sup>10</sup> These concerns may include, without limitation, documentation of impasse with respect to achieving consensus on a proposed amendment, documentation of severe environmental impacts, regional mobility concerns, or significant and sustained public opposition.

## 5.0 MPAH CONSISTENCY REVIEW PROCESS

For a local agency to be eligible for participation in Measure M2 ~~Net-net Revenues~~ revenues, as well as programs—including the CTFP, the agency's General Plan circulation element must be consistent with the MPAH. MPAH consistency policies are described below, followed by a description of the procedural steps OCTA will utilize in reviewing MPAH consistency. The MPAH consistency policies are based on the "Renewed Measure M Eligibility Guidelines" Section 3.4 dated (April, 2011), and included in this *MPAH Guidance* as **Appendix 7**.

### 5.1 MPAH CONSISTENCY POLICIES

1. For an agency's Circulation Element to be consistent with the MPAH, it shall have the minimum planned carrying capacity equivalent to the MPAH for all MPAH links within the agency's jurisdiction. "Planned carrying capacity" shall be measured by the number of ~~through-through~~ lanes on each arterial highway as shown on the local Circulation Element.
2. Agencies are not considered inconsistent as a result of existing capacity limitations on arterials not yet constructed to the ultimate capacity shown on the MPAH.
3. Every two years each local agency must submit a resolution adopted by the governing body attesting that no unilateral reduction in lanes has been made on any MPAH arterial.
4. A roadway on the MPAH that has been unilaterally removed from or downgraded on the local agency's circulation element and/or does not meet the minimum capacity criteria may result in the local agency becoming ineligible to participate in Measure M2 Net Revenues as well as programs—including the CTFP. A local agency's eligibility status may be reinstated upon completion of a cooperative study to resolve the inconsistency. Additionally, the local agency can also re-establish eligibility upon restoring its Circulation Element to its previous state of MPAH consistency.
5. A local agency that unilaterally reduces the number of existing and/or planned ~~through through~~ lanes on an MPAH arterial built to its ultimate configuration to less than the ultimate capacity shown on the MPAH, shall be inconsistent with the MPAH from the date the governing body action is taken. Unilateral action shall mean physical actions such as striping, signing, or physical restrictions executed by the local agency.<sup>23</sup>

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<sup>23</sup> The MPAH does not specify minimum lane widths. Narrowing of travel lanes is not restricted provided the number of through lanes is maintained.



6. A temporary reduction of existing through lanes is permitted if, prior to taking this action, a local agency can demonstrate to OCTA that such action is temporary and can be justified for operational reasons and the agency enters into a binding agreement to restore capacity upon demand by OCTA. OCTA may also determine that the local agency remain eligible on a conditional basis. If the local agency is found ineligible, it shall regain eligibility upon physical restoration of the arterial to its original state, consistent with the MPAH.

~~7. Traffic calming measures shall not be used on arterials classified as Secondary and above on the MPAH. Traffic calming measures may be allowed only on Divided Collectors and Collectors, where it can be demonstrated the calming measures will not reduce vehicle carrying capacity below the actual and projected traffic volumes for the segment and the increased traffic volume on affected MPAH facilities does not result in an intersection level of service (LOS) worse than LOS "D" or the General Plan standard adopted by the affected jurisdiction.<sup>24</sup>~~

7. The use of traffic calming measures<sup>25</sup> on MPAH facilities shall be administered per the following:

- a. For Collectors and Divided Collectors, traffic calming achieved by the speed control measures listed below is permitted.

- i. Vertical deflections (e.g. speed humps and raised crosswalks)
- ii. Horizontal measures (e.g. traffic circles and chicanes)

- b. For Secondary and higher arterials, vertical deflections are not permitted, while horizontal speed control measures may be conditionally permitted. Prior to implementation, a local agency must demonstrate to OCTA that the horizontal speed control measures will not be a detriment to traffic operations for actual and projected traffic volumes. Multi-modal traffic operations, including safety analysis, shall be considered. Existing and long-range roadway segment analysis shall be considered, along with intersection level of service standards, if applicable. OCTA approvals will remain contingent upon the local agency subsequently satisfying the requirements of the California Environmental Quality Act.

- c. Traffic calming achieved by the volume control measures listed below are typically implemented to discourage or eliminate through traffic and shall not be used to restrict through movements on MPAH facilities.<sup>26</sup>

<sup>24</sup> ~~Policy approved by OCTA Board on April 13, 1998.~~

<sup>25</sup> Traffic calming is defined as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.

