



Measure M
Taxpayers Oversight Committee
at the Orange County Transportation Authority
600 S. Main Street, Orange CA, Room 103



October 8, 2013

6:00 p.m.

AGENDA

- 1. Welcome**
- 2. Pledge of Allegiance**
- 3. Approval of Minutes/Attendance Report for August 13, 2013**
- 4. Chairman's Report**
- 5. Action Items**
 - A. AER Subcommittee Eligibility Report FY 13-14
Jack Wu, Annual Eligibility Review Subcommittee Chairman
- 6. Presentation Items**
 - A. Caltrans HOV Lane Degradation Study
Presentation – James Pinheiro, Caltrans
 - B. Water Quality 2013 Tier 1 Grant Funding Allocations
Presentation – Dan Phu, Project Manager, Planning
 - C. M2020 Review
Presentation – Tamara Warren, Program Manager, M Program Management Office
- 7. OCTA Staff Updates (5 minutes each)**
 - Sales Tax Revenue – Andrew Oftelie, Executive Director of Finance & Administration
 - Metrolink – Andrew Oftelie, Executive Director of Finance & Administration
 - I-405/Project K – Jim Beil, Executive Director of Capital Projects
 - Proposed Ordinance Amendment – Alice Rogan, Strategic Communications Manager
- 8. Annual Eligibility Review Subcommittee Report**
- 9. Audit Subcommittee Report**
- 10. Environmental Oversight Committee Report**
- 11. Committee Member Reports**
- 12. Public Comments***
- 13. Adjournment**

*Public Comments: At this time, members of the public may address the Taxpayers Oversight Committee (TOC) regarding any items within the subject matter jurisdiction of the TOC, provided that no action may be taken on off-agenda items unless authorized by law. Comments shall be limited to five (5) minutes per person and 20 minutes for all comments, unless different time limits are set by the Chairman, subject to the approval of the TOC.

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 business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.



Measure M Taxpayers Oversight Committee



INFORMATION ITEMS

- 1. Measure M2 Comprehensive Transportation Funding Programs – 2014 Annual Calls for Projects** **Aug. 12, 2013**
- 2. Capital Programs Division – Fourth Quarter Fiscal Year 2012-13 and Planned Fiscal Year 2013-14 Capital Action Plan Performance Metrics**
- 3. Measure M1 Progress Report for the Period of April 2013 Through June 2013 and Closeout Overview** **Aug. 26, 2013**
- 4. Measure M2 Progress Report for April 2013 Through June 2013**
- 5. Status of the Interstate 405 Improvement Project Between State Route 55 and Interstate 605** **Sept. 23, 2013**

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**Measure M2
Taxpayers Oversight Committee**

**Aug 13, 2013
Meeting Minutes**

Committee Members Present:

Jan Grimes, Orange County Acting Deputy Auditor-Controller, Co-Chairman
Narinder "Nindy" Mahal, First District Representative
Howard Mirowitz, Second District Representative, Co-Chairman
Jack Wu, Second District Representative
Terre Duensing, Third District Representative
Randy Holbrook, Third District Representative
Philip C. La Puma, PE, Fourth District Representative
Cynthia Hall, Fourth District Representative
Nilima Gupta, Fifth District Representative

Committee Member(s) Absent:

Terry Fleskes, Fifth District Representative
Anh-Tuan Le, First District Representative

Orange County Transportation Authority Staff Present:

Jim Beil, Executive Director, Capital Programs
Rose Casey, Director, Highways Program
Marissa Espino, Strategic Communications Officer
Janice Kadlec, Public Reporter Specialist
Kia Mortazavi, Executive Director, Planning
Andy Oftelie, Executive Director, Finance and Administration
Alice Rogan, Strategic Communications Manager, External Affairs

1. Welcome

Chair Jan Grimes welcomed everyone to the Taxpayers Oversight Committee (TOC) meeting and began the meeting 6:00 p.m.

2. Pledge of Allegiance

Chair Jan Grimes asked everyone to stand and led the Pledge of Allegiance.

3. Approval of Minutes/Attendance Report for June 11, 2013

The TOC Minutes and Attendance Report for the June 11, 2013 meeting were received and filed. Due to lack of a quorum no vote was taken.

4. Chairman's Report

Chair Jan Grimes welcomed the four new TOC members and asked everyone around the table to introduce themselves and identify which Supervisorial District they represented

5. CEO Report

OCTA CEO Darrell Johnson introduced himself, gave a background report on his work in transportation, and updated the TOC on what was happening at OCTA. He also touched on his Advanced Ethics Program which is a training program focused on the "grey" areas of ethics.

6. Presentation Items

A. I-405 Improvement Project/Project K

Rose Casey gave an update on the I-405 Improvement Project.

Howard Mirowitz asked what the OCTA Board's reason was to investigate additional concepts for this project. Rose Casey said she believed it was related to potentially providing two general purpose lanes in the corridor and also seeing what the traffic benefit would be by providing a HOT (High Occupancy Toll) lane.

Randy Holbrook asked under Alternative One, how long it would be before the current HOV (High Occupancy Vehicle) lane does not meet the Federal standards. Rose Casey said the current Caltrans HOV Degradation Study (a statewide study) showed the HOV lanes on the I-405 are already congested. The Study proposed a number of solutions: short term solutions like changing the occupancy from two to three or making the lanes continuous access to long term solutions like adding an additional lane. Once the study is approved, a plan needed to be established within 180 days. Ultimately the preferred alternative will be the one that provides a benefit to the corridor.

Nindy Mahal asked if Concept A was separate from the work being done on the I-405, SR-22, and I-605. Rose Casey said it is different. The West County Connectors project is adding a second carpool lane on the I-405 between SR-22 and I-605 along with direct carpool connectors between SR-22 and I-405 and between I-405 and I-605. This is an M1 project, but the bridges that are part of West County Connector will be wide enough to span the M2 I-405 Improvement Project.

Nindy Mahal asked what the completion date for the West County Connector project was. Rose Casey said it is currently scheduled for completion in late 2014 or early 2015. There will be a major closure of the I-405 this weekend related to this project. Alice Rogan handed out brochures about this closure and indicating routes to get around it.

Nilima Gupta asked about the funding for the West County Connectors Program. Rose Casey said the funding for the WCC projects is primarily from State Proposition 1B CMIA (Corridor Mobility Improvement Account) and Federal CMAQ (Congestion Mitigation and Air Quality) and ARRA (American Recovery and Reinvestment Act) funding, and there is a minor amount of M1 funding being utilized for the project as well.

Philip La Puma asked for an update on the HOV degradation. Jim Beil said Caltrans has submitted the statewide HOV Degradation Report to the Federal Highways Administration. Caltrans will be presenting these reports to the OCTA Regional Planning and Highways Board Committee September 16 and the OCTA Board on September 23. Alice Rogan said the TOC can have a presentation on this at their October meeting.

Philip La Puma asked what was the impact of the Degradation Report on the I-405 Project. Jim Beil said the degradation is quite significant as defined by Federal standards for carpool lanes. Jim Beil said one of the reasons Orange County is subject to degradation studies is because they allow alternative fuel vehicles in the carpool lanes, although this accounts for only two percent of the vehicles. The State is subject to degradation reports annually and the report allows 180 days to correct the degradation. We are currently trying to figure out if this means 180 days to correct the problem or 180 days to have a plan on how to correct the problem. The punitive part of the Federal law is the Federal Highways could choose to withhold Federal obligation funding.

B. Capital Projects Update

Jim Beil gave an update on the Capital Projects Program. He gave the committee members copies of the detail reports he gives to the OCTA Board and went into detail on the fourth quarter report.

Nindy Mahal asked about the \$6 billion total on page five/second column under Budget Forecast. Jim Beil said this is programmatic – included in this amount is soft costs for support, right of way capital, and construction capital. Nindy Mahal asked what the time span is for spending the \$6 billion. Jim Beil said the details for spending are in the M2020 plan, but the majority of the Capital Projects will be in the construction phase within the next five to seven years.

Nilima Gupta said in Attachment A the second column shows a savings. Jim Beil said based on the program and the environmental documents, there will be a savings from the original budget for the first three projects.

Howard Mirowitz said the I-5/SR-73 to El Toro Road (Project C and D) the budget shows TBD even though there is a forecast. Isn't there a budget for these projects that comes directly from the M2 Ordinance? Kia Mortazavi said when the

plan was put together a cost or budget was established for each one of the projects, but as the revenues have adjusted, they have had to adjust the budgets down proportionally. Some projects will come in under budget and some will come in over. The project in question has no budget because the environmental report has not been completed.

C. Project V Update

Kia Mortazavi gave an update on M2 Project V – the Community Circulator. This Grant program was designed to aide cities to find local solutions to solve transit needs. He handed out information on the first round of funding for Project V.

Howard Mirowitz said in the information provided for this project, it states there is a total project funding cap of \$525,000 per project per year including capital plus operating costs. In reading the information handed out, it seems some of the projects exceed the cap – specifically the Laguna Beach Project. The Laguna Beach Project is for \$472,500 in capital costs and six years of operations totaling up to \$3.139 million. If he takes \$525,000 times six years it comes to \$3.150 million and if he adds the capital cost to Laguna Beach's \$3.139 million it exceeds the \$3.150 million total.

Kia Mortazavi said he will investigate and get back to the TOC.

Staff response: The first cycle of Project V grant funding covers a seven-year period, at a maximum amount of \$525,000 per year for capital and/or operations. Therefore, the maximum per project grant allocation is capped at \$3,675,000 per project. The grant to Laguna Beach is for \$3,612,360 which is below this amount. The difference is that it is a seven-year program, not a six-year program.

7. OCTA Staff Updates

Metrolink: Andy Oftelie gave a background report on the Metrolink situation for the new TOC members and then gave an update on the current status. Andy explained that Metrolink continues to struggle with financial management and is having difficulty recruiting and retaining qualified staff.

Jack Wu asked why Metrolink is having a problem with staffing up. Andy Oftelie speculated that they are having a problem with getting qualified applicants because the problems are so severe that experienced professionals would likely shy away from the opportunity.

Howard Mirowitz asked if McGladrey (the external auditor) was doing their job properly. Andy pointed out that prior reports from McGladrey were very critical of Metrolink but there didn't appear to be any action by Metrolink staff related to the issues that were raised in the past. Metrolink has said that they did not have the appropriate staff to act on most of the recommendations.

Cynthia Hall asked if one of the objectives of the Forensic Audit is to check for fraud. Andy Oftelie said yes, this is the primary objective of the audit.

Finance Directors Workshop: Andy Oftelie gave an overview of the Finance Directors Workshop. At this workshop OCTA staff walk city staff through their M2 Expenditure Reports and how they should be recording information in the Reports.

Measure M Amendment: Alice Rogan gave an update to the TOC on an upcoming amendment to the Measure M2 Ordinance. Language in the Ordinance needed to be included prohibiting OCTA consultants from being considered for the TOC. The proposed amendment would be: *“No person who has a financial conflict of interest with regard to the allocation of revenues will be eligible to serve as a member”* of the TOC.

M2020 Update: Kia Mortazavi gave an overview of the M2020 Plan Review. The M2020 Plan Review would review the full range of Measure M2 projects slated for delivery by 2020 and make adjustments as needed. The Review would highlight accomplishments and note upcoming critical milestones.

Howard Mirowitz asked if OCTA was experiencing unusual legal costs on some of the M2020 projects. Jim Beil said he did not consider the costs unusual; they are normal for these types of projects. Specifically for the O.C. Bridges Program and Grade Separation project’s legal costs are for acquiring of parcels, partial acquisition, easements, and access. Offers have been made and OCTA is very comfortable with the appraisals being made. The unknown in this type of acquisition are things related to severance damages and good will costs for those being displaced by the acquisition.

Cynthia Hall asked if OCTA is encountering a great deal of eminent domain in the O.C. Bridges projects. Jim Beil said yes, there is quite a bit of eminent domain in the right-of-way acquisition.

Howard Mirowitz said in the OC Bridges Program shows approximately \$25.1 million in over runs and approximately \$20 million of this is legal fees. Jim Beil said legal fees are only one piece of the \$19 million. Howard Mirowitz asked if they are going to see this on some of the other projects moving forward. Jim Beil said it could, the Grade Separations are unique and the right-of-way impacts are very different from the highway projects. The Grade Separation Projects are in areas where most of the grade separations are businesses where the type of severance or business impacts for tenants is unknown until offers are made.

8. Annual Eligibility Review AER Subcommittee Report

The AER Subcommittee did not meet. Jack Wu asked when the next Annual Eligibility Review (ARE) Subcommittee would meet. Alice Rogan said they needed to hold the new member orientation first and assign new members to the Subcommittee.

The new Subcommittee members will be Jack Wu (returning member) and the four new members: Terre Duensing, Nilima Gupta, Cynthia Hall and Nindy Mahal. Someone will be contacting the Subcommittee members in the next two weeks to schedule a meeting.

9. Audit Subcommittee Report

The Audit Subcommittee did not meet.

10. Environmental Oversight Committee (EOC) Report

The EOC did not meet.

11. Committee Member Reports

Howard Mirowitz said in the Investment Policy, the benchmark being used to evaluate investment results for one to three year investments is a Treasury benchmark and for one to five year investments it is a Treasury benchmark. Only 35 percent of the portfolio is Treasury - why is a Treasury benchmark being used? Andy Oftelie said the Treasury benchmark has always been used. With OCTA's policy of protecting principle they have always used the most conservative benchmark.

Howard Mirowitz said he had three other questions from some of the information items sent in the agenda package. Jack Wu suggested the items be tabled to the next meeting. Alice Rogan suggested the items be asked at the next Audit Subcommittee meeting.

12. OCTA Staff Update

Alice Rogan said if anyone is having issues with the new Agenda format, please let her know. Committee members should be able to link up to any Board Agenda item as back-up to the TOC items.

13. Public Comments

There were no Public Comments

14. Adjournment

The Measure M Taxpayers Oversight Committee meeting adjourned at 8:00 p.m. The next meeting will be October 8, 2013.

Taxpayers Oversight Committee
Fiscal Year 2013-2014
Attendance Record



X = Present E = Excused Absence * = Absence Pending Approval U = Unexcused Absence -- = Resigned

Meeting Date	9-Jul	13-Aug	10-Sep	8-Oct	12-Nov	10-Dec	14-Jan	11-Feb	11-Mar	8-Apr	13-May	10-Jun
Terre Duensing		X										
Terry Fleskes		*										
Jan Grimes		X										
Nilima Gupta		X										
Cynthia Hall		X										
Randy Holbrook		X										
Phil La Puma		X										
Anh-Tuan Le		*										
Nindy Mahal		X										
Howard Mirowitz		X										
Jack Wu		X										

Absences Pending Approval

<u>Meeting Date</u>	<u>Name</u>	<u>Reason</u>
August 13, 2013	Terry Fleskes	Medical
August 13, 2013	Anh-Tuan Le	Family Medical Emergency

Action Items



October 8, 2013

To: Taxpayers Oversight Committee

From: Annual Eligibility Review Subcommittee

Subject: Fiscal Year 2013-14 Renewed Measure M Annual Eligibility Review Subcommittee Recommendations

Overview

The Measure M2 ordinance requires all local jurisdictions in Orange County to annually satisfy eligibility requirements in order to receive fair share and competitive grant net revenues. The Annual Eligibility Review subcommittee review process for fiscal year 2013-14 has been completed.

Recommendations

Approve Pavement Management Plans for odd numbered year agencies, Mitigation Fee Programs, and Congestion Management Programs for all local jurisdictions in Orange County; and find all local jurisdictions eligible to receive fair share and competitive grant net revenues for fiscal year 2013-14.

Background

The Board of Directors authorized an amendment to Ordinance No. 2 (Measure M) that finds agencies, which qualify as an "Eligible Jurisdiction" under Ordinance No. 3 (Measure M2) to also be an "Eligible Agency" under Ordinance No. 2.

The Taxpayer's Oversight Committee (TOC) is responsible for reviewing local agencies Local Signal Synchronization Plan, Mitigation Fee Program, Expenditure Report, Congestion Management Plan (CMP), and Pavement Management Plan (PMP) for compliance with Ordinance No. 3. The three eligibility components due this eligibility cycle include the PMPs for odd numbered year agencies (Attachment A), Mitigation Fee Programs, and CMPs. After the annual eligibility review, the determination of the TOC committee is forwarded to the Orange County Transportation Authority Board of Directors for final eligibility determination.

Discussion

The Annual Eligibility Review (AER) subcommittee has been designated by the TOC to review the eligibility submittals with support from Orange County Transportation Authority (OCTA) staff. The AER subcommittee members include Jack Wu (Chair), Narinder Mahal, Terre Duensing, Cynthia Hall, and Nilima Gupta.

Local jurisdictions are required to annually submit eligibility packages by June 30th. OCTA staff reviewed the PMP submittals to ensure each eligibility package was complete and accurate; and worked with the local jurisdictions to obtain information and/or back up materials as needed. The AER subcommittee convened on September 12, 2013 to review and discuss the PMP certifications, Mitigation Fee Programs, and CMPs. The AER subcommittee found the PMP submittals, and the Mitigation Fee Programs, and CMPs to be in compliance with the Ordinance and recommend to the TOC for eligibility approval.

Upon TOC approval, OCTA staff will present the eligibility findings to the Highways Committee on December 2, 2013 and to the OCTA Board of Directors on December 9, 2013. Eligibility determination is conditional upon review of the expenditure reports due December 31, 2013.

Summary

All local jurisdictions in Orange County have submitted FY 2013-14 Renewed Measure M eligibility packages. The Annual Eligibility Review subcommittee reviewed the necessary Pavement Management Plan, Mitigation Fee Program, and Congestion Management Program documentation; and all local jurisdictions meet the eligibility requirements for fiscal year 2013-14.

Attachment

- A. Local Jurisdiction Pavement Management Plan Submittal Schedule

**Local Jurisdiction Pavement Management Plan
Submittal Schedule**

Attachment A

Local Jurisdiction	Updated PMP
Aliso Viejo	June Even Year
Anaheim	June Odd Year
Brea	June Odd Year
Buena Park	June Even Year
Costa Mesa	June Even Year
County of Orange	June Odd Year
Cypress	June Odd Year
Dana Point	June Odd Year
Fountain Valley	June Even Year
Fullerton	June Even Year
Garden Grove	June Even Year
Huntington Beach	June Even Year
Irvine	June Odd Year
Laguna Beach	June Even Year
Laguna Hills	June Even Year
Laguna Niguel	June Even Year
Laguna Woods	June Even Year
Lake Forest	June Odd Year
La Habra	June Odd Year
La Palma	June Even Year
Los Alamitos	June Odd Year
Mission Viejo	June Even Year
Newport Beach	June Odd Year
Orange	June Even Year
Placentia	June Even Year
Rancho Santa Margarita	June Even Year
San Clemente	June Odd Year
San Juan Capistrano	June Odd Year
Santa Ana	June Even Year
Seal Beach	June Even Year
Stanton	June Odd Year
Tustin	June Odd Year
Villa Park	June Even Year
Westminster	June Even Year
Yorba Linda	June Even Year

***Presentation
Items***



COMMITTEE TRANSMITTAL

September 23, 2013

To: Members of the Board of Directors

From: Wendy Knowles, Clerk of the Board

Subject: California Department of Transportation High-Occupancy Vehicle Degradation Action Plan and Managed Lanes Facilities Directive

Regional Planning and Highways Committee Meeting of September 16, 2013

Present: Directors Bates, Donchak, Harper, Lalloway, Miller, Murray, and Spitzer

Absent: Director Nelson

Committee Vote

This item was passed by the Members present.

Committee Recommendations

- A. Direct staff to submit comment letters regarding the High-Occupancy Vehicle Degradation Action Plan and Draft Deputy Directive to the California Department of Transportation.
- B. Direct staff to participate in the Southern California managed lane working group and to work with the California Department of Transportation on a regionally viable managed lane work plan.

Committee Discussion

The Regional Planning and Highways Committee provided comments related to taking advantage of the toll road network and providing more comprehensive analysis of available data to develop the action plan. Staff will address the comments through revisions in Attachments F and G (letters) of the staff report. The redline versions of the letters will be provided to the Board of Directors prior to the September 23rd Board meeting under separate cover.



ORANGE COUNTY TRANSPORTATION AUTHORITY


**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Staff Report



September 16, 2013

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer 

Subject: California Department of Transportation High-Occupancy Vehicle Degradation Action Plan and Managed Lanes Facilities Directive

Overview

In response to federal mandates and state law, the California Department of Transportation has prepared an action plan related to managing congestion in carpool lanes, as well as procedures to implement the action plan. Comments on the action plan and implementation procedures are submitted for Board of Directors review.

Recommendations

- A. Direct staff to submit comment letters regarding the High-Occupancy Vehicle Degradation Action Plan and Draft Deputy Directive to the California Department of Transportation.
- B. Direct staff to participate in the Southern California managed lane working group and to work with the California Department of Transportation on a regionally viable managed lane work plan.

Background

High-occupancy vehicle (HOV) or carpool lanes have been an integral element of the national surface transportation system since the first lanes were introduced in the late 1960s. California's HOV system has expanded to include nearly 1,425 total lane miles in most every urbanized county. The first carpool lanes in Orange County were opened on State Route 55 in November 1985, and since that time, the HOV system in Orange County has evolved to encompass all freeway corridors and 19 percent of the statewide system. Many, if not most, of Orange County's carpool lanes were constructed concurrent with general purpose lanes as a requirement to meet federal Clean Air Act requirements.

Originally constructed to move more people through a corridor, most of Orange County's carpool lanes are now congested and do not offer significant travel time advantages compared to adjacent general purpose lanes. Recognizing this limitation, in December 2011, the Orange County Transportation Authority (OCTA) adopted a set of principles to guide future consideration of "managed" or express lanes (Attachments A and B) that would increase person throughput, raise speeds, and improve travel time. Also acknowledging the congestion trend, the current Federal Transportation Act includes language that "degraded" carpool lanes need to be actively monitored and managed to bring peak hour travel speeds to 45 miles per hour for specific periods of time, if specific low-emission or toll-paying vehicles are permitted to use the lanes (which is the case in California).

In response to the performance of the HOV system, federal requirements, and state law, on July 31, 2013, the California Department of Transportation (Caltrans) released the California HOV Lane Degradation Action Plan (Action Plan) (Attachment C). In addition, Caltrans has developed a Draft Deputy Directive (Directive) (Attachment D) that outlines the decision-making protocols within the agency related to implementation of projects and programs that would address federal carpool lane performance standards. Concurrent with these efforts, OCTA and Caltrans continue to deliver the Measure M2 (M2) freeway congestion relief projects, consistent with the M2020 Plan. These projects include HOV system expansion on portions of Interstate 5, as well as general purpose lane improvements on nearly every other freeway corridor in Orange County.

Issues emerging from the Caltrans reports and the draft Directive are further discussed below.

Discussion

Caltrans Action Plan

The Action Plan provides detailed remedies for every freeway segment with carpool lanes where speeds are consistently below 45 miles per hour during peak hours (Attachment E). These remedies include further study of: (1) additional carpool lanes; (2) carpool merging lanes; (3) conversion of carpool lanes to toll lanes for single occupant vehicles; (4) increased carpool lane occupancy requirements; (5) conversion of limited access carpool lanes to continuous access (similar to State Route 22); (6) new carpool direct access ramps at select locations; and (7) new freeway-to-freeway carpool lane connectors. Overall, the proposed remedies are capital-intensive and require further analysis and planning. Further, it is unclear how these concepts would be developed, funded, and implemented once approved.

Unfortunately, the emphasis on long-term capital projects may conflict with federal law that requires state departments of transportation to remedy degraded carpool lanes facilities within 180 days or risk loss of federal funding and project approvals. Lack of action could potentially jeopardize federal funding for the Orange County freeway program as a result.

Further, the proposed capital projects and other remedies are justified on six months of traffic data without the benefit of long-term travel forecasts. Over time, the improvements identified in the plan may prove insufficient to address long-term carpool lane degradation as demand increases. This could require more projects over-and-above the approaches identified in the plan. A system-wide study that includes long-term benefits and costs should be developed to address this issue.

While the plan acknowledges specific and known issues, it has not been integrated with long-range plans, including comprehensive planning efforts in Los Angeles, Riverside, and San Diego counties. Coordination with adjacent counties is necessary to ensure seamless and integrated transitions to other counties. More importantly, any future project development efforts must ensure that the proposed solutions are complementary to the M2 Freeway Program and supplement commitments made to voters in November 2006. OCTA expects that Caltrans will soon initiate project development work and include OCTA in this process. Finally, the plan does not include a specific option to limit or discontinue the use of the carpool lanes by low-emission vehicles. This option, if approved by the state, would negate the requirement to remedy carpool lane degradation issues within the 180-day window and allow more time for a cooperative and comprehensive planning process. Attachment F is a draft comment letter to Caltrans on the Action Plan that reflects these, as well as other, more detailed issues.

Caltrans Draft Directive

The Caltrans draft Directive defines the concept of managed lanes and outlines the related decision-making process within the Caltrans organization to implement the necessary changes. The Directive does not currently acknowledge locally-funded improvements to the state highway system, such as the M2 Freeway Program, and these investments could be impacted by this Directive. Therefore, it is imperative that the Directive acknowledge that managed lanes not supplant voter commitments made through local transportation sales tax measures including M2; that Caltrans coordinate any managed lane projects with transportation commissions and local agencies;

and that excess tolls, if available, be invested in complementary multi-modal corridor improvements. Further, tolls should not replace state funding for highway operations and maintenance. Attachment G is a draft comment letter to Caltrans on the draft Directive reflecting these issues, as well as others.

As a next step, OCTA is working to form a Southern California managed lane working group that includes Caltrans, neighboring counties, Transportation Corridor Agencies, and the Southern California Association of Governments to facilitate a cooperative, coordinated, and comprehensive discussion of the issues discussed in this report. It is expected that this group will recommend amendments to the Action Plan and revisions to the draft Directive.

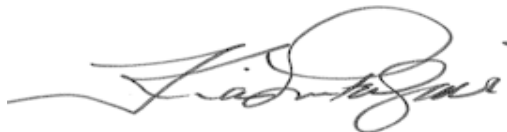
Summary

Caltrans has developed a statewide degradation plan to address congested carpool lanes. The Orange County solutions tend to focus on capital-intensive projects to mitigate carpool lane congestion. At the same time, Caltrans has also prepared a draft guidance document for managed lane facilities that will be used by Caltrans districts in planning, design, construction, and operation of the state highway system. OCTA intends to submit comments on the Action Plan and the draft Directive, and work with other Southern California counties and Caltrans to achieve regional consensus on potential remedies.

Attachments

- A. Managed Lane Definition
- B. Orange County Transportation Authority - Express Lane Planning and Implementation Principles - December 12, 2011
- C. California Department of Transportation - California High-Occupancy Vehicle Lane Degradation Action Plan
- D. California Department of Transportation - Draft Deputy Directive Number: DD-43R - Managed Lane Facilities
- E. Caltrans Proposed HOV Remediation Strategies
- F. Draft Letter to Mr. Joe Rouse - California Department of Transportation - dated XXXX, 2013 - RE: California High-Occupancy Vehicle Lane Degradation Action Plan
- G. Draft Letter to Mr. Joe Rouse - California Department of Transportation - dated XXXX, 2013 - RE: Deputy Directive Number: DD-43R - Managed Lane Facilities

Prepared by:



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



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment A

Managed Lane Definition

Source: Federal Highway Administration

The managed lane concept may vary in specific definition from one agency to the next, but all the definitions have common elements:

- The managed lane concept is typically a "freeway-within-a-freeway" where a set of lanes within the freeway cross section is separated from the general purpose lanes.
- The facility incorporates a high-degree of operational flexibility so that over time, operations can be actively managed to respond to growth and changing needs.
- The operation of, and demand on, the facility is managed using a combination of tools and techniques in order to continuously achieve an optimal condition, such as free-flow speeds.
- The principal management strategies can be categorized into three groups: pricing, vehicle eligibility, and access control.

Examples of operating managed lane projects include high-occupancy vehicle lanes, toll lanes, high-occupancy toll lanes (where carpoolers are offered a discount or no toll), or exclusive or special use lanes. Each of these concepts offers unique benefits. Project goals may include providing the traveler additional choices, increasing person and vehicle throughput, increasing transit use, or generating revenue for further corridor improvements. Every corridor is different with its own unique operating characteristics. The success of a managed lanes project will depend on the effectiveness of the operating strategy to address these characteristics. Careful forethought of project goals is critical to choosing the most appropriate management techniques to implement on the facility.

More detailed information is available at:

http://ops.fhwa.dot.gov/publications/managelanes_primer/



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment B

Orange County Transportation Authority

Express Lane Planning and Implementation Principles



December 12, 2011

User Experience

1. Express lane projects shall be designed and implemented to provide safe, reliable, and predictable travel times.
2. Express lanes shall be planned and implemented to support improved regional connectivity.
3. Design and management of the interface of express lane facilities with existing freeway, high-occupancy vehicle, and express facilities shall seek to achieve a consistent, seamless user experience.

Existing System

4. Express lane projects shall not be implemented to replace committed projects to be funded with local transportation sales tax revenues.
5. Although the California Department of Transportation and Federal Highway Administration control highway operations, OCTA does not intend to replace existing mixed-flow freeway lanes with express lanes.
6. Existing high-occupancy vehicle lanes may be functionally encompassed within an express lane project, provided:
 - a. The total number of lanes is increased by the project; and
 - b. Both vehicle throughput and average vehicle occupancy levels can be maintained and/or improved.

Operations

7. Express lane operations policies shall:
 - a. Assure coverage of capital and operations costs as well as maintenance responsibilities.
 - b. Maximize overall corridor throughput and efficiency through congestion pricing.
 - c. Promote increased average vehicle occupancy, including incentives for carpools, vanpools, and transit services.

Revenues

8. Any express lane project revenues in excess of what is needed for annual debt payments, financing requirements, and operations responsibilities shall be used for congestion relief projects and expanded transit options in the same corridor area.
9. Continued operations of express lanes, beyond bond retirement dates, shall be subject to demonstrated congestion relief measured by vehicle throughput and average vehicle occupancy levels in the corridor.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment C

CALIFORNIA DEPARTMENT OF TRANSPORTATION



**CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE
DEGRADATION ACTION PLAN**

Prepared by

**Division of Traffic Operations
Office of Traffic Management**

Submitted to

**Federal Highway Administration
California Division**

July 31, 2013



INTRODUCTION

As required under title 23, United States Code, section 166(d), the California Department of Transportation (Caltrans) has developed the “California High-Occupancy Vehicle Lane Degradation Action Plan” which lists strategies for addressing degraded high-occupancy vehicle (HOV) lanes. As identified in the “2011 California High-Occupancy Vehicle Lane Degradation Determination Report,” Table 1 summarizes degradation on the monitored HOV lane segments in the 2011 calendar year.

2011 STATEWIDE HOV LANE DEGRADATION SUMMARY		
	First 180-Day Period January to June 2011	Second 180-Day Period July to December 2011
Degraded	43% (572 lane-miles)	49% (656 lane-miles)
Not degraded	57% (754 lane-miles)	51% (670 lane-miles)
Total	100% (1326 lane-miles)	100% (1326 lane-miles)

The data shows that degradation increased in the second half of the year. This increase is consistent with past trends where congestion levels typically increase on all freeways during the second half of the calendar year. Based on this trend, Caltrans and the Federal Highway Administration (FHWA) agreed that the action plan will address only the degraded facilities identified in the second half of 2011. This action plan was developed by Caltrans district staff based on a review of the data and field conditions and in consultation with staff from the FHWA.



ACTION PLAN DESCRIPTION

A map of the HOV lane facilities in each district is provided with the degraded segments shown; each map is then followed by the action plan for each degraded segment in the district. The action plan for each degraded segment includes the peak hour period when degradation was observed, the potential causes of degradation, remediation strategies, and reasons for the strategies. Caltrans proposes a mixture of short-term and long-term strategies to reduce or eliminate degradation. These strategies include:

- **Increased Enforcement by the California Highway Patrol:** Violation rates in HOV lanes should not exceed 10 percent; violation rates on some degraded segments exceed this. Caltrans district staff will request increased enforcement from the California Highway Patrol (CHP) in order to lower the violation rates.
- **Improved Incident Response Times:** The Freeway Service Patrol is a joint program provided by Caltrans, the CHP and regional transportation agencies. The Freeway Service Patrol program is a free service of privately owned tow trucks that patrol designated routes on congested urban California freeways during commute periods. They remove disabled and stranded vehicles from the freeway and are a tool to prevent nonrecurring congestion. Presently, the Freeway Service Patrol strives to respond to incidents within 10 minutes. Much of the degradation observed in California is nonrecurring, which means it could be caused by incidents or inclement weather. In order to minimize the potential for degradation, Caltrans and the CHP will explore the possibility of reducing Freeway Service Patrol response times from 10 minutes to 8 minutes.
- **Improved Detection:** A review of the HOV lane traffic data revealed that the detection systems on many of the lanes are frequently off line, reporting data approximately 50 to 60 percent of the time. Ideally, the detection systems should be operating at least 70 percent of the time. In addition, some of the detection equipment was not correctly coded and was providing data on the wrong lanes. The districts will make a significant effort to repair existing vehicle detectors in order to reduce downtime and to increase the percentage of detectors in working order. Improperly coded detection equipment will be fixed in order to ensure that accurate data is being collected.
- **Improved Infrastructure:** Various short-term and long-term infrastructure improvements are planned on HOV lanes which may reduce or eliminate degradation. These include HOV lane gap closure projects, HOV lane extensions, or widening to provide a second HOV lane. Some of these projects were underway in 2011 or will begin construction within the next 1 to 3 years. Caltrans will request that action be deferred on the degraded segments adjacent to these projects until the improvements

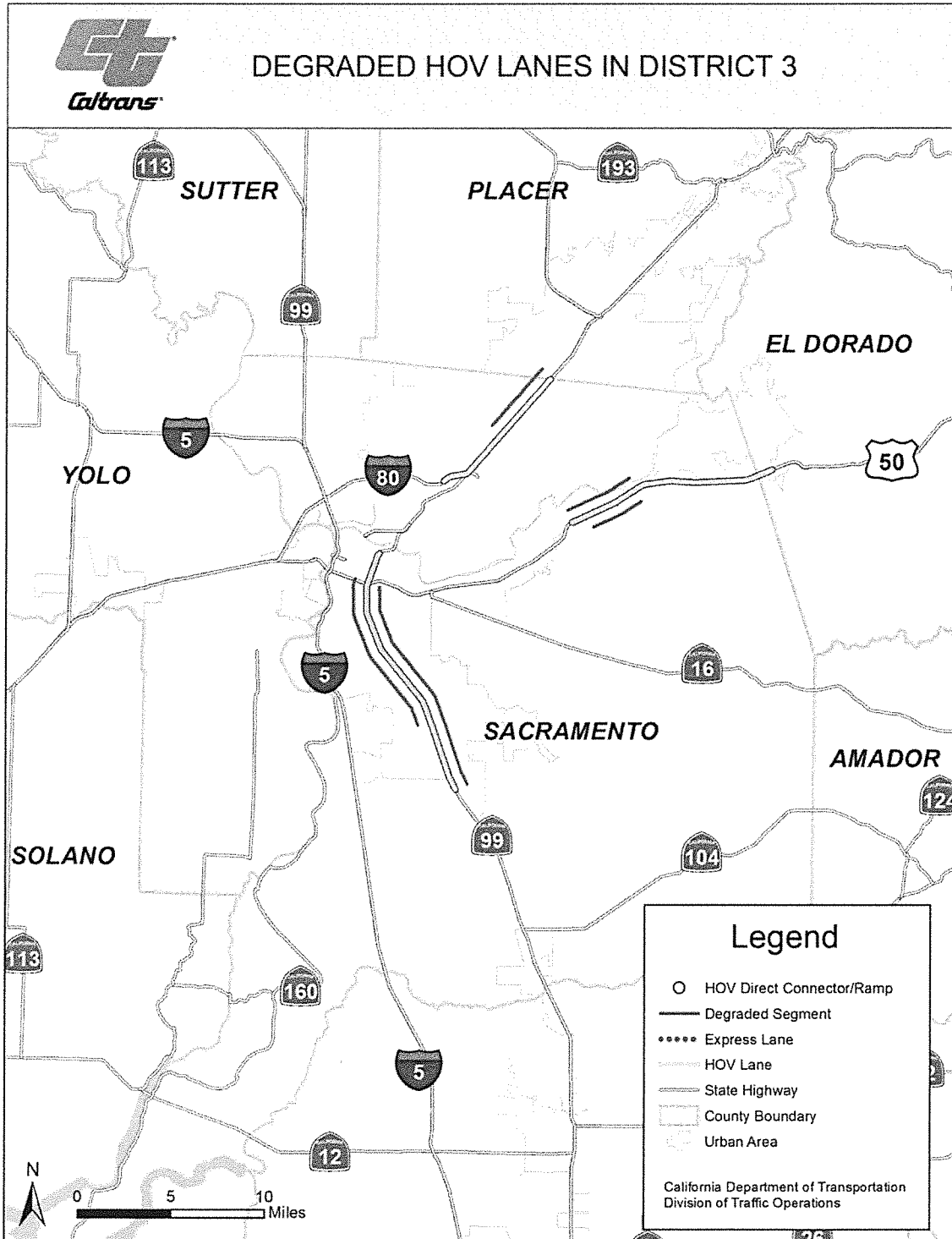
are completed and further analysis is performed. The 2012 degradation determination report may show improvement in those segments where construction has since been completed. Degradation in other locations has been determined to be caused by bottlenecks on adjacent general purpose lanes, causing congestion that affects all lanes of the freeway, including HOV lanes. Some districts will explore minor improvements to eliminate these bottlenecks; in some cases, such improvements were underway in 2011. Caltrans proposes to defer action on these degraded segments until the improvements are completed and further analysis is performed. The 2012 degradation determination report may show improvement in those segments where construction has since been completed.

- **Strategies for Active Traffic Management:** Some Caltrans districts have proposed various active traffic management strategies to further manage demand on freeways. These include on-ramps and freeway connector ramp metering, and “speed harmonization,” which will vary speed limits and reduce stop-and-go conditions. In other locations, HOV lanes will be converted to high-occupancy toll (HOT) lanes within the next 3 to 5 years; these improvements will result in improved detection, dedicated enforcement, and in some cases, additional capacity. Conversion to HOT lanes will require a comprehensive evaluation of existing freeway operations. This evaluation will result in changes in access to HOV lanes, which will reduce friction with adjacent general purpose lanes and improve speeds.

Changing occupancy requirements on HOV lanes is a strategy that Caltrans may selectively employ if the traffic volume in the HOV lane justifies it and the effects to the rest of the freeway can be minimized. Increasing occupancy requirements may result in significant underutilization of the HOV lanes, and could result in additional congestion in adjacent general purpose lanes since former users of HOV lanes would be added to the traffic stream. Conversion to a HOT lane in conjunction with any occupancy increase would be ideal in order to minimize these impacts. One Caltrans district is proposing to increase occupancy on two corridors; in one instance this change would be associated with conversion of the facilities to HOT lanes.

Caltrans is not looking to prohibit inherently low emission vehicles from HOV lanes at this time. These vehicles constitute a very low percentage of the users of HOV lanes. Furthermore, prohibiting these vehicles runs counter to an existing Governor’s Executive Order that directs State agencies to take action to support and incentivize the purchase and use of these vehicles.

The Division of Traffic Operations has established a statewide managed lanes manager who will serve as Caltrans’ single focal point for all issues related to managed lanes. This individual will work with the districts, other divisions within Caltrans, and external partners, including regional transportation agencies, the CHP, and the FHWA to identify and implement strategies that will improve and enhance HOV lane operations and protect the investment that has been made to the system.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 3												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
50	EB	SAC	12.500	SAC	16.311	3.811	0.0	14.5	Evening	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage; 24 potential congestion causing incidents occurred within this segment and time frame. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Add ramp metering to all eastbound ramps. A project is currently in construction. Repair and update vehicle detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite cities of Folsom and Rancho Cordova have increased traffic volumes and congested all lanes on US- 50. Properly operational vehicle detector system will ensure data accuracy.
50	WB	SAC	16.312	SAC	12.500	10.982	18.3	0.8	Morning	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Add ramp metering to all eastbound ramps. A project is currently in construction. HOV lane extension westward was under construction in 2011, opened to traffic in 2012. Conduct further analysis to determine if there have been any improvements after construction was completed. Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite cities of Folsom and Rancho Cordova have increased traffic volumes and congested all lanes on US-50. Properly operational vehicle detector system will ensure data accuracy.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 3												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
80	WB	SAC	18.000	SAC	13.904	4.096	13.7	0.0	Morning	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. 13 potential congestion causing incidents occurred within this segment and time frame. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Adjust ramp metering rates on ramps in this segment and in segments upstream. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response time. Repair and update vehicle detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite cities of Roseville and Rocklin has increased traffic volumes and congested all lanes on I-80. Properly operational vehicle detector system will ensure data accuracy.
							27.5	0.0	Morning	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. Construction of the southbound auxiliary lanes from Mack Road to Cosumnes River Blvd. throughout year 2011 impacted northbound and southbound HOV lane speeds. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Reduce vehicle release rates on NB on-ramps in this segment and in segments upstream. Repair and update vehicle detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite City of Elk Grove has increased traffic volumes and congested all lanes on Route 99. Properly operational vehicle detector system will ensure data accuracy.

(Continued from page 5)



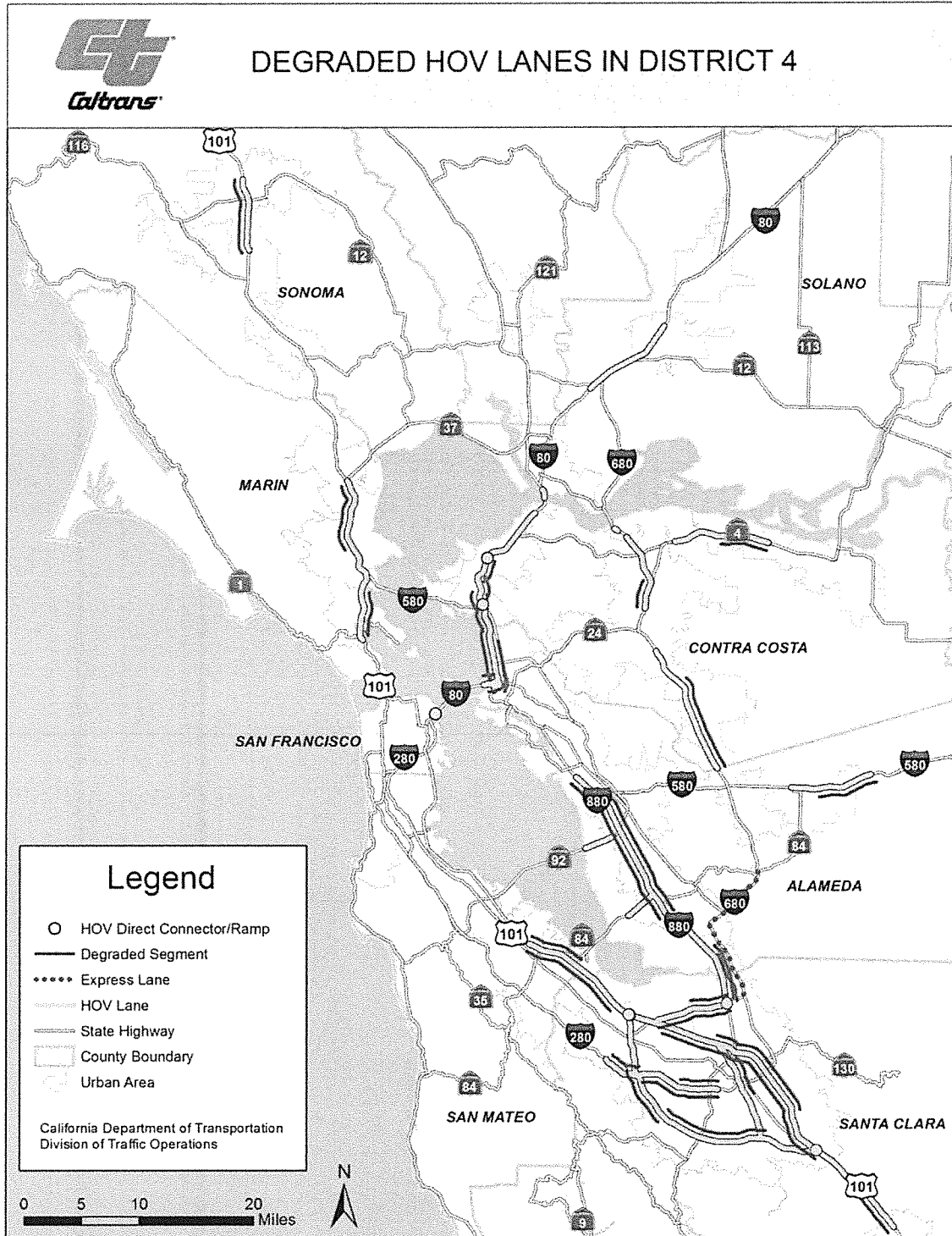
CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 3												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
99	NB	SAC	16.031	SAC	20.165	4.134	33.6	0.0	Morning	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. 12 potential congestion causing incidents occurred within this segment and time frame. Construction of the southbound auxiliary lanes from Mack Road to Cosumnes River Blvd. throughout year 2011 impacted northbound and southbound HOV lane speeds. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Reduce vehicle release rates on NB on-ramps in this segment and in segments upstream. Repair and update vehicle detector system to improve data collection. Review 2012 traffic data to determine if auxiliary lane project improved conditions. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite City of Elk Grove has increased traffic volumes and congested all lanes on Route 99. Properly operational vehicle detector system will ensure data accuracy. Auxiliary lane project removed bottleneck.
							35.9	0.8	Morning	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. 13 potential congestion causing incidents occurred within this segment and time frame. Narrow lanes and shoulders from Fruitridge Road to US-50. Vehicle weaving conflicts at the US-50 interchange. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Reduce vehicle release rates on NB on-ramps in this segment and in segments upstream. Repair and update vehicle detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite City of Elk Grove has increased traffic volumes and congested all lanes on Route 99. Properly operational vehicle detector system will ensure data accuracy.