<sup>26</sup> The MPAH does not restrict the use of volume control measures on non-MPAH streets and driveways that connect to/from the MPAH network.

- i. Full and half street closures
- ii. Diverters
- iii. Median barriers
- iv. Forced turn islands

See **Appendix 8** for additional detail.

8. To be eligible for Measure M2 “fair share” funds, a local agency must adopt a General Plan Circulation Element that does not preclude implementation of the MPAH.
9. A local agency shall be considered conditionally consistent if it requests a change to the MPAH and enters into a Cooperative Study to analyze the request. No change shall be made to the local agency's Circulation Element until after the Cooperative Study is complete and agreement is reached on the proposed amendment.

## **5.2 MPAH CONSISTENCY REVIEW PROCEDURES**

1. On June 30 of every odd year, a local agency wishing to establish eligibility for Measure M2 Net Revenues as well as programs—including the CTFP shall submit to the OCTA Manager of Local Programming the following:
  - A. A resolution in a format consistent with **Appendix 8** adopted by the governing body of the local agency.
  - B. A copy of the local agency's current Circulation Element that shows all arterial highways and their individual arterial designations. Any proposed changes and/or requests for changes to the MPAH should also be included.
2. OCTA shall review the materials submitted, and determine whether the local agency Circulation Elements are consistent with the MPAH, meaning they have a minimum planned carrying capacity equivalent to the MPAH for all MPAH links within the local agency's jurisdiction.
3. Upon completion of the review, OCTA shall prepare a report to OCTA Board for approval, including recommendations on consistency findings and funding eligibility determinations.

## **APPENDIX 8 TRAFFIC CALMING MEASURES**

Traffic calming can be achieved by speed control measures, which include those examples listed below and may be considered on MPAH facilities, subject to MPAH Consistency Policies and local agency sponsorship.

	<b><u>Example</u></b>	<b><u>Definition</u></b>
<b><u>VERTICAL DEFLECTIONS</u></b>	<u>✓ PERMITTED ON COLLECTORS AND DIVIDED COLLECTORS</u> <u>❖ PROHIBITED ON SECONDARY AND HIGHER MPAH ROADWAYS</u>	
	<u>Speed humps:</u>	Rounded raised areas placed across the road. They are also referred to as road humps and undulations.
	<u>Speed tables:</u>	Flat-topped speed humps often constructed with brick or other textured materials on the flat section. They are also called trapezoidal humps, speed platforms, and, if marked for pedestrian crossing, raised crosswalks or raised crossings. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on top.
	<u>Raised intersections:</u>	Flat raised areas covering entire intersections, with ramps on all approaches and often with brick or other textured materials on the flat section. They are also called raised junctions, intersection humps, or plateaus. They usually rise to sidewalk level, or slightly below to provide a “lip” for the visually impaired.
<b><u>HORIZONTAL MEASURES</u></b>	<u>✓ PERMITTED ON COLLECTORS AND DIVIDED COLLECTORS</u> <u>✓ CONDITIONALLY PERMITTED ON SECONDARY AND HIGHER MPAH ROADWAYS</u>	
	<u>Traffic circles<sup>29</sup>:</u>	<u>Raised islands, placed in intersections, around which traffic circulates. They are sometimes called intersection islands. They are usually circular in shape and landscaped in their center islands, though not always. They are typically controlled by YIELD signs on all approaches.</u>
	<u>Chicanes:</u>	<u>Curb extensions that alternate from one side of the street to the other, forming S-shaped curves. They are also referred to as deviations, serpentine, reversing curves, or twists. European manuals recommend shifts in alignment of at least one lane width, deflection angles of at least 45 degrees, and center islands to prevent drivers from taking a straight “racing line” through the feature.</u>
	<u>Lateral shifts:</u>	<u>Curb extensions on otherwise straight streets that cause travel lanes to bend one way and then bend back the other way to the original direction of travel. They are occasionally referred to as axial shifts, staggerings, or jogs.</u>
	<u>Realigned intersections:</u>	<u>Changes in alignment that convert T-intersections with straight approaches into curving streets that meet at right angles. A former “straight through” movement along the top of the T becomes a turning movement. Realigned intersections are sometimes called modified intersections.</u>

<sup>29</sup> Traffic circles are distinguished from roundabouts. Roundabouts are often used to substitute traffic signals or all-way STOP signs as a form of intersection control. Roundabouts are not considered traffic calming measures, but rather, an alternative intersection control method that can be considered on arterial highways. However, when the use of a roundabout results in a reduction in lane capacity, an agency is still subject to the MPAH Consistency Policies, particularly with regard to maintaining the number of through lanes.

Traffic calming achieved by volume control measures shall not be used to restrict through movements on MPAH facilities<sup>30</sup> and include the following:

	<u>Measure</u>	<u>Definition</u>
<u>VOLUME CONTROL MEASURES</u>	<u>❖ PROHIBITED ON MPAH FACILITIES</u>	
	<u>Full Street Closures</u>	<u>Barriers placed across a street to close the street completely to through traffic, usually leaving only sidewalks or bicycle paths open. They are also called cul-de-sacs or dead ends. The barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or any other obstructions that leave an opening smaller than the width of a passenger car.</u>
	<u>Half street closures:</u>	<u>Barriers that block travel in one direction for a short distance on otherwise two-way streets. They are also sometimes called partial closures or one-way closures.</u>
	<u>Diverter:</u>	<u>Barriers placed diagonally across an intersection, blocking through movement. They are also called full diverters or diagonal road closures. Like half closures, diagonal diverters are usually staggered to create circuitous routes through neighborhoods.</u>
	<u>Median barriers:</u>	<u>Raised islands located along the centerline of a street and continuing through an intersection so as to block through movement at a cross street. They are also referred to as median diverters or occasionally as island diverters.</u>
	<u>Forced turn islands:</u>	<u>Raised islands that block certain movements on approaches to an intersection. They are sometimes called forced turn channelizations, pork chops, or in their most common incarnation, right turn islands.</u>

<sup>30</sup> The MPAH does not restrict the use of volume control measures on non-MPAH roadways and driveways that connect to/from the MPAH network.

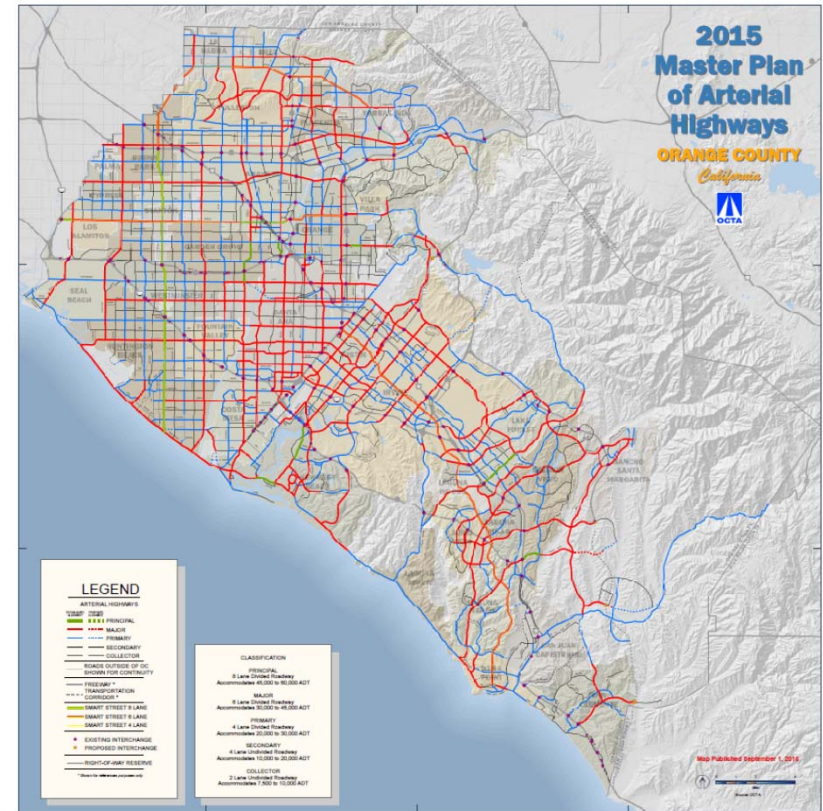


# Guidance for Administration of the Orange County Master Plan of Arterial Highways Related to Complete Streets

# MPAH Overview

- Developed in 1950s
- Linked to Measure M eligibility in 1989
- OCTA became the administrator in 1995
- Updated in 2011:
  - More flexibility to support complete streets and Complete Streets Act (AB 1358 – Chapter 658, Statutes 2008)

MPAH – Master Plan of Arterial Highways  
OCTA – Orange County Transportation Authority  
AB – Assembly Bill



# Complete Streets, Traffic Calming, and MPAH

- Complete streets policies intended to address the travel needs of all users
- Traffic calming focused on speed or volume reduction to improve users' safety
- Local agencies requested modifying the existing MPAH traffic calming policy
  - Current policy precludes traffic calming measures on higher-capacity arterials, even when level of service is not impacted