(Continued from page 6)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 3												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
99	SB	SAC	R24,300	SAC	20,167	4.133	0.0	50.4	Evening	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. Narrow lanes and shoulders from US-50 to Fruitridge Road. Lane drops at Fruitridge Road and Mack Road create bottlenecks that reduce overall capacity, throughput and speed. The bottleneck at Mack Road was eliminated through recent construction of the southbound auxiliary lanes from Mack Road to Cosumnes River Blvd. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the California Highway Patrol to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Add ramp metering to all southbound ramps. A project is currently in the project development process. Repair and update vehicle detector system to improve data collection. Review 2012 traffic data to determine if improvements at Mack Road resulted in improved conditions. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite City of Elk Grove has increased traffic volumes and congested all lanes on Route 99. Properly operational vehicle detector system will ensure data accuracy. Preliminary analysis indicates general purpose congestion may have been reduced by improvements at Mack Road.
99	SB	SAC	20,168	SAC	16,034	4.134	0.8	94.7	Evening	<ul style="list-style-type: none"> High HOV violations. Non-recurrent congestion, such as collisions, weather, and construction increase the degradation percentage. Narrow lanes and shoulders from US-50 to Fruitridge Road. A lane drop at Mack Road reduces overall capacity, throughput and speed. This bottleneck was eliminated through recent construction of the southbound auxiliary lanes from Mack Road to Cosumnes River Blvd. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Current average response time is 10 minutes. District has started initial discussions with the CHP to reduce the response times. Add ramp metering to all southbound ramps. A project is currently in the project development process. Repair and update detector system to improve data collection Review 2012 traffic data to determine if improvements at Mack Road resulted in improved conditions. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Rapid growth in the satellite City of Elk Grove has increased traffic volumes and congested all lanes on Route-99. Good detector health will provide accurate data. Preliminary analysis indicates general purpose congestion may have been reduced by improvements at Mack Road.

(Continued from page 7)





CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 4												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
4	EB	CC	R20.088	CC	24.400	4.288	no data	94.7	Evening	<ul style="list-style-type: none"> End of the HOV Lane. General purpose lanes bottleneck as a result of lane reduction from four lanes to two lanes within a short distance. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Future widening up to Contra Loma Blvd; this project will extend the HOV lane and add second general purpose lane (begin construction March 2012 and end construction Sept. 2015). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. General purpose lane congestion back up into HOV lane. Improve traffic demand management.
80	EB	ALA	2.500	ALA	6.552	4.052	2.3	99.2	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Future Integrated Corridor Mobility project including active traffic management (variable speed limits) and ramp metering (begin construction October 2011 and end construction January 2015). Future project to convert HOV lane to a HOT lane. Currently in PA/ED phase. No construction dates yet. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
80	WB	CC	2.923	ALA	6.423	4.523	38.2	13.0	Morning & Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Future Integrated Corridor Mobility project including active traffic management (variable speed limits) and ramp metering (begin construction October 2011 and; end construction January 2015). Future project to convert HOV lane to a HOT lane. Currently in PA/ED phase. No construction dates yet. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 4												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 10)												
80	WB	ALA	6.423	ALA	1.900	4.523	22.9	95.4	Morning & Evening	<ul style="list-style-type: none"> • Coordinate with the CHP to increase enforcement on the HOV lane. • Improve the response time for the Freeway Service Patrol. • Future Integrated Corridor Mobility project including active traffic management (variable speed limits) and ramp metering (begin construction October 2011 and end construction January 2015). • Future project to convert HOV lane to a HOT lane. Currently in PAVED phase. No construction dates yet. 	<ul style="list-style-type: none"> • Remove ineligible vehicles from the HOV lane. • Improve traffic demand management. 	
85	NB	SCL	4.795	SCL	9.590	4.795	17.6	0.0	Morning	<ul style="list-style-type: none"> • Repair and update detector system to improve data collection. • Coordinate with the CHP to increase enforcement on the HOV lane. • Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2015). 	<ul style="list-style-type: none"> • Properly operational vehicle detector system will ensure data accuracy. • Remove ineligible vehicles from the HOV lane. • Improve traffic demand management. 	
85	NB	SCL	9.590	SCL	R14.210	4.796	18.3	0.8	Morning	<ul style="list-style-type: none"> • Repair and update detector system to improve data collection. • Coordinate with the CHP to increase enforcement on the HOV lane. • Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2015). 	<ul style="list-style-type: none"> • Properly operational vehicle detector system will ensure data accuracy. • Remove ineligible vehicles from the HOV lane. • Improve traffic demand management. 	



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 4												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 11)												
85	SB	SCL	R19.005	SCL	R14.210	4.795	0.0	33.6	Evening	<ul style="list-style-type: none"> HOV volume is at or near capacity. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Coordinate with the CHP to increase enforcement on the HOV lane. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2015). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
87	NB	SCL	3.748	SCL	7.297	3.549	34.4	0.8	Morning	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Coordinate with the CHP to increase enforcement on the HOV lane. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Remove ineligible vehicles from the HOV lane.
101	NB	SCL	30.810	SCL	R35.534	4.724	13.0	0.8	Morning	<ul style="list-style-type: none"> HOV volume is at or near capacity. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
101	NB	SCL	R35.534	SCL	40.254	4.724	25.2	0.0	Morning	<ul style="list-style-type: none"> HOV volume is at or near capacity. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
101	NB	SM	1.876	SM	6.600	4.724	0.0	13.0	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. Reduced speeds in HOV lane could be caused by incidents. HOV lane ends at this location. Congestion in the general purpose lanes could extend into the HOV lane at the end termini. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. A construction project to add auxiliary lanes was started in July 2011 and ended in November 2012. Coordinate with the CHP to increase enforcement on the HOV lane. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management. Remove ineligible vehicles from the HOV lane.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
101	NB	MRN	3.800	MRN	8.323	4.523	no data	78.6	Evening	<ul style="list-style-type: none"> HOV lane speeds drop in response to congestion in the general purpose lanes near Sir Francis Drake and Lucky Dr. interchange where access to eastbound I-580 is located. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Greenbrae interchange modification project (braided ramps) to relieve weaving within this area. (Begin construction January 2016 and end construction February 2018) Coordinate with the CHP to increase enforcement on the HOV lane. Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management. Properly operational vehicle detector system will ensure data accuracy.
	SB	SON	21.600	SON	15.200	6.400	0.8	31.3	Evening	<ul style="list-style-type: none"> On-going construction for an HOV lane at Wilfred and between Rohnert Park Expressway and Old Redwood Highway. Work now completed. Temporary freeway realignment due to construction activities resulting in loop detectors not aligned properly with specific lanes. 	<ul style="list-style-type: none"> Defer action pending further review now that construction of HOV lane is completed. 	<ul style="list-style-type: none"> Project established a continuous HOV facility.
	SB	MRN	18.900	MRN	12.846	6.054	51.9	no data	Morning	<ul style="list-style-type: none"> Only 30 minutes of HOV data is analyzed because HOV lane operation ends at 8:30 AM. Fluctuation in the vehicle movements as a result of the transitional period when the HOV lane operation ends and it converts into a general purpose lane. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.
	SB	SM	6.600	SM	1.876	4.724	67.9	28.2	Morning & Evening	<ul style="list-style-type: none"> HOV volume is at or near capacity. This freeway segment was under construction in 2011 through 2012 to add auxiliary lanes between Marsh Road and Embarcadero Road/Oregon Expressway. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. A construction project to add auxiliary lanes was started in July 2011 and ended in November 2012. A project is underway to establish two HOV lanes downstream from this segment which will eventually be converted into dual HOT lanes (begin construction November 2011 and end construction August 2013). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.

(Continued from page 12)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
101	SB	SM	1.876	SCL	49.702	4.724	0.0	86.3	Evening	<ul style="list-style-type: none"> HOV volume is at or near capacity. This freeway segment was under construction in 2011 through 2012 to add auxiliary lanes between Marsh Road and Embarcadero Road/Oregon Expressway. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. A construction project to add auxiliary lanes was started in July 2011 and ended in November 2012. A project is underway to establish two HOV lanes downstream from this segment which will eventually be converted into dual HOT lanes (begin construction November 2011 and end construction August 2013). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
101	SB	SCL	44.978	SCL	40.254	4.724	0.0	58.8	Evening	<ul style="list-style-type: none"> HOV lane speed drop in response to congestion in the general purpose lanes between De La Cruz Boulevard and SR-87, and between De La Cruz Boulevard and Fair Oaks Avenue. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Repair and update detector system to improve data collection. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.
101	SB	SCL	40.254	SCL	R35.534	4.724	0.0	35.1	Evening	<ul style="list-style-type: none"> HOV volume is at or near capacity. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Repair and update detector system to improve data collection. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.

(Continued from page 13)

CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 14)												
101	SB	SCL	R35.534	SCL	30.810	4.724	27.5	41.2	Morning & Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Coordinate with the CHP to increase enforcement on the HOV lane. Project to add a lane between Story Road interchange and Yerba Buena interchange. Modify Tully interchange (begin construction November 2010 and end construction October 2012) and Capitol Expressway interchange (begin construction August 2012 and end construction December 2014). Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.
101	SB	SCL	30.810	SCL	R26.448	4.724	6.9	24.4	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.
101	SB	SCL	R21.724	SCL	R17.000	4.724	0.0	19.8	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction fall 2016). Future ramp metering project 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 15)												
237	EB	SCL	3.000	SCL	R6.241	3.241	1.5	14.5	Evening	<ul style="list-style-type: none"> Inadequate vehicle detector system at this segment. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Coordinate with the CHP to increase enforcement on the HOV lane. Future project to extend the HOT lane from Zanker Road to Mathilda Avenue. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
237	EB	SCL	R6.241	SCL	9.500	3.241	0.0	19.1	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Conversion of the HOV lane to an HOT lane was completed in 2012 between Zanker Road and I-880 (begin construction summer 2011 and end construction spring 2012). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.
237	WB	SCL	9.500	SCL	R6.265	3.266	13.7	4.6	Morning	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Conversion of the HOV lane to an HOT lane was completed in 2012 between I-880 and North First Street (begin construction summer 2011 and end construction spring 2012). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.
280	NB	SCL	L4.700	SCL	6.879	3.561	11.5	0.0	Morning	<ul style="list-style-type: none"> High HOV violations. Geometric constraint and bottlenecks along this corridor. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. I-280/I-880/Stevens Creek interchange modification in construction to relieve congestion on I-280 at this location (begin construction September 2012 and end construction March 2015). Ramp metering activated in 2012 between US-101 and I-880. Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve operations at the I-280/I-880 interchange. Improve traffic demand management. Properly operational vehicle detector system will ensure data accuracy.
280	NB	SCL	10.439	SCL	14.000	3.561	32.8	0.0	Morning	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 4												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 16)												
280	SB	SCL	10.439	SCL	6.879	3.560	0.8	16.8	Evening	<ul style="list-style-type: none"> HOV lane volume is at capacity. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
280	SB	SCL	6.879	SCL	L4.700	3.561	0.0	10.7	Evening	<ul style="list-style-type: none"> Increased seasonal traffic within the vicinity of shopping malls along the corridor during the winter months. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
580	EB	ALA	13.048	ALA	10.333	2.715	0.0	19.8	Evening	<ul style="list-style-type: none"> High traffic demand along the corridor with a need for a second HOV lane on portion of the corridor. HOV lane is degraded mainly on Friday evening due to the high volume of commuters leaving the Bay Area for the weekend. 	<ul style="list-style-type: none"> Improve the response time for Freeway Service Patrol during construction of an auxiliary lane. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction spring 2015). Future ramp metering project. 	<ul style="list-style-type: none"> Improve traffic demand management.
580	EB	ALA	10.333	ALA	R7.648	2.714	0.8	83.2	Evening	<ul style="list-style-type: none"> End of HOV lane and mainline lane reduction from five lanes to four lanes. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Future freeway widening to add truck climbing lanes. Future project to convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction fall 2014 and end construction spring 2015). Future ramp metering project. 	<ul style="list-style-type: none"> Congestion downstream from the HOV lane endpoint backs up into HOV lane. Improve traffic demand management.

CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 17)												
680	NB	ALA	R21.600	CC	R3.898	4.177	14.5	3.8	Morning	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Improve the response time for Freeway Service Patrol during the construction of an auxiliary lane between Crow Canyon and Sycamore (begin construction March 2013 and end construction December 2014). Future project to convert existing HOV lane to a HOT lane (begin construction Feb. 2015 and end construction November 2015). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Minimize impact of incidents through construction zone. Improve traffic demand management.
680	NB	CC	R3.898	CC	R8.100	4.177	8.4	33.6	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Improve the response time for Freeway Service Patrol during the construction of an auxiliary lane between Crow Canyon and Sycamore (begin construction March 2013 and end construction December 2014). Future project to convert existing HOV lane to a HOT lane (begin construction Feb. 2015 and end construction November 2015). 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy. Minimize impact of incidents through construction zone. Improve traffic demand management.
680	SB	CC	R18.579	CC	16.300	2.279	36.6	4.6	Morning	<ul style="list-style-type: none"> HOV lane ends at this location. A lane drop at North Main Street resulting in a bottleneck and the congestion extends into the HOV lane. 	<ul style="list-style-type: none"> Improve the response time for the Freeway Service Patrol. Coordinate with the CHP to increase enforcement on the HOV lane. Future southbound HOV lane gap closure project (begin construction 2016 and end construction 2018). 	<ul style="list-style-type: none"> Minimize incident impacts on the corridor capacity near the HOV end termini. Remove ineligible vehicles from the HOV lane.
680	SB	ALA	M2.385	SCL	M7.600	4.720	0.0	23.7	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

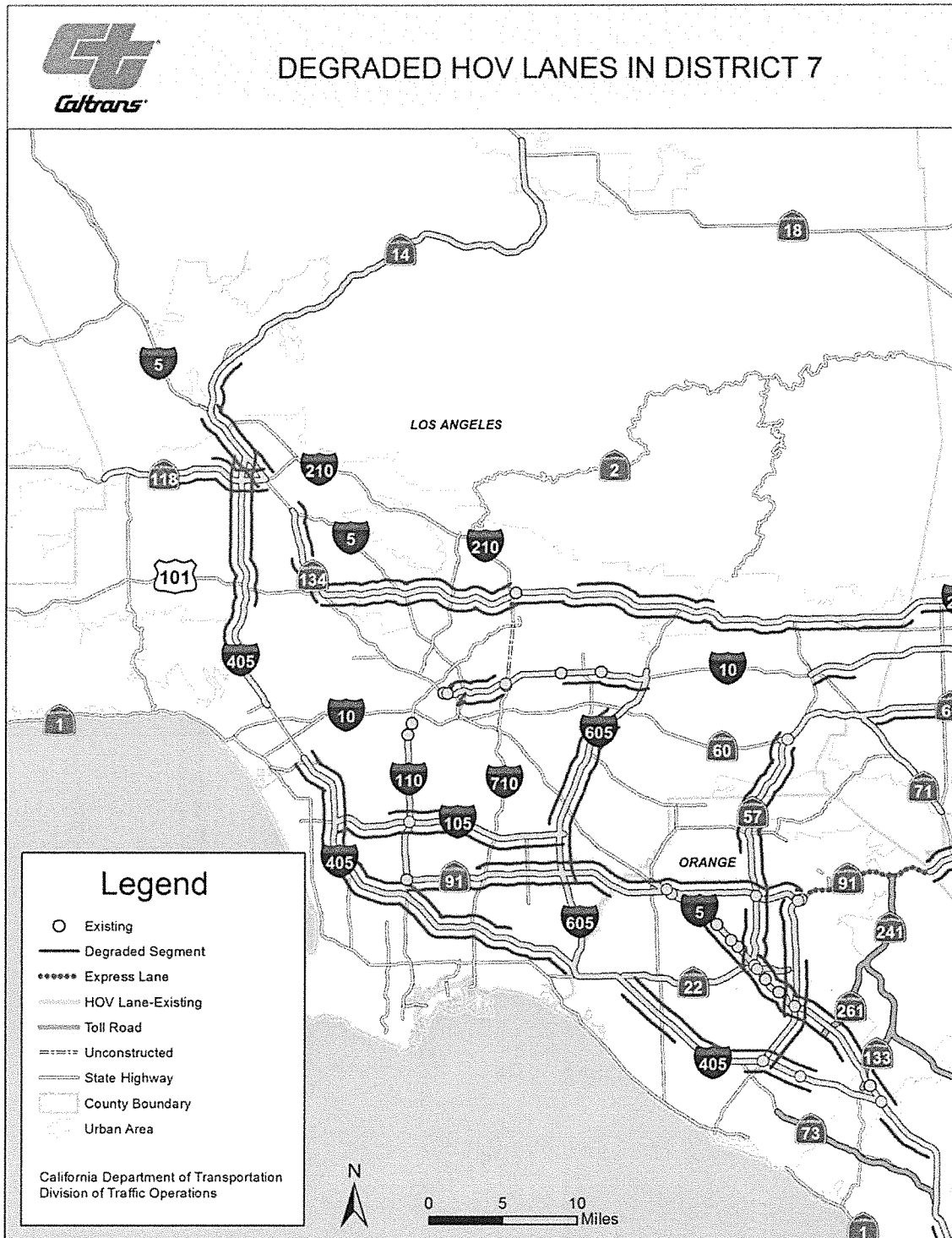
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 18)												
880	NB	SCL	8.700	ALA	3.089	4.616	0.0	39.7	Evening	<ul style="list-style-type: none"> HOV lane speed drop in response to congestion in the general purpose lanes. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Santa Clara Valley Transportation Agency is assessing a proposal to extend a second HOT lane further north into Alameda County. Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Improve traffic demand management. Properly operational vehicle detector system will ensure data accuracy.
880	NB	ALA	7.705	ALA	12.321	4.616	1.5	50.4	Evening	<ul style="list-style-type: none"> HOV lane speed drop in response to congestion in the general purpose lanes. Vehicle weaving conflict at the SR-84 interchange. Detectors health is poor along this corridor. 	<ul style="list-style-type: none"> Future project to convert HOV lane to a HOT lane (begin construction March 2015 and end construction Jan. 2016). Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Improve traffic demand management. Properly operational vehicle detector system will ensure data accuracy.
880	NB	ALA	12.321	ALA	19.300	6.979	0.0	86.3	Evening	<ul style="list-style-type: none"> HOV lane speed drop in response to congestion in the general purpose lanes. Vehicle weaving conflict at the SR-92 interchange. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Future project to convert HOV lane to a HOT lane. (Begin construction March 2015 and end construction Jan. 2016) Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Improve traffic demand management. Properly operational vehicle detector system will ensure data accuracy.
880	NB	ALA	R34.700	ALA	R35.400	0.700	0.8	45.8	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Improve the response time for the Freeway Service Patrol. Apply Integrated Corridor Management strategies on I-80. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management. Improvements on I-80 may reduce congestion from spilling back onto NB I-880.
880	SB	ALA	22.700	ALA	17.855	4.845	24.4	11.5	Morning & Evening	<ul style="list-style-type: none"> High volume coming from SR-238. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Repair and update detector system to improve data collection. Future project to convert HOV lane to a HOT lane (begin construction March 2015 and end construction Jan. 2016). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Properly operational vehicle detector system will ensure data accuracy. Improve traffic demand management.
880	SB	ALA	17.855	ALA	13.009	4.846	23.7	16.8	Morning & Evening	<ul style="list-style-type: none"> HOV lane speed drop in response to congestion in the general purpose lanes. Vehicle weaving conflict at the SR-92 interchange. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Future project to convert HOV lane to a HOT lane (begin construction March 2015 and end construction Jan. 2016) 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 4

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
880	SB	ALA	13.009	ALA	8.164	4.845	17.6	0.0	Morning	<ul style="list-style-type: none"> HOV lane speed drop in response to congestion in the general purpose lanes. Vehicle weaving conflict at the SR-84 interchange. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Future project to convert HOV lane to a HOT lane (begin construction March 2015 and end construction Jan. 2016). 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.

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CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 7												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
5	NB	LA	39.400	LA	42.389	2.989	26.0	49.6	Morning & Evening	<ul style="list-style-type: none"> General purpose lane drops at San Fernando Mission Road cause bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Investigate if respiping the general purpose lanes to sustain four lanes is possible. Eliminate bottleneck. 	
5	NB	LA	42.389	LA	R45.600	2.988	8.4	61.1	Evening	<ul style="list-style-type: none"> Ongoing construction of the SR-14 HOV connector which opened at the end of 2012. 	<ul style="list-style-type: none"> Defer action until the effects of the connector are analyzed. Completion of direct connector could improve conditions. 	
5	SB	LA	R45.600	LA	42.389	2.988	31.3	54.2	Morning & Evening	<ul style="list-style-type: none"> Ongoing construction of the SR-14 HOV connector which opened at the end of 2012. 	<ul style="list-style-type: none"> Defer action until the effects of the connector are analyzed. Completion of direct connector could improve conditions. 	
5	SB	LA	42.389	LA	39.400	2.989	19.8	22.1	Morning & Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Properly operational vehicle detector system will ensure data accuracy. 	
10	EB	LA	17.000	LA	20.904	4.559	0.0	13.7	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. Segment may not be properly coded into the system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. Properly operational vehicle detector system will ensure data accuracy. 	
10	EB	LA	25.464	LA	31.200	5.736	0.0	100.0	Evening	<ul style="list-style-type: none"> Bottleneck at I-605 due to general purpose lane drop and diverge. 	<ul style="list-style-type: none"> Eliminate bottleneck. 	
10	EB	LA	42.400	LA	45.330	2.930	0.0	19.1	Evening	<ul style="list-style-type: none"> High vehicle and truck volume from SR-57. 	<ul style="list-style-type: none"> Improve traffic demand management. 	
10	WB	LA	20.904	LA	17.000	4.559	13.0	0.0	Morning	<ul style="list-style-type: none"> Possible congestion due to vehicles merging onto congested traffic on US-101 or onto Alameda Street. Faulty vehicle detector system. Segment may not be properly coded into the system. 	<ul style="list-style-type: none"> Minimize queuing. Properly operational vehicle detector system will ensure data accuracy. 	
14	NB	LA	R24.800	LA	R29.281	4.481	No data	10.7	Evening	<ul style="list-style-type: none"> HOV lane terminated approaching I-5. The lane has now been extended onto a direct connector to I-5 as of the end of 2012. 	<ul style="list-style-type: none"> Study this segment after traffic normalizes with the HOV direct connector. 	



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
57	NB	LA	R22.551	LA	R4.500	4.500	8.4	64.9	Evening	<ul style="list-style-type: none"> High traffic demand from the Orange County area and eastbound SR-60. This area also has a very high truck volume with steep terrain. 	<ul style="list-style-type: none"> Needs further investigation. 	
	SB	LA	R4.500	LA	R22.551	4.500	0.0	33.6	Evening	<ul style="list-style-type: none"> High truck volumes. 	<ul style="list-style-type: none"> Needs further investigation. 	
91	EB	LA	R6.400	LA	R11.167	4.767	0.0	79.4	Evening	<ul style="list-style-type: none"> The number of general purpose lanes drops from four to three at the I-710 interchange, causing a bottleneck. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lane to sustain four lanes throughout the interchange is possible. SR-91/I-110 HOV Direct Connector would benefit this area especially with the Artesia Transit Center. Design in HOV ingress/egress weaving lanes. 	<ul style="list-style-type: none"> Improve traffic demand management.
91	EB	LA	R15.933	LA	R15.933	4.766	0.0	82.4	Evening	<ul style="list-style-type: none"> The number of general purpose lanes drops from four lanes to three lanes at the I-605 interchange, causing a bottleneck. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lane to sustain four lanes throughout the interchange is possible. Design in HOV ingress/egress weaving lanes. 	<ul style="list-style-type: none"> Improve traffic demand management.
91	EB	LA	R15.933	LA	R20.700	4.767	0.0	31.3	Evening	<ul style="list-style-type: none"> The number of general purpose lanes drops from four lanes to three lanes at the I-605 interchange, causing a bottleneck. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lane to sustain four lanes throughout the interchange is possible. Study the possibility of metering the connector ramps at the I-605 interchange. 	<ul style="list-style-type: none"> Increase capacity. Improve traffic demand management.
91	WB	LA	R20.700	LA	R15.933	4.767	10.7	4.6	Morning	<ul style="list-style-type: none"> The number of general purpose lanes drops from four lanes to three lanes at the I-605 interchange, causing a bottleneck. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lane to sustain four lanes throughout the interchange is possible. Study the possibility of metering the connector ramps at the I-605 interchange. 	<ul style="list-style-type: none"> Increase capacity. Improve traffic demand management.
91	WB	LA	R15.933	LA	R11.167	4.766	32.8	0.0	Morning	<ul style="list-style-type: none"> The number of general purpose lanes drops from four to three at the I-710 interchange, causing a bottleneck.. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lane to sustain four lanes throughout the interchange is possible. 	<ul style="list-style-type: none"> Increase capacity.

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CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 23)												
105	EB	LA	R2.200	LA	R6.173	3.973	0.0	83.2	Evening	<ul style="list-style-type: none"> General purpose lane drops after Prairie cause bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lanes to sustain four lanes is possible. Design in weave lanes at HOV access openings. 	<ul style="list-style-type: none"> Eliminate bottleneck. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
105	EB	LA	R6.173	LA	R10.145	3.972	21.4	89.3	Morning & Evening	<ul style="list-style-type: none"> General purpose lane drops before Vermont cause bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lanes to sustain four lanes is possible. Design in weave lanes at HOV access openings. 	<ul style="list-style-type: none"> Eliminate bottleneck. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
105	EB	LA	R10.145	LA	R14.117	3.972	0.0	45.8	Evening	<ul style="list-style-type: none"> Congestion in the general purpose lane. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> If possible have a minimum of four continuous general purpose lanes. 	<ul style="list-style-type: none"> Increase capacity.
105	EB	LA	R14.117	LA	R18.090	3.973	0.0	48.9	Evening	<ul style="list-style-type: none"> This facility would benefit with an HOV direct connector. The HOV traffic is pushed back into the general purpose lanes. 	<ul style="list-style-type: none"> Further study needed. Long term solution is to provide a HOV direct connector at I-710. 	<ul style="list-style-type: none"> Eliminate vehicle weaving conflict to merge across multiple general purpose lanes.
105	WB	LA	R10.145	LA	R6.172	3.973	71.0	1.5	Morning	<ul style="list-style-type: none"> General purpose lane drops cause bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lanes to sustain four lanes throughout is possible. Design in weave lanes at HOV access openings. 	<ul style="list-style-type: none"> Eliminate bottleneck. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
118	EB	LA	R3.800	LA	R7.600	3.800	32.1	43.5	Morning & Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.
118	EB	LA	R7.600	LA	R11.400	3.800	32.1	6.1	Morning	<ul style="list-style-type: none"> The HOV lane terminates before the I-5 interchange. The HOV lane becomes the number one lane which then merges into the number two lane. 	<ul style="list-style-type: none"> Investigate if restriping the general purpose lanes to sustain four lanes throughout is possible. 	<ul style="list-style-type: none"> Increase capacity.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 24)												
118	WB	LA	R11.400	LA	R7.600	3.800	100.0	100.0	Morning & Evening	<ul style="list-style-type: none"> Vehicle weaving conflict from southbound I-405 to the HOV lane. The SR-118 connector ramp needs to be investigated to study if truck volume and truck merging causes congestion. Motorists travel speeds are too high to allow upstream traffic to adjust. 	<ul style="list-style-type: none"> Long term solution is to provide a HOV direct connector at the I-405 interchange to eliminate the HOV traffic weaving conflicts and allow more connector volume for trucks. Coordinate with the CHP to increase speed enforcement. 	<ul style="list-style-type: none"> Improve traffic demand management.
134	EB	LA	0.000	LA	4.428	4.428	12.2	75.6	Morning & Evening	<ul style="list-style-type: none"> Residual effect from the I-5 interchange. At this point, the HOV lane ends and there is a general purpose lane drop within the interchange curve. Since the HOV lane ends, HOV traffic quickly merges across the left lanes from southbound I-5 to merge back into the HOV lane on SR-134. 	<ul style="list-style-type: none"> Continue the HOV lane. Investigate if widening can occur to eliminate the lane drop within interchange. Long term solution is to provide direct connectors at the I-5 interchange. 	<ul style="list-style-type: none"> Improve traffic demand management.
134	EB	LA	4.428	LA	R8.855	4.427	0.8	61.8	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.
134	EB	LA	R8.855	LA	R13.283	4.428	1.5	43.5	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.
134	WB	LA	R13.300	LA	R8.872	4.428	0.8	38.2	Evening	<ul style="list-style-type: none"> Faulty vehicle detector system. 	<ul style="list-style-type: none"> Repair and update detector system to improve data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.
134	WB	LA	R8.872	LA	4.428	4.427	2.3	38.2	Evening	<ul style="list-style-type: none"> The HOV lane discontinues at the I-5 interchange. There is a general purpose lane drop. The cumulative condition of the pavement within the area of the merge of the connector from northbound I-5. Vehicle weaving conflicts. 	<ul style="list-style-type: none"> Improve the interchange. Long term solution is to provide direct connectors at the I-5 interchange. 	<ul style="list-style-type: none"> Improve traffic demand management.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 25)												
134	WB	LA	4.428	LA	0.000	4.428	0.0	13.7	Evening	<ul style="list-style-type: none"> A complete squeeze of the SR-134 to US-101. Traffic volume at the interchange exceeds its capacity. Plus there is congestion on US-101. 	<ul style="list-style-type: none"> Improve the interchange. 	<ul style="list-style-type: none"> Improve traffic demand management.
170	NB	LA	R17.505	LA	R20.510	3.005	6.9	96.2	Evening	<ul style="list-style-type: none"> The HOV lane ends. There is a general purpose lane drop. This interchange is currently under construction which includes an HOV direct connector to I-5. 	<ul style="list-style-type: none"> Defer action until construction is completed and traffic normalizes. 	<ul style="list-style-type: none"> Completion of HOV direct connector could improve conditions.
170	SB	LA	R17.505	LA	R14.500	3.005	58.0	0.8	Morning	<ul style="list-style-type: none"> Congestion from the SR-170/US-101 interchange. General purpose lane drops from four lanes down to two lanes. The HOV lane ends. Traffic volume exceeds capacity for vehicles heading on southbound US-101. 	<ul style="list-style-type: none"> Investigate if respaving the general purpose lanes to sustain a minimum of three lanes throughout the interchange is possible. Also, possible continuation of the HOV lane through the interchange. Long term solution is improvements to the interchange. 	<ul style="list-style-type: none"> Eliminate bottlenecks.
210	EB	LA	R25.000	LA	L29.568	4.568	0.0	55.7	Evening	<ul style="list-style-type: none"> General purpose lane drops at Molino and Rosemead causing congestion Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. Speeding drivers in both HOV and general purpose lanes do not allow the upstream traffic to adjust. 	<ul style="list-style-type: none"> Restripe if possible to eliminate at least one of the two lane drops. Coordinate with the CHP to increase speed limit enforcement. Design in weave lanes at HOV access openings. 	<ul style="list-style-type: none"> Eliminate bottleneck. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
210	EB	LA	L29.568	LA	R33.827	4.568	0.0	98.5	Evening	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above.
210	EB	LA	R33.827	LA	R38.396	4.569	0.0	94.7	Evening	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above.
210	EB	LA	R38.396	LA	R42.964	4.568	0.0	12.2	Evening	<ul style="list-style-type: none"> General purpose lane drop at San Dimas combined with high volumes entering from SR-57 cause congestion. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Restripe if possible to eliminate the lane drop. 	<ul style="list-style-type: none"> Eliminate bottleneck.
210	EB	LA	R42.964	LA	R47.532	4.568	0.0	64.9	Evening	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 26)												
210	EB	LA	R47.532	LA	R52.100	4.568	100.0	33.6	Morning & Evening	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above. 	
210	WB	LA	R38.395	LA	R33.827	4.568	56.5	14.5	Morning & Evening	<ul style="list-style-type: none"> HOV traffic exits the HOV lane to merge onto I-605. 	<ul style="list-style-type: none"> Design in weave lanes at HOV access opening to serve I-605. 	
210	WB	LA	R33.827	LA	L29.568	4.568	40.5	38.9	Morning & Evening	<ul style="list-style-type: none"> From the westbound Huntington Drive on-ramp there is an auxiliary lane that is striped like a fifth lane. This fifth lane only exists until 2nd Street. This causes confusion for motorists thinking that there is a fifth lane. Also it causes complications with the high truck volume. 	<ul style="list-style-type: none"> Restripe this on-ramp acceleration lane as an auxiliary lane. 	
405	NB	LA	4.842	LA	9.861	4.843	10.7	0.8	Morning	<ul style="list-style-type: none"> High vehicle volume from southbound I-710. 	<ul style="list-style-type: none"> Meter the connector ramp. 	
405	NB	LA	9.861	LA	14.703	4.842	56.5	55.7	Morning & Evening	<ul style="list-style-type: none"> General purpose lane drops prior to I-110. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Restripe if deemed possible to continue fourth lane. Design in weave lanes at HOV access openings. Long term solution is a HOV direct connector at I-405/I-110 interchange. 	
405	NB	LA	14.703	LA	19.546	4.843	75.6	0.0	Morning	<ul style="list-style-type: none"> HOV traffic exits the HOV lane to merge onto I-105. 	<ul style="list-style-type: none"> Design in weave lanes at HOV access opening to serve I-105. Long term solution may be a HOV direct connector at I-405/I-105 interchange. 	
405	NB	LA	19.546	LA	24.388	4.842	32.1	0.8	Morning	<ul style="list-style-type: none"> General purpose lanes are congested. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Adjust ramp metering rates in this segment. 	
405	NB	LA	24.388	LA	26.400	2.012	68.7	45.0	Morning & Evening	<ul style="list-style-type: none"> Residual effect of ongoing upstream construction for the northbound HOV lane. 	<ul style="list-style-type: none"> Defer action until the HOV lane is completed. 	



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
405	NB	LA	38.600	LA	43.758	5.158	0.0	35.9	Evening	<ul style="list-style-type: none"> General purpose lane drops at San Fernando Mission Rd and at the end of the HOV lane at I-5 creating bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Look into the possibility of restriping a fourth lane through segment. 	<ul style="list-style-type: none"> Eliminate bottleneck.
405	NB	LA	43.758	LA	48.600	4.842	0.0	28.2	Evening	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above.
405	SB	LA	48.600	LA	43.758	4.842	13.0	7.6	Morning	<ul style="list-style-type: none"> Unknown. Possibly faulty vehicle detection system. 	<ul style="list-style-type: none"> Review detector system to verify accurate data collection. 	<ul style="list-style-type: none"> Properly operational vehicle detector system will ensure data accuracy.
405	SB	LA	4.842	ORA	24.178	4.842	0.8	87.8	Evening	<ul style="list-style-type: none"> General purpose lanes are congested. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Defer action until improvements at I-605/I-405 interchange are completed. 	<ul style="list-style-type: none"> Completion of improvements at I-605 could improve conditions.
405	SB	LA	43.758	LA	38.915	4.843	95.4	12.2	Morning & Evening	<ul style="list-style-type: none"> Slab replacement of the right three lanes approaching US-101. Geometrics at the US-101 interchange cause congestion. Lane drop southbound at US-101 connector, queuing from US-101. Approaching US-101 interchange, the 2 right lanes are elephant tracked, leaving 3 general purpose lanes for southbound I-405. High demand from both directions of US-101 to southbound I-405 combined with weaving to Van Nuys off-ramp. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Slab rehab of the right 3 lanes approaching US-101. Install delineators along the solid white line on the connector from SB US-101 to prevent premature weaving to the Van Nuys off-ramp. Possible restripe of SB I-405 through interchange to give 4 general purpose lanes. Design in weave lanes at HOV access openings. Long term solution is additional improvements to US-101 interchange. 	<ul style="list-style-type: none"> Improvements are needed at the US-101 interchange due to high volumes and vehicle weaving conflicts. Residual effects from the congestion on US-101 also affect I-405.
405	SB	LA	38.915	LA	34.073	4.842	38.2	0.0	Morning	<ul style="list-style-type: none"> General purpose lanes are congested. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Further study needed. 	<ul style="list-style-type: none"> Daily recurrent congestion due to high volumes and inadequate capacity. No room to make improvements on mainline.

(Continued from page 27)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

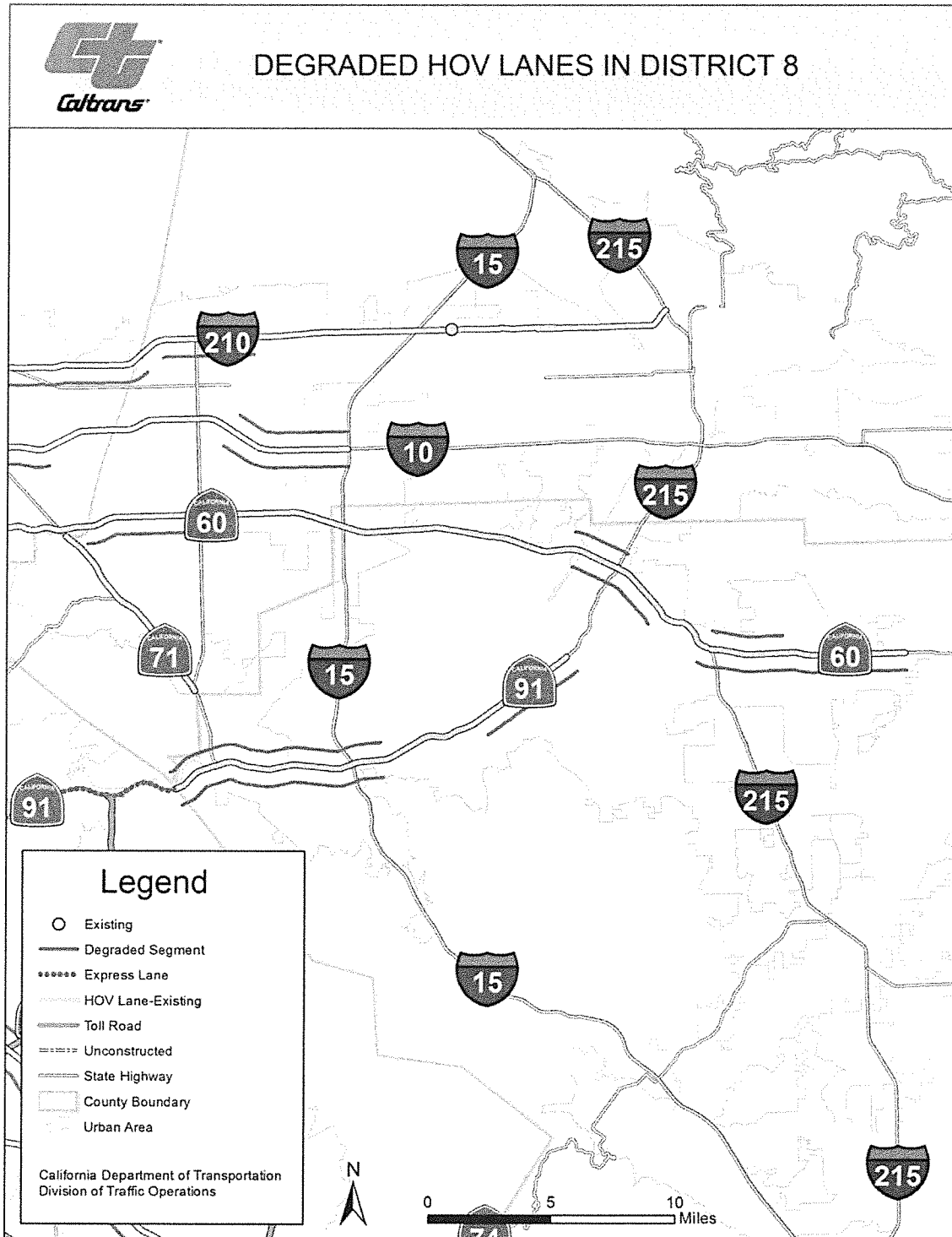
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 28)												
405	SB	LA	26.400	LA	24.388	2.012	0.0	36.6	Evening	<ul style="list-style-type: none"> High vehicle volumes from SR-90. 	<ul style="list-style-type: none"> Meter the connector ramp from SR-90. 	<ul style="list-style-type: none"> Control platoons of vehicles entering the HOV lane.
405	SB	LA	24.388	LA	19.546	4.842	0.0	48.9	Evening	<ul style="list-style-type: none"> Further study needed. 	<ul style="list-style-type: none"> Look into possibly metering the HOV lane at on-ramps. 	<ul style="list-style-type: none"> Control platoons of vehicles entering the HOV lane.
405	SB	LA	19.546	LA	14.703	4.843	10.7	53.4	Morning & Evening	<ul style="list-style-type: none"> General purpose lane drops at I-110 and Avalon cause bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Investigate if resurfacing the general purpose lanes to sustain four lanes is possible. Design in weave lanes at HOV access openings. 	<ul style="list-style-type: none"> Eliminate bottleneck Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
405	SB	LA	14.703	LA	9.861	4.842	0.0	63.4	Evening	<ul style="list-style-type: none"> Further study needed. 	<ul style="list-style-type: none"> Further study needed. 	<ul style="list-style-type: none"> Needs further investigation.
405	SB	LA	9.861	LA	4.842	4.843	0.0	58.0	Evening	<ul style="list-style-type: none"> General purpose lane drops at I-710 cause bottlenecks. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Investigate if resurfacing the general purpose lane to sustain four lanes is possible. Design in weave lanes at HOV access openings. 	<ul style="list-style-type: none"> Eliminate bottleneck Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
605	NB	LA	R4.140	LA	R8.280	4.140	19.1	19.1	Morning & Evening	<ul style="list-style-type: none"> General purpose lane drops at I-5 interchange cause bottlenecks. High vehicle volume from I-5 causes congestion in the general purpose lanes. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Restripe if possible to eliminate the lane drop. 	<ul style="list-style-type: none"> Eliminate bottleneck.
605	NB	LA	R8.280	LA	R12.420	4.140	0.0	32.8	Evening	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above. 	<ul style="list-style-type: none"> Same as above.
605	NB	LA	R12.420	LA	R16.560	4.140	0.0	42.0	Evening	<ul style="list-style-type: none"> Construction on I-10 east of I-605 affects I-10/I-605 interchange and this segment. 	<ul style="list-style-type: none"> Defer action until improvements on I-10 are completed. 	<ul style="list-style-type: none"> Completion of improvements at interchange could improve conditions.
605	SB	LA	R16.560	LA	R12.420	4.140	2.3	22.1	Evening	<ul style="list-style-type: none"> Construction on I-10 east of I-605 affects I-10/I-605 interchange and this segment. 	<ul style="list-style-type: none"> Defer action until improvements on I-10 are completed. 	<ul style="list-style-type: none"> Completion of improvements at interchange could improve conditions.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 7

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
605	SB	LA	R12.420	LA	R8.280	4.140	4.6	42.0	Evening	<ul style="list-style-type: none"> General purpose lane drops at I-5 interchange cause bottlenecks. High vehicle volume from I-5 causes congestion in the general purpose lanes. Vehicle weaving conflict at ingress/egress locations due to congestion in the general purpose lane. 	<ul style="list-style-type: none"> Restripe if possible to eliminate the lane drop. 	<ul style="list-style-type: none"> Eliminate bottleneck.