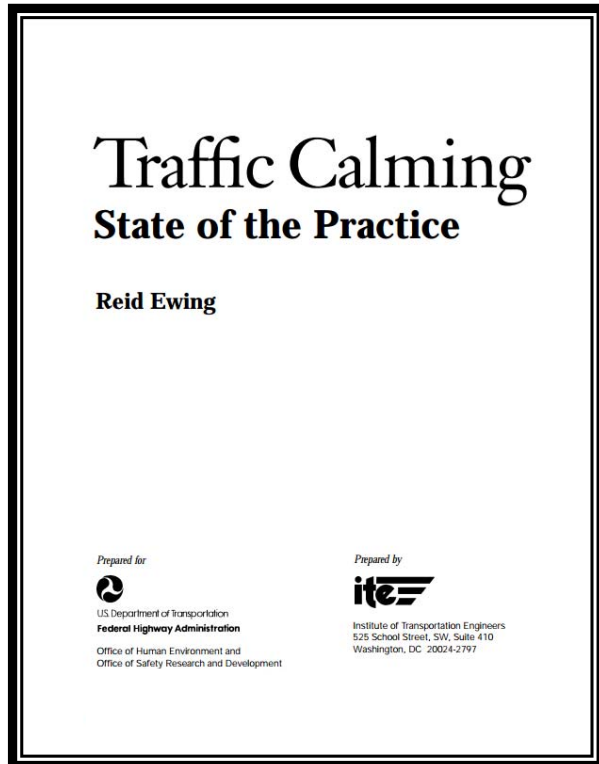


# 2017 Guidance Update

- Summer 2016 – The TAC Appointed an Ad Hoc Committee to:
  - Determine if the MPAH traffic calming policy needed updating
- The Ad Hoc Committee met three times and determined:
  - Changes were necessary to support Complete Streets
  - Traffic calming measures needed to be more clearly defined
  - Permitted, conditional, and prohibited treatments needed to be identified



# Types of Traffic Calming Measures



- Identified two types of traffic calming:
  - Speed control measures
  - Volume control measures

# Speed Control Measures (Examples)

## Vertical Treatments

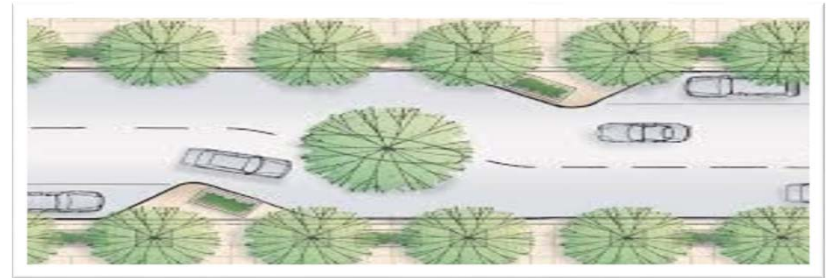


Speed Hump



Raised Intersection

## Horizontal Treatments



Chicane



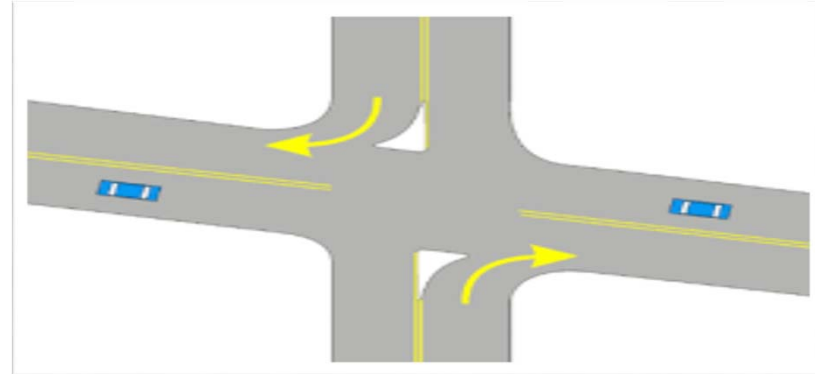
Traffic Circle

# Volume Control Measures (Examples)



Partial Closure

Forced Turn Islands



Full Closure

# Proposed Policy

PROPOSED POLICY	Collector (Two Lanes Undivided)	Divided Collector (Two Lanes Divided)	Secondary (Four Lanes Undivided)	Primary (Four Lanes Divided)	Major (Six Lanes Divided)	Principal (Eight Lanes Divided)
Speed Control Measures (Horizontal Measures)	Allowed (Revised Policy)		Conditional (New Policy)			
Speed Control Measures (Vertical Deflections)			Prohibited (Clarified-Previous Policy Maintained)			
Volume Control Measures	Prohibited (Clarified-Previous Policy Maintained)					