(Continued from page 29)



CALIFORNIA HIGH OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 8

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
10	EB	SBD	4.950	SBD	9.900	4.950	0.0	33.6	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. HOV lane ends. Increased traffic to and from Ontario Airport. 	<ul style="list-style-type: none"> Increase occupancy requirements. Convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction July 2019 and end construction August 2024). 	<ul style="list-style-type: none"> Reduce HOV volume while maintaining the same level of person-throughput. Increase capacity.
10	WB	SBD	9.900	SBD	4.950	4.950	4.6	32.1	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Congestion from Los Angeles County. Increased traffic to and from Ontario Airport. 	<ul style="list-style-type: none"> Increase occupancy requirements. Convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction July 2019 and end construction August 2024). 	<ul style="list-style-type: none"> Reduce HOV volume while maintaining the same level of person-throughput. Increase capacity.
60	EB	LA	R30.456	SBD	R4.987	4.987	0.0	55.7	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient ingress/egress locations. 	<ul style="list-style-type: none"> Convert HOV lane from limited access to continuous access (begin construction March 2013 and end construction September 2013). 	<ul style="list-style-type: none"> Eliminate vehicle weaving conflicts at ingress/egress locations.
60	EB	RIV	10.266	RIV	15.413	4.988	0.0	12.2	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Gap in the HOV lane at the SR-60/I-215 east junction. General purpose lanes are congested before the HOV lane ends. 	<ul style="list-style-type: none"> Construct an HOV lane in each direction to provide a continuous HOV lane from west to east of SR-60 and I-215 east junction (begin construction July 2011 and end construction March 2014). 	<ul style="list-style-type: none"> Close gap in HOV lane.
60	EB	RIV	15.413	RIV	20.400	4.987	0.0	29.0	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient ingress/egress locations. 	<ul style="list-style-type: none"> Convert HOV lane from limited access to continuous access (begin construction July 2011 and end construction November 2012). 	<ul style="list-style-type: none"> Eliminate vehicle weaving conflicts at ingress/egress locations.
60	WB	RIV	15.413	RIV	10.266	4.988	10.7	6.9	Morning	<ul style="list-style-type: none"> HOV volume exceeds capacity. Gap in the HOV lane at the SR-60/I-215 east junction. General purpose lanes are congested before the HOV lane ends. 	<ul style="list-style-type: none"> Construct an HOV lane in each direction to provide a continuous HOV lane from west to east of SR-60 and I-215 east junction (begin construction July 2011 and end construction March 2014). 	<ul style="list-style-type: none"> Close gap in HOV lane.

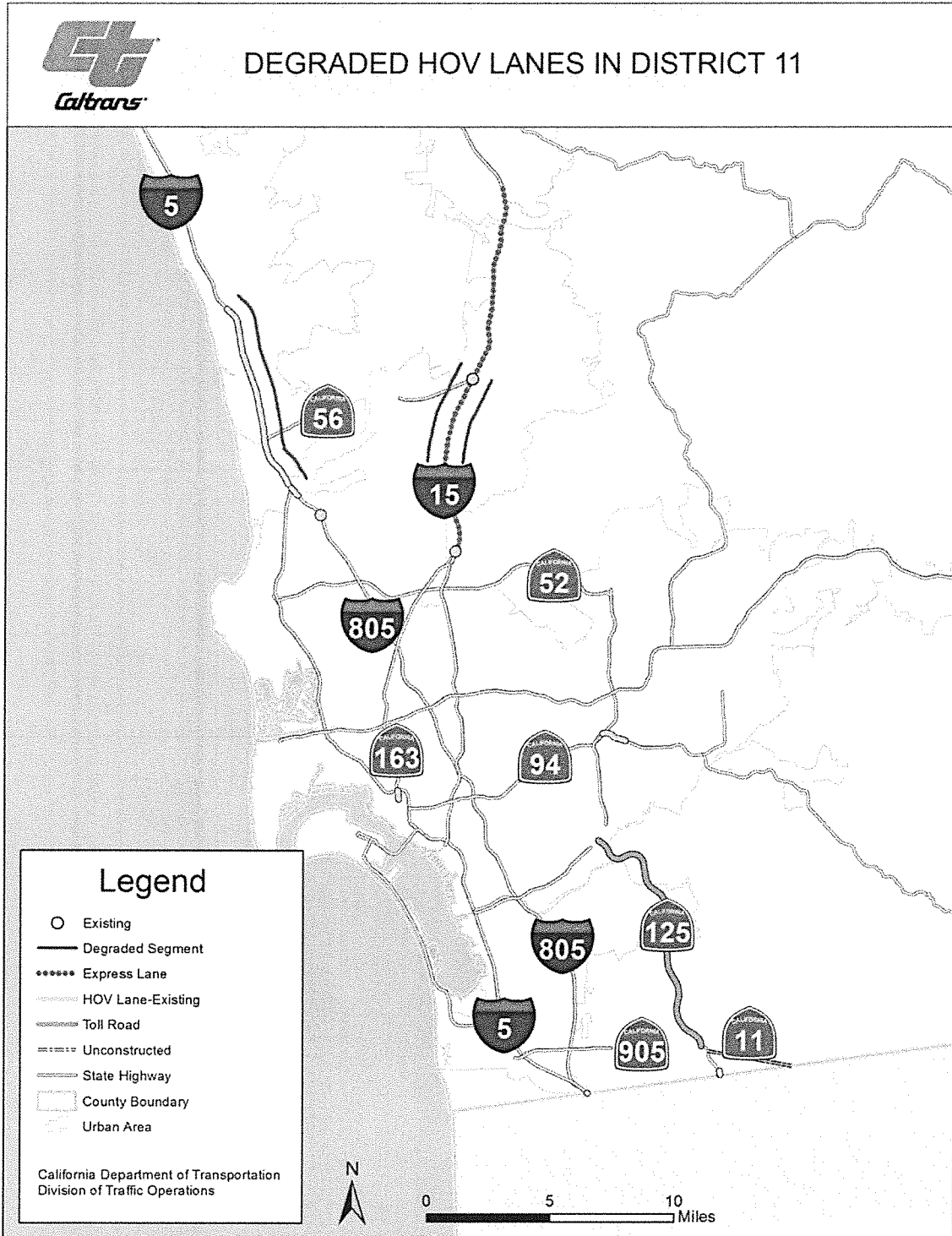
CALIFORNIA HIGH OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 8												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 32)												
91	EB	ORA	R18.905	RIV	4.266	4.378	0.8	91.6	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. 	<ul style="list-style-type: none"> Add a general purpose lane in each direction; convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction July 2013 and end construction July 2018). Increase occupancy from HOV-2 to HOT-3 as part of this project. 	<ul style="list-style-type: none"> Increase capacity.
91	EB	RIV	4.266	RIV	8.644	4.378	0.8	77.9	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. 	<ul style="list-style-type: none"> Add a general purpose lane in each direction; convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction July 2013 and end construction July 2018). Increase occupancy from HOV-2 to HOT-3 as part of this project. 	<ul style="list-style-type: none"> Increase capacity.
91	EB	RIV	13.022	RIV	17.400	4.378	52.7	5.3	Morning	<ul style="list-style-type: none"> HOV volume exceeds capacity. General purpose lanes are congested before the HOV lane ends. 	<ul style="list-style-type: none"> Add one HOV lane in each direction from Adam Street to SR-60/SR-91/I-215 interchange (begin construction March 2012 and end construction February 2016). I-215 Bi-County HOV gap closure project adds one HOV lane in each direction from SR-60/SR-91/I-215 interchange to connect to existing HOV lane at Orange Show Road (begin construction February 2013 and end construction March 2016). 	<ul style="list-style-type: none"> Increase capacity. Avoid vehicle weaving conflicts and provide a continuous HOV facility.
91	WB	RIV	8.644	RIV	4.266	4.378	74.0	26.0	Morning & Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Increased traffic from I-15. Insufficient Ingress/Egress locations. 	<ul style="list-style-type: none"> Add a general purpose lane in each direction; convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction July 2013 and end construction July 2018). Increase occupancy from HOV-2 to HOT-3 as part of this project. 	<ul style="list-style-type: none"> Increase capacity.



CALIFORNIA HIGH OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 8

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
91	WB	RIV	4,266	ORA	R18,905	4,378	10.7	0.8	Morning	<ul style="list-style-type: none"> HOV volume exceeds capacity. HOV-2 lane ends at this location and becomes a HOT-3 lane at Orange County line. 	<ul style="list-style-type: none"> Add a general purpose lane in each direction; convert existing HOV lane to a HOT lane and add a second HOT lane to operate as a dual lane facility (begin construction July 2013, and end construction July 2018). Increase occupancy from HOV-2 to HOT-3 as part of this project. 	<ul style="list-style-type: none"> Increase capacity. Avoid vehicle weaving conflict and provide for continuous HOT lane operation.
210	EB	SBD	1,000	SBD	4,933	4,933	0.0	23.7	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. High number of HOV violation. 	<ul style="list-style-type: none"> Coordinate with the CHP to increase enforcement on the HOV lane. Establish Freeway Service Patrol along this route. 	<ul style="list-style-type: none"> Remove ineligible vehicles from the HOV lane. Improve traffic demand management.
215	SB	RIV	43,300	RIV	40,646	2,654	1.5	79.4	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Gap in the HOV lane at the SR-60/I-215 east junction. General purpose lanes are congested before the HOV lane ends. 	<ul style="list-style-type: none"> Construct an HOV lane in each direction to provide a continuous HOV lane from west to east of SR-60 and I-215 east junction (begin construction July 2011 and end construction March 2014). 	<ul style="list-style-type: none"> Close gap in HOV lane.

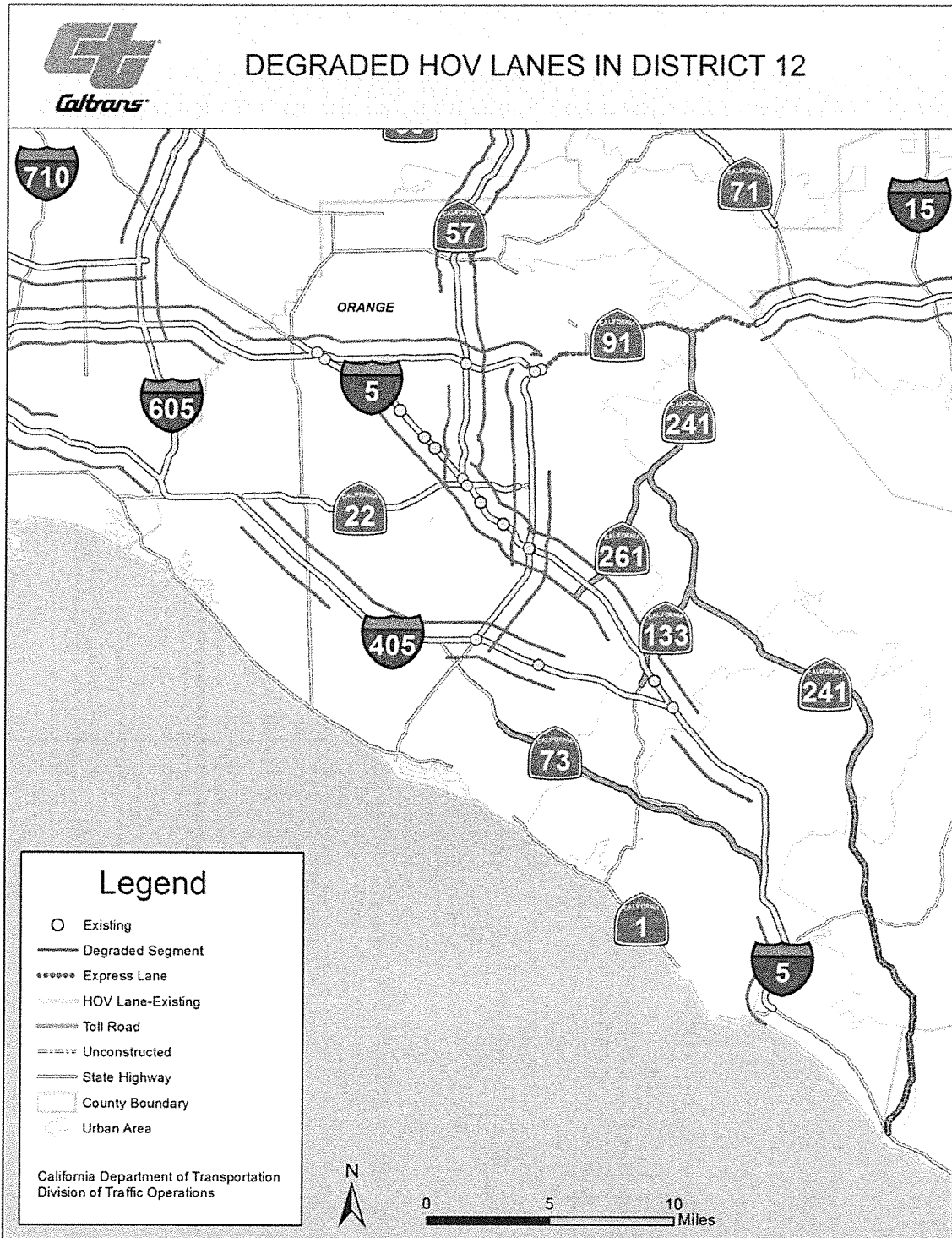
(Continued from page 33)





CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 11

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
5	NB	SD	R30,700	SD	R34,600	3,900	0.0	46.6	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Existing HOV Lane ends by becoming the number one general purpose lane just south of Manchester Avenue. 	<ul style="list-style-type: none"> Current project development to extend the single northbound HOV lane an additional 13 miles from just south of Manchester Avenue to SR-78. Anticipated construction will begin in early 2015. 	<ul style="list-style-type: none"> Expand the HOV network.
5	NB	SD	R34,600	SD	R38,500	3,900	0.8	59.5	Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Existing HOV Lane ends by becoming the number one general purpose lane just south of Manchester Avenue. 	<ul style="list-style-type: none"> Current project development to extend the single northbound HOV lane an additional 13 miles from just south of Manchester Avenue to SR-78. Anticipated construction will begin in early 2015. 	<ul style="list-style-type: none"> Expand the HOV network.
15	NB	SD	M15,900	SD	M19,800	3,900	No data	21.4	Evening	<ul style="list-style-type: none"> Portions of the I-15 Managed Lanes were under construction, which caused the degradation. Faulty vehicle detector system. Segment may not be properly coded into the system. 	<ul style="list-style-type: none"> I-15 Managed Lanes was completed on January 17, 2012. It is now fully operational. Defer any action pending further evaluation now that construction is completed. Update detector system to improve data collection. 	<ul style="list-style-type: none"> Disruption for the traveling public resulting from the construction activities.
15	SB	SD	M19,800	SD	M15,900	3,900	37.4	No data	Morning	<ul style="list-style-type: none"> Portions of the I-15 Managed Lanes were under construction, which caused the degradation. Faulty vehicle detector system. Segment may not be properly coded into the system. 	<ul style="list-style-type: none"> I-15 Managed Lanes was completed on January 17, 2012. It is now fully operational. Defer any action pending further evaluation now that construction is completed. Update detector system to improve data collection. 	<ul style="list-style-type: none"> Disruption for the traveling public resulting from the construction activities.





CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
5	NB	ORA	20.497	ORA	R25.097	4.600	20.6	38.2	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Major bottlenecks occurring at Sand Canyon Rd. and Jeffrey Rd. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Vehicle weaving conflict between the two HOV lanes just north of Barranca Pkwy. Vehicle weaving conflicts due to insufficient ingress/egress locations at Sand Canyon Rd. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Complete direct access ramps on Barranca Pkwy. Proposed project will convert existing buffer-separated HOV facility to continuous access striping to eliminate weaving maneuver at ingress/egress locations. Construction completion 12/2017. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
5	NB	ORA	R25.097	ORA	29.703	4.599	47.3	84.7	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Merging problem occurring at Tuslin Ranch Rd due to no shoulder and non-standard lane width. Bottleneck occurring SR-55 on general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity Vehicle weaving conflicts due to insufficient ingress/egress locations. HOV violations. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added Proposed project will convert existing buffer-separated HOV facility to continuous access striping to eliminate weaving maneuver at ingress/egress locations. Construction completion 12/2017. Long term solution could be direct access ramps at select locations. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
5	NB	ORA	29,703	ORA	34,302	4,599	0.0	91.6	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. HOV violations. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Proposed project will add a second HOV lane between SR-55 and SR-57 to provide a dual lane facility. PA & ED phase completion 11/2013. Construction completion 02/2019. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
							46.6	2.3	Morning	<ul style="list-style-type: none"> Vehicle weaving conflict at ingress/egress locations. Bottleneck occurring at merge of direct connector from SB SR-57 HOV lane. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Proposed project will convert existing buffer-separated HOV facility to continuous access striping to eliminate weaving maneuver at ingress/egress locations. Construction completion date is 12/2017. Proposed project will add a second HOV lane between SR-55 and SR-57 to provide a dual lane facility. PA & ED phase completion 11/2013. Construction completion 02/2019. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.

(Continued from page 39)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
5	SB	ORA	34.302	ORA	29.703	4.599	36.6	22.9	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Merging problem occurring at HOV direct access ramp at Grand Avenue. Geometric bottleneck occurring at SR-55 HOV direct connector diverge. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Proposed project will convert existing buffer-separated HOV facility to continuous access striping to eliminate weaving maneuver at ingress/egress locations. Construction completion 12/2017. Proposed project will add a second HOV lane between SR-55 and SR-57 to provide a dual lane facility. PA & ED completion in 11/2013. Construction completion 02/2019. Extend merge striping further south. Add flashing warning signs to alert drivers of potential standing queues during morning peak hours on SB SR-57 and SB I-5 prior to the merging point (minor improvement). 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
							13.7	10.7	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Vehicle weaving conflict at ingress/egress locations at SR-55, Red Hill Ave., Tustin Ranch Rd., Jamboree Rd. and Culver Dr. Faulty vehicle detector system due to construction activity. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Proposed project will convert existing HOV buffer separated access to continuous access to eliminate weaving maneuver at the ingress/egress. Construction completion 12/2017. Long term solution could be direct access ramps at select locations. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.

(Continued from page 40)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN STRATEGIES FOR DISTRICT 12												
Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
(Continued from page 41)												
5	SB	ORA	20.497	ORA	15.898	4.599	0.0	16.0	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Bottleneck occurring at El Toro Rd, Alicia Pkwy and Oso Pkwy. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient ingress/egress at Alicia Pkwy, North of La Paz Rd and North of Oso Pkwy. Construction activity at La Paz Interchange was just finished. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Proposed project will convert existing HOV buffer separated access to continuous access to eliminate weaving maneuver at the ingress/egress. Proposed project will extend second HOV lane in both directions between El Toro Rd. and Alicia Pkwy. PA & ED phase will be completed in 07/2014. Construction completion date is 12/2023. Long term solution is to add HOV direct access ramp at Los Alisos Blvd. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
5	SB	ORA	11.299	ORA	6.700	4.599	18.3	19.8	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient ingress/egress at Tustin Ranch Rd., Jamboree Rd. and Culver Dr. Faulty vehicle detector system. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Proposed project will convert existing HOV buffer separated access to continuous access to eliminate weaving maneuver at the ingress/egress. Long term solution could be direct access ramps at select locations. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
55	NB	ORA	R6.000	ORA	R9.761	3.761	0.8	48.9	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Major bottleneck occurring at Dyer Rd. on-ramp. Another bottleneck occurring in the general purpose lanes due to the lane drop upstream of the connector from SB I-405. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Faulty vehicle detector system due to construction activity. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Add HOV direct access ramps at Alton Ave. Proposed lane addition project between I-405 and I-5. If HOV lane capacity is increased, degradation will be addressed. PA & ED phase will be completed in 02/2014. Construction completion date is 01/2024. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
							0.0	27.5	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Bottlenecks include the 17th St. on-ramp due to congested slow speeds in the adjacent mainline lane and SR-22 traffic weaving out of the HOV lane. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Bottlenecks occurring in the HOV lane due to diverge at connector to northbound I-5 and pinch point under I-5 with zero shoulder. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Long term solution could be direct connectors at SR-22 interchange (recommend to increase capacity & eliminate bottleneck). 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
							58.0	2.3	Morning	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity High HOV violations. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Long term solution could be direct access ramps at select locations. 	<ul style="list-style-type: none"> Increase capacity Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.

(Continued from page 42)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
55	SB	ORA	13.539	ORA	R9.761	3.760	18.3	3.1	Morning	<ul style="list-style-type: none"> Congestion in general purpose lanes. Major bottleneck occurring at 17th St. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Merging problem occurring at the HOV direct connector from southbound I-5. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Long term solution could be direct connectors at SR-22 interchange (recommend to increase capacity & eliminate bottleneck). 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
												<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Bottleneck occurring at Orangehorpe Ave. and the SR-91 interchange due to merging problem SR-91 HOV direct connector. Construction activities due to ongoing freeway widening project.	Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if general purpose lanes are added. Long term solution could be direct access ramps at select locations.	Increase capacity Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
57	NB	ORA	14.700	ORA	18.600	3.900	29.0	29.0	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Long climbing grade. Lane drop at Imperial Hwy. Geometric constraints on the horizontal curve. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Construction activities. HOV violations. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. 	<ul style="list-style-type: none"> Increase capacity.

(Continued from page 43)

CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
57	SB	ORA	R22.500	ORA	18.600	3.900	46.6	4.6	Morning	<ul style="list-style-type: none"> Congestion in general purpose lanes due to geometric constraints (vertical curve from LA county line to south of Lambert Rd, UC & horizontal curve at Imperial Hwy interchange). When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Construction activities. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Increase capacity. 	
							40.5	16.0	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Bottleneck occurring from HOV direct connector merging onto SB I-5 from SB SR-57. Non-standard left shoulder width. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Long term solution could be direct access ramps to/from Cerritos Ave. Increase capacity. 	
91	WB	ORA	R9.870	ORA	5.356	4.514	0.8	10.7	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. Major bottlenecks occurring at Lakeview Ave. and State College Blvd. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Increase capacity. 	

(Continued from page 44)

CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
91	WB	ORA	5.356	ORA	0.841	4.515	1.5	16.0	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Bottleneck occurring at State College Blvd. due to merging problem from SB SR-57 HOV direct connector. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Increase capacity. 	
							5.3	40.5	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. HOV lane drop downstream of direct connector from I-5. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Increase capacity. 	
							0.8	36.6	Morning & Evening	<ul style="list-style-type: none"> HOV volume exceeds capacity. Faulty vehicle detector system. Construction activity (0L060) 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Add HOV direct access ramps to/from Von Karman Ave and Bear St. Add HOV direct connector at SR-73 (recommend to increase capacity & eliminate bottleneck). Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings. 	
405	NB	ORA	5.080	ORA	9.929	4.849						

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CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
405	NB	ORA	9.929	ORA	14.779	4.850	0.0	87.0	Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes due to bottleneck occurring at SR-55 interchange and lane drop at Euclid St. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient egress to Fairview Dr. HOV violations. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Add HOV direct access ramps to/from Bear St Add HOV direct connector at SR-73 (recommend to increase capacity & eliminate bottleneck). A proposed widening project in both directions on I-405 between SR-73 and I-605 includes an alternative that adds HOV capacity and converts existing and new HOV lanes to HOT. PA&ED Phase completion 12/2014. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
							14.5	67.9	Morning & Evening			

(Continued from page 46)



CALIFORNIA HIGH-OCCUPANCY VEHICLE LANE DEGRADATION ACTION PLAN
STRATEGIES FOR DISTRICT 12

Route	Direction	Begin County	Begin Postmile	End County	End Postmile	Length (Miles)	Degradation Level			Potential Cause(s)	Remediation Strategies	Reasons for Strategies
							Morning (% Days Degraded)	Evening (% Days Degraded)	Peak Period Degraded			
405	SB	ORA	19.628	ORA	14.779	4.849	38.9	17.6	Morning & Evening	<ul style="list-style-type: none"> Congestion in general purpose lanes. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient ingress/egress at Edward St., McFadden Ave. and Magnolia St Construction activity at SR-22 interchange. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Add HOV direct access ramps in the vicinity between Beach Blvd. and Bolsa Ave. A proposed widening project in both directions on I-405 between SR-73 and I-605 includes an alternative that adds HOV capacity and converts existing and new HOV lanes to HOT. PA&ED Phase completion 12/2014. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.
										<ul style="list-style-type: none"> Congestion in general purpose lanes. General purpose lane bottleneck occurring at Culver Dr. Geometric bottleneck occurring at SR-55 interchange. When general purpose lanes are congested this results in weaving conflict at ingress/egress location and congests the HOV lane due to the speed differential. HOV volume exceeds capacity. Vehicle weaving conflicts due to insufficient ingress/egress High HOV violations. 	<ul style="list-style-type: none"> Further study needed. Options include adding second HOV lane, HOV weaving lane, or adding second lane and converting both to HOT. Increasing occupancy may be considered if converted to HOT and additional general purpose lanes are added. Add HOV direct access ramps to/from Von Karman Ave. 	<ul style="list-style-type: none"> Increase capacity. Minimize queuing in HOV lanes due to congestion in general purpose lanes at access openings.

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ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment D

Deputy Directive

Number: DD-43R

*Refer to
Director's Policy:* DP-08
Freeway System
Management

Effective Date: TBD

Supersedes: DD-43 (7-1-1995)

TITLE Managed Lane Facilities

POLICY

The California Department of Transportation (Caltrans) uses managed lane facilities on the State Highway System (SHS). Effective managed lanes improve the performance of the freeway corridor, reduce greenhouse gas emissions, increase person throughput, provide options to travelers, and meet federal freeway performance standards.

As the owner and operator of the SHS, Caltrans may adjust the operation of managed lanes in coordination with regional and local agencies to optimize system performance. Adjustments can include modifications to the hours of operation, vehicle occupancy requirements, or access control; adding a lane; or implementing pricing (tolls). Caltrans monitors and reports on managed lane performance annually.

Caltrans may seek authority to collect the tolls on priced managed lanes. Regional transportation agencies may also seek tolling authority in cooperation with Caltrans. In these cases, the agency shall execute agreements with Caltrans defining overall roles and responsibilities and requirements related to data sharing; net revenue allocations; and performance goals, monitoring, and annual reporting. The agreements shall require the agency to reimburse Caltrans for costs incurred relative to the development and operation of the facility. Excess toll revenues generated from the facility shall be used in accordance with State and federal laws; this could include funding of operational and maintenance expenditures on adjacent mixed flow lanes and other improvements on the freeway corridor. Incident management plans and concepts of operations consistent with the requirements of the Federal Highway Administration (FHWA) shall be developed for priced managed lanes.

Managed lanes should be designed and operated in a manner that does not increase congestion on the general purpose lanes of the freeway or degrade the overall performance of the freeway. Impacts to and consistency with

operations on intersecting and adjacent freeways and at jurisdictional boundaries must also be considered.

DEFINITION/BACKGROUND

Managed lanes are dedicated lanes set aside within a freeway corridor that are operated using a variety of fixed or real-time strategies, such as occupancy minimums, pricing (tolls), and access control. Certain low- and zero-emission vehicles may be accepted in accordance with state and federal law. The three types of managed lane strategies used on the SHS are as follows:

- High occupancy vehicle (HOV) lanes: Dedicated lanes for vehicles carrying a minimum number of occupants.
- High occupancy/toll (HOT) lanes: Dedicated lanes that are free for vehicles carrying a minimum number of occupants; vehicles containing less than the minimum number of occupants must pay a toll to use the lanes.
- Express toll lanes: Dedicated lanes that require all users pay a toll; vehicles carrying a minimum number of occupants may pay a discounted toll to use the lanes.

The Federal Highway Act, Title 23, authorizes states to operate HOV, HOT, or express toll lanes on federal-aid highways. Related California legislation includes:

- Vehicle Code section 21655.5 and Streets and Highways Code section 149 authorize Caltrans to operate preferential lanes for buses and other high occupancy vehicles.
- Streets and Highways Code sections 149.1 and 149.4 through 149.10 authorize various regional transportation agencies to operate a limited number of HOT lanes in cooperation with Caltrans.
- Vehicle Code sections 21655.9 and 5205.5 authorize zero emission vehicles and certain classes of low emission vehicles that do not meet occupancy requirements to use HOV lanes and to use HOT lanes without paying a toll.
- Government Code section 64112 authorizes the California Transportation Financing Authority to grant authority to Caltrans or regional transportation agencies to operate toll facilities such as priced managed lanes.
- Streets and Highways Code section 143 authorizes Caltrans and/or regional transportation agencies to develop and operate toll facilities such as priced managed lanes through a comprehensive development agreement with a contracting entity or lessee.

RESPONSIBILITIES

Deputy Director, Planning and Modal Programs:

- Encourages the use of appropriate managed lane strategies.
- Ensures Planning and Modal Programs work with appropriate divisions and district offices in developing or revising policies, procedures, and guidance on planning managed lanes.

Deputy Director, Maintenance and Operations:

- Encourages the use of appropriate managed lanes strategies.
- Ensures Maintenance and Operations Programs work with appropriate divisions and districts in developing or revising policies, procedures, standards, and guidance on planning, designing, and operating managed lanes.

Assistant Director, Audits and Investigations:

- Ensures that toll revenues that Caltrans receives from priced managed lanes are appropriated in accordance with state and federal laws.

Deputy Director, Project Delivery (Chief Engineer):

- Ensures Project Delivery Programs work with appropriate divisions and districts in developing or revising policies, procedures, standards, and guidance on designing managed lanes.
- Work with Districts and other Headquarters division in the development and execution of necessary agreements for priced managed lanes.

District Directors:

- Ensure appropriate managed lane strategies are selected.
- Implement managed lane strategies or modify existing managed lane operations in partnership with regional transportation agencies.
- Ensure adherence to federal and statewide policies, procedures, standards, and guidance on planning, designing, and operating managed lanes.
- Work with Headquarters divisions and regional transportation agencies to execute necessary agreements for priced managed lanes.

Chief, Division of Traffic Operations:

- Develops, implements, and maintains statewide policies, procedures, standards, and guidance for planning, designing, and operating managed lanes.
- Provides direction and assistance to district staff on managed lane activities, as well as resources for training district staff.
- Ensures statewide consistency in the planning, implementation, and operation of managed lanes.
- Maintains a statewide inventory of existing and planned managed lanes.

- Reviews annual managed lanes performance reports. Shares trends and findings with FHWA, Districts and regional transportation agencies.

Chief, Division of Maintenance:

- Ensures statewide consistency in the maintenance and operation of managed lanes.

Chief, Division of Transportation Planning:

- Develops, maintains, or revises statewide policies, procedures, standards, and guidance for planning managed lanes.
- Works in cooperation with districts and regional transportation planning agencies to develop managed lane strategies or adjust existing managed lane operations as part of system and corridor planning processes.

Deputy District Directors, Planning and Modal Programs:

- Direct Planning and Modal staff to follow policies, procedures, standards, and guidance for planning managed lanes.
- Ensure staff works with the District Division of Traffic Operations in the planning of managed lanes.
- Coordinate with local and regional stakeholders on managed lane planning activities.

Deputy District Directors, Project Delivery:

- Direct Project Delivery staff to follow policies, procedures, standards, and guidance for designing managed lanes.

Deputy District Directors, Operations:

- Direct Operations staff to follow policies, procedures, standards, and guidance for planning, designing, and operating managed lanes.
- Coordinate with the California Highway Patrol (CHP) on the implementation of managed lane strategies, adjustment to existing managed lane operations, and enforcement of managed lanes.
- Ensure efficient managed lane operations in cooperation with regional transportation agencies, transit operators, and local governments.
- Ensure consistent managed lane operations between neighboring jurisdictions and districts.
- Ensure that incident management plans and concepts of operations are developed for priced managed lanes.
- Provide support and guidance to regional transportation agencies in implementing appropriate managed lane strategies and adjusting existing managed lane operations.
- Ensure that annual performance monitoring reports are developed for managed lanes and submit this information to Headquarters, regional transportation agencies, CHP, and others, as appropriate.

- Provide cost estimates for division activities associated with managed lanes.

Deputy District Directors, Maintenance:

- Direct Maintenance staff to follow policies, procedures, standards, and guidance for operating managed lanes.
- Ensure that SHS infrastructure maintenance promotes efficient managed lane operations in cooperation with regional transportation agencies and other agencies as appropriate, such as transit operators.
- Provide cost estimates for division activities associated with managed lanes.

Traffic Operations Managed Lanes Manager:

- Coordinates at a high level with other HQ divisions, with District management, and with local agency leaders to increase Caltrans' abilities and activities to utilize managed lanes.
- Facilitates and conducts policies, practices and guidelines development.
- Ensures real-time strategy incorporation, including occupancy, pricing and access control, into planning, design, construction, operations and maintenance activities.
- Evaluates managed lane development opportunities and proposed changes to existing managed lanes in cooperation with the districts, sponsoring regional and local transportation agencies, and the Federal Highway Administration.
- Coordinates and evaluates research studies and best practices pertaining to managed lane systems operational methods, strategies and equipment.
- Develops managed lane tolling and revenue sharing proposals for approval by the Department's Executive Board and the California Transportation Commission.
- Provides a statewide role guiding district staff in the technical implementation of managed lanes.

Employees:

- Adhere to statewide policies, procedures, standards and guidance for planning, designing, and operating managed lanes.
- Work collaboratively with stakeholders by providing support and guidance in the implementation of managed lane strategies or adjustment of existing managed lane operations.
- Identify impediments to implementing managed lane strategies or making adjustments to existing managed lane operations and seek expeditious resolution.
- Identify opportunities to include appropriate managed lane strategies in capital projects.

APPLICABILITY

All departmental employees involved in the planning, design, construction, maintenance, and operation of the SHS. All managed lane facilities on the SHS.

RICHARD D. LAND
Chief Deputy Director

Date Signed

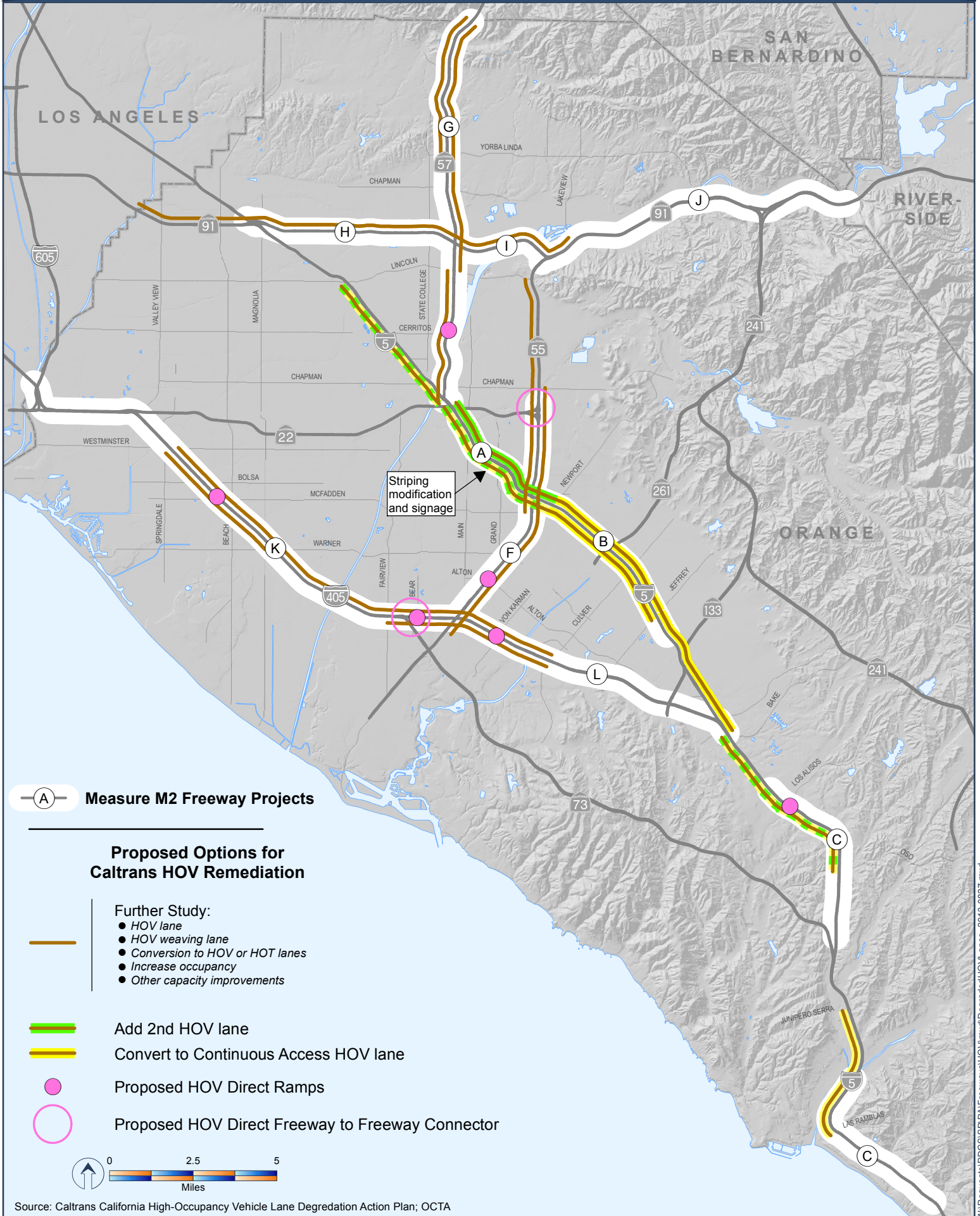
DRAFT



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment E



(A) Measure M2 Freeway Projects

Proposed Options for Caltrans HOV Remediation

Further Study:

- HOV lane
- HOV weaving lane
- Conversion to HOV or HOT lanes
- Increase occupancy
- Other capacity improvements



Add 2nd HOV lane



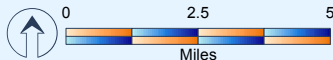
Convert to Continuous Access HOV lane



Proposed HOV Direct Ramps



Proposed HOV Direct Freeway to Freeway Connector



Source: Caltrans California High-Occupancy Vehicle Lane Degradation Action Plan; OCTA



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment F

DRAFT

XXXX, 2013

Mr. Joe Rouse
California Department of Transportation
Statewide Managed Lanes-Manager
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

RE: California High-Occupancy Vehicle Lane Degradation Action Plan

Dear Mr. Rouse:

The Orange County Transportation Authority (OCTA) has completed its review of the California High-Occupancy Vehicle (HOV) Lane Degradation Action Plan (Action Plan), and offers the following policy and technical comments for the California Department of Transportation's (Caltrans) consideration.

Policy Comments:

- It is unclear if remediation strategies (strategies) identified in the Action Plan would take state and/or federal funding priority over existing priorities established by OCTA, such as the Measure M2 (M2) Program of Projects.
- The Action Plan does not discuss financial mechanisms to support implementation of the strategies. Since degradation in HOV lanes is primarily an operational issue (due to the state's existing HOV 2+ and Inherently Low-Emission Vehicle policies), would these strategies be funded through the State Highways Operations and Protection Program?
- Strategies for Orange County identify capital intensive improvements. However, the Action Plan has not included an assessment of whether these strategies are viable, given existing right-of-way and funding constraints. Enforcement strategies similar to those identified for other districts should also be given consideration in District 12.
- The Action Plan should be explicit in describing how the strategies identified will bring HOV lanes up to the federal performance standard. As currently identified, it is unclear how the strategies would feasibly achieve the federal performance standard within 180 days.

Technical Comments:

- The Action Plan bases recommendations solely on data from the second half of 2011. This approach is not consistent with transportation planning best

practices, which evaluate several full years of data and then develop recommendations based upon aggregation of data trends over time. It is imprudent to recommend significant infrastructure investments based upon a methodology that is not consistent with industry best practices.

- The Action Plan indicates that findings were based on data from HOV lane detection systems which were online/working approximately 50 – 60 percent of the time. Given this level of malfunction, it is troubling that these data are being used as the basis for improvement recommendations.
- The Action Plan states that increasing HOV occupancy requirements to HOV 3+ may result in HOV lane underutilization and additional congestion in general purpose lanes. However, the strategies recommend evaluation of second HOV lanes throughout much of Orange County. It does not appear that this approach has been modeled in order to support this recommendation. Construction of additional HOV lanes could also potentially result in HOV lane underutilization and additional congestion in general purpose lanes. Further technical documentation should be provided to support this recommendation.
- The strategies also do not consider the entire M2 Freeway Program of Projects. The M2 Freeway Program of Projects has been the subject of extensive planning efforts involving Caltrans and local stakeholders. In many cases, right-of-way that would likely be assumed for second HOV lanes has already been accounted for in existing project study reports and environmental documents. Many of these documents have achieved stakeholder consensus and have been approved by Caltrans.

In closing, OCTA appreciates the opportunity to comment on the Action Plan. We look forward to working in partnership with Caltrans District 12 to resolve these extensive policy and technical concerns. Should you have any questions, please contact Kia Mortazavi, Executive Director, Planning, at (714) 560-5741.

Sincerely,

Darrell Johnson
Chief Executive Officer

DJ:km

c: Ryan Chamberlain, Caltrans
James Pinheiro, Caltrans



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Attachment G

DRAFT

XXXX, 2013

Mr. Joe Rouse
California Department of Transportation
Statewide Managed Lanes Manager
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

RE: Deputy Directive Number: DD-43R – Managed Lane Facilities

Dear Mr. Rouse:

Thank you for the opportunity to review Deputy Directive- DD-43R (Directive). The Orange County Transportation Authority (OCTA) appreciates the California Department of Transportation's (Caltrans) efforts to update its managed lane policies. OCTA has been on the forefront of working with the state on projects that make more efficient use of the highway capacity as demonstrated by the extent of high-occupancy vehicle (HOV) lane system in place today in Orange County and operation of the 91 Express Lanes. OCTA has also been working with Caltrans on implementation of continuous access projects to eliminate bottlenecks within the HOV lanes and support more efficient operation of our highways. We are open to pursuing such joint efforts, and the Directive should highlight the role of transportation commissions and explicitly require early consultation towards consensus solutions.

OCTA believes that prior to developing a guiding document of this nature, an overall programmatic planning level perspective is needed. More importantly, Orange County has funded, and plans to fund, additional improvements to the state highway system. These investments will be affected by virtue of this Directive.

The Directive suggests use of various strategies, including tolls, as adjustments to optimize system performance. However, doing so may result in higher general purpose lane congestion. As such, the Directive should be more explicit on how such situations will be handled and balanced with the broader transportation system and related environmental considerations.

The Directive notes that as owner operator of the state highway system, Caltrans may adjust the operation of managed lanes to improve performance of the highway system. We believe the Directive should also state that Caltrans would propose its full operational discretion and funding source to accomplish this goal.

Additionally, OCTA believes the Directive should consider the following:

- Define the institutional framework for Caltrans to engage in effective collaboration and cooperation with local/regional authorities on managed lanes.
- Define Caltrans' goals for managed lanes within the general framework of optimized system performance and state Caltrans' priorities among a host of goals, such as reduced congestion and delay; meeting capacity needs; addressing HOV degradation; increasing revenues; improving average vehicle occupancy; and reducing emissions. As presented, the policy is unclear with regard to the priority of these various goals, although they all appear or are hinted at in the document.
- Provide a more direct statement of when, where, and why managed lanes should be used, and acknowledge the political and social challenges that they represent along with the transportation benefits.
- Acknowledge the parallel work on HOV degradation and incorporate by reference the 2011 Degradation Study and 2013 Degradation Action Plan in order to provide a more complete picture of the context in which the managed lanes policy is being developed.
- Provide a more complete listing of California Legislation related to managed lane implementation and operations.
- State very clearly the circumstances under which Caltrans might seek tolling authority.
- The use of excess toll revenues should not be prescribed by this policy. For existing managed lanes, authorizing legislation or binding agreements have already determined these uses. Generally, this involves improvements within the same travel corridor. For future facilities, the flexibility to negotiate the uses of excess revenues may be critical to successful implementation, but would have to comply with established precedence and existing statutes.

Mr. Joe Rouse
XXXX, 2013
Page 3

- Excess toll revenues should never be diverted to uses outside of the corridor/area in which the facility is located nor supplant the state's funding that would otherwise be used to maintain the facilities.