# Next Steps

- If recommendations are approved by the Board of Directors:
  - Guidance will be updated and made available to local agencies
  - Administration of the MPAH traffic calming policy will be modified



***April 3, 2017***

**To:** Regional Planning and Highways Committee

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

**Subject:** Comprehensive Transportation Funding Programs – 2017 Call for Projects Programming Recommendations

### ***Overview***

The Orange County Transportation Authority issued the 2017 annual Measure M2 Regional Capacity Program and Regional Traffic Signal Synchronization Program call for projects in August 2016. This call for projects made available up to \$40 million in grant funding for streets and roads projects countywide. A list of projects recommended for funding is presented for review and approval.

### ***Recommendations***

- A. Approve the 2017 Regional Capacity Program to fund 13 projects, in an amount totaling \$32.24 million.
- B. Approve the 2017 Regional Traffic Signal Synchronization Program to fund five projects, in an amount totaling \$2.5 million.

### ***Background***

The Regional Capacity Program (RCP), Project O, is the Measure M2 (M2) funding program that provides funds for capital improvements to congested streets, roads, intersections, and interchanges. The Comprehensive Transportation Funding Programs (CTFP) Guidelines (Guidelines) emphasize bringing relief to congested roads. Less congested roads could also get funded given available capacity.

The Regional Traffic Signal Synchronization Program (RTSSP), Project P, is the M2 program which provides funding for multi-jurisdictional signal synchronization projects along Orange County streets and roads. Funding is typically provided for a three-year period that includes the implementation of signal synchronization, as well as a limited amount of funding for ongoing maintenance and monitoring to keep the investments in optimal condition.

The 2017 Guidelines call for projects (call) allowed elements such as new traffic signal cabinets, controllers, software, communications equipment and operations and maintenance activities.

Both programs are included in the CTFP. The CTFP allocates funds through a competitive process using a common set of guidelines and scoring criteria. The Guidelines are developed in collaboration with the Technical Advisory Committee (TAC). The Guidelines for the 2017 call were approved by the Orange County Transportation Authority (OCTA) Board of Directors (Board) on August 8, 2016. The 2017 Guidelines established a tiered funding approach to prioritize high scoring RCP projects with funding availability for small and large projects. The first tier is for projects scoring 50 points or higher, and the second tier is for qualified projects after Tier 1. Within Tier 1, two categories were established: Category 1, with 60 percent of M2 funds available for smaller projects requesting \$5 million or less, and Category 2, with 40 percent of M2 funds available for larger projects requesting \$5 million or more. There were no tiering provisions for the RTSSP call.

On August 8, 2016, the Board authorized staff to issue a call, making available approximately \$32 million in RCP funding and \$8 million in RTSSP funding.

### ***Discussion***

#### **RCP**

On October 21, 2016, OCTA received 16 applications requesting \$46 million in RCP funding, as reflected in Attachment A. The applications were evaluated and ranked per the scoring criteria identified in the Guidelines.

Per the tiered approach, \$32 million is first split between Category 1 and Category 2 Tier 1 projects, as shown in the table below.

2017 RCP Projects Summary		
Total Funds Available	Tier 1 Category 1 (60 percent) M2 Request < \$5 million Project Score > 50	Tier 1 Category 2 (40 percent) M2 Request > \$5 million Project Score > 50
\$32 million	\$19.2 million	\$12.8 million

The staff recommendation is to program approximately \$32.24 million to fund 13 projects shown in Attachment B. The project application submitted by the City of Newport Beach (City) for the implementation phase of the Old Newport Beach and Pacific Coast Highway Project was considered incomplete due to the absence of the California Department of Transportation's approval on the environmental document. The City can resubmit the application during the future call upon receiving the necessary approvals specified in the Guidelines. The City of Buena Park withdrew their application for the Orangethorpe Avenue Street Widening Project. Although the project application submitted by the City of Brea scored 50 points, OCTA is unable to fully fund the project, as the requested allocation exceeded the available funds. The City of Brea may re-apply during a future call.

Staff prepared the final funding recommendations in (escalated final values) per the tiered funding approach outlined above and described in the 2017 CTFP Guidelines. (Attachment B) This recommendation provides an additional \$243,000 for RCP projects, which is slightly above the \$32 million amount released for the call. This amount can be addressed given available capacity within the total \$40 million target.