To help Caltrans address the above concerns in a coordinated manner, I have asked the Southern California Regional Transportation Planning Agencies leaders to designate an ad-hoc committee. Kia Mortazavi, Executive of Planning, will be my designated representative and will be working with his counterparts, Southern California Association of Governments' and Caltrans' staff, and assist Caltrans in finalizing the Directive. Should you have questions, please contact Kia Mortazavi, at (714) 560-5741.

Sincerely,

Darrell Johnson
Chief Executive Officer

DJ:km

c: Anne Mayer, Riverside County Transportation Commission
Art Leahy, Los Angeles County Metropolitan Transportation Authority
Gary Gallegos, San Diego Association of Governments
Hasan Ikhata, Southern California Association of Governments
James Pinheiro, Caltrans
Ryan Chamberlain, Caltrans



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Revised Attachment F

DRAFT

XXXX, 2013

Mr. Joe Rouse
California Department of Transportation
Statewide Managed Lanes-Manager
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

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- The Action Plan does not discuss financial mechanisms to support implementation of the strategies. Since degradation in HOV lanes is primarily an operational issue (due to the state's existing HOV 2+ and Inherently Low-Emission Vehicle policies), would these strategies be funded through the State Highways Operations and Protection Program?
- Strategies for Orange County identify capital intensive improvements. However, the Action Plan has not included an assessment of whether these strategies are viable, given existing right-of-way and funding constraints. Enforcement strategies similar to those identified for other districts should also be given consideration in District 12.
- [Action Plan strategies do not consider available capacity on the parallel toll road corridors. Opportunities to address degradation by taking advantage of the unused capacity in these toll road corridors should be further explored with Transportation Corridor Agencies and Caltrans.](#)
- The Action Plan should be explicit in describing how the strategies identified will bring HOV lanes up to the federal performance standard. As currently,

identified, it is unclear how the strategies would feasibly achieve the federal performance standard within 180 days.

Technical Comments:

- The Action Plan bases recommendations solely on data from the second half of 2011. This approach is not consistent with transportation planning best practices, which evaluate several full years of data and then develop recommendations based upon aggregation of data trends over time. It is imprudent to recommend significant infrastructure investments based upon a methodology that is not consistent with industry best practices. [OCTA suggests that Caltrans reconsider the methodology used to develop the Action Plan.](#)
- The Action Plan indicates that findings were based on data from HOV lane detection systems which were online/working approximately 50 – 60 percent of the time. Given this level of malfunction, it is troubling that these data are being used as the basis for improvement recommendations.
- The Action Plan states that increasing HOV occupancy requirements to HOV 3+ may result in HOV lane underutilization and additional congestion in general purpose lanes. However, the strategies recommend evaluation of second HOV lanes throughout much of Orange County. It does not appear that this approach has been modeled in order to support this recommendation. ~~Construction of additional HOV lanes could also potentially result in HOV lane underutilization and additional congestion in general purpose lanes.~~ Further technical documentation should be provided to support this recommendation.
- The strategies also do not consider the entire M2 Freeway Program of Projects. The M2 Freeway Program of Projects has been the subject of extensive planning efforts involving Caltrans and local stakeholders. In many cases, right-of-way that would likely be assumed for second HOV lanes has already been accounted for in existing project study reports and environmental documents. Many of these documents have achieved stakeholder consensus and have been approved by Caltrans.

In closing, OCTA appreciates the opportunity to comment on the Action Plan. We look forward to working in partnership with Caltrans District 12 to resolve these extensive policy and technical concerns. Should you have any questions, please contact Kia Mortazavi, Executive Director, Planning, at (714) 560-5741.

Mr. Joe Rouse
XXXX, 2013
Page 3

Sincerely,

Darrell Johnson
Chief Executive Officer

DJ:km

c: [Malcolm Dougherty, Caltrans](#)
Ryan Chamberlain, Caltrans
James Pinheiro, Caltrans



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Revised Attachment G

DRAFT

XXXX, 2013

Mr. Joe Rouse
California Department of Transportation
Statewide Managed Lanes Manager
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

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OCTA believes that prior to developing a guiding document of this nature, an overall programmatic planning level perspective is needed. More importantly, Orange County has funded, and plans to fund, additional improvements to the state highway system. These investments will be affected by virtue of this Directive.

The Directive suggests use of various strategies, including tolls, as adjustments to optimize system performance. However, doing so may result in higher general purpose lane congestion. As such, the Directive should be more explicit on how such situations will be handled and balanced with the broader transportation system and related environmental considerations.

The Directive notes that as owner operator of the state highway system, Caltrans may adjust the operation of managed lanes to improve performance of the highway system. We believe the Directive should also state that Caltrans would propose its full operational discretion and funding source to accomplish this goal.

Additionally, OCTA believes the Directive should consider the following:

- Define the institutional framework for Caltrans to engage in effective collaboration and cooperation with local/regional authorities on managed lanes.
- Define Caltrans' goals for managed lanes within the general framework of optimized system performance and state Caltrans' priorities among a host of goals, such as reduced congestion and delay; meeting capacity needs; addressing HOV degradation; increasing revenues; improving average vehicle occupancy; and reducing emissions. As presented, the policy is unclear with regard to the priority of these various goals, although they all appear or are hinted at in the document.
- [Include guidance on use of available capacity in parallel transportation corridors as a means to address congestion in degraded corridors.](#)
- Provide a more direct statement of when, where, and why managed lanes should be used, and acknowledge the political and social challenges that they represent along with the transportation benefits.
- Acknowledge the parallel work on HOV degradation and incorporate by reference the 2011 Degradation Study and 2013 Degradation Action Plan in order to provide a more complete picture of the context in which the managed lanes policy is being developed.
- Provide a more complete listing of California Legislation related to managed lane implementation and operations.
- State very clearly the circumstances under which Caltrans might seek tolling authority.
- The use of excess toll revenues should not be prescribed by this policy. For existing managed lanes, authorizing legislation or binding agreements have already determined these uses. Generally, this involves improvements within the same travel corridor. For future facilities, the flexibility to negotiate the uses of excess revenues may be critical to successful implementation, but would have to comply with established precedence and existing statutes.

Mr. Joe Rouse
XXXX, 2013
Page 3

- Excess toll revenues should never be diverted to uses outside of the corridor/area in which the facility is located nor supplant the state's funding that would otherwise be used to maintain the facilities.

To help Caltrans address the above concerns in a coordinated manner, I have asked the Southern California Regional Transportation Planning Agencies leaders to designate an ad-hoc committee. Kia Mortazavi, Executive of Planning, will be my designated representative and will be working with his counterparts, Southern California Association of Governments' and Caltrans' staff, and assist Caltrans in finalizing the Directive. Should you have questions, please contact Kia Mortazavi, at (714) 560-5741.

Sincerely,

Darrell Johnson
Chief Executive Officer

DJ:km

c: Anne Mayer, Riverside County Transportation Commission
Art Leahy, Los Angeles County Metropolitan Transportation Authority
Gary Gallegos, San Diego Association of Governments
Hasan Ikhata, Southern California Association of Governments
James Pinheiro, Caltrans
[Malcolm Dougherty, Caltrans](#)
Ryan Chamberlain, Caltrans



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

Handout



BOARD OF DIRECTORS

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Todd Spitzer
Director

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Director

Ryan Chamberlain
Ex-Officio Member

CHIEF EXECUTIVE OFFICE

Darrell Johnson
Chief Executive Officer

September 20, 2013

The Honorable James M Righeimer
Mayor
City of Costa Mesa
P.O. Box 1200
Costa Mesa, CA 92628-1200

Dear Mayor Righeimer:

Thank you for your recent letter regarding the Interstate 405 Improvement Project (I-405 Project) and the City of Costa Mesa's (City) request to postpone taking action on the project pending the City's review and discussions with the California Department of Transportation (Caltrans) and Orange County Transportation Authority (OCTA) staff on the degradation study and various options that are being considered as a result of this study.

The OCTA and Caltrans are committed to reducing congestion, enhancing operations, and increasing mobility while minimizing environmental impacts and right-of-way acquisition. Analysis of potential solutions to alleviate congestion on the I-405 corridor in Orange County has been underway for nearly a decade.

It is important the I-405 Project continues to move forward in order to avoid further schedule delays and escalation costs.

On Monday, September 23, 2013, the OCTA Board of Directors (Board) will consider directing staff to continue development of the I 405 Project, Measure M2 Project K, which adds a single general purpose lane in each direction between Euclid Street and Interstate 605, as approved by the Board on October 22, 2012.

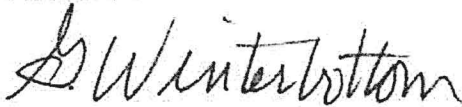
In addition, the Board will consider directing staff to explore and coordinate with the Transportation Corridor Agencies on solutions to resolve high-occupancy vehicle lane degradation and opportunities to increase high-occupancy vehicle capacity and connectivity between the I-405 and State Route 73 (SR-73), including opportunities for financial participation in transportation projects in the region. Staff intends to report back to the Board in approximately 60 days. During this time, staff is planning to meet with the City to discuss the project with a specific focus on the Fairview Street Bridge and a potential direct connection to SR-73.

Mayor Righeimer
September 20, 2013
Page 2

OCTA looks forward to working closely with the City of Costa Mesa as the project progresses.

Please feel free to contact me at (714) 560-5343 if you have any questions.

Sincerely,



Gregory T. Winterbottom
Chairman

GTW:cb

c: OCTA Board of Directors
Darrell Johnson, OCTA Chief Executive Officer
Ryan Chamberlain, Caltrans, District 12 Director
Costa Mesa City Council
Thomas R. Hatch, Chief Executive Officer
Ernesto Munoz, Public Services Director
Raja Sethuraman, Transportation Services Manager



CITY OF COSTA MESA

CALIFORNIA 92628-1200

P.O. BOX 1200

FROM THE OFFICE OF MAYOR JAMES M. RIGHEIMER

September 16, 2013

Mr. Gregory T. Winterbottom, Chairman, Board of Directors
Members of Board of Directors
Orange County Transportation Authority
550 South Main Street/P.O. Box 14184
Orange, CA 92863-1584

SUBJECT : INTERSTATE 405 IMPROVEMENT PROJECT

Dear Chairman Winterbottom and Honorable Board Members:

The City of Costa Mesa appreciates the Orange County Transportation Authority (OCTA) for its leadership and efforts in the implementation of regional traffic solutions. Over the past decade, the City has partnered with OCTA on several regional as well as local projects, including the I-405 Improvement project. The City understands that the Regional Planning & Highways Committee and the OCTA Board are considering certain actions on the I-405 project on September 16, 2013, and September 23, 2013, respectively.

As you are aware, the Costa Mesa City Council had approved a resolution in June 2012, supporting Alternatives 1 and 2 of the I-405 Improvement Project. This was then followed by OCTA Board approval of Alternative 1 as the locally preferred alternative on October 22, 2012. Since then, the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) was re-circulated and the State of California Department of Transportation (Caltrans) conducted a Statewide High Occupancy Vehicle (HOV) Degradation study. This study was pursuant to the requirements of the federal transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21).

The City of Costa Mesa requests that the OCTA RP&H Committee, as well as the Board postpone taking action on this project, pending City's review and discussions with Caltrans and OCTA staff on the degradation study and various options that are being considered as a result of this study. The I-405 Improvement Project is an important element of the Measure M2 program and requires a high level of cooperation between OCTA, Caltrans and all impacted agencies to assure a successful project delivery. The City of Costa Mesa looks forward to working with OCTA, Caltrans, and the affected corridor cities on this major improvement project.

Sincerely,

James M. Righimer
Mayor

- c Costa Mesa City Council
- Darrell Johnson, OCTA CEO
- Ryan Chamberlain, Chief, Caltrans District 12
- Thomas R. Hatch, Chief Executive Officer
- Ernesto Munoz, Public Services Director
- Raja Sethuraman, Transportation Services Manager

77 FAIR DRIVE

PHONE: (949) 274-9909 • www.costamesaca.gov • FAX: (714) 754-5330



ORANGE COUNTY TRANSPORTATION AUTHORITY

**California Department of Transportation High-Occupancy
Vehicle Degradation Action Plan and Managed Lanes
Facilities Directive**

PowerPoint



2011 CALIFORNIA HOV DEGRADATION DETERMINATION REPORT and ACTION PLAN SUMMARY

OCTA BOARD MEETING

September 23, 2013



Requirements

- Prepare HOV Degradation Determination Report.
- DOTs to remedy degradation (180 days).
- Remedy period began on July 31st.
- Remedies must be firm and clearly defined.
- Potential Sanctions: Federal funding / project approvals.
- Keep HOV speeds above 45 mph more than 90% of the time.

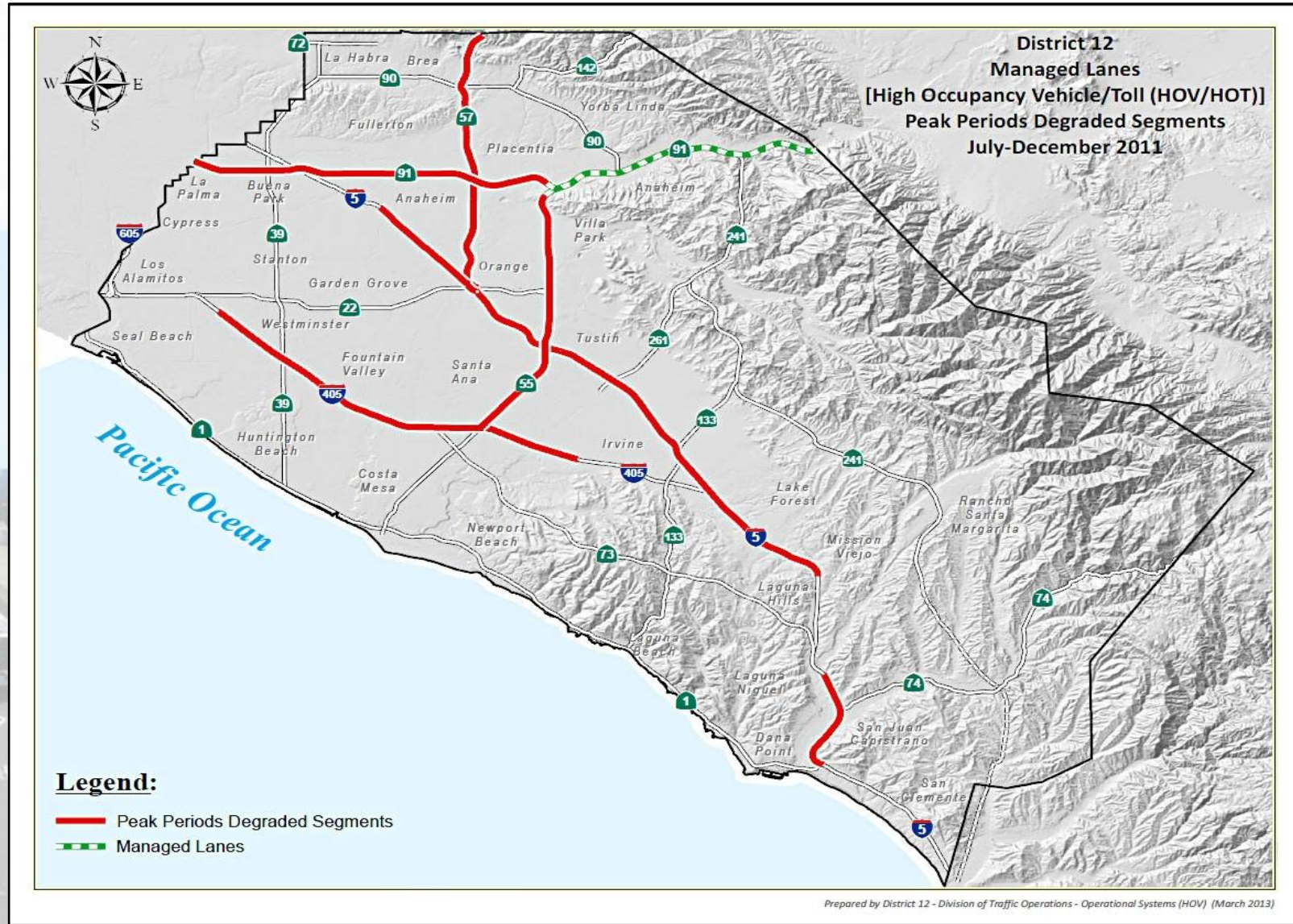


Degradation Determination

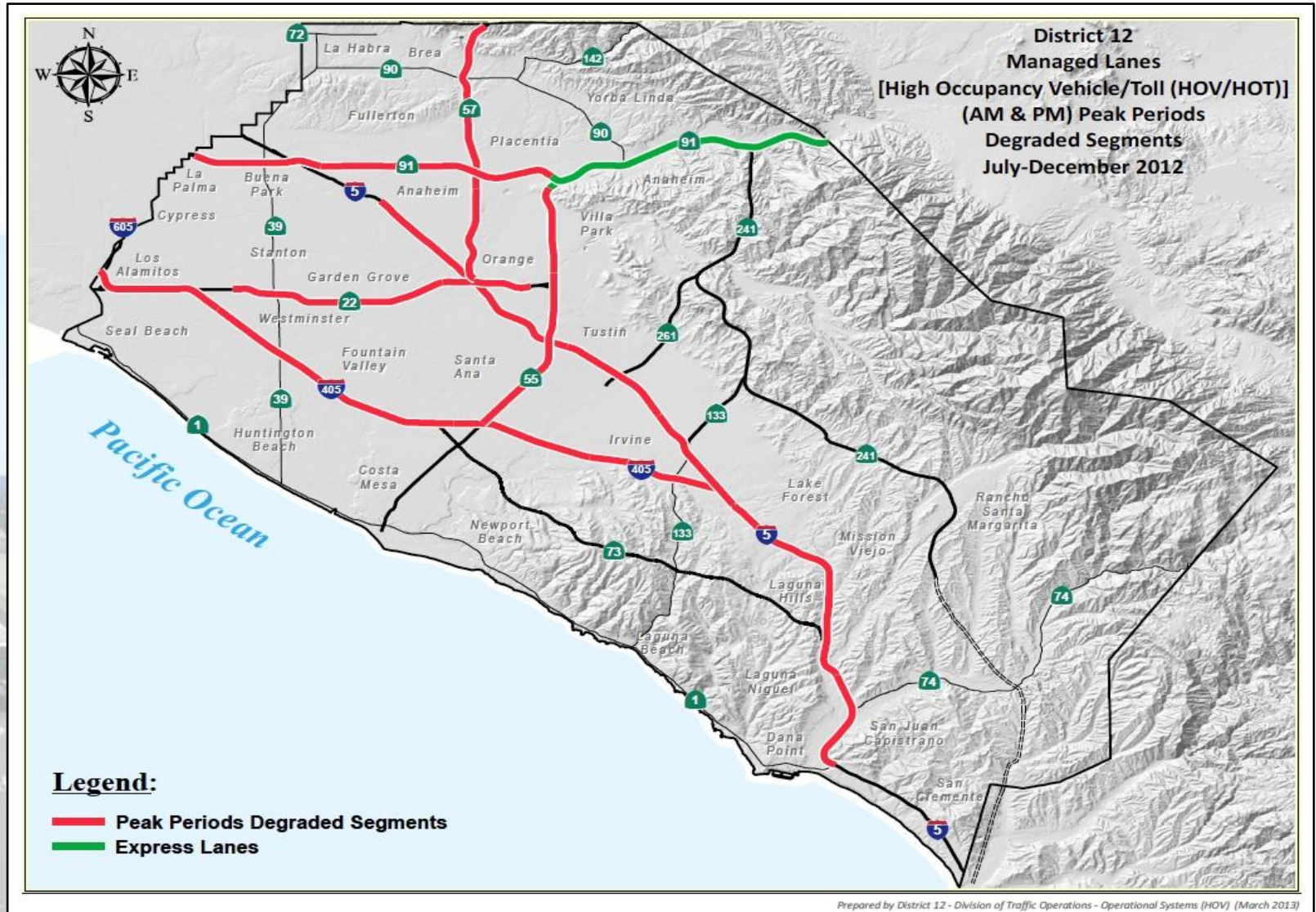
- Measured for 6 months (July to December).
- Degradation has been increasing since 2005.
- Most HOV lanes degraded in 2011.
- Increased in 2012.
- Continues to increase as economy recovers.



Orange County HOV Lane Degradation Map (July 1 - December 31, 2011)



Orange County HOV Lane Degradation Map (July 1 - December 31, 2012)



Causes of Degradation

- Demand exceeding capacity.
- Bottlenecks.
- Merging.
- Congestion in general purpose lanes (Friction).
- Construction activities.
- Driver behavior.
- HOV violators.



Remediation Solutions

Two lanes

- Add second HOV Lane 2+.
- Add second HOV lane and convert to HOT 2+.
- Add second HOV lane and convert to HOT 3+.

One lane

- Raise HOV occupancy to 3+ and convert to HOT.
- Raise HOV occupancy to 3+.

Operational Improvements

- Add HOV weaving lane.
- Add HOV direct connectors.
- Increase enforcement.
- Intelligent Transportation Systems / Transportation Demand Management (ITS/TDM).



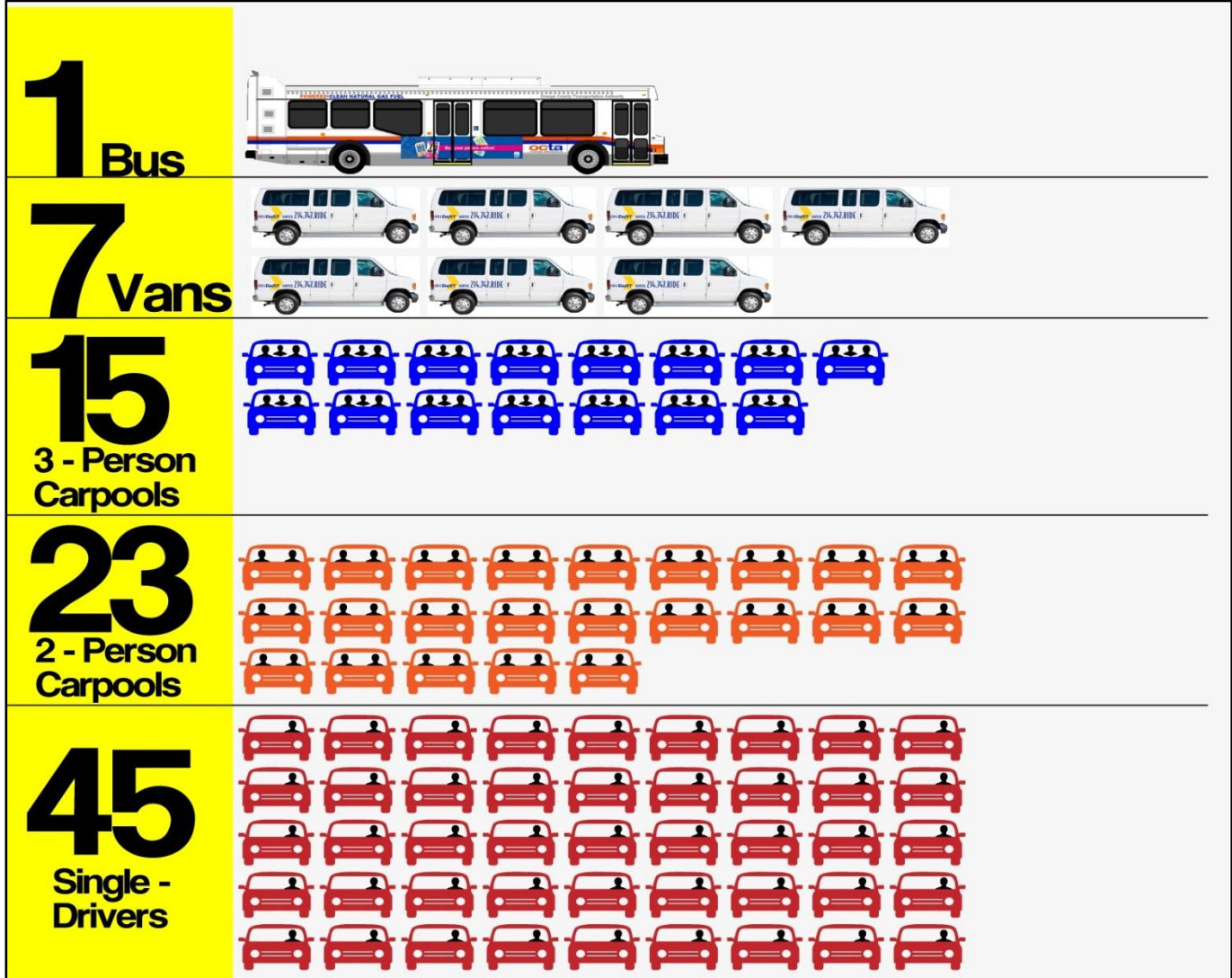
Benefits of Solutions

- Increase Capacity.
- Improved HOV operation.
- Higher speed / Decreased travel time.
- Provides travel choices.
- Improved trip reliability.
- Improved air quality.
- Potential transit alternatives.
- Cost sharing.

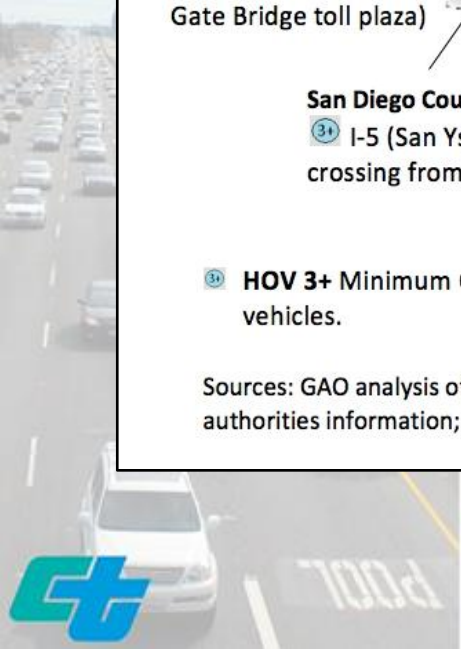
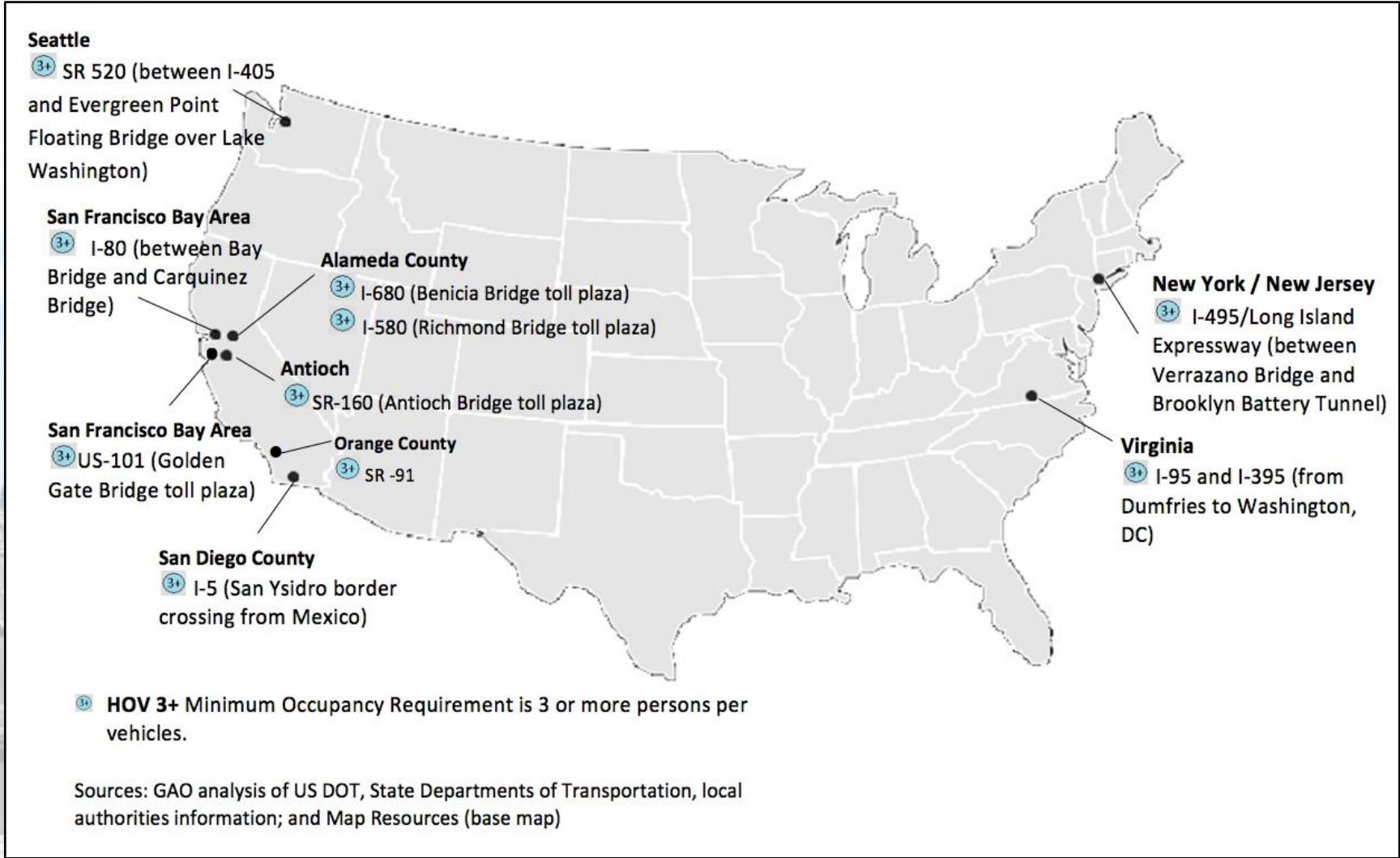


HOV Lanes Move More People

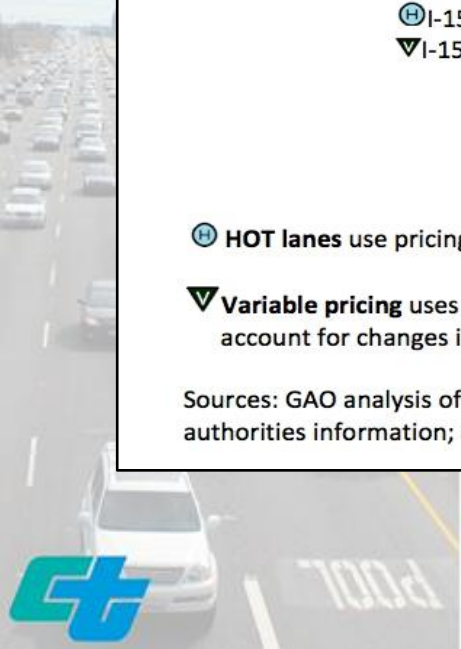
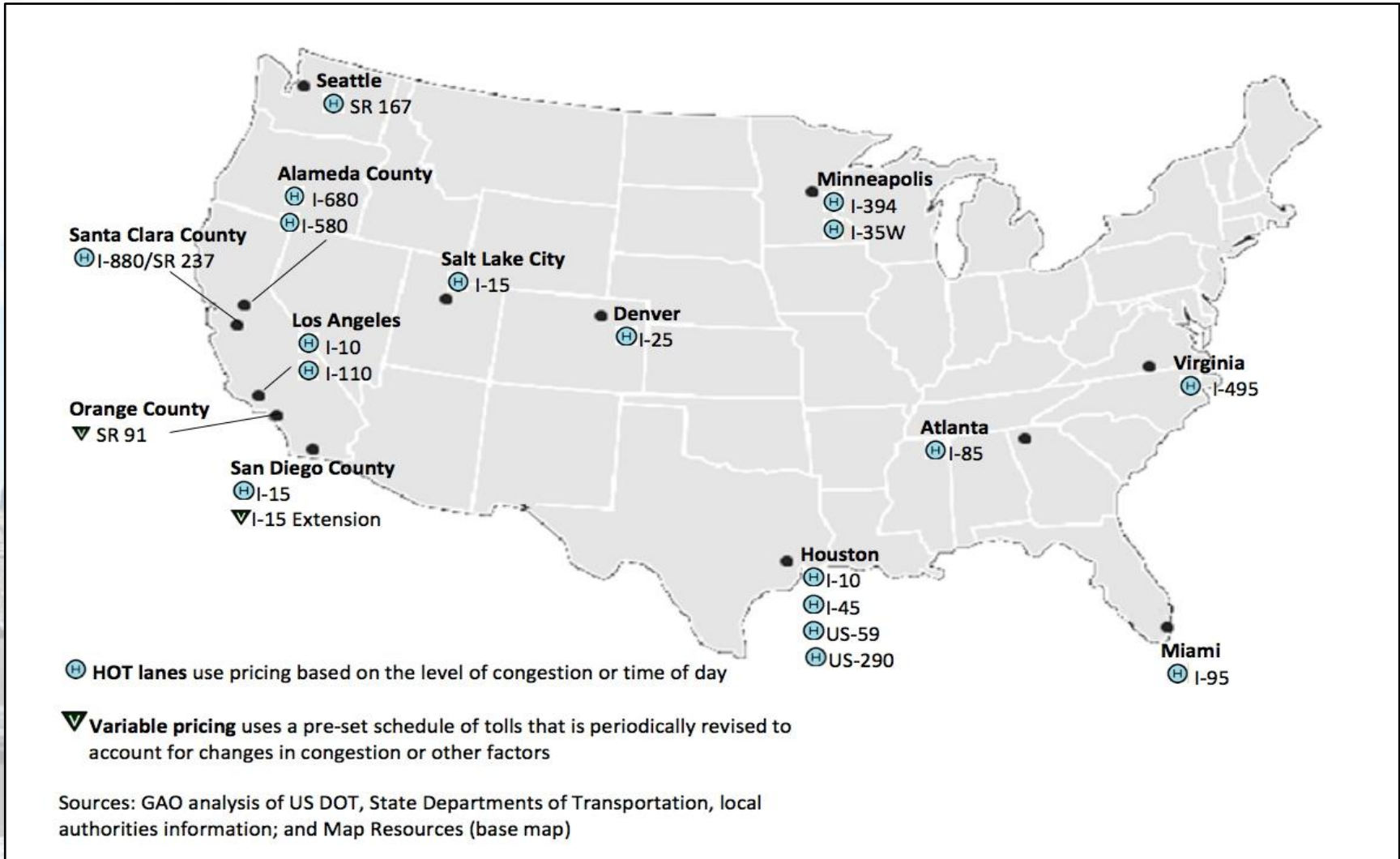
Number of Vehicles to Carry 45 People



HOV 3+ Systems in the U.S



Existing Priced Facilities in the US (2013)



- Working with FHWA on acceptable remedies.
- 2012 Degradation Report.
- Regional Transportation Plan/Sustainable Communities Strategy (2012-2035).
- District 12 HOV Assessment Study.
- Orange County Managed Lane Feasibility Study.
- SCAG Regional Express Lane Network Study.
- District 12 Managed Lane Public Participation Contract.
- I-405 Managed Lanes Project Study Report (Orange County).
- I-405 (OC Line to LAX) HOV to HOT Feasibility Study.
- Deputy Directive 43-R (DD-43R) Managed Lanes.
- New Managed Lanes Manager.





COMMITTEE TRANSMITTAL

September 23, 2013

To: Members of the Board of Directors

From: *WK*
Wendy Knowles, Clerk of the Board

Subject: Measure M2 Environmental Cleanup Program – 2013 Tier 1
Water Quality Grant Funding Allocations

Regional Planning and Highways Committee Meeting of September 16, 2013

Present: Directors Bates, Donchak, Harper, Lalloway, Miller, Murray,
and Spitzer

Absent: Director Nelson

Committee Vote

This item was passed by the Members present.

Director Harper was not present to vote on this item.

Committee Recommendations

- A. Approve the Tier 1 programming recommendations for \$2,831,240 of Measure M2 Environmental Cleanup Program funding.
- B. Authorize the allocation of funds through the Comprehensive Transportation Funding Programs master funding agreement process for projects approved for programming.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Environmental Cleanup Program – 2013 Tier 1
Water Quality Grant Funding Allocations**

Staff Report



September 16, 2013

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Measure M2 Environmental Cleanup Program – 2013 Tier 1 Water Quality Grant Funding Allocations

Overview

The Orange County Transportation Authority's Environmental Cleanup Program, Project X, provides for the allocation of two percent of annual Measure M2 revenues to improve overall water quality from transportation-generated pollution. The Orange County Transportation Authority issued the second annual Measure M2 Environmental Cleanup Program Tier 1 call for applications in March 2013. A priority list of Tier 1 projects for funding is presented for review and approval.

Recommendations

- A. Approve the Tier 1 programming recommendations for \$2,831,240 of Measure M2 Environmental Cleanup Program funding.
- B. Authorize the allocation of funds through the Comprehensive Transportation Funding Programs master funding agreement process for projects approved for programming.

Background

In May 2010, the Orange County Transportation Authority (OCTA) Board of Directors (Board) approved a two-tiered approach to fund the Measure M2 (M2) Environmental Cleanup Program, Project X. The funding plan called for up to \$19.5 million in Tier 1 grants on a "pay-as-you-go" basis through fiscal year (FY) 2017-18, and up to \$38 million in Tier 2 grants via bonding through FY 2014-15.

The Tier 1 Grant Program is designed to mitigate the more visible forms of pollutants, such as litter and debris, which collect on the roadways and in the catch basins (storm drains) prior to being deposited in waterways and the

ocean. It consists of grant funding for Orange County local governments to purchase equipment and upgrades for existing catch basins and other related best management practices (BMP). Examples include screens, filters, and inserts for catch basins, as well as other devices designed to remove the above mentioned pollutants. In August 2012, the Board approved funding of \$2,764,244 for the second Tier 1 Grant Program for 33 projects based on the scoring criteria.

Discussion

OCTA issued the 2013 Tier 1 call for projects (call) between March 15 and May 17, 2013. Staff received 46 applications from 29 cities and the County of Orange.

Review and evaluation of the 46 applications was conducted by OCTA staff and the Vice Chairman of the Environmental Cleanup Allocation Committee (ECAC).

The applications were ranked based on Board-approved criteria that included the following: (1) the highest priority project from each agency; (2) identification of the affected waterway and the pollutant(s) treated by the proposed BMP; (3) an operations and maintenance plan adequate to maintain the efficiency of the proposed BMP for regularly scheduled inspections, maintenance, and cleaning/disposal of pollutants; (4) a clear and detailed work plan with a specific implementation period; and (5) how effective the proposed project would be at removing trash and debris.

As part of the Comprehensive Transportation Funding Programs (CTFP) Tier 1 Guidelines revisions for the FY 2013-14 call, the ECAC recommended and the Board approved an increase in the total funding amount which could be requested per project to \$200,000 to fund more extensive cleanup strategies. Due to this higher grant amount per project, fewer individual projects are being recommended for funding for this call compared to the last two calls. Of the projects recommended for funding, the majority have a substantial overmatch.

Upon scoring, the evaluation team recommended projects for funding based on total points earned. On August 8 2013, the ECAC endorsed the recommendation to fund 19 projects.

The 19 Tier 1 proposals recommended for funding by the ECAC (Attachment A) generally include three types of projects. The number of projects in each category, along with a brief description of project types, is provided below:

- 1) Automatic retractable screen and other debris screens or inserts (15 projects): screen or insert units prevent debris from entering the storm drain system.
- 2) Continuous deflective separator (CDS) (three projects): CDS units divert runoff away from waterways and screen storm drain flows from trash and debris. CDS units screen, separate, and trap debris, sediment, oil, and grease from storm water runoff.
- 3) Bioretention system (one project): Pollutants are captured and immobilized, then decompose and incorporate into the biomass of the bioretention system. Storm water continues to flow into the drain system where the treated water is discharged.

These projects are designed to prevent the more visible forms of pollutants (litter/debris) from entering the local storm drain systems. These projects can be implemented relatively quickly which is a key goal for the Tier 1 Grant Program. Local agencies must contribute a minimum match of 25 percent of the project cost. These matching funds can be provided by cash contributions and/or in-kind services such as the cost of maintenance and operations. Attachment B includes proposed projects not recommended for funding.

To date, all of Orange County's 34 cities and the County of Orange have applied for funding. With the inclusion of the recommended projects from this third call, 32 cities will have received funding.

Next Steps

Upon approval of recommendations by the Board, each local agency will be requested to execute a letter agreement under the master funding agreement approved by the OCTA Board in July 2011. Further, staff will continue to monitor project status and project delivery through the CTFP semi-annual review process.

The next Tier 1 call for projects is anticipated in early to mid-2014. It is anticipated that approximately \$2.8 million will be available for the next call. Prior to the release of the next call, the ECAC will review the CTFP Guidelines and scoring criteria to determine if changes should be made to maximize the funding distribution throughout the County. The ECAC also encouraged staff to continue outreach efforts to maintain participation in the Tier 1 Grant Program from all 34 cities and the County of Orange.

Fiscal Impact

This project was approved in OCTA's FY 2013-14 Budget, Planning Division, Account 0017-7831-MX001-T6S, and is funded with M2 funds.

Summary

Proposed programming recommendations for the Measure M2 Environmental Cleanup Program Tier 1 Water Quality Grant Program have been developed by staff and approved by the Environmental Cleanup Allocation Committee. Funding for 19 projects, totaling \$2,831,240, is proposed. Staff is seeking Board of Directors' approval to execute a letter agreement with local jurisdictions to receive Measure M2 funds.

Attachments

- A. 2013 Orange County Transportation Authority Environmental Cleanup Program Tier 1 Call for Projects Funding Recommendations – Funded Projects List
- B. 2013 Environmental Cleanup Program Tier 1 Call for Projects – Unfunded Projects List

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ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Environmental Cleanup Program – 2013 Tier 1
Water Quality Grant Funding Allocations**

Attachment A

**2013 Orange County Transportation Authority
Environmental Cleanup Program Tier 1 Call for Projects Funding Recommendations – Funded Projects List**

	Agency	Project Title	Project Description	Cumulative Programming	Funds Requested	Local Match	Project Cost	Score
1	Newport Beach	Domingo Drive Litter Removal Project	Install a continuous deflective separation (CDS) unit within watershed	\$106,000	\$106,000	\$36,280	\$142,280	88
2	Tustin	Installation of Catch Basin Inserts and Screens	Install 14 connector pipe screens (CPS) and 112 catch basin inserts and automatic retractable screens (ARS)	\$261,268	\$155,268	\$51,700	\$206,968	88
3	Orange	CDS Unit at Santiago Creek	Install a CDS hydrodynamic separator at the downstream end of a 54 inch storm drain line on Shaffer Street	\$373,018	\$111,750	\$37,250	\$149,000	87
4	Buena Park	Buena Park G2 Full Capture System Installation	Retrofit 147 catch basins with "full capture system" that combines ARS and CPS.	\$572,889	\$199,871	\$92,610	\$292,481	86.5
5	Stanton	Fiscal Year 2013-14 Citywide Catch Basin Environmental Cleanup Program Project	Install 64 round curb inlet filters	\$692,889	\$120,000	\$68,687	\$188,687	86
6	Fountain Valley	Ocean Protection and Environmental Cleanup 2013	Installation of Bio Clean environmental curb inlet baskets	\$792,534	\$99,645	\$73,011	\$172,656	85.5
7	Santa Ana	Arterial Catch Basin Connector Pipe Screen Installation Project	Retrofit 580 catch basins with CPS	\$992,534	\$200,000	\$351,000	\$551,000	85
8	Laguna Beach	Gaviota Drive Diversion Project	Install a CDS unit and a diversion which will work in concert to protect the ocean from pollution at the popular Gaviota Drive beach access point	\$1,192,534	\$200,000	\$150,000	\$350,000	84.5
9	Huntington Beach	Northwest Catch Basin Retrofit Project - Phase I	Retrofit 126 catch basins with the Bio Clean round curb inlet filters and grate inlet skimmer boxes	\$1,392,122	\$199,588	\$93,839	\$293,427	84
10	Lake Forest	Automatic Retractable Screen Catch Basin Retrofit Phase III	Retrofit approximately 57 catch basin locations with cleanscreen ARS	\$1,480,122	\$88,000	\$29,300	\$117,300	84
11	Mission Viejo	Marguerite Parkway Stormwater and Transportation Runoff Abatement Project (Via Florecer - Trabuco)	Install six ARS and construct structural retrofits within 41,000 square feet of roadway median	\$1,626,122	\$146,000	\$49,000	\$195,000	84
12	Villa Park	Catch Basin Debris Filters Installation Round 2	Procurement, installation, maintenance, and evaluation of round curb inlet filters on 122 existing catch basin locations	\$1,826,122	\$200,000	\$66,667	\$266,667	84
13	Westminster	Gillespie Park Filterra Bioretention & Irrigation System Modernization	Install a proprietary bioretention system and replace an out-dated irrigation system with a new water efficient smart irrigation system	\$1,998,622	\$172,500	\$57,880	\$230,380	84
14	Aliso Viejo	Stormwater Litter Control Project Phase III	Installation of Bio Clean high-capacity filter inserts on 100 storm drain catch basins on public streets	\$2,193,726	\$195,104	\$66,300	\$261,404	82
15	Brea	Citywide Catch Basin Inserts Project 7524	Bio Clean curb inlet baskets and grate inlet skimmer boxes for 117 storm drain inlets	\$2,393,726	\$200,000	\$288,587	\$488,587	82
16	Laguna Hills	Laguna Hills Debris Gates Phase III	Installation of debris gates within Aliso Creek and San Juan Creek watersheds	\$2,458,641	\$64,915	\$22,304	\$87,219	80
17	Seal Beach	Filter Inserts and Screen Installation Project	Install 54 drainpacs and 13 ARS	\$2,496,641	\$38,000	\$13,000	\$51,000	80
18	Rancho Santa Margarita	Santa Margarita Parkway and Avenida Empresa Improvements	Installation of Bio Clean high-capacity filter inserts on a total of seven storm drain catch basins located on two public streets. Installation of a low flow drip irrigation system in a new median	\$2,631,240	\$134,599	\$62,500	\$197,099	79.5
19	County of Orange	Catch Basins Screens Phase III	Retrofit approximately 175 existing catch basins in the unincorporated community of Ladera Ranch with CPS. Includes the purchase of vacuum type catch basin cleaners.	\$2,831,240	\$200,000	\$67,163	\$267,163	79



ORANGE COUNTY TRANSPORTATION AUTHORITY

M2020 Plan Review

Staff Report



September 9, 2013

To: Members of the Board of Directors
From: Darrell Johnson, Chief Executive Officer
Subject: M2020 Plan Review

Overview

The M2020 Plan is a roadmap for accelerating the delivery of the Measure M2 freeway, transit, road, and environmental projects through the year 2020. Accelerating projects relies on advancing project development efforts and the use of potential future bond financing. Approved by the Board of Directors in September 2012, the plan is used to measure progress against implementation goals, as well as with funding and budget plans. New issues that have emerged since plan adoption are presented for review.

Recommendations

- A. Receive and file as an information item.
- B. Return to the Board of Directors with an M2020 Plan update as needed.

Background

The Program Management Office (PMO) provides unified oversight and action to ensure successful delivery of projects described in the Measure M2 (M2) Transportation Investment Plan. While other divisions within the Orange County Transportation Authority (OCTA) carry out Transportation Investment Plan individual projects and programs, the PMO monitors and enforces capital improvement program delivery. To ensure successful delivery of the overall Measure M Program, the PMO coordinates the discussion with other divisions. As part of the PMO role, setting a course for delivery of the program elements is a function of the office, and, as such, the M2020 Plan was developed.

On September 10, 2012, the Board of Directors (Board) approved the M2020 Plan, which set a course for advancement of major M2 projects and programs between now and the year 2020. The M2020 Plan (Attachment A) has incorporated a sound funding foundation of matching state, federal, and

local funds that have already been committed, as well as anticipated future funds. The M2020 Plan assumes a conservative amount of federal and state funding to be available in the coming years given the current trend for limited funding of traditional transportation projects.

In all, more than \$5 billion in transportation improvements promised to the voters in M2 are planned to be completed or under construction by 2020 as part of the M2020 Plan. This includes \$3 billion to complete 14 freeway projects, \$36 million to environmentally clear the nine remaining freeway projects, \$1.2 billion for streets and roads, \$1 billion for transit, and \$58 million for environmental programs.

To deliver the M2020 Plan and bring mobility improvements to the County as soon as possible, the plan assumes bonding in the freeway and transit modes. Funding assumptions included in the M2020 Plan were based on information available as of May 2012 for M2 revenue forecasts prepared by Orange County universities, future state and federal funding projections consistent with current trends at the time of adoption, and project/program costs in year-of-expenditure (YOE) dollars.

Discussion

As a year has passed since the adoption of the M2020 Plan, staff believed it was prudent to review the M2020 Plan to ensure that the aggressive program of projects implementation remains deliverable. Staff reviewed the risks that were identified in the M2020 Plan and looked at current revenue projections and project costs and schedules to determine progress. Assessing the 14 objectives included in the plan, staff specifically looked at the following areas of risk.

Financial – With sales tax revenues remaining strong following the recession, the overall program revenues are still 36 percent below the original (2005) revenue expectations. Additionally, with the current trend of limited state and federal funding opportunities, the program, as adopted, is restricted with minimal program contingency.

Project Delivery – Given the extent of the front-loaded projects across all modes, it is more important than ever to ensure that costs and schedules are being closely monitored. OCTA has realized savings in construction bids, but has also been impacted by higher right-of-way (ROW) costs than initially assumed. For example, the OC Bridges Program anticipated ROW costs have increased 21 percent from when the M2020 Plan was developed in 2012. Additionally, external resources are likely to be in higher demand as neighboring counties continue to accelerate capital projects and competition increases as a result. Ensuring timely decisions and approvals will avoid delay and the potential of higher project costs. Project acceleration, which is what

the M2020 Plan is built around, is intended to provide mobility benefits sooner and avoid the risk of higher debt costs and inflationary impacts.

Legislative Authority – The M2020 Plan assumes that the Interstate 405 (I-405) will be built using a design-build (DB) method of delivery. OCTA sponsored AB 401 (Daly, D-Anaheim) to seek authority to utilize a DB method to deliver the I-405. AB 401 is currently pending in the state legislature and must pass to the Governor by September 13, 2013. The Governor then has until October 13, 2013 to sign the bill into law, which if signed by the Governor, AB 401 will take effect on January 1, 2014. If this bill does not pass the legislature and/or is not signed by the Governor, this will result in a change to the plan.

Regulatory Conditions – New regulations continue to be a challenge. The early adoption of Breaking Down Barriers is a positive gain, but additional requirements such as Buy America are expected to have an impact on delivery schedules. Upcoming projects that will be challenged with Buy America rules are the Interstate 5 south projects. Staff will work closely with the utility companies to ensure timely implementation of the work required to keep the project on schedule.

Organizational Readiness Assessment – When the plan was adopted, the Board directed staff to conduct an M2 Organizational Readiness Assessment to determine if OCTA is able, as currently structured and resourced, to deliver the plan. Early findings have indicated a few areas in need of adjustments, but no fatal flaws. In particular, resource needs have been identified in the ROW Department, Audit Department, legal resources, PMO, and Contracts Administration and Materials Management Department. Discussions are underway on the best approach for filling these needs, whether by consultant support or full time staff. Any addition to resources will be brought to the Board for consideration and action.

M2020 Plan Funding Assumptions

Funding assumptions included in the 2012 M2020 Plan were based on the May 2012 M2 revenue forecasts prepared by Orange County universities, future state and federal funding projections consistent with current trends, and project/program costs in YOE dollars. Revenues and expenses were merged into a high-level cash flow model that was refined and included in the November 26, 2012 Board-approved M2 Plan of Finance. Bond assumptions were included to address projected negative ending balances by year (compared to a pay-as-you-go scenario).

While the streets and roads and transit modes are primarily based on a pay-as-you-go basis, the M2 Freeway Program (Freeway Program) relies on approximately \$1 billion in future revenue bonds and \$720 million (beyond what is already secured) in external state and federal revenues in order to deliver the program of freeway projects. The Freeway Program is the major risk area in the M2020 Plan due to the defined scope of delivery, drop in originally anticipated revenues (compared to 2005 projections), and the cost of freeway project delivery. As a result, the focus of the 2013 M2020 Plan review is on the freeway mode.

To ensure the freeway component of M2020 Plan is progressing and remains deliverable, revised cash flows were developed for the Freeway Program focusing on year-by-year ending balances through 2041. This effort was conducted to ensure the complete Freeway Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. As was the case when the M2020 Plan was developed, the same is true today; without issuing revenue bonds, the Freeway Program cannot be delivered as planned. To utilize a pay-as-you-go approach would require project delivery schedules to be adjusted significantly, delaying mobility benefits and potentially risking the ability to deliver the complete freeway plan. Therefore, the updated freeway cash flow included the following updates:

- Revised cost estimates for the entire Freeway Program
- Use of the Board-approved May 2013 sales tax forecasts average from three major universities
- Updated bonding assumptions
- Addition of a 180 days of working capital requirement

The results are similar to the 2012 plan. The Freeway Program is deliverable, but major unplanned revenue decreases or cost increases could impact delivery of the program. For example, the Freeway Program ending balance is positive in 2041 at \$304 million, but is less than five percent of total revenue (Attachment B). With 27 years left in the program, uncertainties remain but appear manageable with continued effort and diligence to contain costs and secure state and federal revenues. Increasing funding commitments beyond the M2020 Plan should be carefully evaluated and presented to the Board to consider alternatives, trade-offs, and financial risk.

To evaluate the potential impact of future major uncertainties, the Freeway Program cash flow was also tested with another revenue and bonding assumption. For this scenario, the most conservative of the three university sales tax forecasts was used along with revised bonding assumptions (constrained to debt coverage ratios). This scenario shows that if the sales tax growth is off by an average of .66 percent per year as compared to the three university

average forecast (May 2013, Board-approved), the program is not deliverable. This results in a Freeway Program negative balance of –\$167 million in 2041, assuming maximum bonding against Freeway Program revenue (Attachment C). The negative ending balance starts in year 2019, reaches the lowest point in 2022, and is not able to recover.

Addressing an imbalance of this magnitude would require a major infusion of external revenue, reductions in the scope of freeway projects, or cancellation of projects. It is unlikely that OCTA would be able to secure external state and federal revenues to meet this need beyond what is already in the plan given the current outlook. As a result, it is imperative that OCTA continue efforts to keep costs contained and secure the planned revenue for the Freeway Program.

With careful management of projects and use of financial resources, the full scope of the Measure M Program continues to be deliverable as promised. It should be noted that the M2020 Plan includes funding to deliver the M2 commitment of one general purpose lane in each direction (Board-adopted Alternative 1) for Project K (I-405) using the DB method of delivery. If an alternative other than Alternative 1 is desired by the Board or current schedules cannot be achieved, then a separate funding source and separate plan of finance for improvements beyond Alternative 1 will be required.

Next Steps

The M2020 Plan was developed to capitalize on projects and programs that can be advanced, providing mobility sooner to Orange County residents. Staff will continue to work to deliver the M2020 Plan. If direction from the Board changes with regard to the I-405 or the Fixed-Guideway Program, staff will return to the Board with recommended M2020 Plan changes.

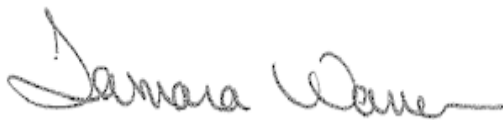
Summary

The M2020 Plan, approved by the Board of Directors on September 10, 2012, set the course for accelerating Measure M2 projects and programs over the next eight years. The benefit of the M2020 Plan is the early delivery of numerous projects, which provides mobility benefits early to our residents. The plan is deliverable as adopted in September 2012, but any variance in costs and funding plan could impact project delivery, requiring that project scopes and schedules be carefully managed and closely monitored.

Attachments

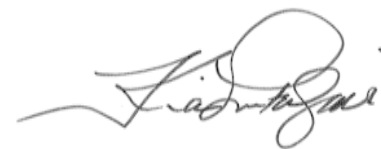
- A. M2020 Plan – Sept. 10, 2012
- B. M2020 Plan Objectives
- C. Measure M2 (M2) Freeway Program Revenues, Estimated Costs, and Ending Balances (Approved Three Universities Average)
- D. Measure M2 (M2) Freeway Program Revenues, Estimated Costs, and Ending Balances (Most Conservative)

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ORANGE COUNTY TRANSPORTATION AUTHORITY

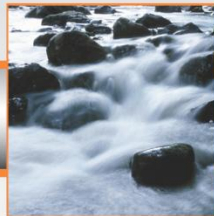
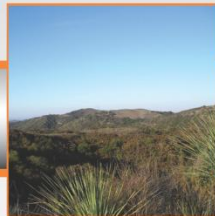
M2020 Plan Review

Attachment A



M2020 Plan

Sept. 10, 2012



Printed April 24, 2013

**For the latest version of the M2020 Plan,
including any edits or corrections,
please visit: www.octa.net/m2020**

**For status updates on M2 projects and programs,
including quarterly progress reports,
please visit: www.octa.net/m2**

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Introduction



Introduction

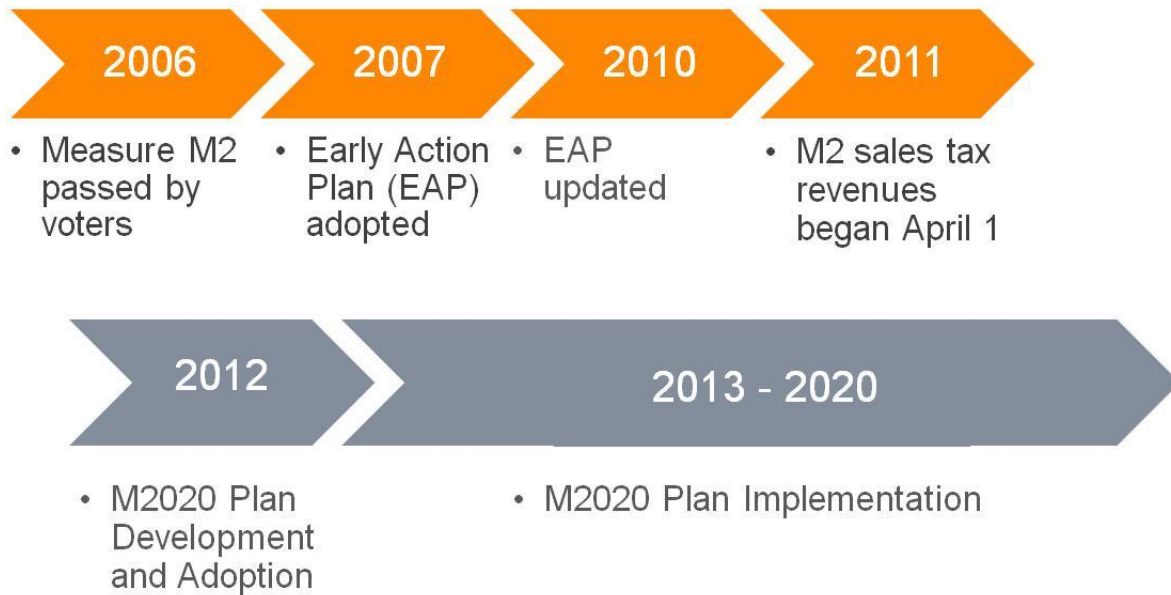
On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the renewal of the Measure M one-half cent sales tax for transportation improvements. Voters originally endorsed Measure M in 1990 (M1) with a sunset in 2011. With the approval of Renewed Measure M (M2), the voters agreed to continued investment of local tax dollars in Orange County's transportation infrastructure for another 30 years to 2041.

In 2007, the Board of Directors (Board) approved (and subsequently updated in 2010) an Early Action Plan (EAP) to advance the implementation of M2. The EAP was a five-year plan providing guidance to staff through 2012. With five years under our belt, and all major elements of the Board-directed EAP near to or complete, it is time again to develop our plan for the next several years.

On February 27, 2012, an M2 Board workshop took place. The workshop revealed that despite the economic downturn and resulting decrease in sales tax revenues, OCTA could still deliver the entire M2 Program as promised to the voters by leveraging state and federal funds. In addition, the agency could expedite delivery to further capitalize on competitive construction costs and deliver mobility benefits years earlier. At the workshop, options were presented to the Board for delivering the freeway program which included M2 bonding. Following the workshop, a development update on the streets and roads, transit, and environmental program plan elements was presented to the Board in June 2012.

This M2020 Plan outlines the projects and programs for all modes that can be delivered on an expedited schedule between now and the year 2020, along with anticipated schedules and major milestones. This plan also positions OCTA on a course to go beyond the early implementation projects if additional external funds can be accessed earlier.

Measure M2 Timeline



Guiding Principles

During the development of the EAP, guiding principles were established that set the direction for staff on establishing priorities for freeway project acceleration. These guiding principles listed below continue to guide us today and are the basis for the M2020 Plan.

- Project Readiness
- Congestion Relief and Demand
- External Funding Availability
- Public Opinion and Support
- Project Sequencing and Connectivity
- Project Duration and Cycle

Key Objectives

Building on the accomplishments of the EAP, the M2020 Plan represents a blueprint for continued advancement of M2 for the approximately eight-year period from 2013 through 2020. That blueprint commits to meeting the following 14 objectives in the eight-year period:

Freeways

1. Deliver 14 construction projects (listed on page 16) along Interstate 405, Interstate 5, State Route 55, and State Route 91. (M2 projects A, C, D, E, F, G, H, I, J, & K). This comprises two-thirds of the M2 freeway program, amounting to nearly \$3 billion in year-of-expenditure (YOE) dollars worth of transportation investments inclusive of what has already been delivered.
2. Complete the environmental phase of the nine remaining M2 projects (listed on the bottom of page 16) making them shelf ready for early delivery as external funds become available. (Projects B, D, F, G, I, J, L, & M). This positions the remaining freeway projects, estimated at \$1.4 billion in current year dollars (\$2.6 billion YOE) in transportation investment, for implementation and potentially advancement as additional funds become available.

Streets and Roads

3. Invest nearly \$1.2 billion of funding for street and road improvement projects to expand roadway capacity and protect pavement conditions. (Projects O, P, and Q).
4. Synchronize 2,000 traffic signals across the County to ease traffic flow. (Project P).

Transit

5. Expand Metrolink peak period capacity and address gaps in the existing schedule, as well as make continued investments to improve rail stations, such as the Orange and Laguna Niguel/Mission Viejo stations, and operating facilities. (Project R).
6. Expand Metrolink service into Los Angeles contingent upon cooperation and funding participation from route partners. (Project R).

7. Provide up to \$575 million in M2 and external funding (includes \$58 million in local match funds) to implement Board-selected fixed-guideway projects. Based on the level of interest from local jurisdictions, additional funds will be available for proposed/future local jurisdiction projects for bus and van connections to Metrolink (Project S).
8. Deliver improvements to position Orange County to connect to planned statewide higher speed rail projects (Project T).
9. Provide up to \$75 million of funding to expand mobility choices for seniors and persons with disabilities by stabilizing OCTA bus fares and providing funds for senior community transportation programs and senior non-emergency medical transportation services (Project U).
10. Provide up to \$50 million of funding to encourage development, implementation, and operation of local community transit services (Project V).

Freeway Environmental Mitigation

11. Establish long-term management framework for acquired properties, place approximately 1,000 acres of open space into conservancy, and target restoration of approximately 180 acres of habitat to its natural condition in exchange for receiving the necessary permits from resource agencies for the 13 planned M2 freeway projects as part of the Freeway Mitigation Program (Projects A-M).
12. Complete resource management plans to determine appropriate public access on acquired properties.

Environmental Cleanup

13. Complete the implementation of up to \$20 million of improvements to prevent flow of roadside trash into waterways (Project X).
14. Provide up to \$38 million to fund construction of up to three major regional water quality improvement projects as part of the Environmental Cleanup Program (Project X).

In all, more than \$5 billion in transportation improvements promised to the voters in M2 could be completed or under construction by 2020. In addition, the groundwork will be laid for another \$1.4 billion in freeway improvements by environmentally clearing all remaining projects to be shelf ready in the event additional federal, state, or local funding becomes available.

It's important to note that M2 - Project K, includes funding for one general purpose lane in each direction on Interstate 405. OCTA and the California Department of Transportation (Caltrans) are currently determining the locally preferred alternative through an environmental review process which may include additional capacity. If the project selected includes more than the one general purpose lane included in M2, additional funding will need to be identified to address improvements beyond the M2 project which is not assumed as part of this M2020 Plan.

Oversight and Safeguards

The M2020 Plan will take place with the full oversight and regular reporting promised to the voters. Regular progress reports on implementing the M2020 Plan will be included in the M2 Quarterly Report that is prepared for the Board and included on the OCTA website as well as other means, to ensure accessibility and transparency of the information. Contact information for the OCTA staff member responsible for each program or project will be included.

Additionally, during the M2020 eight-year time period, as specified in the M2 Ordinance No. 3, Section 10, there will be two performance assessments. Performance assessments are to be conducted at least once every three years to evaluate the efficiency, effectiveness, economy, and program results of the authority in satisfying the provisions and requirements of the Measure M2 Investment Summary of the Plan, the Plan and the Ordinance. These assessments will take place during year 2015 and 2018.

Also included in Ordinance No. 3, Section 11, the first ten-year comprehensive review of programs and projects will be conducted during the M2020 time period. Due to the early initiation of project development activities prior to the start-up of revenue collection in 2011, the review is planned for 2016, and will determine the basis for setting the direction for future refinements to the M2 Plan and M2020 Plan. The ten-year review will include a comprehensive review of all projects and programs implemented under the M2 Plan to evaluate the performance of the overall program and may result in revisions to further improve performance.

Sustainable Community Strategy

It's important to note that M2 also supports and enhances the ability of OCTA to support the regional Sustainable Communities Strategy (SCS) in Orange County. M2 provides expanded transit services, more efficient street and highway operations, preserves open space through the environmental mitigation program and provides supplemental funding for water quality improvements. Brief summaries of the specific programs are listed below.

- ✓ Projects A through N – freeway improvements and freeway service patrol to provide emission reductions through congestion relief
- ✓ Projects O and P – regional arterial and signal synchronization improvements that may include bike and pedestrian project elements to provide emission reductions through congestion relief
- ✓ Project Q – local transportation funding capacity for bike, pedestrian, and transit enhancements
- ✓ Project R – expanded Metrolink train capacity to improve transit reliability and convenience
- ✓ Project S – transit extensions to improve access between Metrolink stations, residential and employment centers, and reduce reliance on highways
- ✓ Project T – station improvements to connect to planned future high-speed rail services
- ✓ Project U – sustain mobility choices for seniors and persons with disabilities
- ✓ Project V – community based circulators to complement regional transit services with local communities
- ✓ Project W – transit stop improvements to support transfers between bus lines
- ✓ Project X – water quality improvement programs and projects to meet federal Clean Water Act standards for urban runoff and augment required mitigations
- ✓ Freeway Mitigation Program – natural resource protection strategy to provide for more comprehensive mitigation of environmental impacts from M2 freeway improvements

Risks

M2020's advancement of projects and programs is not without risks. In order to be successful, OCTA needs to be aware and prepared to manage risks in several areas. A table of the risks and suggested management actions is included on the following page.

M2020 Plan - Major Risks

Item	Risk	Proposed Action
Organizational		
1	Organizational readiness to tackle multi-billion dollar capital program considering scale of projects.	Update the 2009 organizational assessment with special emphasis on organizational structure necessary to deliver M2020.
2	Realistic assessment of delivery schedules and required resources.	Prepare a report on best practices and peer agency approaches to project schedule and resource analysis.
3	Availability of specialized staff given the scope of right-of-way (ROW) activities – between 202 and 365 parcels affected (including temporary construction easements) by the I-405 project alone depending on the alternative selected.	Conduct an assessment of the ROW department resources, capabilities, and workload, and develop management recommendations to address the needs of the M2020 Plan.
4	Availability of management and technical capabilities to deliver/operate future rail guideway projects.	Prepare a report on guideway project delivery and operation management plans concurrent with completion of the respective environmental phase.
Financial		
5	Exposure to added bond costs due to schedule changes.	Develop a Plan of Finance to address the optimal financing dates and structure.
6	Delay in project phases affecting overall costs and ability to deliver M2020.	Identify critical program activities and develop strategies to minimize delays.
Policy		
7	Changes in priorities over the life of the program.	Implement a defined process to assess tradeoffs of changes in priorities.
8	Legislative authority to use design/build (D/B) for delivery methods.	Verify the applicability of SB-4 to M2020 projects. Develop legislative strategies for alternative delivery if necessary.
Institutional		
9	Internal/external agency functional units not available, overloaded, or have competing priorities.	Conduct a workload analysis and develop staffing and contracting-out plans. Focus review on contracting, project management, project controls, and accounts payable resources. Partner with Caltrans to align priorities and resources. Ensure timely implementation of Breaking Down Barriers legislation.
10	Ability of local agencies to balance pavement management needs with a new capacity and transit project funds for matching requirements.	Provide a comprehensive overview in a workshop setting of all funding opportunities to local agencies to support strategic decision making at the local level.

These in summary include:

Organizational - Review the organizational structure and processes to ensure that OCTA can take on a program of this scale which includes large projects such as the I-405 design/build (D/B) effort, as well as potential fixed guideway construction projects. OCTA needs to be prepared with capabilities and management processes in place to ensure projects and programs are not delayed due to insufficient organizational elements.

Financial – The M2020 Plan is a schedule driven program. As a result, careful assessment of financing options to allow for potential schedule changes, ability to take advantage of external revenues, controlling interest costs, and managing project costs will need to be considered. Additionally, the tight variance between the costs and funding plan will require that project scopes and schedules be carefully managed and closely monitored given the small margin of safety. OCTA also needs to be mindful that the magnitude of the projects advancing through the M2020 Plan doesn't inadvertently create resource competition amongst our own projects, thereby reducing our ability to realize a competitive bidding environment for materials and services.

Policy – Change in priorities can result in impacts to project delivery. It will be important that a process be defined to assess tradeoffs if there will be significant changes to the project list. Additionally, legislative authority for D/B is constantly being challenged. This authority allows for earlier delivery of mobility benefits through the efficiencies that can be achieved with this project delivery method. If D/B authority is not available, OCTA needs to be prepared to pursue legislation or reassess the scope of the M2020 Plan given the time frame of a traditional design bid build method. This may require extending project schedules and increasing project cost estimates.

Institutional – Workload is a critical component of the plan. It is important to assess and develop appropriate internal staffing and contracting out plans. OCTA's ability to secure adequate resources for reviews and approval from critical project development partners such as Caltrans, the Federal Highway Administration, and permitting agencies, is another area of risk. OCTA should work with Caltrans on ways to prioritize projects in the M2020 Plan within Caltrans. Timely implementation of Breaking Down Barriers legislation included in "Moving Ahead for Progress in the 21st Century" (MAP-21) will need to be ensured. Additionally, local agencies are being challenged with limited funding due to severe budget cuts. To help support strategic decision making at the local level, a workshop focusing on a comprehensive overview of M2 programs and development of partnering strategies that protect the overall level of investment is suggested.

M2020 Plan Funding Assumptions

Funding assumptions are included in the M2020 Plan. The assumptions are based on M2 revenue forecasts prepared by Orange County universities, future state and federal funding projections consistent with current trends, and project/program costs in YOE dollars. Revenues and expenses are merged into a high-level cash flow model that will be subsequently refined in the upcoming plan of finance. Bond assumptions are also included to address projected negative ending balances by year (compared to a pay-as-you-go scenario). Bond assumptions are constrained to minimum debt coverage ratios, and the appendix on page 79 of the M2020 Plan includes a more detailed discussion on assumed revenues, costs, and debt service.

For M2020 freeway program development, forecasted revenues and costs through 2041 were tested. This effort was conducted to ensure the complete M2 Freeway Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. The funding assumptions in the freeway mode assume \$1.994 billion in total revenue, with costs for the same period totaling \$2.973 billion. This leaves a funding shortfall of close to a billion dollars (\$.979 million) with the shortfall beginning in FY 2015-16 and continuing through the life of the program. To bridge this funding gap and keep projects on schedule, bonding as well as an expectation for receipt of external funding to augment the program is required. Although the full program (through 2041) is deliverable, the freeway mode remains tight.

The 2041 plan relies on the future receipt of \$720 million in state and federal revenues. This assumes \$30 million a year in federal and/or state funds are available from 2018 to 2041. Even with these assumptions, there will be several points in the program with low year-by-year ending balances. Although these are positive balances, the margin leaves minimal flexibility to respond to economic uncertainties, or project scope changes and schedule delays that may result in project cost increases. The tight variance between the costs and funding plan will require that project scopes and schedules be carefully managed and closely monitored given the small margin of safety.

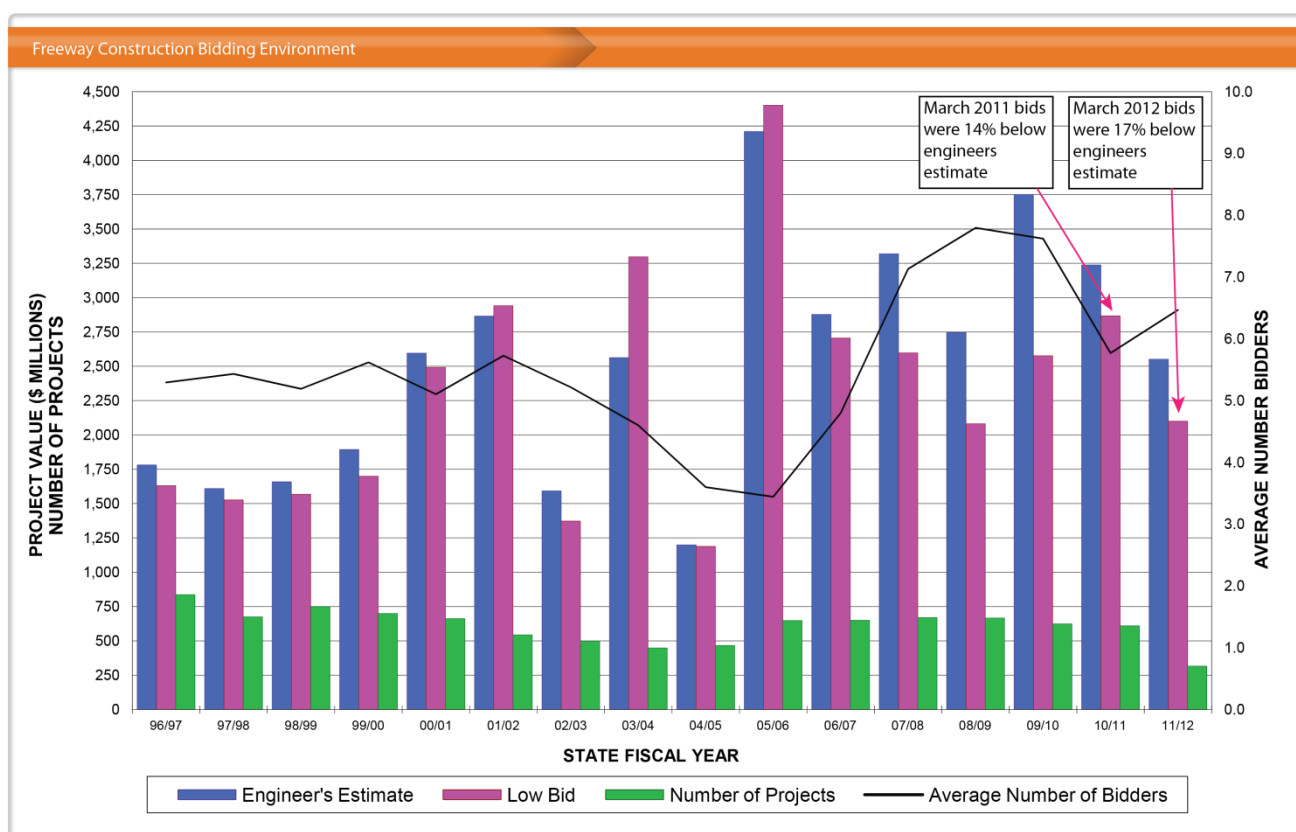
With careful management of the projects and use of financial resources, the full scope of the M2 Program can be delivered as promised.

Funding and Financing

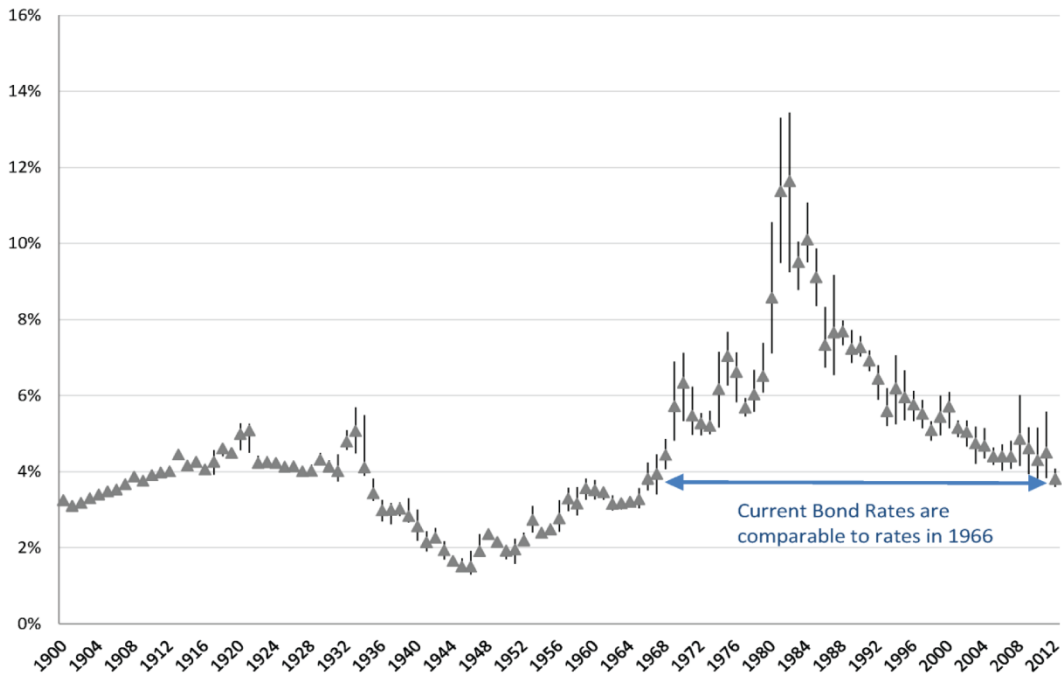
The Board's vision in developing the EAP created a great opportunity for the M2 Program. While the economy took a significant downturn, OCTA advanced projects years before revenue became available. Projects were accelerated, making them shelf ready. This allowed OCTA to capture significant one time external funding provided through State Proposition 1B funds and American Recovery & Reinvestment Act funds.

These external funds provided a considerable boost to OCTA's ability to deliver the M2 Freeway Program despite the economic downturn and resulting decrease in projected revenues. This approach of leveraging external funds has proven very successful for highways and should be the model as we move forward with transit projects for capital and operating needs.

OCTA has also significantly benefited from a competitive bidding environment. Freeway construction bids have consistently come in between 10 and 20 percent below engineers' estimates since 2006. This is a marked change from the time period of FY 2001-02 through FY 2005-06 when bids were coming in higher. See graph below showing the low bid results from FY 2006-07 through the middle of FY 2011-12.



Pay-as-you-go project funding is identified in the Ordinance as the preferred method of financing, while bond financing is an option that is within the purview of the OCTA Board. The current cost of debt is at a historic low. In fact, current bond rates have not been this low since 1966. See graph on the following page showing historical issuance rates of 20-year bonds. OCTA has a strong track record of successfully delivering projects early utilizing bond financing with both M1, as well as the EAP with M2. The M2020 Plan anticipates bond financing for the freeway program as a means to continue with the aggressive delivery of freeway projects.



The M2020 Plan also assumes approval of an amendment to the M2 Transportation Investment Plan to reallocate \$709 million, a portion of the \$847 million in projected savings currently allocated to State Route 91 - Project J to Interstate 405 - Project K. This amendment is detailed in the staff report presented to the Board on Sept. 10, 2012.

Plan of Finance

A Plan of Finance is needed to ensure that the cash flow requirements from FY 2012-13 through FY 2020-21 for the M2020 Plan are met. Significant expenditures are anticipated for project development, design, ROW, and construction and the programming of road, transit, and environmental funds. Preliminary program level cash flow needs for these elements have been identified, and are included in the accompanying sections by mode. Detailed cash flow needs will be provided to the Board as part of the Plan of Finance. The preliminary collective financing needed to deliver the M2020 Plan is estimated at approximately \$1.7 billion. The Plan of Finance will project the amount on a year by year basis.

The M2020 Plan calls for a Plan of Finance to be prepared and presented to the Board for review and approval within 90 days of the M2020 Final Plan approval.

The Plan of Finance will consist of the following:

- Refined cost estimates for each M2020 project and program, including annual cash flow estimates;
- Adjustment of all cost and revenue estimated to YOE values;
- Refinement of revenue estimates for state, federal, and other non-M2 revenue sources;
- Analysis of financing options, including major risk factors, and recommendation of a preferred strategy

The Plan of Finance will not be a static document. Project costs and schedules and revenue estimates will be continuously monitored along with the Comprehensive Business Plan. The financing strategy will be refined and adjustments brought back to the Board for action as circumstances change.

Financing Policy Guidelines

Following are the recommended policies to guide the preparation and maintenance of the Plan of Finance.

1. Aggressively seek and utilize first all available local, state and federal matching funds and grants.
2. Utilize debt financing subject to the following conditions:
 - Debt financing can be shown to meet the requirements of Section 5 of the Orange County Local Transportation Authority Ordinance No. 3 and is the most cost effective option to meet the need.
 - Financing costs accrue appropriately to the M2 mode for which borrowing occurs.

Additionally, in the event that further external funds become available for freeways, i.e. federal, state or local funds, the freeway projects included in the plan to be environmentally cleared and therefore shelf ready, would be available for additional early delivery. Projects recommended to move forward would be brought before the Board and would be based on readiness as well as project cost versus the external funding available. The list of projects is shown in the table on the following page and grouped by project cost.

M2 Freeway Projects Cleared Through Environmental	Cost (2011, \$M)
B I-5 Widening (SR-55 to I-405)	424.8
L I-405 Widening (SR-55 to I-5)	322.9
I SR-91 Widening (SR-57 to SR-55)	307.2
J SR-91 Widening (SR-241 to I-15)	124.0
G SR-57 NB Widening (Lambert Road to County Line)	82.4
F SR-55 Widening (I-5 to SR-22)	70.5
D I-5/EI Toro Road Interchange Improvements	60.1
M I-605/Katella Avenue Interchange Improvements	22.2
G SR-57 NB Widening (Orangewood Ave. to Katella Ave.)	14.7
TOTAL	\$1,428.8

Staffing and Resources

Staffing and resources needed to implement the M2020 Plan in FY 2012-13 are assumed to be covered within the existing budget. Following the organizational assessment and the workload analysis, if additional needs are identified, a budget amendment along with justification would be provided for the Board's consideration.

Next Steps

The M2020 Plan has been developed to capitalize on projects and programs that can be advanced, providing mobility sooner to Orange County residents. Subsequent to adoption by the Board, the M2020 Plan will be distributed to local jurisdictions and key stakeholders. Quarterly status reports on implementation of the M2020 Plan will be incorporated into the M2 quarterly reports beginning in 2013. The Plan of Finance for the M2020 Plan will be presented to the Board for review and consideration on adoption within 90 days.



Freeway Projects

M2 Freeway Projects



By 2020:

In Construction/Complete

- A** I-5 Widening (SR-55 to SR-57)
- C** **D** I-5 Widening (PCH to Avenida Pico)
- C** **D** I-5 Widening (El Toro Road to SR-73)
- D** I-5/SR-74 (Ortega Hwy) Interchange Improvements
- E** SR-22 Access Improvements
- F** SR-55 Widening (I-405 to I-5)
- G** SR-57 Widening (Orangethorpe Ave. to Lambert Road)
- G** SR-57 Widening (Katella Ave. to Lincoln Ave.)
- H** SR-91 Widening (I-5 to SR-57)
- I** SR-91 Widening (SR-55 to Tustin Ave.)
- J** SR-91 Widening (SR-55 to SR-71)
- K** I-405 Widening (I-605 to SR-55)

Environmentally Cleared/Shelf Ready

- B** I-5 Widening (SR-55 to I-405)
- D** I-5 at El Toro Road Interchange Improvements
- F** SR-55 Widening (I-5 to SR-22)
- G** SR-57 NB Widening (Orangewood Avenue to Katella Avenue)
- G** SR-57 NB Widening (Lambert Road to County Line)
- I** SR-91 Widening (SR-57 to SR-55)
- J** SR-91 Widening (SR-241 to I-5)*
- L** I-405 Widening (SR-55 to I-5)
- M** I-605/Katella Ave. Interchange Improvements

* Project environmentally cleared as part of the Riverside County Transportation Commission's Corridor Improvement Project.

M2020 Projects

M2020 Freeway Projects Through Construction



M2020 Freeway Projects Through Environmental Phase

- B** I-5 Widening (SR-55 to I-405)
- D** I-5 / El Toro Road Interchange Improvements
- F** SR-55 Widening (I-5 to SR-22)
- G** SR-57 NB Widening (Orangewood Avenue to Katella Avenue)
- G** SR-57 NB Widening (Lambert Road to County Line)

- I** SR-91 Widening (SR-57 to SR-55)
- J** SR-91 Widening (SR-241 to I-15)*
- L** I-405 Widening (SR-55 to I-5)
- M** I-605 / Katella Ave. Interchange Improvements

* Project environmentally cleared as part of the Riverside County Transportation Commission's Corridor Improvement Project.

A. I-5 (SR-55 to SR-57)

Description:

Project A will reduce freeway congestion by adding a second High-Occupancy Vehicle (HOV) lane, northbound and southbound, on Interstate 5 (I-5) between State Route 55 (SR-55), and State Route 57 (SR-57).

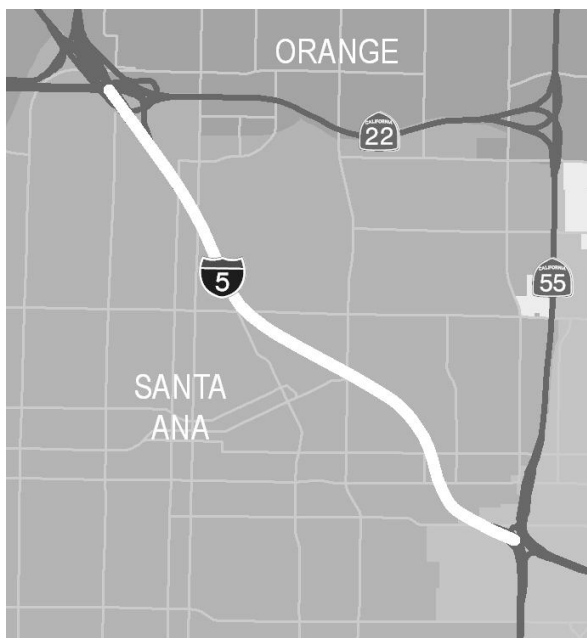
The project includes improvements at the I-5 / SR-55 interchange area between Fourth Street and SR-55. The project will generally be constructed within the existing ROW.

Cost :

\$46.4 million (YOE).

Status:

This project is currently in the environmental phase, scheduled for completion in summer 2013. The project is expected to be open to traffic in late 2017.



Present Day:

The current daily traffic volume on this segment of I-5 is about 378,000 vehicles and is severely congested. The HOV lanes experience more congestion in the peak period than the adjacent general purpose lanes, underscoring the need to add HOV capacity on this freeway segment.

Benefits:

The project will increase the capacity of the HOV facility on I-5 in Santa Ana to meet traffic demands and eliminate bottlenecks. The project is needed to accommodate HOV traffic from both the SR-55/I-5 and SR-57/I-5 direct HOV connectors. The project will also reconstruct the First Street / Fourth Street interchange on southbound I-5 to increase the weaving length between the First Street entrance ramp and SR-55. This will enhance safety and traffic operations, and reduce existing congestion on this section of the freeway. The extension of the auxiliary lane from southbound I-5 to southbound SR-55 through the McFadden Avenue exit ramp on SR-55 to Edinger Avenue, is now part of Project F.

External Funding:

This project is programmed for funding with \$46.4 million in state funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues.

A. I-5 (SR-55 to SR-57)

Related Projects:

Project F.

Involved Agencies:

OCTA, City of Santa Ana and Caltrans.

Assumptions:

Costs based on August 2, 2012 estimates included in Primavera.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

B. I-5 (SR-55 to the El Toro “Y” Area)

Description:

The project will increase I-5 freeway capacity and reduce congestion by constructing new northbound and southbound general purpose lanes and improving key interchanges in the area between SR-55 and State Route 133 (SR-133) (near the El Toro “Y”). This segment of I-5 is the major route serving activity areas in the cities of Irvine, Tustin, Santa Ana, and north Orange County. The project will generally be constructed within the existing ROW.

Cost :

\$728.12 million (YOE), including advancement to environmental phase included in the M2020 Plan.

Status:

Preliminary engineering is complete, and the M2020 Plan includes advancement of the project to the environmental phase. Environmental clearance for the project is expected by 2020.