#### RTSSP

OCTA received five applications requesting \$2.5 million in RTSSP funding. All applications were reviewed for eligibility, consistency, and adherence to guidelines and program objectives. Staff worked with the local agencies to address technical issues related to excess right-of-way, construction unit costs, and project scopes.

The staff recommendation is to program \$2.5 million to fund the five projects. All of the recommended RTSSP projects will be implemented in fiscal year 2017-18. The details of projects recommended for funding for the RTSSP are shown in Attachment C. Although the Board authorized \$8 million in funding for the 2017 call cycle, the remaining balance of \$5.5 million will be carried forward into the next call.

The table below provides an overall summary of the funding recommendations:

2017 CTFP Call Summary (\$ in millions)			
	RCP	RTSSP	Total
Number of Applications Recommended for Approval	13	5	18
Amount Recommended for Approval (escalated)	\$32.24	\$2.5	\$34.74



Recommendations presented in the report are consistent with the 2017 Guidelines approved by the Board. Staff recommends programming \$34.74 million for 18 projects under RCP and RTSSP.

The recommended project programming was approved by the Technical Steering Committee and the TAC on February 22, 2017. If approved, the new projects will be incorporated into the master funding agreement between OCTA and all local agencies. Staff will continue to monitor the project status and project delivery throughout the semi-annual review process.

### ***Summary***

The proposed programming recommendations for projects in the RCP and RTSSP have been developed by staff. Funding for 18 projects totaling \$34.74 million in M2 funds is proposed. Staff is seeking Board approval of the programming recommendations presented.

### ***Attachments***

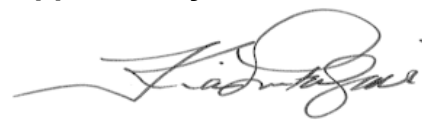
- A. 2017 Measure M2 Regional Capacity Program Call for Projects – Applications Received
- B. 2017 Measure M2 Regional Capacity Program Call for Projects – Programming Recommendations
- C. 2017 Measure M2 RTSSP Call for Projects – Programming Recommendation

**Prepared by:**



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(714) 560-5673

**Approved by:**



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

**2017 Measure M2 Regional Capacity Program Call for Projects - Applications Received**

Agency	Project	Fund	Phase	Score	Total	ENG	ROW	CON
Orange County	Ortega Highway Widening Improvements (PA&ED Phase)	ACE	E	69	\$ 1,950,000	\$ 1,950,000		
Santa Ana	Warner Avenue Improvements from Oak Street to Grand Avenue	ACE	E	61	\$ 811,125	\$ 811,125		
Santa Ana	Warner Avenue Improvements from Main Street to Orange Avenue	ACE	R	58	\$ 8,586,900		\$ 8,586,900	
Irvine	University/Ridgeline Intersection Improvement	ICE	C	57	\$ 1,690,054			\$ 1,690,054
Orange County	Cow Camp Road Segment 2A and 2B Construction	ACE	C	56	\$ 14,278,770			\$ 14,278,770
Brea	SR-57 and Lambert Road Interchange Improvements Project Phase 1	FAST	C	54	\$ 12,400,000			\$ 12,400,000
Anaheim	Lincoln Avenue from East Street to Evergreen Street	ACE	R	51	\$ 1,147,669		\$ 1,147,669	
Orange	Tustin/Meats Intersection Right Turn Lane Addition	ICE	C	47	\$ 712,500			\$ 712,500
Garden Grove	Euclid Street and Westminster Avenue Intersection Improvement	ICE	R	45	\$ 784,326		\$ 784,326	
Mission Viejo	Los Alisos Boulevard and Santa Margarita Parkway ICE Project	ICE	E, C	45	\$ 203,698	\$ 14,552		\$ 189,146
Costa Mesa	Hyland Avenue at MacArthur Boulevard Intersection Improvements	ICE	R, C	44	\$ 403,449		\$ 129,972	\$ 273,477
Santa Ana	Bristol Street and Memory Lane Intersection Improvements	ICE	R	43	\$ 1,167,244		\$ 1,167,244	
Orange	Tustin Street and Chapman Avenue Intersection Widening	ICE	C	38	\$ 375,000			\$ 375,000
Santa Ana	Warner Avenue and Flower Street Intersection Improvements	ICE	C	34	\$ 87,187			\$ 87,187
					\$ 44,597,922			

**UNFUNDED (Project Withdrawn by Applicant)**

Buena Park	Orangethorpe Avenue Street Widening of the South Side	ACE	C		\$ 300,000			
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**UNFUNDED (Application Incomplete - Environmental Approval Required)**