Present Day:

The current traffic volume on this segment of I-5 is about 356,000 vehicles per day and is expected to increase nearly 24 percent by 2030, bringing it up to 440,000 vehicles per day.

Benefits:

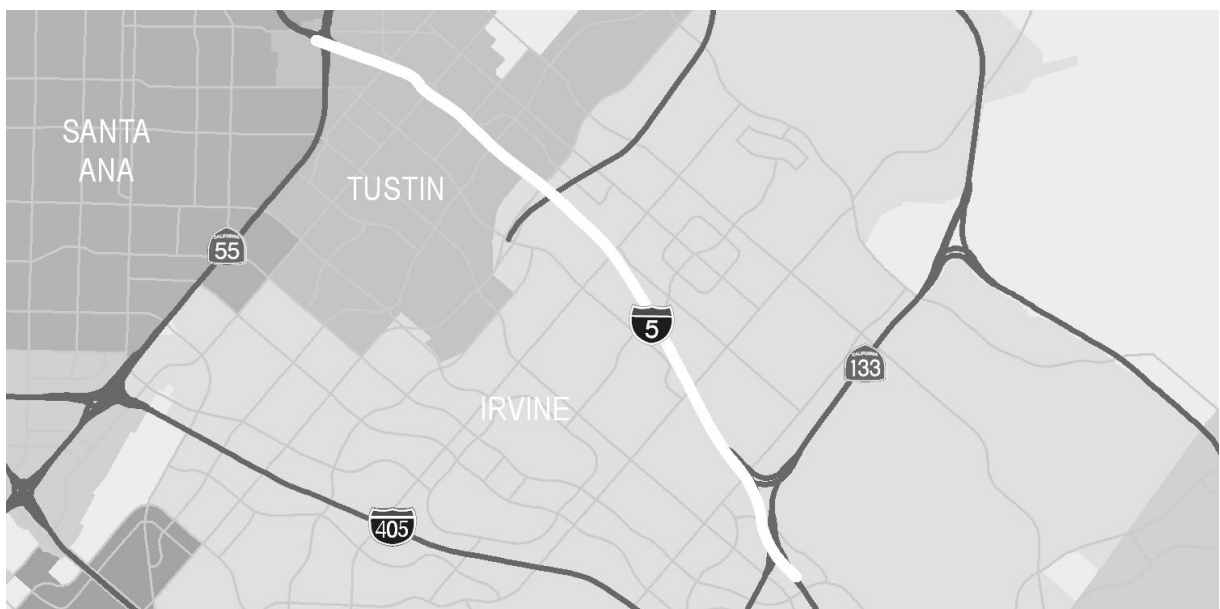
The improvement project on I-5 between SR-55 and the vicinity of the El Toro “Y” would alleviate congestion and reduce delay.

External Funding:

None at this time. This project is eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues.



B. I-5 (SR-55 to the El Toro “Y” Area)

Related Projects:

Projects A and F.

Involved Agencies:

OCTA, Cities of Tustin and Irvine, and Caltrans.

Assumptions:

Costs based on 2012 Freeway Plan.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

C. I-5 (El Toro Road to SR-73 includes Avery & La Paz Interchanges)

Description:

This project will add new lanes to I-5 from the vicinity of the El Toro Road Interchange in the City of Lake Forest to the vicinity of State Route 73 (SR-73) in the City of Mission Viejo. The project will also include major improvements at the Avery Parkway and La Paz Road interchanges as part of Project D.

Cost :

\$558.75 million (YOE).

Status:

Preliminary engineering for this project was completed in February 2011, and the environmental phase is currently underway. Construction is expected to start in 2018, and the project will be open to traffic in 2022.

Present Day:

Current traffic volume on the I-5 near the El Toro “Y” is about 342,000 vehicles per day. This volume will increase in the future by 35 percent, bringing it up to 460,000 vehicles per day.

Benefits:

This project will help alleviate congestion and reduce traffic delays. The interchange improvement projects I-5 / La Paz Road and I-5 / Avery Parkway called for in M2 Project D will each reduce chokepoints and congestion, as well as accommodate future traffic demands on the local roads at each interchange.

External Funding:

\$5 million in federal funds are currently programmed for pre-construction activities. Future phases are also eligible for state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are moderate with this project due to the potential ROW impacts.

Related Projects:

Project C (Avenida Pico to Pacific Coast Highway) and Project D (El Toro Road interchange).



C. I-5 (El Toro Road to SR-73 includes Avery & La Paz Interchanges)

Involved Agencies:

OCTA, City of Mission Viejo, Transportation Corridor Agencies, and Caltrans.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

Assumptions:

Costs based on August 2012 estimates included in Primavera.

C. I-5 (Avenida Pico to PCH includes Pico Interchange)

Description:

Project C will reduce freeway congestion on the I-5 by extending the HOV lanes from Avenida Pico to San Juan Creek Road in the cities of San Juan Capistrano, Dana Point, and San Clemente. The project also includes major interchange improvements at Avenida Pico as included in M2's Project D. The project will generally be constructed within the existing right of way.

Cost :

\$259 million (YOE) for the entire projects, which is divided into three phases.

Status:

Project C is currently in design phase. Some segments may be open to traffic as early as 2015, and the entire project will be complete and open to traffic by 2016.

Present Day:

This portion of I-5 has high level of traffic during the weekdays as well as the weekends and holidays throughout the proposed project limits. Traffic is expected to increase by over 30 percent in the future leading to substantial delays.

Benefits:

The improvement project on I-5 between Pacific Coast Highway (PCH), Avenida Pico includes extending the HOV lane between Camino Capistrano and Avenida Pico southbound, and Avenida Pico and PCH northbound. This extension of the HOV lanes will eliminate a southbound lane drop at Pacific Coast Highway and enable more efficient operation of general purpose lanes, and also serve projected traffic volumes for the year 2035.



C. I-5 (Avenida Pico to PCH includes Pico Interchange)

External Funding:

Approximately \$208 million in federal and state funds are programmed for Project C (Avenida Pico to PCH).

Risks:

Overall time, scope, costs, and quality risks are low with this project due to the project phasing (three segments), relatively low cost for each segment, and straightforward design issues.

Related Projects:

Project D.

Involved Agencies:

OCTA, cities of San Clemente, Dana Point, San Juan Capistrano and Caltrans.

Assumptions:

Costs based on August 2012 estimates included in Primavera.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

D. I-5 (El Toro Interchange)

Description:

The project proposes improvements at the El Toro Road interchange on the I-5 in south Orange County. Improvements at the interchange include widening the local roads, modifying entrance and exit ramps, and modifying or replacing existing bridge structures.

Cost :

\$134.4 million (YOE) including advancement of the environmental phase.

Status:

The M2020 Plan includes advancement of this project to the environmental phase. Planning work is underway and will be complete in 2013. Environmental clearance will be complete by 2020.

Present Day:

This portion of I-5 has high level of traffic during the weekdays, as well as the weekends and holidays throughout the proposed project limits. Traffic is expected to increase by over 30 percent in the future leading to substantial delays.

Benefits:

The interchange improvement project at I-5 / El Toro Road will reduce chokepoints and accommodate forecast traffic demands on the local roads. Modification of the entrance and exit ramps will alleviate congestion at adjacent intersections.

External Funding:

This project is eligible for future state and federal funds. No external funds are current programmed for this project.



D. I-5 (El Toro Interchange)

Risks:

Overall time, scope, costs, and quality risks are low with this project due to straightforward design issues and low ROW impacts with most of the alternatives. Further, the mainline Project C may address ROW impacts for the El Toro interchange project, further reducing property impacts.

Related Projects:

Project C.

Involved Agencies:

OCTA, cities of Laguna Hills and Lake Forest, and Caltrans.

Assumptions:

Costs based on 2012 Freeway Plan prepared by RBF.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

D. I-5 (Ortega Highway Interchange)

Description:

The project will improve the Interstate 5 (I-5) interchange at State Route 74 (SR-74) in south Orange County. Improvements include modifying entrance and exit ramps and replacing the existing bridge structure.

Cost :

\$90.947 million (YOE).

Status:

The project is currently in construction and will be open to traffic in 2015.

Present Day:

This portion of I-5 has high level of traffic during the weekdays as well as the weekends and holidays throughout the proposed project limits. Traffic is expected to increase by over 30 percent in the future leading to substantial delays.

Benefits:

This project will eliminate a major chokepoint, reduce congestion, and accommodate forecast traffic demand on SR-74 at the interchange.

External Funding:

External funds of \$86.21 million are currently programmed for this project.

Risks:

Overall time, scope, costs, and quality risks are moderate with this project due to ROW costs.

Related Projects:

Future Ortega Highway widening to the north of the current project.

Involved Agencies:

OCTA, City of San Juan Capistrano, and Caltrans.

Assumptions:

Costs based on August 2, 2012 Primavera report.



D. I-5 (Ortega Highway Interchange)

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

E. SR-22 Access Improvements

Description:

Construct interchange improvements at Euclid Street, Brookhurst Street, and Harbor Boulevard to reduce freeway and street congestion near these interchanges.

Cost :

The cost for this project was \$25.8 million.

Status:

These projects were completed in 2006 as part of the SR-22 widening project.

Present Day:

Prior to completion of the project, the existing freeway overcrossings did not allow clearance for widening of these three streets to accommodate existing and projected traffic.

Benefits:

The project reconstructed the freeway overcrossings to allow widening of these streets to be widened through the interchange area. These

improvements reduced congestion and delay at all three interchanges.

External Funding:

\$15.9 million of M1 funds and \$9.9 million of other non-Measure M2 (federal, state and city) funds were used for the project.

Risks:

None – project completed.

Related Projects:

None

Involved Agencies:

OCTA, City of Garden Grove, and Caltrans.

Assumptions:

N/A

References:

- OCTA 2010 Long Range Transportation Plan



F. SR-55 (I-405 to I-5 and I-5 to SR-22)

Description:

SR-55, Phase I:

This project will add new lanes to SR-55 between the I-5 and the I-405, including merging lanes between interchanges to smooth traffic flow. The project will generally be constructed within the existing ROW.

SR-55, Phase II.

This future phase will add new lanes to the SR-55 between the SR-22 and the I-5, including merging lanes between interchanges to smooth traffic flow. Operational improvements between SR-22 and SR-91 will also be evaluated in a future environmental document (advanced as part of the M2020 Plan). The purpose of the project is to increase freeway capacity and reduce congestion.

Cost :

Phase I: \$275 million (YOE).

Phase II: \$148.46 (YOE) including advancement of environmental phase.

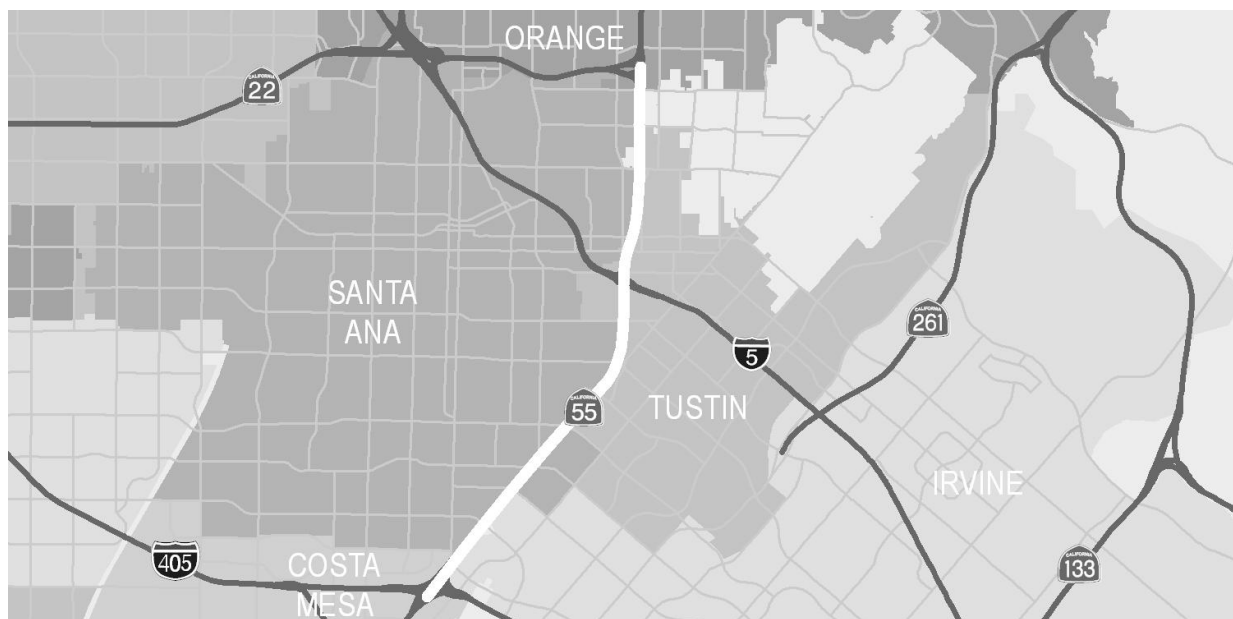
Status:

Phase I is currently in the environmental phase, scheduled for completion in 2014. Phase I is expected to be open to traffic in 2020.

The Phase II project will be advanced to the environmental phase as part of the 2012 M2020 Plan, and the Phase II environmental document will be complete by 2020.

Present Day:

This freeway carries about 295,000 vehicles on a daily basis. This volume is expected to increase by nearly 13 percent, bringing it up to 332,000 vehicles per day in the future.



F. SR-55 (I-405 to I-5 and I-5 to SR-22)

Benefits:

The purpose of the project improvements on SR-55 between the I-5 and SR-22 is to improve mobility and reduce congestion by providing an improved level of operation for existing and forecasted traffic volumes (especially for weaving and lane efficiency at ramp junctions).

External Funding:

None at this time. This project is eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues.

Related Projects:

Project A.

Involved Agencies:

OCTA, Cities of Orange and Santa Ana, and Caltrans.

Assumptions:

Phase I costs based on Aug. 2, 2012 estimates included in Primavera.

Phase II costs based on 2012 Freeway Plan.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

G. SR-57 Improvements

Description:

The improvements along the SR-57 consist of adding one general purpose lane in the northbound (NB) direction from Orangewood Avenue in the City of Orange to approximately Tonner Canyon in the City of Brea. The project may add new auxiliary lanes in select locations. The project is divided into two phases as described below.

Phase I:

This phase is currently in the construction phase and consists of three construction segments including Yorba Linda Boulevard to Lambert Road, Orangethorpe to Yorba Linda Avenue, and Katella Avenue to Lincoln Avenue. All three segments will be complete and open to traffic in 2014.

Phase IIa:

This phase includes (northbound) NB improvements from Lambert Road to the Los Angeles County line that may include the addition of a NB truck climbing lane. The M2020 Plan includes advancement of this project to the environmental phase.

Phase IIb:

This phase includes adding one general purpose lane in the NB direction from approximately Orangewood Avenue in the City of Orange to Katella Avenue in the City of Anaheim. The M2020 Plan includes advancement of this project to the environmental phase.

Cost :

Phase I: \$151.72 million (YOE).

Phase IIa: \$170.4 million (YOE) including advancement of environmental phase.

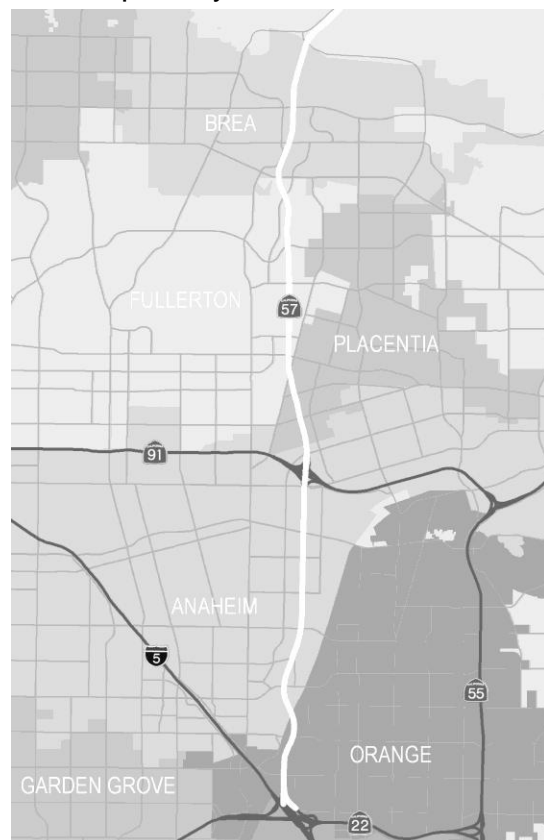
Phase IIb: \$34.5 million (YOE) including advancement of environmental phase.

Status:

Phase I is currently under construction and will be open to traffic in 2014. Phases IIa and IIb will be advanced to the environmental clearance as part of the M2020 Plan.

Present Day:

This freeway carries about 300,000 vehicles on a daily basis. This volume is expected to increase by nearly 13 percent, bringing it up to 340,000 vehicles per day in the future.



G. SR-57 Improvements

Benefits:

These projects will substantially improve existing and future mobility, reduce congestion, improve mainline weaving, and merge / diverge movements, which will improve both traffic operations and safety.

External Funding:

Measure M2 and state funds comprise the majority of funding for the Phase I project. Phases IIa and IIb are eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues.

Related Projects:

Project H.

Involved Agencies:

OCTA, Caltrans, and cities of Orange, Anaheim, Fullerton, Placentia, and Brea.

Assumptions:

Phase I costs based on Aug. 2, 2012 estimates included in Primavera.

Phase IIa and IIb costs based on the 2012 Freeway Plan.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

H. SR-91 (I-5 to SR-57)

Description:

The project proposes to widen the westbound (WB) SR-91 by connecting existing auxiliary lanes through interchanges, thus forming a fourth continuous general purpose lane between the SR-57 and the I-5.

Cost :

\$72.764 million (YOE).

Status:

Design is complete on this project, and construction will start in 2013. The project will be open to traffic in late 2015.

Present Day:

SR-91 serves as a major commuting route connecting Orange County with Riverside and Los Angeles counties. SR-91 is also one of the most congested freeways in Southern California.

Benefits:

The addition of a new through lane on WB SR-91 is intended to reduce congestion, provide additional mainline capacity, and improve operations at each interchange.

External Funding:

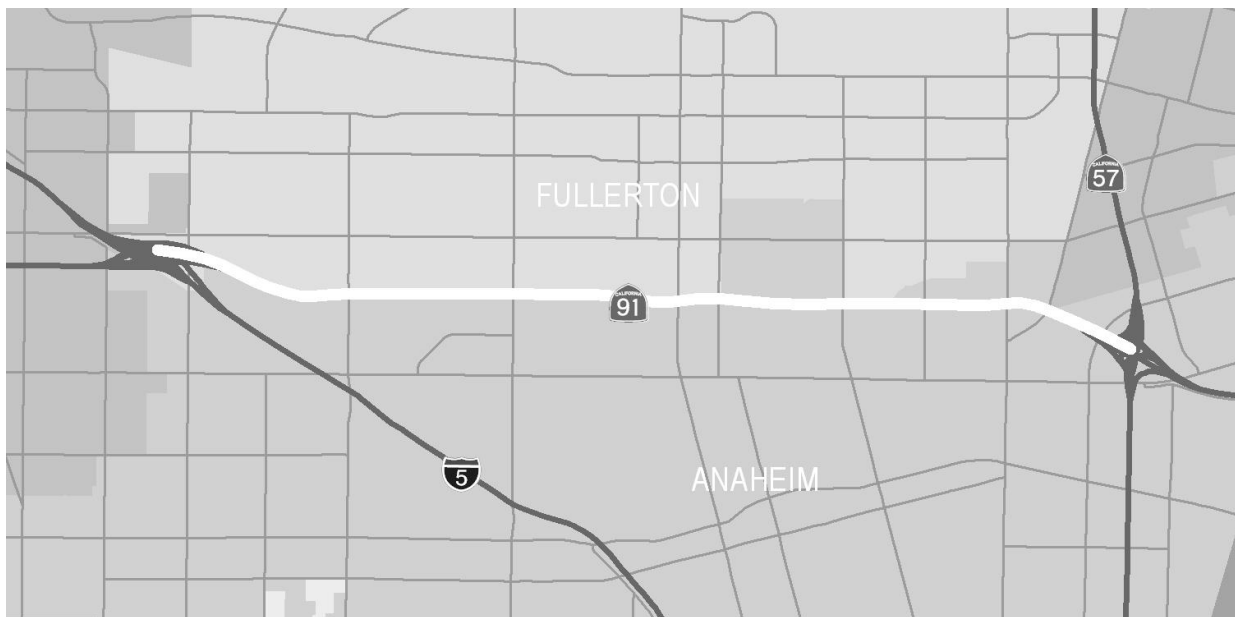
State and local funds will be used to construct this project. State construction funds of \$34.95 million (Proposition 1B) are programmed for the project.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to straightforward design issues and low ROW impacts with most of the alternatives.

Related Projects:

Project I.



H. SR-91 (I-5 to SR-57)

Involved Agencies:

OCTA, cities of Fullerton and Anaheim, and Caltrans.

Assumptions:

Costs based on August 2, 2012 Primavera report.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

I. SR-91 (SR-55 to SR-57)

Description:

Phase I:

This project phase will add a westbound (WB) auxiliary lane on SR-91, beginning at the NB SR-55 to WB SR-91 connector, through the Tustin Avenue interchange.

Phase II:

This future project phase includes adding an eastbound (EB) general purpose lane on the SR-91 between SR-57 and SR-55. Improvements to the SR-91 / SR-55 interchange area will also be evaluated. The project will generally be constructed within the existing ROW.

Cost :

Phase I: \$49.919 million (YOE).

Phase II: \$550.77 million (YOE) including advancement of the environmental phase of the project.

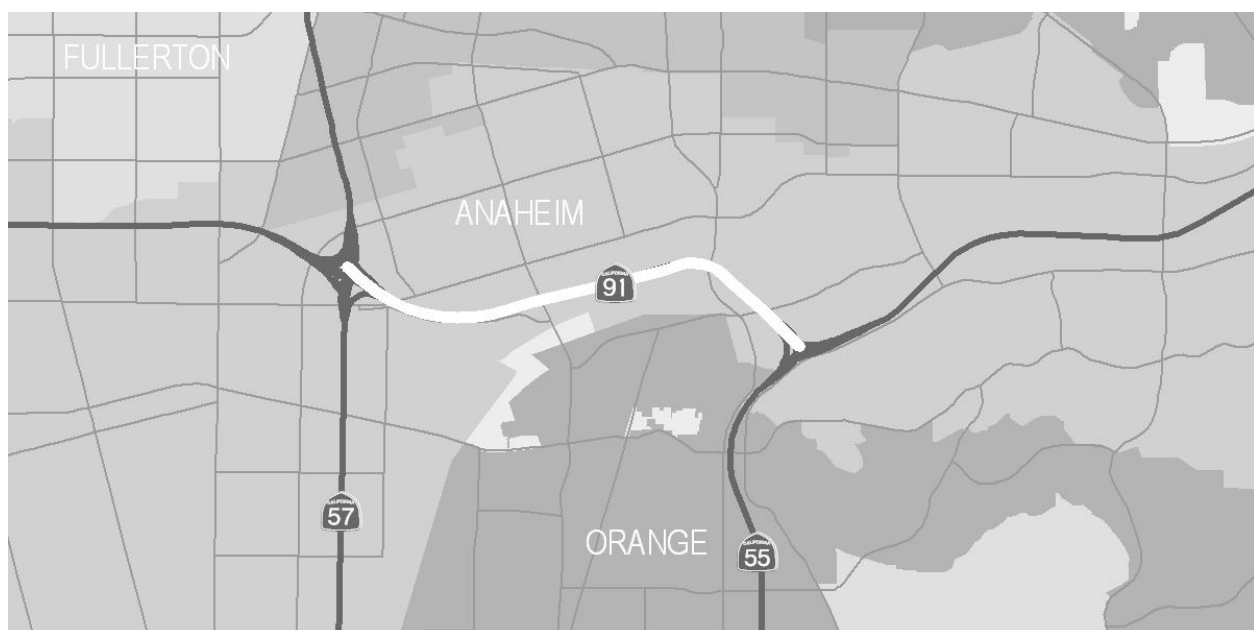
Status:

Phase I is currently in design and construction is expected to start by early 2014. This phase will be open to traffic in 2015.

Phase II is currently in the planning phase and will be advanced to the environmental phase as part of the M2020 Plan.

Present Day:

Current freeway volume on this segment of the SR-91 is about 245,000 vehicles per day. This vehicular demand is expected to increase by 22 percent, bringing it up to 300,000 vehicles per day in the future.



I. SR-91 (SR-55 to SR-57)

Benefits:

Phase I: The project is intended to reduce operational problems on this section of WB SR-91, including weaving and merging maneuvers.

Phase II: These improvements are expected to improve the connection from EB SR-91 to southbound (SB) SR-55.

External Funding:

Phase I includes \$27.93 million in state funds.

Phase II is eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to straightforward design issues and low ROW impacts with most of the alternatives.

Related Projects:

Projects H and J.

Involved Agencies:

OCTA, cities of Orange and Anaheim, and Caltrans.

Assumptions:

Costs based on August 2, 2012 Primavera report and 2012 Freeway Plan.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

J. SR-91 (SR-55 to SR-71)

Description:

Project J adds capacity on the SR-91 beginning at the SR-55 and extending to State Route 71 (SR-71) in Riverside County.

The first project adds one EB lane to the segment of SR-91 from one mile east of SR-241 to SR-71 in Riverside County.

The second project will improve the segment of SR-91 between SR-55 and SR-241.

A third project will improve lanes between SR-241 and the Riverside County line consistent with the Riverside County Corridor Improvement Project interchanges.

Cost :

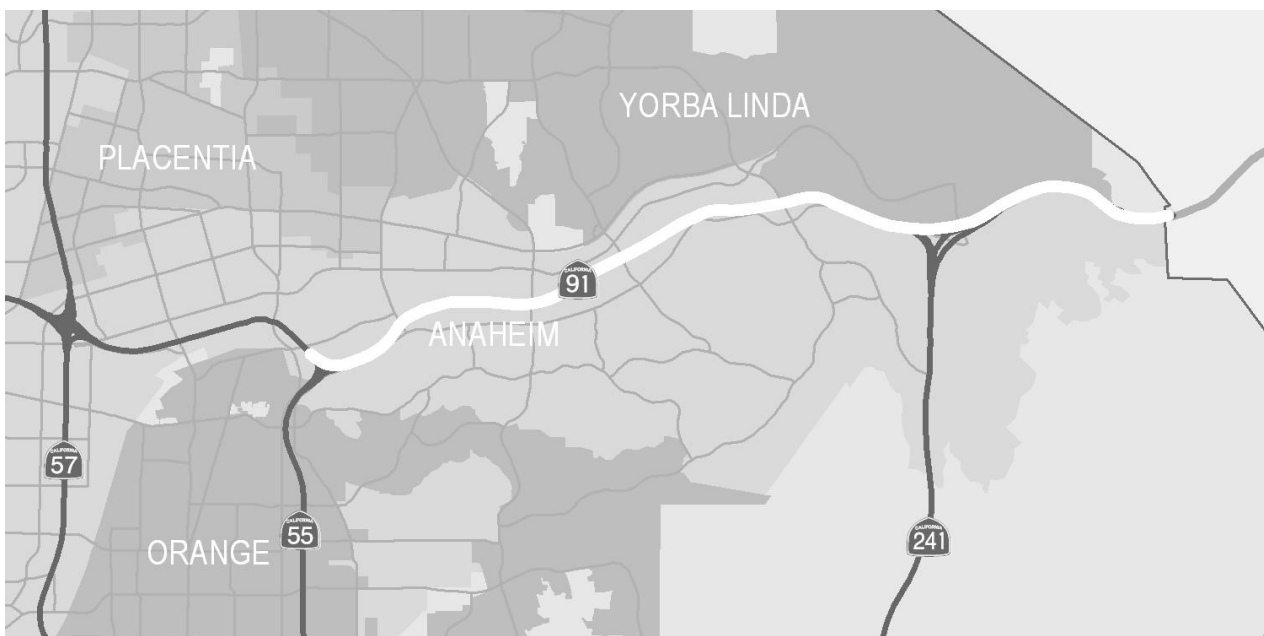
\$435.5 million (YOE). See assumptions.

Status:

The project improvement on EB SR-91 between SR-241 and SR-71 was completed in January 2011. The improvement project on SR-91 between SR-55 and SR-241 is currently under construction, and is scheduled to be completed by December 2012. The third project is contingent on future widening in Riverside County to match the planned lanes in Orange County.

Present Day:

Today, this freeway carries about 314,000 vehicles every day. This volume is expected to increase by 36 percent, bringing it up to 426,000 vehicles by 2030.



J. SR-91 (SR-55 to SR-71)

Benefits:

The project improvements on EB SR-91 between SR-241 to SR-71 added one general purpose lane. This project improves weaving in this segment as it reduces the volume of exiting vehicles in the SR-91 mainline through lanes that are exiting at Green River Road and SR-71.

The proposed project improvement on SR-91 between SR-55 and SR-241 will alleviate congestion and reduce delay.

External Funding:

\$137.62 million in state and federal funds are programmed for SR-91 improvements in Orange County. Future project phases are eligible for state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues.

Related Projects:

Project I and the Riverside County Corridor Improvement Project (CIP).

Involved Agencies:

OCTA, cities of Anaheim and Yorba Linda, County of Orange, and Caltrans.

Assumptions:

Costs based on Aug. 2, 2012 estimates included in Primavera and the 2012 Freeway Plan.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

K. I-405 (SR-73 to SR-605)

Description:

Project K will reduce freeway congestion on the I-405 by adding one lane in each direction from Euclid Street / SR-73 to Interstate 605 (I-605). The project will make best use of available freeway property by staying generally within the freeway ROW and updating key local interchanges to current standards. General purpose lane widening from Euclid Street to I-605 may be constructed at the same time as new I-405 express lanes that would operate from SR-73 to I-605. The general purpose lanes would be funded with M2 funds; the express lanes would be funded with toll revenues.

Cost :

\$1,327 million (YOE) for the general purpose lane widening (M2). Plus \$400 million (YOE) for an express lanes option (funded by tolls) if selected. See assumptions.

Status:

Project K is currently in environmental phase and is expected to be open to traffic in 2019. This schedule is based on the D/B project delivery method.

Present Day:

I-405 carries about 430,000 vehicles daily. The volume is expected to increase by over 20 percent, bringing it up to 528,000 vehicles daily by 2030. The project will increase freeway capacity and reduce congestion.

Benefits:

Project K includes the addition of auxiliary and general purpose lanes. The project adds approximately 20 percent more freeway lanes to I-405 in both directions between Euclid Street to the I-605 interchange.



K. I-405 (SR-73 to SR-605)

An express lanes option, if selected, would operate congestion-free throughout the day due to toll rates that vary based on traffic demand. The express lanes would provide commuters a reliable travel option compared to the adjacent, general purpose lanes. When combined with the M2 project, the improvements would provide the most throughput in the corridor.

External Funding:

This project may be eligible for federal Regional Surface Transportation Program funds. These funds may be programmed for design, ROW, and construction concurrent with the completion of the environmental document in 2013, subject to federal funding availability.

Risks:

Overall time, scope, costs, and quality risks are moderate with this project due to the relatively high costs. Current costs assume D/B delivery method and schedule. A design-bid-build delivery method and schedule are likely to increase costs above the current estimate.

Related Projects:

Project L.

Involved Agencies:

OCTA, cities of Costa Mesa, Fountain Valley, Westminster, Huntington Beach, Seal Beach, and Caltrans.

Assumptions:

Costs based on January 30, 2012 estimates included in Primavera. If selected, toll revenues would pay for an express lanes option, and Measure M2 would pay for general purpose lane widening.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

L. I-405 (SR-55 to I-405)

Description:

This project will add new lanes to the I-405 from the SR-55 to the vicinity of the I-5 to alleviate congestion and reduce delay. The project may also improve chokepoints at interchanges to improve freeway operations in the Interstate 405 (I-405) / I-5 El Toro “Y” area.

Cost :

\$784.34 million (YOE) including advancement of this project to the environmental phase as part of the M2020 Plan.

Status:

The project is currently in the preliminary engineering phase (scheduled for completion in 2013). The M2020 Plan includes advancement of this project to the environmental phase.

Present Day:

This segment of the freeway carries 354,000 vehicles a day. This number will increase by nearly 13 percent, bringing it up to 401,000 vehicles per day by 2030. The project will increase freeway capacity and reduce congestion.

Benefits:

The improvement project on I-405 between SR-55 and El Toro “Y” would help alleviate congestion and reduce delay.

External Funding:

This project is eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to straightforward design issues and low ROW impacts with most of the alternatives.



L. I-405 (SR-55 to I-405)

Related Projects:

Project K.

Involved Agencies:

OCTA, City of Irvine, Transportation Corridor Agencies, and Caltrans.

Assumptions:

Costs based on 2012 Freeway Plan.

References:

- OCTA 2010 Long Range Transportation Plan
- 2012 Freeway Plan

M. I-605 Interchange Improvements

Description:

Improve freeway access and arterial connection to Interstate 605 (I-605) at Katella Avenue, which serves the communities of Los Alamitos and Cypress. The project will be coordinated with other planned improvements along the SR-22 and the I-405. Specific improvements will be subject to approved plans developed in cooperation with local jurisdictions and affected communities.

Cost:

The cost for this project is estimated to be \$50.06 million (YOE).

Status:

The planning phase for this project will be initiated in 2013 and will be done in cooperation with the City of Los Alamitos.

Present Day:

The existing interchange design is outdated and results in both arterial congestion and freeway queuing in the interchange area.

Benefits:

The I-605 / Katella Avenue interchange project will include both freeway and arterial improvements that will reduce congestion, traffic queuing, and delay within the interchange area.

External Funding:

This project is eligible for future state and federal funds.

Risks:

Not known at this time.

Related Projects:

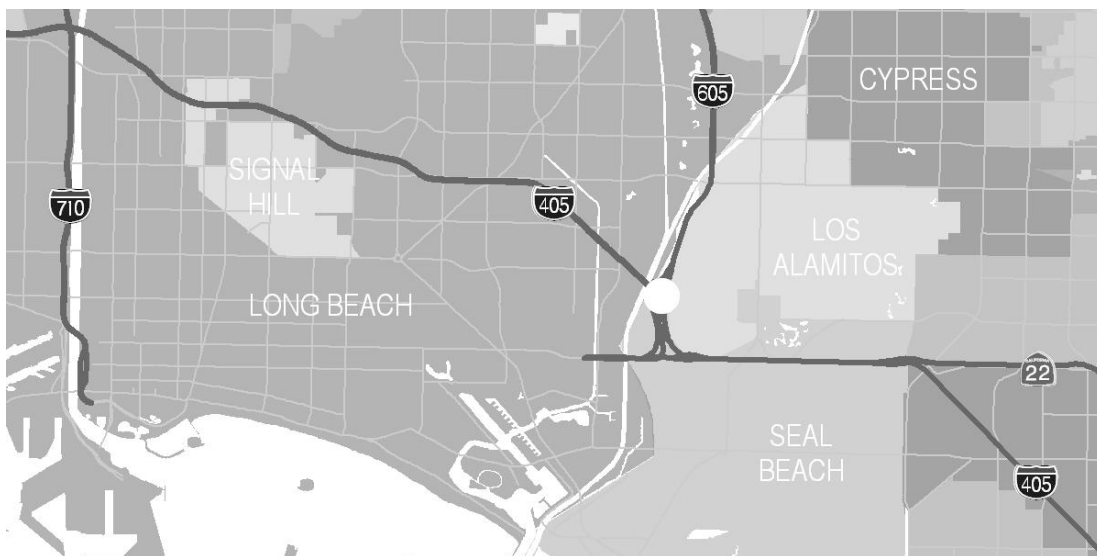
I-405 / I-605 / SR-22 HOV connector project (West County Connector).

Involved Agencies:

OCTA, City of Los Alamitos, and Caltrans.

References:

- 2011 Measure M2 Freeway Strategic Plan



N. Freeway Service Patrol

Description:

The Freeway Service Patrol (FSP) provides competitively bid, privately contracted tow truck service. This service helps stranded motorists, quickly clearing disabled vehicles and large debris from freeway lanes to minimize congestion caused by blocked traffic lanes and passing motorists rubbernecking.

Cost :

FY 2013 through FY 2020
\$31.0 million (M2 Revenue)
\$13.1 million (Projected Expenditures)

Status:

As of June 2012, FSP operates on Orange County freeways Monday through Friday during peak commuting hours, and along congested freeways in the central core of the county during midday. Service is also operated Saturday and Sunday on the I-5 in south Orange County and in limited areas on the SR-91 and SR-22. As demand and congestion levels increase, this project will permit service hours to be extended throughout the day and on weekends on additional freeway segments.

Benefits:

To keep Orange County moving, FSP provides a range of free services from a jump start or a gallon of gas, to changing a flat tire or towing a disabled vehicle off the freeway.

For every dollar invested in this program, over \$7.50 of congestion relief benefit is received. In FY 2009-10, this program eliminated 1.86 million vehicle hours of delay, saved 3.2 million gallons of gasoline, and reduced pollution emissions equivalent to 5,000 vehicles.

External Funding:

State Highway Account (SHA) -
\$2.6 million annually
SAFE (\$1 per vehicle registration fee)
- \$1.4 million annually

Risks:

Should the State of California stop funding FSP through the SHA, M2 will be needed to maintain existing service levels.

Related Projects:

M2 Project N funds may be used to support FSP service for construction of Projects A-M.

Involved Agencies:

OCTA, Caltrans, and the California Highway Patrol,

Assumptions:

Project N is assumed to be funded on a pay-as-you-go basis.

References:

- Measure M2 Project N Guidelines
- Freeway Service Patrol Project, Approved on February 13, 2012

Freeway Environmental Mitigation Program



Overview:

The OCTA Mitigation and Resource Protection Program (Mitigation Program) provides for allocation of at least five percent of the total M2 freeway budget for comprehensive environmental mitigation for the impacts from freeway improvements. The Mitigation Program was approved by Orange County voters under the M2 half-cent sales tax for transportation improvements in 2006.

A master agreement between OCTA, Caltrans, and state and federal resource agencies was approved in January 2010. This offers higher-value environmental benefits such as habitat protection, connectivity, and resource preservation in exchange for streamlined project approvals for the 13 M2 freeway projects.

In August 2007, the OCTA Board approved a five-year M2 EAP, covering the years from 2007 to 2012, to advance the implementation of several key M2 projects, including the Mitigation Program.

To adhere to the promise of M2, the M2020 Plan includes the following framework for the Mitigation Program as it relates to the 13 freeway projects:

- Streamline freeway projects through the biological permitting process.

- Provide comprehensive environmental mitigation.
- Partner with state and federal resource agencies.
- Provide higher-value environmental benefits such as habitat protection, connectivity, and resource preservation.

M2020 Action Plan:

The Board provided a policy to allocate approximately 80 percent of the revenues to acquisitions and 20 percent to fund restoration projects. This policy will need to be revisited periodically to ensure it continues to meet program needs. The M2020 Plan for the Mitigation Program recommends five major initiatives through 2020 consistent with the above framework.

1. Execute the Natural Community Conservation Plan / Habitat Conservation Plan (NCCP/HCP) Implementing Agreement.
2. Complete resource management plans to determine appropriate access on acquired properties.
3. Revisit program expenditures / revenues to determine potential future funding needs.
4. Establish and maintain long-term endowment accounts for acquisition properties.
5. Establish long term management scheme for acquired properties and transition to appropriate land manager(s).

Mitigation Program

Description:

In July 2010, OCTA began preparing a conservation plan called the NCCP / HCP, which examines habitat resources within broad geographic areas and identifies conservation and mitigation measures to protect habitat and species.

This analysis is expected to be completed in early 2013, however, the master agreement includes an "advance credit" provision that allows funds to be allocated prior to completion of the NCCP / HCP.

The public will have an opportunity to comment on the draft NCCP / HCP during a 45-day public comment period that will take place in fall 2012. This will give interested parties the opportunity to provide input on the NCCP / HCP, as well as on the Mitigation Program.

Cost:

In summer 2007, the Board approved approximately \$55 million as part of the EAP. Accordingly, of the \$55 million, \$42 million and \$10.5 million were allocated for acquisition and restoration, respectively. An additional \$2.5 million was allocated for development of the NCCP / HCP and other professional services such as appraisals and conducting biological surveys.

Status:

In 2011, OCTA acquired five properties totaling approximately 950 acres of open space in the Trabuco Canyon area and in Brea.

In September 2010, a total of \$5.5 million was allocated to restore approximately 180 acres of open space lands throughout Orange County.

In June 2011, approximately \$5 million was allocated for a second round of restoration funds. In May 2012, the Board approved the use of those funds to restore another 214 acres.

Present Day:

Approximately \$7 million remains for additional acquisitions, and the funds are expected to be allocated within 2012.

Subsequent to the completion of the \$55 million EAP expenditures, a revisit of the program expenditures and revenues will assist OCTA in determining potential future funding needs. This will be dependent on the sales tax revenue stream and how much additional acquisitions and restoration projects are needed to fulfill the commitment of the NCCP / HCP.

Benefits:

The completed NCCP/HCP is a tool by which OCTA will obtain biological permits for the 13 M2 freeway projects. This comprehensive process will enable OCTA to streamline future M2 freeway improvement projects.

Mitigation Program

External Funding:

Examples of external funding include:

- United State Fish and Wildlife Service (USFWS) contribution toward the acquisition of open space land in the Trabuco Canyon area.
- USFWS Habitat Conservation Planning Assistant Grant to help fund the completion of the NCCP / HCP.
- Restoration project sponsors utilize external funds to implement their projects.

Risks:

The completion of the NCCP / HCP is critical in order to ensure timely implementation of various M2 freeway improvement projects.

Successful implementation of restoration projects will ensure OCTA meets the fulfillment of the NCCP/HCP.

Related Projects:

Not applicable.

Involved Agencies:

California Department of Fish and Game, USFWS, Caltrans, US Army Corps of Engineers, and the environmental community.

Assumptions:

This program is assumed to be funded primarily on a pay-as-you-go basis in the future.