Newport Beach	Old Newport Boulevard and Pacific Coast Highway	ACE	C		\$ 1,275,000			
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Acronyms:

ENG/E - Engineering  
 ROW/R - Right-of-way  
 CON/C - Construction  
 PA&ED - Project Approval and Environmental Documentation,  
 ACE - Arterial Capacity Enhancements  
 ICE - Independent Cost Estimate  
 SR-57 - State Route 57  
 FAST - Fixing America's Surface Transportation Act

## 2017 Measure M2 Regional Capacity Program Call for Projects - Programming Recommendations

Tier 1 Projects - Category 1 (60 percent) Measure M Funds Request <\$5 million and Project Score > 50					
Agency	Project	Fund	Phase	Score	Balance
				Beginning Balance	\$ 19,200,000
Orange County	Ortega Highway Widening Improvements (PA&ED Phase)	ACE	E	69	\$ 1,950,000
Santa Ana	Warner Avenue Improvements from Oak Street to Grand Avenue	ACE	E	61	\$ 811,125
Irvine	University/Ridgeline Intersection Improvement	ICE	C	57	\$ 1,724,024
Anaheim	Lincoln Avenue from East Street to Evergreen Street	ACE	R	51	\$ 1,147,669
				Sub-Total:	\$ 5,632,818
					\$13,567,182

Tier 1 projects - Category 2 (40 percent) Measure M Funds Request >\$5 million and Project Score > 50					
Agency	Project	Fund	Phase	Score	Balance
				Beginning Balance	\$ 12,800,000
Santa Ana	Warner Avenue Improvements from Main Street to Orange Avenue	ACE	R	58	\$ 8,586,900
				Sub-Total:	\$ 8,586,900
					\$ 4,213,100

Tier 1 Total: \$ 14,219,718

Balance available for Tier 2 Projects \$17,780,282

Tier 2 Projects - No Category Split - Qualifying Projects After Tier 1					
Agency	Project	Fund	Phase	Score	Balance
				Beginning Balance	\$ 17,780,282
Orange County	Cow Camp Road Segment 2A and 2B Construction	ACE	C	56	\$ 14,278,770
Orange	Tustin/Meats Intersection Right Turn Lane Addition	ICE	C	47	\$ 719,625
Garden Grove	Euclid Street and Westminster Avenue Intersection Improvement	ICE	R	45	\$ 784,326
Mission Viejo	Los Alisos Boulevard and Santa Margarita Parkway ICE Project	ICE	E, C	45	\$ 205,589
Costa Mesa	Hyland Avenue at MacArthur Boulevard Intersection Improvements	ICE	R, C	44	\$ 406,184
Santa Ana	Bristol Street and Memory Lane Intersection Improvements	ICE	R	43	\$ 1,167,244
Orange	Tustin Street and Chapman Avenue Intersection Widening	ICE	C	38	\$ 375,000
Santa Ana	Warner Avenue and Flower Street Intersection Improvements	ICE	C	34	\$ 87,187
				Tier 2 Total:	\$ 18,023,925

Tier 1 and 2 Total: \$ 32,243,643

Brea	SR-57 and Lambert Road Interchange Improvements Project Phase 1	FAST	C	50	\$ 12,400,000
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\* All projects recommended for funding met the minimum requirement of level of service "D".

## Acronyms:

PA&amp;ED - Project Approval and Environmental Documentation, ACE - Arterial Capacity Enhancements, E - Engineering,

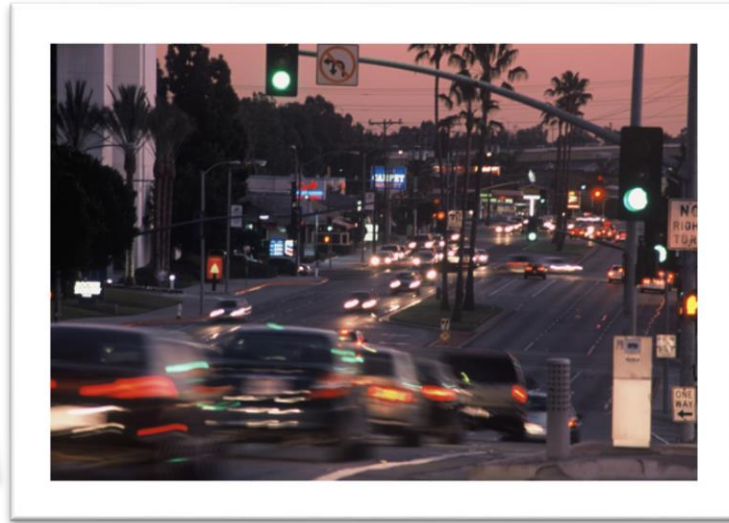
ICE - Independent Cost Estimate, C - Construction, R - Right-of-Way, SR-57 - State Route 57, FAST - Fixing America's Surface Transportation Act