References:

- Conservation Assessment of Orange County
- California Natural Diversity Database
- OCTA's Comprehensive Business Plan



Streets and Roads Projects

M2 Streets & Roads Programs



- ⊙ Regional Capacity Program**
 (not mapped)
 - Up to 300 miles of roadway improvements
 - Competitive Program with annual call for projects

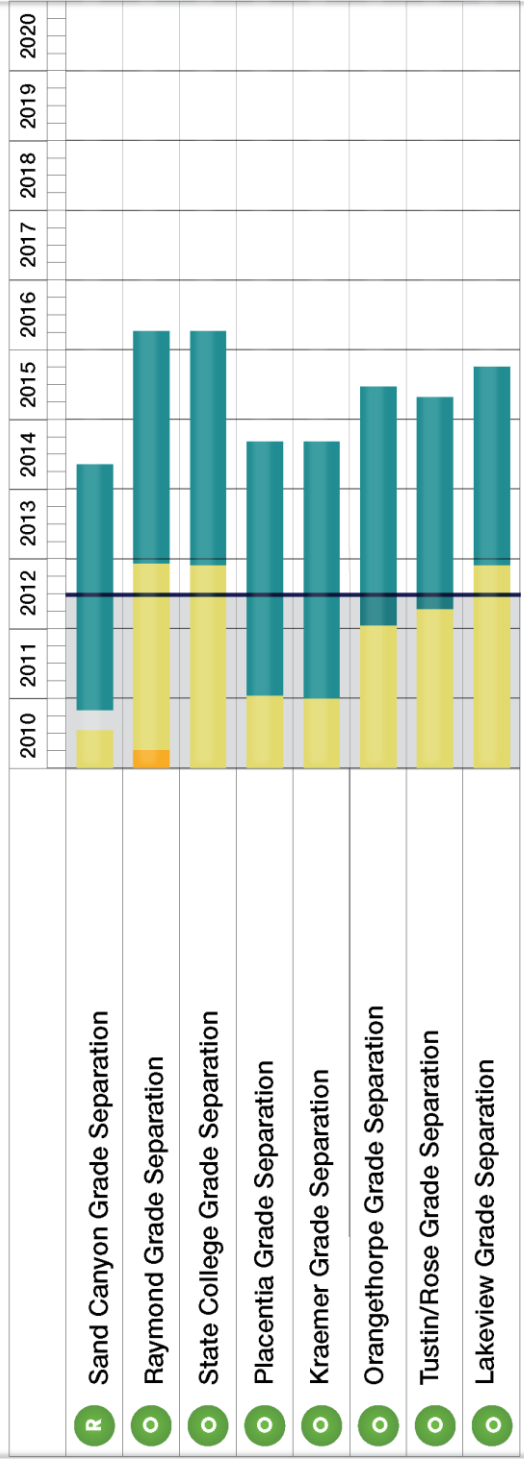
- ⊙ Local Fair Share Program**
 (not mapped)
 - Street maintenance and improvements

- P Regional traffic Signal Synchronization Program**
 (See grid above)
 - Over 2,000 coordinated signals

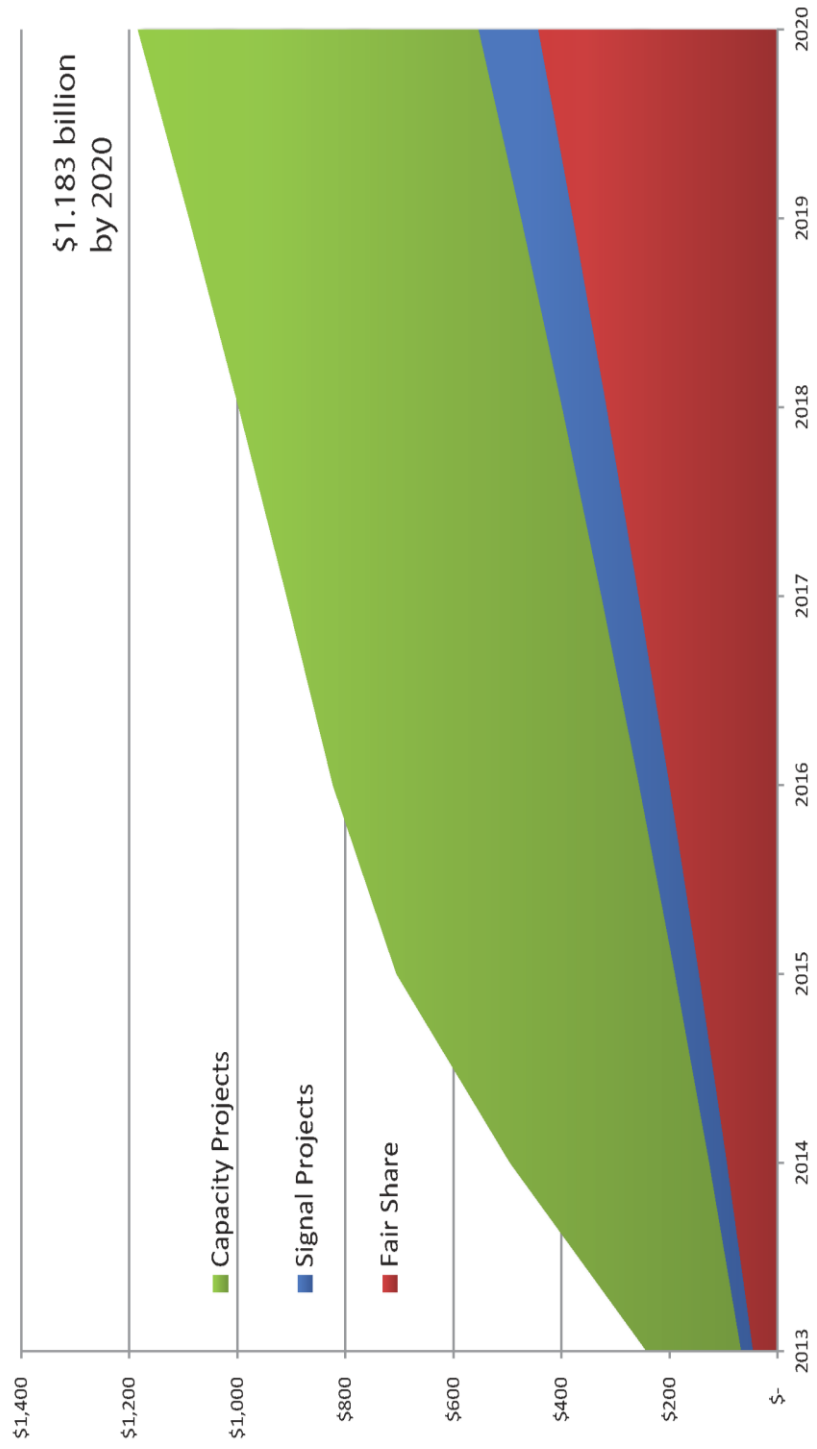
M2020 Projects

M2020 Grade Separation Projects

Environmental Design/Right of Way Construction



M2 Streets and Roads Program Expenditures



Streets and Roads



Overview:

Local streets provide the capacity for the movement of people and goods which is essential to Orange County's commerce and vitality. Streets carry approximately half of Orange County's car and truck traffic and nearly all of Orange County's bicycle and pedestrian traffic. Keeping people moving on local streets is an essential function of the M2 funding programs for local streets. To meet this broad mobility goal, the M2020 Plan includes the following framework for the streets and roads program:

- Target M2 competitive program funds for streets with the worst traffic congestion.
- Maintain the value of investments in streets by synchronizing traffic signals and keeping pavement in good condition.
- Keep traffic moving on Orange County streets by constructing key grade separations along the Burlington Northern Santa Fe Railway (BNSF) corridor in north Orange County.
- Consider all modes of travel when planning for added street capacity.

M2020 Action Plan:

The M2020 Action Plan for streets and roads recommends several major initiatives through 2020, consistent with the previous framework.

Invest nearly \$1.2 billion in streets and road improvements by 2020 (including state, federal, and local funds):

1. Provide up to \$175 million in Project O competitive funds by 2020.
2. Award up to \$110 million in Project P competitive funds by 2020, targeting 2,000 signals for synchronization.
3. Encourage local agencies to invest the projected \$443 million in M2 fair share funds in street maintenance and rehabilitation to keep pavement in good condition.
4. Complete seven Orangethorpe Corridor grade separations (OC Bridges) by 2016 at a cost of approximately \$455 million during the plan period.
5. Update the Master Plan of Arterial Highways Guidance for multi-modal corridors by mid-2013.
6. Issue periodic calls for projects for bicycle and pedestrian projects, contingent on the availability of federal Congestion Mitigation Air Quality funds.

O. Regional Capacity Program

Description:

This program, in combination with local matching funds, provides a funding source to complete the Orange County Master Plan of Arterial Highways (MPAH). The MPAH includes future roadway improvements and considerations for bicycle and pedestrian components as part of each project as applicable to local conditions.

The program also provides for intersection improvements and other projects to help improve street operations and reduce congestion. This program includes funding for completion of seven grade separations that will eliminate car and train conflicts along the Burlington Northern Santa Fe Railway in northern Orange County. The program allocates funds through a process that recommends funding for projects that relieve congestion, are cost effective, and can proceed to construction quickly.

Cost (Escalated):

\$128 million for new competitive calls for projects between 2013 and 2020 and \$47 million of investments in funding commitments.

Status:

To date, OCTA has awarded Project O funds through two competitive calls for projects.

Present Day:

Approximately 890 miles of new lanes remain to be completed, mostly in the form of widening existing streets to ultimate planned widths. Seven grade separations in northern Orange County are also part of this program. Completion of the entire system will

result in better traffic flow, expanded travel choices, and a more efficient transportation system.

Benefits:

Improvements funded through this program (including local matching funds) are projected to improve peak period arterial speeds by nearly 27 percent by 2035 compared to not constructing those projects.

External Funding:

Local agencies are required to provide a 50 percent minimum local match. Matching funds may be reduced contingent on participation in pavement and signal programs, as well as use of non-M2 funds for local match.

The Orangethorpe Corridor project (“OC Bridges”) funding includes 75 percent in external state, federal, and local funds.

Risks:

Local agencies must meet eligibility requirements to receive funding. Local agencies must meet timely use of funds provisions included in M2.

Related Projects:

Project P – Regional Traffic Signal Synchronization Program; Project Q — Local Fair Share Program.

Involved Agencies:

All local agencies (cities and County of Orange).

O. Regional Capacity Program

Assumptions:

Project O is assumed to be funded primarily on a pay-as-you-go basis with bonding for the seven OC Bridges projects. Inter-program borrowing may be necessary to deliver the \$128 million for new calls for projects through 2020. More detailed assumptions are included in the appendices.

References:

- Orange County Master Plan of Arterial Highways Guidelines
- Commuter Bikeways Strategic Plan

P. Regional Traffic Signal Synchronization Program

Description:

Optimizing traffic signal timing is a low-cost, high-benefit approach to reducing congestion and improving traffic flow. Better signal timing results in fewer traffic stops, delays, and pollution, and saves commuters gas and money. M2 includes Project P, which provides funds to local agencies to implement new signal timing on a 750-mile regional network that covers most of Orange County.

Cost (Escalated):

\$110 million for new competitive calls for projects between 2013 and 2020.

Status:

Local agencies and OCTA are currently implementing 17 corridor-based signal synchronization projects for a cost of approximately \$7.4 million in M2 funds. Most of these projects will be implemented by early 2013. Another 24 projects will be implemented by mid-2013 for a cost of approximately \$9.7 million in M2 funds.

Present Day:

Many traffic signal synchronization projects today are limited to segments of roads in individual cities. M2 provides funds to expand these projects to benefit neighboring cities and regional corridors.

Benefits:

Optimizing signal timing offers substantial benefits in reducing traffic delays and improving air quality. As part of prior efforts (completed in 2011), OCTA implemented optimized signal timing on ten corridors with

533 intersections covering 158 miles of roadway. On the average, each project resulted in a 20 percent travel time savings for corridor end-to-end travel, saving commuters time and money for a relatively low investment of \$7.4 million. Future projects may see comparable benefits when combined with capital improvements to reduce physical bottlenecks where appropriate.

External Funding:

Local agencies are required to provide a 20 percent minimum local match. Matching funds may be in-kind services. Future needs for more capital intensive investments as systems age.

Risks:

Local agencies must meet eligibility requirements to receive funding. Local agencies must meet timely use of funds provisions included in M2.

Related Projects:

Project O – Regional Capacity Program; Project Q – Local Fair Share Program.

Involved Agencies:

All local agencies (cities and County of Orange) and Caltrans.

Assumptions:

Project P is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- OCTA's Comprehensive Business Plan

Q. Local Fair Share Program

M2 provides formula funds through Project Q that local agencies may use for a variety of purposes and needs including repairing aging streets, residential street projects, bicycle lanes, and pedestrian safety (plus other transportation uses).

Key among these needs includes pavement preservation, which involves extending the useful life of pavement and avoiding costly street reconstruction. Preserving and maintaining roads in good condition is a key goal of M2 and Project Q in particular.

Cost (Escalated):

\$443 million between 2013 and 2020.

Status:

Orange County streets are in generally good condition on average (with a pavement condition index of 78 based on a recent statewide report). As roadway pavement conditions deteriorate, however, the cost for repairs increases exponentially. For example, it costs 12 times less to maintain pavement in good condition compared to pavement that is at the end of its service life.

Present Day:

The cost of street rehabilitation has increased substantially in recent years, and gas tax revenues have not kept pace with these increases. Asphalt prices, in particular, have increased more than ten-fold since 1997, and this has a direct impact on the costs of street maintenance and rehabilitation.

Benefits:

Investments in streets and roads save future costs, keeps traffic moving, and offers expanded travel choices.

Funds are also flexible and can be used for matching funds for bike and pedestrian facilities, as well as local transit services.

External Funding:

In addition to \$443 million of M2 funds invested between 2013 and 2020, local agencies are expected to spend approximately \$2 billion in general fund and gas tax revenues during the same period.

Risks:

Local agencies must meet eligibility requirements to receive funding. Local agencies must meet timely use of funds provisions included in M2.

Related Projects:

Project O – Regional Capacity Program; Project P – Regional Traffic Signal Synchronization.

Involved Agencies:

All local agencies (cities and County of Orange).

Assumptions:

Project Q is assumed to be funded on a pay-as-you-go basis.

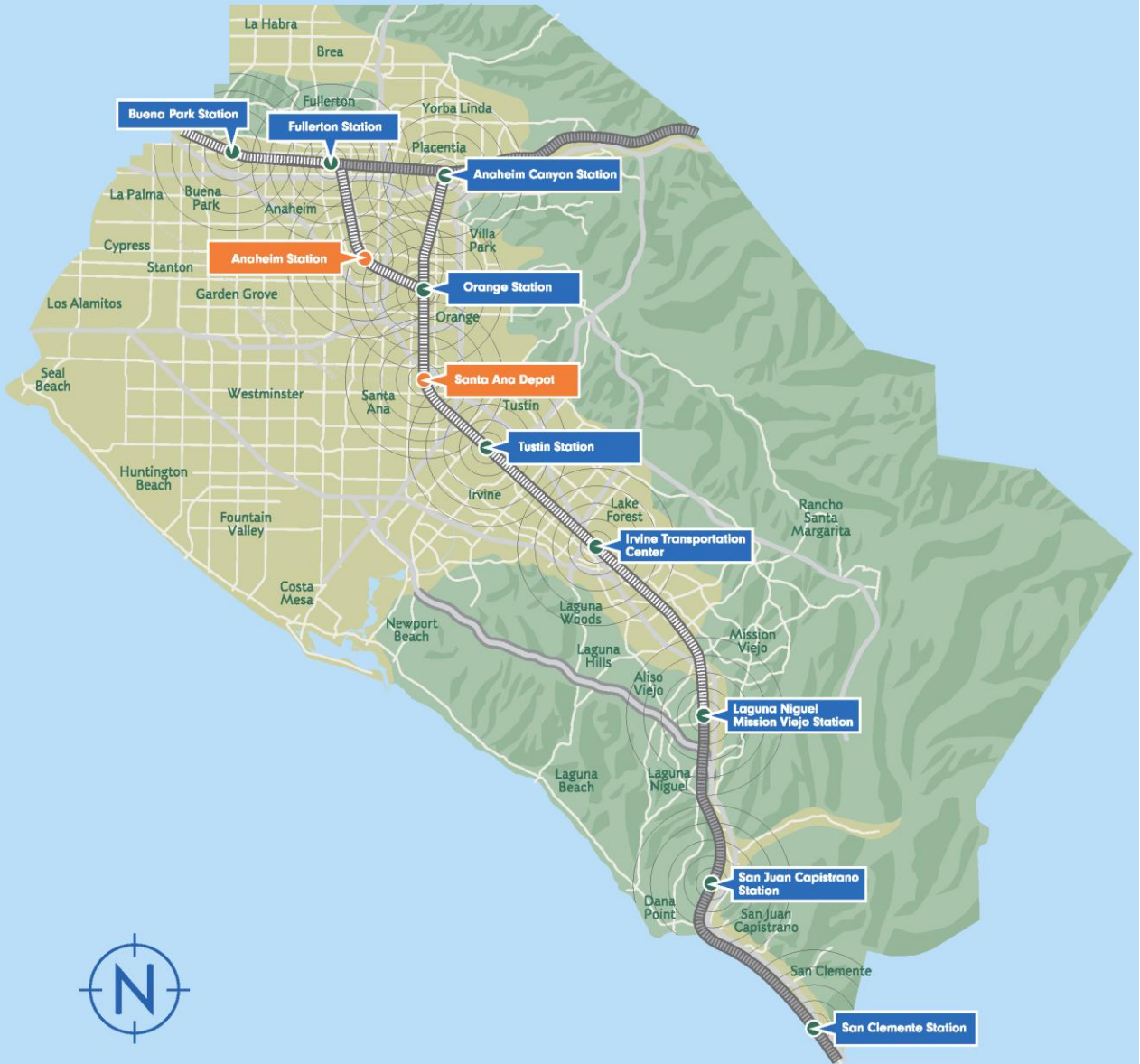
References:

- M2 Eligibility Guidelines
- California Statewide Local Streets and Roads Needs Assessment
- OCTA's Comprehensive Business Plan



Transit Programs

M2 Transit Projects



R High Frequency Metrolink Service (—●— = existing rail line/stations)

S Transit Extensions to Metrolink (●)
 - Anaheim Rapid Connection
 - Santa Ana/Garden Grove Fixed Guideway

T Metrolink Gateways (not mapped)

U Expand Mobility Choices for Seniors and Persons with Disabilities (countywide; not mapped)

V Community Based Transit/Circulators (countywide; not mapped)

W Safe Transit Stops (countywide; not mapped)

Transit



Overview:

Building a visionary transit system that is safe, clean, and convenient, focuses on Orange County's transportation future. Providing mobility choices and connectivity for Orange County residents and workers is a key component of the overall M2 Plan. To meet this broad mobility goal, the M2020 Plan includes the following framework for the transit program:

- Increase capacity and frequency of train service on Metrolink lines serving Orange County.
- Broaden the reach of the Metrolink system to other Orange County cities, communities, employment, and activity centers with locally-based transit extensions through a competitive process.
- Provide local improvements to stations on the Orange County Metrolink corridor necessary to connect to planned higher speed rail systems.
- Provide services and programs to meet the growing transportation needs of seniors and persons with disabilities.
- Establish a competitive program for local jurisdictions to develop local bus transit services such as community-based circulators.
- Provide for additional passenger amenities at 100 of the busiest transit stops across the County to increase transit safety and comfort.

M2020 Plan:

The M2020 Plan for transit recommends eight major initiatives through 2020, consistent with the above framework.

1. Increase Metrolink frequency and expand daily train capacity by 15 percent, as well as improve stations and operating facilities.
2. Extend high-frequency Metrolink service into Los Angeles, contingent upon cooperation and participation from route partners.
3. Begin construction on Board-approved fixed guideway extensions to Metrolink subject to receipt of federal New Starts funding.
4. Initiate competitive programs with local agencies for implementation of bus / van connections to Metrolink.
5. Deliver improvements to connect Orange County to planned higher speed rail projects.
6. Provide \$75 million to expand mobility choices for seniors and persons with disabilities.
7. Provide \$50 million to encourage development, implementation, and operation of local community transit services.
8. Provide \$5.5 million for passenger amenities at the busiest bus stops.

R. High Frequency Metrolink Service

Description:

The program provides for sustained and potential increased rail service and capacity along the three Metrolink lines serving Orange County. The program also provides for safety and operational improvements to the railroad infrastructure necessary to support existing and expanded train service, including grade crossing improvements, track improvements, signal and communications system improvements, as well as other projects as necessary to support the rail system. Grade separations will also be considered as funding permits.

Cost (Escalated):

\$221.5 million between 2013 and 2020.

Status:

Most capital improvements required for expansion of Metrolink service during mid-day are complete. OCTA and partner agencies are working together with Metrolink and BNSF to implement improvements allowing expansion of service to Los Angeles. OCTA is also working with the Los Angeles-San Diego-San Luis Obispo Rail (LOSSAN) Corridor agencies to enact legislation to support better coordination of services in the corridor for greater integration.

Present Day:

Metrolink is currently operating 48 weekday trains in Orange County. To date, rail safety enhancements have been completed and quiet zones have been established in Anaheim, Irvine, Orange, San Clemente, Santa Ana, and Tustin.

Benefits:

Project R allows for sustained operation and enhanced capacity of Metrolink trains serving Orange County, providing a viable alternative to vehicle travel, thereby reducing congestion on crowded roadways and freeways.

During the peak hour, Metrolink carries the equivalent number of passengers that would fill one freeway lane on the I-5.

External Funding:

Propositions 1A, 1B, and 116, and Federal 5309 funding.

Risks:

The current sales tax revenue projections limit the ability to expand Metrolink service. Expansion to Los Angeles is contingent upon the cooperation and participation of route partner agencies.

Related Projects:

Project S – Transit Connections to Metrolink; Project T – Convert Metrolink Stations to Regional Gateways.

Involved Agencies:

Metrolink, Los Angeles County Metropolitan Transportation Authority, BNSF, and all corridor agencies.

Assumptions:

Funding and operating agreements with partner agencies will be successfully implemented.

References:

OCTA Comprehensive Business Plan

S. Transit Extensions to Metrolink

Description:

The Metrolink corridor provides a backbone for a high-capacity transit system linking communities within the central core of Orange County, and to the north and south of Orange County. Approximately two-thirds of Orange County's population and employment centers are within a four-mile radius of Metrolink stations.

This project established a competitive program for local jurisdictions to broaden the reach of Metrolink to other Orange County cities, communities, and activity centers via transit to connect passengers to their final destinations.

Cost (Escalated):

\$575 million including external funding.

Status:

Fixed Guideway

Through a competitive process, two projects are moving through the fixed guideway process. Both projects, one in the cities of Santa Ana and Garden Grove, and the other in the City of Anaheim, are in the process of conducting alternatives analysis and environmental review.

Rubber Tire

OCTA's first call for projects was issued in March 2012, and two proposals (two cities each) were received.

Present Day:

Maintaining and growing Metrolink ridership relies on convenient and seamless bus and rail connections. Currently, OCTA fixed bus service and company shuttles are the prime providers of transit connections.

Benefits:

The program will provide expanded transit access to the backbone Metrolink system, thereby allowing Metrolink commuters to connect to other parts of the County without using an automobile.

External Funding:

For construction of the two fixed guideway projects, participating cities are required to provide a ten percent match (this equals approximately \$58 million). In addition, approximately \$300 million in Federal New Starts grants and other federal and state funding is needed to deliver the projects.

Risks:

For the fixed guideway projects, the federal capital funding grant program, New Starts, is highly competitive and a technically rigorous program. There is a consistent shortfall between the number of qualified projects seeking New Starts and funding availability. As grantee, OCTA must demonstrate it has the technical, financial, and legal capacity to deliver both fixed guideway projects on time and on budget prior to the Federal Transit Administration (FTA), allowing either project to move forward into design / construction.

S. Transit Extensions to Metrolink

Related Projects:

Project R – High Frequency Metrolink Service; Project T – Convert Metrolink Stations to Regional Gateways; and Project V – Community Based Circulators.

Involved Agencies:

Local jurisdictions, Federal Transit Administration (FTA).

Assumptions:

One million dollars annually set aside for operating cost of rubber tire systems.

The rubber tire program is anticipated to have future calls for projects, based on the level of interest from local jurisdictions.

Local agencies will be able to provide their required match and OCTA, as grantee, will be successful in capturing New Starts funding for the two guideway projects.

References:

- M2 Eligibility Guidelines
- Federal 5309 Funding Guidelines
- OCTA's Comprehensive Business Plan

T. Convert Metrolink Stations to Regional Gateways that Connect Orange County with High-Speed Rail Systems

Description:

This program provides for local improvements to stations along the LOSSAN Corridor in Orange County to facilitate connections to future high-speed rail systems.

The program ensures Orange County's presence in the development and implementation of high-speed rail systems that will serve Orange County.

Cost (Escalated):

\$109.8 million between 2013 and 2020.

Status:

Excluding bond interest cost, OCTA has committed \$81.6 million to support the project.

Present Day:

OCTA held a competitive call for projects in May 2010 for eligible station cities for the development and implementation of station projects in preparation of future high-speed rail systems.

The City of Anaheim received environmental clearance for the Anaheim Regional Transportation Intermodal Center project in early 2012, and anticipates contract award for construction in August 2012.

Benefits:

The project will allow for potential early investment in the Orange County rail system to facilitate the ultimate integration of various high-speed rail systems within the County.

The project will also provide convenient and efficient connections to these high-speed systems for residents, workers, and visitors in Orange County.

External Funding:

Federal 5309 Funding; FTA Bus Livability Grant; Highway Safety Improvement Program Grant; California State Transportation Improvement Program Funding.

Risks:

The high-speed rail programs that would provide future connectivity to Orange County are in the early stages of development and will require prudent planning as to not preclude viable connection to the station projects that precede them.

Related Projects:

California High-Speed Rail System; California Nevada Super Speed Train.

Involved Agencies:

City of Anaheim; California High-Speed Rail Authority; California Nevada Super Speed Train Commission.

Assumptions:

The California High-Speed Rail System will extend to the City of Anaheim as identified in their Revised 2012 Business Plan. The California Nevada Super Speed Train could also connect to the City of Anaheim via Las Vegas and Ontario.

T. Convert Metrolink Stations to Regional Gateways that Connect Orange County with High-Speed Rail Systems

References:

- M2 Eligibility Guidelines
- California High-Speed Rail Revised 2012 Business Plan
- California Nevada Super Speed Train Project Definition

U. Expand Mobility Choices for Seniors and Persons with Disabilities

Description: M2 Project U provides funding to support mobility choices for seniors and persons with disabilities. Project U funds the fare stabilization program, the OCTA Senior Mobility Program (SMP) and the County of Orange Senior Non-Emergency Medical Transportation Program (SNEMT). All of these programs support OCTA's effort to expand mobility resources for seniors.

The SMP was established in 2001 and for the first ten years, was supported with Transit Development Act funds. The allocation of M2 Project U funding ensures the continuation of dedicated resources to sustain this program for the next 30 years. The fare stabilization program ensures that fares for seniors and persons with disabilities continue to be discounted at the same percentage as 2006 levels.

Cost (Escalated):

\$74.1 million on a pay-as-you-go basis between 2013 through 2020.

Status: Currently, 25 cities participate in the SMP, offering a variety of senior transportation resources for medical, nutrition, shopping, and social trips. The County of Orange established the SNEMT in 2002, utilizing Tobacco Settlement Revenue (TSR) to fund the program. M2 Project U funding supplements existing TSR resources to expand the capacity of the program and increase the number of available SNEMT trips.

Additionally, projected revenues for the fare stabilization program are expected to be sufficient until FY 2034-35.

Present Day: Studies of senior mobility needs have identified seniors' preference for utilizing local, community-based transportation services rather than countywide or regional services. The SMP allows participating cities to identify the specific mobility needs of the seniors in their communities and develop transportation programs to best meet those needs with available funding.

The SNEMT fills a gap in senior transportation services, as trips are often provided to seniors who do not qualify for OCTA ACCESS service, or to seniors whose advanced age or profound condition make it difficult to use ACCESS service. The County of Orange currently contracts with three social service agencies to provide SNEMT services, allowing this program to provide enhanced service elements beyond the requirements of ACCESS, a paratransit service that complements OCTA's fixed route bus service and is provided to comply with the Americans with Disabilities Act.

Benefits: M2 funding of these programs, combined with OCTA ACCESS service and other senior transportation services funded with public and private resources, provide a menu of mobility options for Orange County seniors, allowing them to select the service that most appropriately meets their transportation needs.

U. Expand Mobility Choices for Seniors and Persons with Disabilities

External Funding:

Cities contribute a 20 percent match to their SMP services. A variety of funding sources are used by cities for their SMP match requirement, including general fund, Community Development Block Grants, sponsorships, advertising revenue, and administrative in-kind resources. The County of Orange utilizes primarily TSR funds to meet their maintenance of effort (MOE) requirement.

Risks:

Cities must provide matching funds. TSR revenues for the County SNEMT program are declining, which could impact the County's ability to meet their MOE as required in the Ordinance.

Related Projects:

County of Orange SNEMT.

Involved Agencies:

Participating SMP cities include Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Hills, Laguna Niguel, Laguna Woods, La Habra, Lake Forest, Newport Beach, Orange, Placentia, Rancho Santa Margarita, San Clemente, Santa Ana, Seal Beach, Stanton, Tustin, Westminster, and Yorba Linda. The Orange County Office on Aging administers the SNEMT Program.

Assumptions:

Project U is assumed to be funded on a pay-as-you-go basis.

References:

- Project U Funding and Policy Guidelines
- OCTA's Comprehensive Business Plan

V. Community Based Circulators

Description:

Through a competitive process, local jurisdictions can receive funding to develop local bus transit services such as community based circulators, shuttles, and bus trolleys that complement regional bus and rail services, and meet local needs in areas not adequately served by regional transit.

Cost (Escalated):

\$49.5 million on a pay-as-you-go basis between 2013 through 2020.

Status:

No funding has been allocated as of yet. Program guidelines are currently being developed and Board policy direction will be sought in summer 2012. Letters of interest will be requested to gauge city interest in the program.

Present Day:

A need for local community based transit service is regularly expressed by communities.

Benefits:

Community based circulators can provide relief to arterials in high traffic areas, and provide non-auto based mobility options that meet specific local needs.

External Funding:

It is anticipated that the draft guidelines currently under development will include a local match requirement for both capital and any operating funds authorized by the Board.

Risks:

Local agencies must meet eligibility requirements to receive funding. Ability to sustain service will be key to moving projects forward.

Related Projects:

Project S, Transit Extensions to Metrolink (some Project S and V routes could serve dual purposes)

Involved Agencies:

OCTA and participating cities.

Assumptions:

Project V is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- Project V Guidelines (under development)
- OCTA's Comprehensive Business Plan

W. Safe Transit Stops

Description:

The program provides for passenger amenities at the 100 busiest transit stops across Orange County. The intent is to assist bus riders transferring between bus lines and provide improved passenger amenities.

Cost (Escalated):

\$5.5 million on a pay-as-you-go basis between 2013 through 2020.

Status:

Staff has identified potential locations for amenity upgrades based on passenger boardings. On-call services are being sought to assist in development of the program to include preparing program guidelines and identifying associated regulatory issues, including Title VI and environmental justice concerns, performing cost/benefit analyses for proposed amenity enhancements, identifying financial strategies to maintain enhancements into the future, and preparing an implementation plan. On-call services expected to be available in first quarter of FY 2012-13, and draft guidelines will be ready for consideration by the Board by the end of 2012.

Present Day:

OCTA bus stops currently do not have real-time schedule and arrival time information, and some high volume stops lack passenger amenities commensurate with the volume of riders.

Benefits:

Passenger information and amenities such as real-time information and better lighting at key stops would be a significant benefit for the customer.

External Funding:

FTA funds from both 5307 and 5309.

Risks:

Depending on the amenities selected, long term maintenance and operating costs could be hard to sustain.

Traditional real-time passenger information systems may be superseded by the onset of mobile phones providing similar information.

Related Projects:

Cities are responsible for amenities at bus stops. Future city-sponsored projects are unknown.

Involved Agencies:

All local agencies (cities and County of Orange).

Assumptions:

Project W is assumed to be funded on a pay-as-you-go basis.

References:

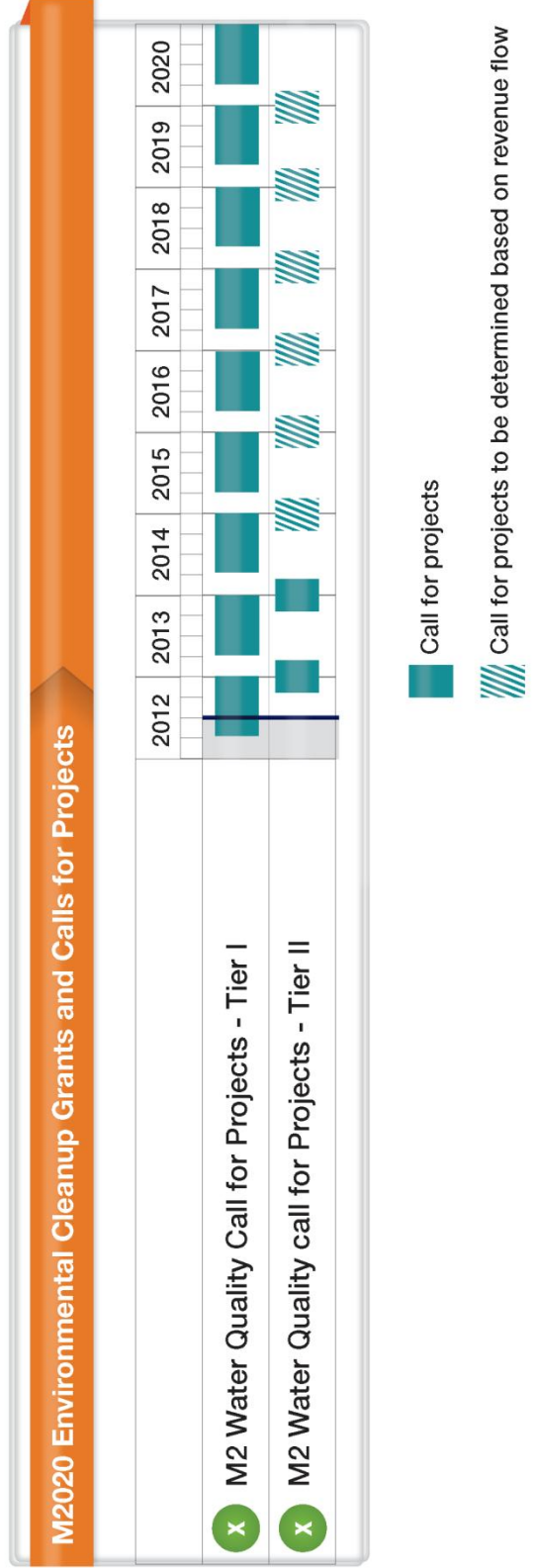
- M2 Eligibility Guidelines
- Project W Guidelines (under development)
- OCTA's Comprehensive Business Plan



Environmental Cleanup



M2020 Projects



Environmental Cleanup Allocation Program



Overview:

The OCTA Environmental Cleanup Program (ECP) provides for the allocation of approximately \$300 million to improve overall water quality in Orange County from transportation-related pollution. The ECP was approved by Orange County voters under the M2 half-cent sales tax for transportation improvements in 2006.

In August 2007, the OCTA Board approved a five-year M2 EAP, covering the years 2007 to 2012, to advance the implementation of several key M2 projects, including the ECP.

To adhere to the promise of M2, the M2020 Plan includes the following framework for the Program:

- Provide supplemental funds (not supplant) for existing transportation related water quality programs
- Allocate funds on a competitive basis to improve water quality standards in Orange County
- Reduce transportation-generated pollutants along Orange County's streets, roads and freeways
- Implement best management practices to improve runoff from streets, roads and freeways

M2020 Action Plan:

The M2020 Action Plan for the ECP recommends three major initiatives through 2020 consistent with the above framework.

1. Allocate competitive Tier 1 Grant Program (up to \$19.5 million) for trash/debris removal
2. Allocate competitive Tier 2 Grant Program (up to \$38 million) for regional scale water quality improvement projects
3. Continue to assess needed improvements throughout the County taking cost benefit into consideration

X. Water Quality Program

Description:

In May 2010, the Board approved a two-tiered approach to fund the M2 Program. The Tier 1 Grant Program is designed to mitigate the more visible forms of pollutants, such as litter and debris that collect on roadways and in storm drains. Tier 1 consists of funding equipment purchases and upgrades to existing catch basins and related best management practices, such as screens and other low-flow diversion devices.

The Tier 2 Grant Program consists of funding regional, potentially multi-jurisdictional, capital-intensive projects. Examples include constructed wetlands, detention / infiltration basins, and bioswales which mitigate pollutants such as heavy metals, organic chemicals, and sediment.

Cost:

A total of \$19.5 million is available for the Tier 1 program over a seven-year period from FY 2011-12 through FY 2017-2018. The Tier 2 program will be funded beginning in FY 2012-13 using bond financing revenues with up to \$38 million allocated through FY 2015-16. Beyond FY 2015-16, funding will be based on a pay-as-you-go basis.

Status:

The first Tier 1 call for projects was issued in February 2011. In August 2011, the Board approved just over \$2.8 million to fund 34 projects in 23 cities and the County of Orange.

Present Day:

The second Tier 1 call for projects was between February 21, 2012 and April 20, 2012.

In August 2012, the Board authorized funding of 33 projects totaling \$2.76 million to 25 cities plus the County of Orange for the second Tier 1 call for projects. To date, 67 projects totaling over \$5.5 million have been allocated for two Tier 1 calls for projects.

Benefits:

Improvements funded through this program (including local matching funds) will improve overall water quality in Orange County. Funds are allocated on a countywide competitive basis to assist jurisdictions in meeting the Clean Water Act for controlling transportation-generated pollution.

External Funding:

Local agencies are required to provide a 25 percent (Tier 1) and 50 percent (Tier 2) minimum local match. Tier 2 matching funds may be reduced depending on project readiness and operations and maintenance above the ten-year minimum requirement.

Risks:

Local agencies must meet eligibility requirements to receive funding. Local agencies must meet timely use of funds provisions included in M2.

Ability to balance the benefits of regional M2 investments with local expectations for localized investments.

Related Projects:

Not Applicable.

X. Water Quality Program

Involved Agencies:

All local agencies (cities and County of Orange). Third parties such as water and wastewater public entities, environmental organizations, non-profit groups, and homeowner's associations cannot be a lead agency applicant; however, they could jointly apply with an eligible applicant.

Assumptions:

Funds will be allocated on a countywide competitive basis to assist jurisdictions with improving water quality related to transportation pollution.

References:

- Tier 2 Grant Program Planning Study
- OCTA's Comprehensive Business Plan



Outreach Program



M2020 Outreach Program March – June 2012

OCTA conducted outreach efforts from March to June 2012 to gain input on the proposals included in M2020 to accelerate many of the improvements called for in the M2 Investment Plan.

The goal of the M2020 outreach program was to gather feedback on accelerating M2 from a broad spectrum of organizations. Qualitative, cost-effective tools, including OCTA's website and speaker's bureau presentations, were used to gauge public interest in acceleration, as well as identify priorities. In addition, OCTA's public committees, which represent a wide variety of constituents, provided input on M2020 and gave insight on issues and potential solutions. See the M2020 Outreach Log for more details.

The following organizations provided input:

- UCI (Engineering Group)
- Orange County City Managers Association
- Orange County Business Council/OC Moves
- South County Mayors Association
- Santa Ana Rotary
- OCTA Technical Advisory Committee
- Women in Transportation Seminar
- American Society of Civil Engineers
- American Council of Engineering Companies
- Orange County Taxpayers Association
- Friends of Harbors, Beaches & Parks/Environmental Coalition
- OC Planning Directors
- American Public Works Association
- American Planning Association
- Tustin Rotary
- Anaheim Chamber Legislative Committee
- International Chinese Transportation Professionals Association
- Construction Management Association of America

OCTA's Public Committees also provided input:

- I-405 Stakeholder Working Group
- OCTA Citizens Advisory Committee
- OCTA Special Needs Advisory Committee
- Measure M Taxpayers Oversight Committee
- Measure M Environmental Clean Up Allocation Committee

In addition, a homepage for M2020 was added to the OCTA website so that members of the public could see the proposals online. The website was promoted through e-blasts and press releases. From March through July 2012, there were nearly 3,000 hits to the M2020 website.

- In general, most groups were in favor of the concept of accelerating M2 improvements. While the cost of bonding was mentioned a few times, most participants saw the benefit of expediting projects and providing enhanced mobility sooner.
- Comments related to the I-405 Improvement Project alternatives were mixed – generally positive, but with a few concerns:
 - The technical groups understood the throughput benefits of the Express Lanes option.
 - While most groups saw the benefit of having additional revenues for future projects, there were questions on how it could be spent.
 - There was some feedback on the inequity of toll lanes.
 - There was also some concern about changing the HOV requirement from 2+ to 3+ lanes.
 - Several participants mentioned the need to ensure regional connectivity of toll lanes (i.e., what are Los Angeles' plans?).
 - The environmental groups were concerned with consistency with AB 32/ SB 375 and the sustainable communities strategy, and encouraged the use of transit on the toll lanes.
- For streets and roads projects, participants stressed the importance of gap closure projects, bikeways, and fixing missing links.
- For transit, incorporating bus rapid transit (BRT) to get people out of their cars was mentioned several times.
- For environmental mitigation, participants discussed the importance of management of acquired properties and the need to prevent misuse.

Once the Board takes action on M2020, outreach efforts will continue to educate the public on the next steps and future improvements. OCTA's public committees will continue to play a large role in giving feedback on priorities and providing information to their various constituencies.



M2020 Outreach Log

Organization	Date	Comments/Questions
UCI (Engineering Group)	March 2	<ul style="list-style-type: none"> Express lanes make sense. Like options.
Orange County City Managers Association (OCCMA)	March 7	<ul style="list-style-type: none"> Are there ingress/egress points on the express facility?
Orange County Business Council Infrastructure Committee	March 13	<ul style="list-style-type: none"> What are the major differences in Alternatives 1, 2, and 3 for Interstate 405? Do you think financing will result in cost savings over the life of Measure M?
South County Mayors Association	March 15	<ul style="list-style-type: none"> How do we help our constituents understand the value of Alternative 3?
Santa Ana Rotary	March 28	<ul style="list-style-type: none"> General support for acceleration of projects.
OCTA Technical Advisory Committee	March 28	<ul style="list-style-type: none"> Are you available to make council presentations on the M2020 plan? What if the original M2 projections had remained? Why don't options B and C add projects? Why not consider Alternative 2 under option B? The cost is minimal Does OCTA have a legal conflict looking at toll lanes in M2? Can corridor cities receive an advance copy of the I-405 traffic study now? What if you don't receive the projected toll revenue? Will toll surplus be used to leverage other projects?
Measure M Taxpayers Oversight Committee (TOC)	April 10	<ul style="list-style-type: none"> Generally supportive of accelerating projects. Re: I-405 - concern that an existing carpool lane would be taken away and reduce its utility by making it a 3+ express lane which is not mentioned in M2. Need to educate public about benefits of changing from HOV2+ to HOV 3+ on I-405 if toll lanes are built. Who originally paid for the existing HOV lane? Why put the three person restriction on the HOV express lanes? Why not make the express lanes free if there are two occupants in the car? This would solve the problem of taking away a public utility. Why does doubling the Express Lanes result in triple the volume? What are the forecasts for Option 3 (three people per car free) if it was free for two people per car? Do the proposed express lanes preclude anyone without a transponder? What is the cost of financing Measure M? What would happen if the current 2011 projections slipped back to the 2010 numbers?



M2020 Outreach Log

Organization	Date	Comments/Questions
OCTA Citizens Advisory Committee (CAC)	April 17	<ul style="list-style-type: none"> • Straw poll – majority of CAC supports accelerating improvements. • Most feel high-occupancy toll (HOT) lanes are a good idea. • Concern about equity issue because there will not be a complete HOV network. • Do not do as LA and take away existing HOV lanes. • Need a regional context in terms of a network – what is LA doing? • M2020 Transit: <ul style="list-style-type: none"> ○ Need regional connectivity in transit. ○ Put BRT on HOT lanes. • M2020 street projects: gap closures, bikeways, fix missing links.
Women in Transportation Seminar (WTS-OC)	April 18	<ul style="list-style-type: none"> • Is the footprint the same for all I-405 alternatives? • How can the consulting community help? • Are you getting pushback from Professional Engineers in California? • Is public-private partnership “P3” an option for express facility? • Where can excess toll revenue be spent? • Are there ingress and egress points in express facility?
American Society of Civil Engineers Orange County (ASCE)	April 23	<ul style="list-style-type: none"> • General support for acceleration of projects.
American Council of Engineering Companies (ACEC)	April 25	<ul style="list-style-type: none"> • Generally, the group supports Measure M bonds and toll bonds and supports building Alternative 3. • What is the Federal Highway Administration’s stand on tolling and how can the ACEC help? • Do we have design build legislation and if not, what is our plan to get it? • AB 1010 (91 Express Lanes legislation) provided guidance on how net toll revenues could be spent – what is the plan for the I-405?
Orange County Taxpayer Association	April 26	<ul style="list-style-type: none"> • Generally supportive of the plan. • Where are the access points on the I-405 Alternative 3 Express Lanes? • How does the State Route-91 Express Lanes work?



M2020 Outreach Log

Organization	Date	Comments/Questions
Friends of Harbors, Beaches & Parks/ Environmental Coalition	May 1	<p>M2020 Overall:</p> <ul style="list-style-type: none"> • Spending millions on the I-405 may not be best use of funds. • The HOT lane alternative may not be a viable option. • The project's goal should strive to get people out of cars. • Project needs to consider other modes of transportation (e.g. rail and transit). • Political constraints are understood, but OCTA needs to consider other options that are consistent with SB 375 (greenhouse gas) - How are we addressing AB 32/SB 375? • The project should consider BRT - need high quality buses. • What does the Southern California Association of Governments' Regional Transportation Plan consider? • Acceleration needs to be "aware of" sustainable communities strategy • Important to protect wildlife corridor under the I-405 near the El Toro "Y" area. • What kind of commitments does LA have to I-405 lane additions? • Adding Metrolink trains doesn't help those along I-405 corridor without a connection. • Need another rail line to connect with LA. <p>Environmental Mitigation Program:</p> <ul style="list-style-type: none"> • Oversight is crucial. • How do you know if you allocated enough to cover management costs? • What are the costs & components to management? • Does OCTA have legislative ability to put forth ordinances regarding misuse? • Is OCTA being pressured to provide access to sensitive properties? • Mitigation purpose "trumps" access. • Education is key to those who want access. • Does the Water Quality Program help meet new regulations?
Measure M Environmental Clean-up Allocation Committee (ECAC)	May 10	<ul style="list-style-type: none"> • How does the Signal Synchronization Program work? How do they select corridors? (Seen success and want more). • What happens once you have completed a large portion of the Measure M Freeway Program and you still have years left without money? • Express lane alternative seems like the way to go. Is there a staff position on it? • Is the financing plan for M2020 program safe? • Why not bond all programs to accelerate? • Do we have jobs numbers for what M2020 will provide?
OC Planning Directors	May 10	<ul style="list-style-type: none"> • Has OCTA considered the impacts of slower economic growth in the development of the M2020 Plan? • Will there be intermediate access points to the I-405 express lanes? • Will the express lanes be physically separated? • Will the express lane pricing vary according to congestion levels? • Will there be more information on the throughput of alternative 2 versus alternative 3 in the environmental impact report? • OCTA should consider providing more bus service between Fullerton train station and job centers in Brea.