**2017 Measure M2 RTSSP Call for Projects - Programming Recommendations**

Agency	Project	Fund	Signals	Primary Implementation	Maintenance and Operations	Total Funding	Score
Irvine	Irvine Boulevard Signal Synchronization Project	RTSSP	29	\$ 297,526	\$ 80,640	\$ 378,166	61
Fullerton	Gilbert Street / Idaho Street Corridor RTSSP	RTSSP	19	\$ 862,560	\$ 54,720	\$ 917,280	51
San Clemente	Camino Vera Cruz	RTSSP	5	\$ 182,606	\$ 10,080	\$ 192,686	37
Costa Mesa	Bear Street Signal Synchronization	RTSSP	14	\$ 467,872	\$ 26,880	\$ 494,752	35
Mission Viejo	Olympiad Road - Felipe Road Corridor	RTSSP	20	\$ 486,280	\$ 29,376	\$ 515,656	31
			<b>Total</b>	<b>\$ 2,296,844</b>	<b>\$ 201,696</b>	<b>\$ 2,498,540</b>	

All submitted projects meet minimum eligibility requirements.

RTSSP - Regional Traffic Signal Synchronization Program



# Comprehensive Transportation Funding Programs 2017 Call for Projects Programming Recommendations



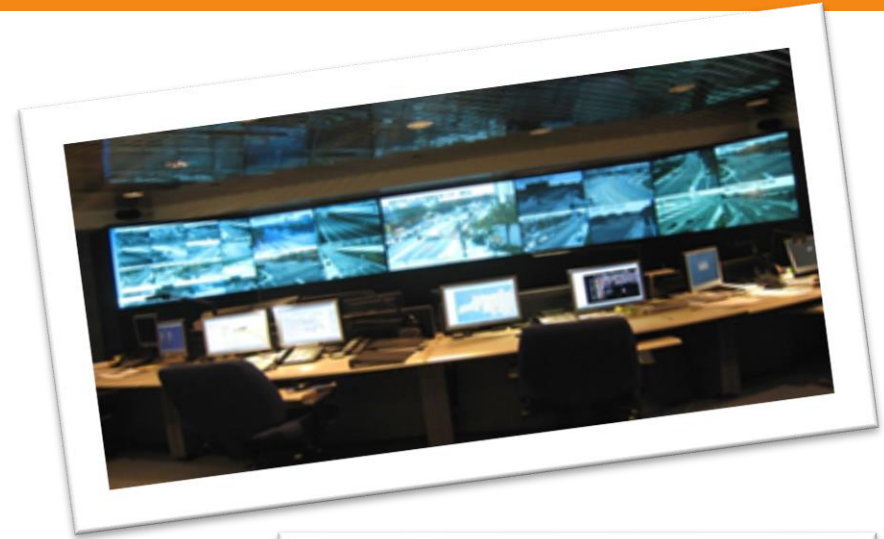
# CTFP Overview

- Project O – Regional Capacity Program
  - Arterial Capacity Enhancements
  - Intersection Capacity Enhancements
  - Freeway Arterial/Street Transitions
- Project P – Regional Signal Synchronization Program
  - Signal Coordination Projects

# 2017 Call for Projects (Call)

## 2017 CTFP Measure M2 Funds Available

- Regional Capacity Program
  - \$32 million
- Traffic Signal Synchronization Program
  - \$8 million



# 2017 Programming Recommendations

- Regional Capacity Program
  - Approve 13 projects allocating \$32.24 million
    - Five street widening projects providing \$26.77 million
    - Eight intersection improvements projects providing \$5.47 million
- Regional Traffic Signal Synchronization Program
  - Approve five projects allocating \$2.5 million
    - Signal coordination for 85 signals



# 2017 Call Timeline and Milestones

- February 22, 2017 – Technical Advisory Committee approval
- April 3, 2017 – Regional Planning and Highways Committee
- April 10, 2017 – OCTA Board of Directors (Board)
- August 2017 – Release of 2018 call, subject to Board approval

# Staff Recommendations

- Approve the 2017 Regional Capacity Program to fund 13 projects, in an amount totaling \$32.24 million
- Approve the 2017 Regional Traffic Signal Synchronization Program to fund five projects, in an amount totaling \$2.5 million