M2020 Outreach Log

Organization	Date	Comments/Questions
American Planning Association – Orange County Chapter	May 17	<ul style="list-style-type: none"> OCTA should reach out to local utilities to ensure project coordination. Wouldn't I-405 Alternative 3 move more cars and people? Is OCTA coordinating with Los Angeles on proposed I-405 improvements?
OCTA – Special Needs in Transit Advisory Committee (SNAC)	May 22	<ul style="list-style-type: none"> Will new lane(s) on I-405 end at the Los Angeles County border, resulting in a traffic nightmare similar to the I-5 situation? Will I-405 improvements require OCTA to acquire homes for freeway expansion? Will adding express lanes make much of an impact if most drivers are unable to afford cost? Do M2020 plans incorporate a freeway connection from the 5 South to the 55 North? What impact does the I-5 improvement project between the El Toro "Y" and SR-73 have on improvements already made at the El Toro "Y"? Regarding streets and roads, it seems some jurisdictions have competing interests for signal synchronization strategies How are signal sync projects prioritized in terms of selecting streets on the master plan?
Tustin Rotary	May 31	<ul style="list-style-type: none"> General support for acceleration of projects
Anaheim Chamber of Commerce Legislative Committee	June 7	<ul style="list-style-type: none"> What is Costa Mesa's issue with the project? Are any Senior Mobility Programs being expedited? What about streets and roads projects in Anaheim?
International Chinese Transportation Professionals Assoc.	June 12	<ul style="list-style-type: none"> General support for acceleration of projects
Construction Management Association of America – Southern California Chapter	June 29	<ul style="list-style-type: none"> What are the alternative sources of funding for Alternatives 2 and 3? Have you thought about integrating movable center medians similar to San Diego? What groups have you outreached to in an effort to educate the public? Does Alternative 3 include a carpool lane? Were toll lanes included in the RTP? Do the bridges get reconstructed in all alternatives? Could you potentially add tolling later?



Appendix

M2020 Plan Funding Assumptions



Funding assumptions are included in the M2020 Plan and will be updated as major conditions change. The assumptions were based on M2 revenue forecasts prepared by Orange County universities, future state/federal funding forecasts consistent with current trends, and project/program costs in YOE dollars. Revenues and expenses were merged into a high-level cash flow model that will be subsequently refined in the upcoming plan of finance. Bond assumptions were also included to address projected negative ending balances by year (compared to a pay-as-you-go scenario) in the freeway program. Bond assumptions were constrained to minimum debt coverage ratios. Details on assumed revenues, costs, and debt service are provided below.

Freeway program

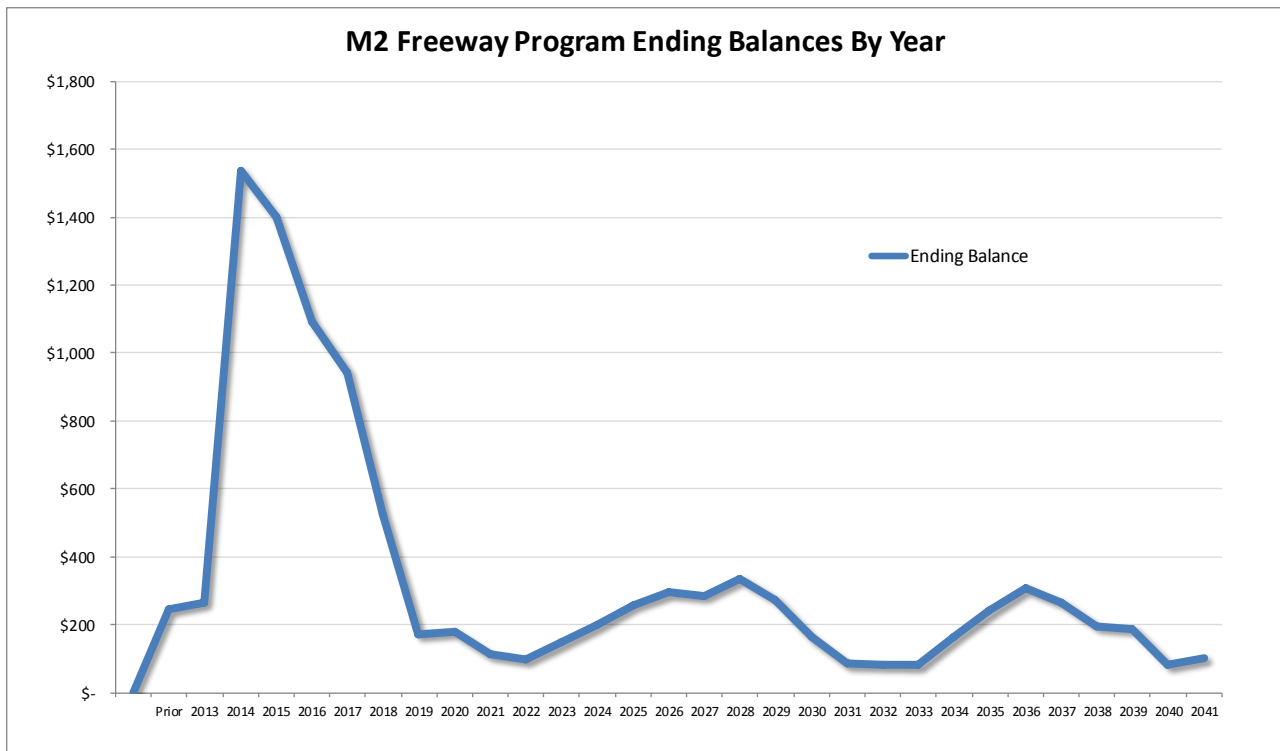
Revenues for the M2 Freeway Program assumed a proportional share (approximately 41 percent) of annual M2 revenue. From inception to 2020, the freeway program would receive approximately \$1.25 billion in M2 revenue (including \$55 million in prior bond proceeds) and \$744 million in state/federal grants (\$673 million of which is already programmed) for a total of \$1.994 billion in total revenue. Costs for the same period would total \$2.973 billion leaving a funding shortfall of close to a billion dollars (\$.979 billion). To bridge this funding gap and keep projects on schedule, bonding would be required, and the plan assumes three new bond issues between 2014 and 2020. Bond issues (treated as revenue source for cash flow purposes) would exceed the forecasted billion dollar freeway program shortfall since debt service payments follow each bond issue. Bonding would be constrained to legal debt coverage ratios, and the plan of finance will refine all bond assumptions.

For M2020 freeway program development, forecasted revenues and costs through 2041 were also tested. This effort was conducted to ensure the complete M2 Freeway Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. For ready-to-go projects (projects currently in environmental or final design), project schedules and costs were based on data provided by OCTA's Project Controls Department. For projects that have not yet entered the environmental phase, conceptual estimates were prepared by RBF and escalated to YOE dollars (with schedules and costs constrained to ending balances by year). These future projects may be advanced based on revenue availability. The table below summarizes revenues and costs assumed in the M2 Freeway Program through 2041 (in YOE dollars).

Projected M2 Freeway Program Revenues, Estimated Costs, and Ending Balances

(Millions of Dollars; Year of Expenditure)

M2 Freeway Project	M2 Projected Revenue <u>A</u>	Programmed Other Revenue <u>B</u>	Estimated Costs (YOE) <u>C</u>	Project Revenues - Costs <u>D = A + B - C</u>
Project A (I-5, SR-55 to SR-57)	\$ 581.76	\$ 46.36	\$ 46.35	\$ 581.76
Project B (I-5, SR-55 to "Y")	\$ 371.58		\$ 728.12	\$ (356.54)
Project C (I-5, South of "Y")	\$ 776.09	\$ 208.04	\$ 818.06	\$ 166.07
Project D (I-5 interchanges)	\$ 319.35	\$ 86.21	\$ 225.35	\$ 180.21
Project E (SR-22 access improvements)	\$ 148.53	\$ 25.60	\$ 25.60	\$ 148.53
Project F (SR-55 improvements)	\$ 453.03		\$ 423.39	\$ 29.64
Project G (SR-57 improvements)	\$ 320.21	\$ 106.30	\$ 356.51	\$ 70.01
Project H (SR-91, I-5 to SR-57)	\$ 173.29	\$ 34.95	\$ 72.77	\$ 135.47
Project I (SR-91, SR-57 to SR-55)	\$ 515.54	\$ 27.93	\$ 600.69	\$ (57.22)
Project J (SR-91, SR-55 to OC/RC line)	\$ 1,144.95	\$ 137.62	\$ 435.50	\$ 847.07
Project K (I-405, I-605 to SR-55)	\$ 618.89		\$ 1,327.62	\$ (708.73)
Project L (I-405, SR-55 to I-5)	\$ 395.72		\$ 784.34	\$ (388.62)
Project M (I-605 access improvements)	\$ 24.76		\$ 50.06	\$ (25.30)
Project N (Freeway Service Patrol)	\$ 185.67		\$ 185.67	\$ -
Mitigation Program @ 5%	\$ 317.34		\$ 317.34	\$ -
Subtotal M2 Revenues and Costs:	\$ 6,346.70	\$ 673.01	\$ 6,397.37	\$ 622.35
Projected Bond Interest Costs:			\$ 1,247.60	
Column D: Current Projected Balance:	\$ 6,346.70	\$ 673.01	\$ 7,644.97	\$ (625.25)
Additional Revenue to Delivery Program:		\$ 720.00		
Column D: 2041 Projected Balance:	\$ 6,346.70	\$ 1,393.01	\$ 7,644.97	\$ 94.75



Projected revenue by project at 95% of line item estimates to account for mitigation program at 5% of freeway program revenue.

June 2012 revenue estimate.

Assumes \$30 million per year (additional external revenue) from 2018 to 2041 (\$720 million).

Project E was completed as part of the SR-22 widening project.

It should be noted that the prior “2041” plan relies on the future receipt of \$720 million in state/federal revenues. This assumes that \$30 million a year in federal (Surface Transportation Program or Congestion Mitigation Air Quality) or state (State Transportation Improvement Program) funds are available from 2018 to 2041.

These assumptions result in several points in the program with low year-by-year ending balances. Although these are positive balances, the margin leaves minimal flexibility to respond to economic uncertainties, or project scope changes and schedule delays that may result in project cost increases. The tight variance between the costs and funding plan will require that project scopes and schedules be carefully managed and closely monitored given the small margin of safety.

In summary, the analysis shows that despite the economic downturn, the full scope of the M2 Program can be delivered as promised. Although the full program (through 2041) is deliverable, the freeway mode remains tight.

Streets and Roads

The M2 streets and roads program consists of Project O (Regional Capacity Program), Project P (Regional Traffic Signal Synchronization Program), and Project Q (Local Fair Share Program). Combined M2 revenues for these programs assume a proportional share (approximately 30.56 percent) of annual M2 revenue. From inception (2011) to 2020, the streets and roads program would receive approximately \$883 million in M2 revenue, \$123 million in prior bond proceeds, \$433 million in state/federal grants, and \$11.75 million in local/private agencies’ contributions (for the OC Bridges Program), for a total of \$1.45 billion in total revenue. Costs for the same period would total approximately \$1.45 billion (including debt service payments against prior bonding). While the overall streets and roads program balances by 2020, there are several years where internal borrowing may be necessary to address negative ending balances (up to \$97 million in 2015). This issue will be addressed in the plan of finance that may recommend additional bonding or internal borrowing from other M2 programs (if necessary).

The above dollar amounts reflect revenues and costs from M2 inception (2011) to 2020. The M2020 plan focuses on revenues and costs for the eight-year period between FY 2012-13 and 2019-2020. For that period, revenues and expenses balance to approximately \$1.2 billion. Dollar amounts included in the streets and roads portion of the plan generally reference the eight-year plan period (totaling \$1.2 billion).

Transit Program

The M2 transit program consists of Project R (High Frequency Metrolink Service), Project S (Transit Extensions to Metrolink), Project T (Metrolink Gateways), Project U (Seniors/Disabled Persons Mobility Programs), Project V (Community Based Transit/Circulators), and Project W (Safe Transit Stops). Revenues for the M2 Transit Program assume a proportional share (approximately 23.87 percent) of annual M2 revenue. From inception to 2020, the transit program would receive approximately \$600 million in M2 revenue. With the exception of prior bonds issued for Project T, the M2020 Plan assumes that annual proportional revenues will be adequate to meet program cash flow requirements. This includes the assumption that federal grants of \$302 million will be available for the Santa Ana/Garden Grove and Anaheim fixed guideway projects and \$58 million in local match will be provided by local agencies. The upcoming plan of finance will test potential bonding for the M2 portion of the fixed guideway projects (estimated at \$215 million). As a result, the M2 funding portion of the fixed guideway projects may include future bonds.



Comments on M2020 Plan

The M2020 plan was adopted by the OCTA Board on September 10, 2012. The log below reflects comments and questions made during the approval of the M2020 Plan.

Organization	Date	Comments/Questions
Environmental Advocates of Orange County (Melanie Schlotterbeck)	Sept. 10	<ul style="list-style-type: none"> Notes that the M2020 Plan of Finance only includes the planned freeway program and will not include the environmental mitigation program until after the conservation plan is released in early 2013. Wants to ensure that M2020 Plan of Finance can accommodate future, not-yet-determined environmental programs.
Transit Advocates of Orange County (Roy Shahbazian)	Sept. 10	<ul style="list-style-type: none"> Based on customer survey interest in San Diego and Los Angeles as Metrolink destinations, suggests changing M2020 plan goals: <ul style="list-style-type: none"> Change the Metrolink goal (Attachment B, Item 6), to read: "Expand Metrolink service into Los Angeles and coordinate service to allow run-through trains to San Diego, contingent upon funding participation by rail partners." Suggests evaluating possible changes to Project U to increase the scope of fare stabilization. Requests that staff explore the possibility of expanding fare stabilization to low income riders; asks that staff consider a change to the Measure M investment plan to accommodate increased fare stabilization.
Transit Advocates of Orange County (Jane Reifer)	Sept. 10	<ul style="list-style-type: none"> Suggests that Bus Rapid Transit (BRT) be considered as a form of transit extension to Metrolink (Project S), as several of the planned BRT routes connect to Metrolink stations. Asks to expedite Metrolink expansion to Los Angeles / San Diego over expansion within Orange County, in order to provide a larger increase in ridership. Requests that OCTA expand the definition of fare stabilization to include persons of low income, to mitigate future fare increases. Asks that the Anaheim Regional Transportation Intermodal Center (ARTIC) project cover possible costs to the OCTA Bus system caused by redirected bus routes to ARTIC. Suggests that improvements to transit stops (Project W) be expanded beyond 100 stops in order to provide more modest improvements to more transit stations.



Frequently Asked Questions on M2020 Plan

On September 10, 2012, the Board of Directors (Board) adopted the M2020 Plan and deferred a decision on the recommended implementing actions until September 24, 2012. During the M2020 Plan presentation, several questions and comments were made by Board Members, as well as members of the public. Responses to questions are provided below.

Question	Response
<p>1. How can the M2020 Plan be amended?</p>	<p>The M2020 Plan sets the course for the next eight years. Although the plan is set, there are opportunities for adjustments as needed. Adjustments would need to ensure the integrity of the plan is maintained and that changes would not jeopardize the Orange County Transportation Authority's (OCTA) ability to deliver the entire Measure M2 (M2) Plan to the voters as promised. A good example is the Early Action Plan (EAP). The EAP was adopted by the Board in 2007. In 2010, the plan was amended to include additional projects as a result of receiving additional revenue. If additional revenue were to become available or in the event of a significant downturn in revenue, then an amendment or adjustment to the M2020 Plan would likely be made at that time.</p>
<p>2. Can M2 cost savings pay for the incremental cost of Interstate 405 Alternative 2?</p>	<p>The M2 Investment Plan includes Project K (Alternative 1) which would provide for one general purpose (GP) lane in each direction. Alternative 2 would provide for two GP lanes in each direction and is above the M2 commitment made to the voters. If the Board decided to pursue Alternative 2, it would require amending the M2 Transportation Investment Plan to include two lanes, and shifting M2 or other state/federal funds from other projects. Adding the incremental cost of Alternative 2 to the M2020 plan would consume the entire amount of projected freeway program balance. This would severely limit the ability of the OCTA Board to consider advancing other M2 freeway projects in the future. In addition, OCTA would have no flexibility to respond to downward changes in revenue that may occur in the future. For example, M1 freeway program balance dropped by \$142.5 million between 2007 and 2012 (from a forecasted \$172.5 million in 2007 to \$30 million in 2012).</p> <p>In developing the M2020 Plan, OCTA has used conservative revenue and cost assumptions, consistent with past practice in delivery of M1. At the same time, OCTA has taken an ambitious approach towards project delivery to capitalize on favorable construction and bond markets. M2 is the primary funding during the M2020 period. A conservative amount of new external funds are assumed in the M2020 period due to continuing flux in state and federal transportation funding legislation. As such, availability of any additional M2 funding capacity in the M2020 period is critical to the success of the overall plan.</p>

<p>3. How will future inflation impact the M2020 Plan?</p>	<p>The M2020 Plan includes assumptions for project cost escalations, as well as growth in revenues. The M2020 Plan accelerates projects to capitalize on the current low bid climate and the low cost of debt. While sales tax revenues and expenses have trended toward similar levels of inflation in the past, recent experience in cost spikes for structural steel, pavement materials, and other construction items underscore the need to carefully manage costs, expedite projects to the extent possible, and lock-in low debt costs. As part of the existing M2 quarterly reports, the Board will be kept updated on the progress of the plan, any major shifts in assumptions, and the need for adjustments.</p>
<p>4. Can more M2 funding be made available for Project S – Transit Extensions to Metrolink?</p>	<p>The M2020 Plan assumes up to \$575 million in M2 and external funding (including \$58 million in local match funds) for both projects. A plan of finance for the M2020 Plan will be developed and brought to the Board for approval in the coming months. Staff proposes to include language in this plan that will address the concern that if federal New Starts funding is not available, OCTA will look to other state and federal sources to backfill. For example, the plan could include up to \$80 million in future Congestion Mitigation and Air Quality funds to be used in advance of New Starts grants. In addition, staff is working with the cities of Santa Ana/Garden Grove and Anaheim to further refine annual cash flow requirements which could result in additional M2 project funding being available.</p>
<p>5. Can bus rapid transit (BRT) service be funded with M2 Project S funds?</p>	<p>Yes. BRT is an eligible expense under Project S, which provides competitive funding for local jurisdictions to broaden reach of the rail system. To date, OCTA has approved two fixed guideway projects for study and ultimate implementation through a competitive call for projects. Additionally, through another competitive call for projects, OCTA received proposals and awarded funds for the implementation of rubber tire projects. Early in the planning process, BRT was considered by local jurisdictions during Step One of the Go Local Program. However, this type of service was not pursued by local jurisdictions. While local agencies did not propose BRT as part of the latest round of rubber tire call for projects, there may be future opportunities to consider BRT contingent on local agencies' interest and funding availability.</p>
<p>6. Can M2 Project U funds be used to offset or minimize the impacts of fare increases on low income communities?</p>	<p>No. M2, Project U was passed by the voters to specifically expand mobility choices for seniors and persons with disabilities. The plan did not include funds to offset or minimize the impacts of fare increases on low income communities.</p>
<p>7. What's included in the M2020 Plan for the freeway mitigation program?</p>	<p>The intent of the plan is to continue moving forward with the environmental mitigation program as planned. Future expenditures will be discussed and brought through the Environmental Oversight Committee (EOC) to ensure interested parties are represented. The M2020 Plan envisions executing the Natural Community Conservation Plan/ Habitat Conservation Plan implementing agreement, completing the resource management plans, and establishing and maintaining long-term endowment accounts for acquisition properties. Once these actions are in place, the remaining needs and funding available will be known and through the EOC, recommendations for the next steps will be determined.</p>



ORANGE COUNTY TRANSPORTATION AUTHORITY

M2020 Plan Review

Attachment B

M2020 Plan Objectives

Freeways

1. Deliver 14 projects along Interstate 405, Interstate 5, State Route 55, State Route 57, and State Route 91 (Projects A, C, D, E, F, G, H, I, J, and K). This completes two-thirds of the M2 freeway improvements, amounting to nearly \$3 billion in year-of-expenditure (YOE) dollars worth of transportation investments.
2. Complete the environmental phase of all remaining Measure M2 (M2) freeway projects, making these shelf-ready for early delivery as external funds become available (Projects B, D, F, G, I, J, L, and M). This positions the remaining M2 freeway improvements, valued at approximately \$1.4 billion in current YOE dollars (\$2.6 billion) in transportation investment, for complete implementation.

Streets and Roads

3. Invest nearly \$1.2 billion of funding for street and road improvement projects to expand roadway capacity and protect pavement conditions (Projects O, P, and Q).
4. Synchronize 2,000 traffic signals across the County to ease traffic flow (Project P).

Transit

5. Expand Metrolink peak period capacity and address gaps in the existing schedule, as well as make investments to improve rail stations such as the Orange and Laguna Niguel/Mission Viejo stations, and operating facilities (Project R).
6. Expand Metrolink service into Los Angeles contingent upon funding participation from route partners (Project R).
7. Provide up to \$575 million in M2 and external funding (includes \$58 million in local match funds) to implement Board of Directors-selected fixed-guideway projects and proposed/future city projects for bus and van connections to Metrolink (Project S).
8. Deliver improvements to position Orange County to connect to planned statewide higher-speed rail projects (Project T).
9. Provide up to \$75 million of funding to expand mobility choices for seniors and persons with disabilities by stabilizing Orange County Transportation Authority bus fares and providing funds for senior community transportation programs and senior non-emergency medical transportation services (Project U).

10. Provide up to \$50 million of funding to encourage development, implementation, and operation of efficient local community transit services (Project V).

Freeway Environmental Mitigation

11. Secure the necessary permits from resource agencies for the 13 planned M2 freeway projects as part of the Freeway Mitigation Program in exchange for establishing a long-term management framework for acquired properties. Placing approximately 1,000 acres of open space into conservancy and targeting restoration of approximately 180 acres of habitat to its natural condition (Projects A through M).
12. Provide appropriate public access on acquired properties based on resource management plan development and completion (Projects A through M).

Environmental Cleanup

13. Complete the implementation of up to \$20 million of investments to prevent flow of roadside trash into the waterways (Project X).
14. Provide up to \$38 million to fund and complete construction of up to three major regional water quality improvement projects as part of the Environmental Cleanup Program (Project X).



ORANGE COUNTY TRANSPORTATION AUTHORITY

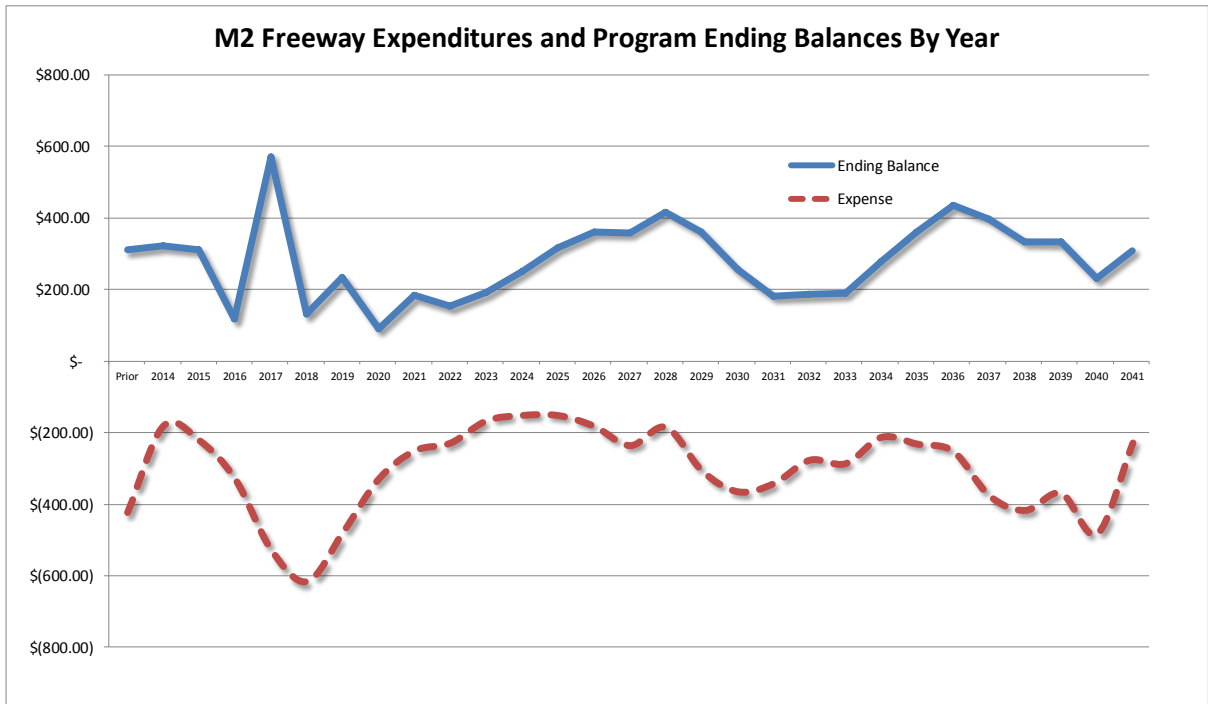
M2020 Plan Review

Attachment C

**Measure M2 (M2) Freeway Program Revenues, Estimated Costs, and Ending Balances
(Approved Three Universities Average)**

(Millions of Dollars; Year-of-Expenditure {YOE})

M2 Freeway Project	M2 Projected Revenue A	Programmed Other Revenue B	Estimated Costs (YOE) C	Project Revenues - Costs D = A + B - C
Project A (I-5, SR-55 to SR-57)	\$ 579.46	\$ 46.36	\$ 46.26	\$ 579.56
Project B (I-5, SR-55 to El Toro Y {"Y"})	370.12		725.70	(355.58)
Project C (I-5, south of "Y")	773.03	208.04	795.99	185.08
Project D (I-5 interchanges)	318.09	86.21	214.41	189.89
Project E (SR-22 access improvements)	147.95	25.60	25.60	147.95
Project F (SR-55 improvements)	451.24		423.53	27.71
Project G (SR-57 improvements)	318.95	106.30	354.11	71.14
Project H (SR-91, I-5 to SR-57)	172.61	34.95	68.30	139.25
Project I (SR-91, SR-57 to SR-55)	513.50	27.93	599.46	(58.03)
Project J (SR-91, SR-55 to OC/RC line)	1,140.43	137.62	431.83	846.22
Project K (I-405, I-605 to SR-55)	616.45	6.18	1,299.06	(676.43)
Project L (I-405, SR-55 to I-5)	394.16		786.35	(392.19)
Project M (I-605 access improvements)	24.66		50.83	(26.17)
Project N (Freeway Service Patrol)	184.93		184.93	-
Mitigation Program at five percent	316.08		316.08	-
Subtotal M2 Revenues and Costs:	\$ 6,321.65	\$ 679.20	\$ 6,322.45	\$ 678.39
Projected Bond Interest Costs:			\$ 1,088.82	
Column D: Current Projected Balance:	\$ 6,321.65	\$ 679.20	\$ 7,411.27	\$ (410.43)
Additional Revenue to Delivery Program:		\$ 720.00		
Column D: 2041 Projected Balance:	\$ 6,321.65	\$ 1,399.20	\$ 7,411.27	\$ 309.57



Ending balance by year at minimum 180 days working capital.
 May 2013 revenue estimate.
 Assumes \$30 million per year (additional external revenue) from 2018 to 2041 (\$720 million).
 Project E was completed as part of the SR-22 widening project.

- I-5 – Interstate 5
- I-405 – Interstate 405
- SR-55 – State Route 55
- SR-57 – State Route 57
- SR-22 - State Route 22
- SR-91 – State Route 91
- OC/RC – Orange County/Riverside County line
- I-605 – Interstate 605



ORANGE COUNTY TRANSPORTATION AUTHORITY

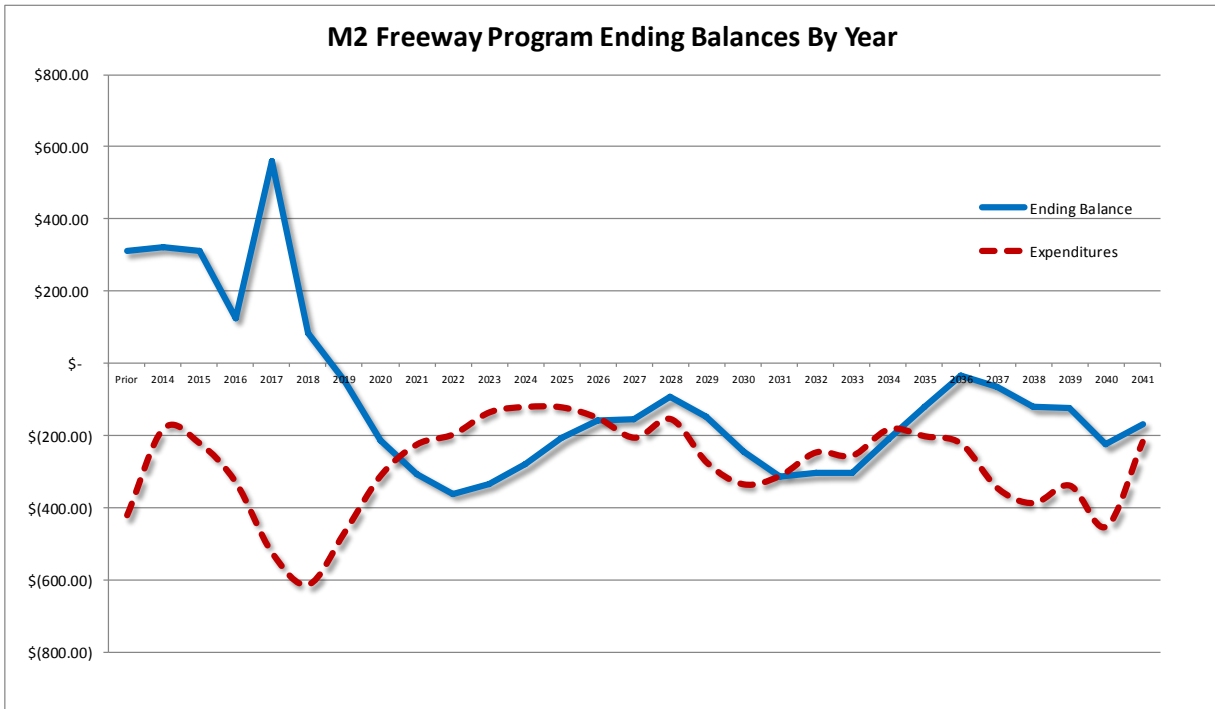
M2020 Plan Review

Attachment D

**Measure M2 (M2) Freeway Program Revenues, Estimated Costs, and Ending Balances
(Most Conservative)**

(Millions of Dollars; Year-of-Expenditure {YOE})

M2 Freeway Project	M2 Projected Revenue <u>A</u>	Programmed Other Revenue <u>B</u>	Estimated Costs (YOE) <u>C</u>	Project Revenues - Costs <u>D = A + B - C</u>
Project A (I-5, SR-55 to SR-57)	\$ 508.53	\$ 46.36	\$ 46.26	\$ 508.63
Project B (I-5, SR-55 to El Toro Y {"Y"})	324.81		725.70	(400.88)
Project C (I-5, south of "Y")	678.41	208.04	795.99	90.46
Project D (I-5 interchanges)	279.15	86.21	214.41	150.95
Project E (SR-22 access improvements)	129.84	25.60	25.60	129.84
Project F (SR-55 improvements)	396.01		423.53	(27.53)
Project G (SR-57 improvements)	279.91	106.30	354.11	32.10
Project H (SR-91, I-5 to SR-57)	151.48	34.95	68.30	118.13
Project I (SR-91,SR-57 to SR-55)	450.65	27.93	599.46	(120.89)
Project J (SR-91, SR-55 to OC/RC line)	1,000.84	137.62	431.83	706.63
Project K (I-405, I-605 to SR-55)	540.99	6.18	1,299.06	(751.88)
Project L (I-405, SR-55 to I-5)	345.91		786.35	(440.44)
Project M (I-605 access improvements)	21.64		50.83	(29.19)
Project N (Freeway Service Patrol)	162.30		162.30	-
Mitigation Program at five percent	277.39		277.39	-
Subtotal M2 Revenues and Costs:	\$ 5,547.85	\$ 679.20	\$ 6,261.12	\$ (34.07)
Projected Bond Interest Costs:			\$ 852.94	
Column D: Current Projected Balance:	\$ 5,547.85	\$ 679.20	\$ 7,114.06	\$ (887.01)
Additional Revenue to Delivery Program:		\$ 720.00		
Column D: 2041 Projected Balance:	\$ 5,547.85	\$ 1,399.20	\$ 7,114.06	\$ (167.01)



Ending balance by year at minimum 180 days working capital.
 May 2013 revenue estimate.
 Assumes \$30 million per year (additional external revenue) from 2018 to 2041 (\$720 million).
 Project E was completed as part of the SR-22 widening project.

- I-5 – Interstate 5
- I-405 – Interstate 405
- SR-55 – State Route 55
- SR-57 – State Route 57
- SR-22 – State Route 22
- SR-91 – State Route 91
- OC/RC – Orange County/Riverside County line
- I-605 – Interstate 605



ORANGE COUNTY TRANSPORTATION AUTHORITY

M2020 Plan Review

PowerPoint



M2020 Plan Review



The PMO...

- **Provides unified oversight and ensures successful delivery of Measure M2 (M2)**
- **Monitors and reports on M2 activities and progress**
- **Aligns M2 activities across divisions**
- **Oversees implementation of the M2020 Plan**

M2020 Goals

Expediting M2



- **Deliver the complete M2 Program as promised**
- **Accelerate project delivery**
- **Deliver mobility early**
- **Capitalize on favorable bidding climate**
- **Limit future inflation risk**
- **Take advantage of historic low debt costs**



M2020 Objectives



- Invest nearly \$1.2 billion of funding for streets and roads improvements
- Expand rail options and fund fixed-guideways
- Continue environmental programs
- Complete two-thirds of the freeway program and environmentally clear the remaining projects



M2020 Freeways



Potential Risk Areas

The review looked at the following risk areas:

- **Financial**
- **Project Delivery**
- **Legislative Authority**
- **Regulatory Conditions**
- **Organizational Readiness**



M2020 Plan Funding Assumptions

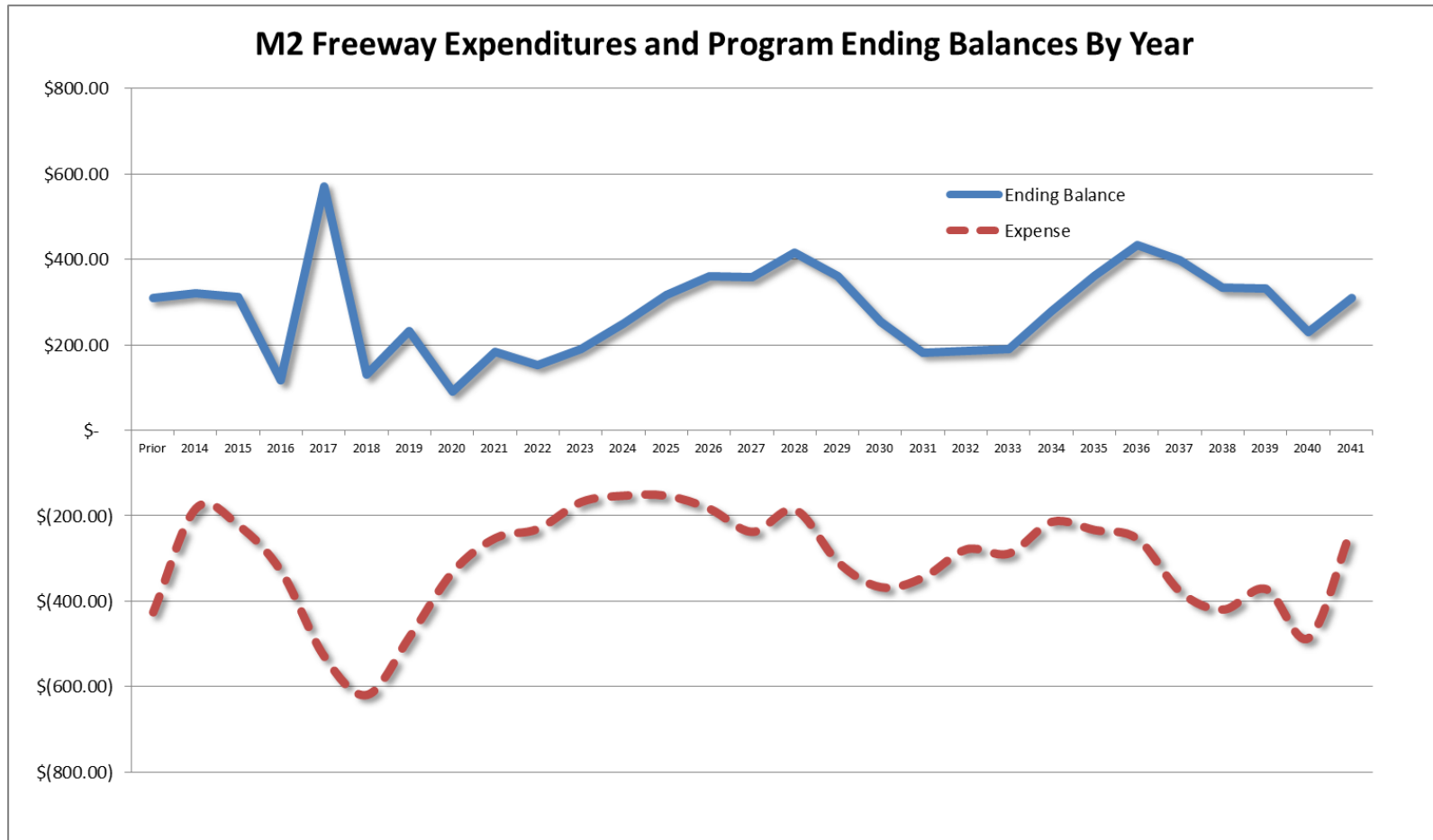


- **Funding assumptions based on May 2012 Revenue Forecast**
 - **Review used May 2013 Forecast**

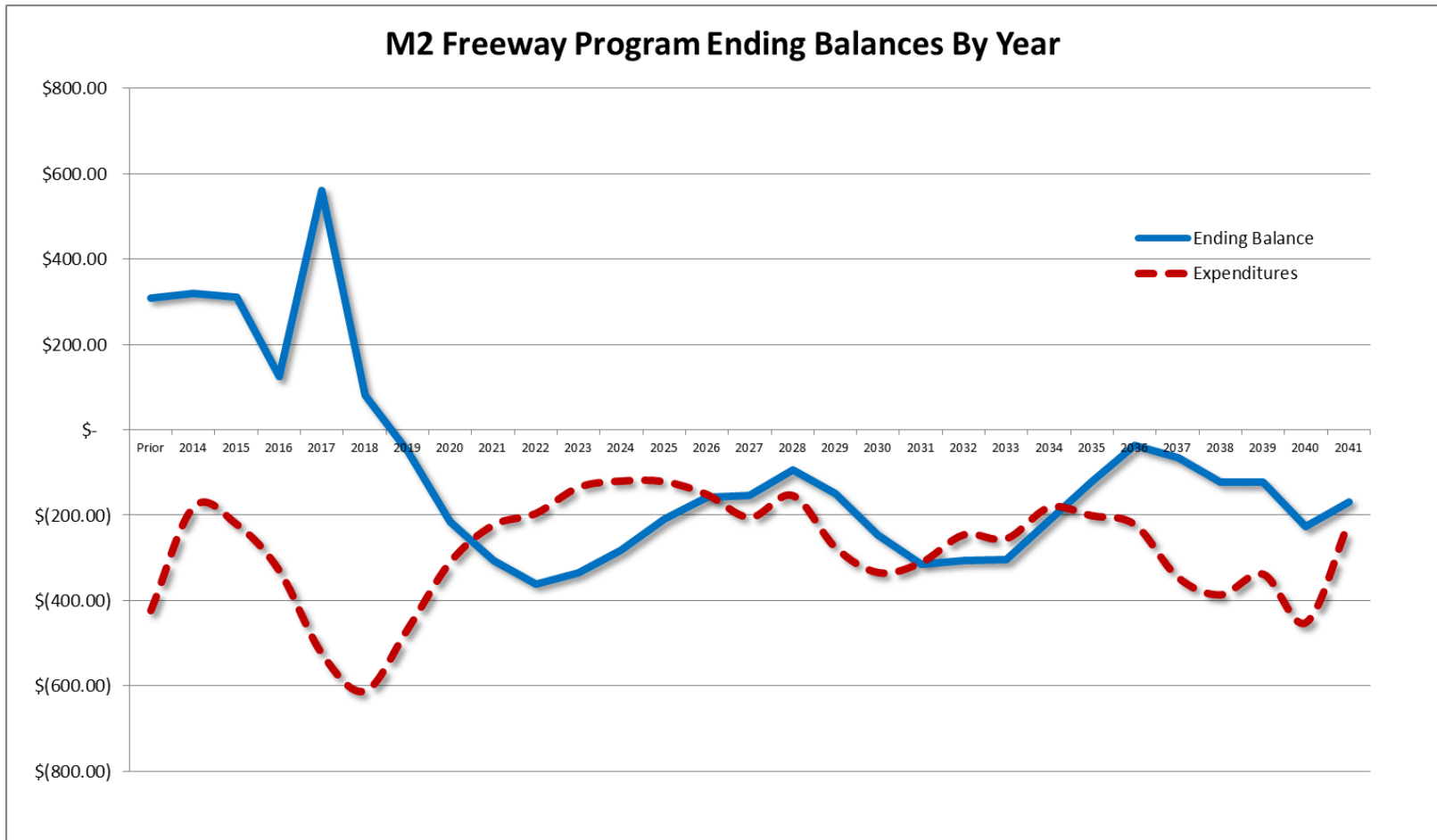
- **Bond assumptions were included to deliver the plan and address projected negative ending balances by year (as compared to pay-as-you-go)**
 - **Review also assumes sales tax revenue bonds**

Freeway Program Balance

(Board Approved Three Universities Average)



Freeway Program Balance (Most Conservative)



M2020 Plan Review Summary



- **M2020 Plan continues to be deliverable with minimal margin for variance**
- **Project delivery requires close monitoring to avoid costly delays**
- **Resources adjustments needed to ensure timely delivery**
- **Increasing funding commitments beyond the M2020 Plan requires careful Board of Directors (Board) consideration of alternatives, trade-offs, and financial risk**

Next Steps



- **Monitor upcoming key Board decisions on M2020 projects**
- **Return to the Board with M2020 Plan update needed**

Information Items



COMMITTEE TRANSMITTAL

August 12, 2013

To: Members of the Board of Directors
From: ^{WK} Wendy Knowles, Clerk of the Board
Subject: Measure M2 Comprehensive Transportation Funding Programs
- 2014 Annual Calls for Projects

Regional Planning and Highways Committee Meeting of August 5, 2013

Present: Directors Bates, Donchak, Harper, Lalloway, Miller, and Spitzer
Absent: Directors Murray and Nelson

Committee Vote

This item was passed by the Members present.

Director Harper was not present to vote on this item.

Committee Recommendations

- A. Approve the proposed modifications to the Comprehensive Transportation Funding Programs guidelines.
- B. Authorize staff to issue the 2014 annual call for projects for the Regional Capacity Program for approximately \$35 million.
- C. Authorize staff to issue the 2014 annual call for projects for the Regional Traffic Signal Synchronization Program for approximately \$12 million.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Comprehensive Transportation Funding
Programs -2014 Annual Calls for Projects**

Staff Report



August 5, 2013

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Measure M2 Comprehensive Transportation Funding Programs - 2014 Annual Calls for Projects

Overview

Measure M2 includes competitive capital grant programs for transportation projects, including the countywide Regional Capacity Program and the Regional Traffic Signal Synchronization Program, which focus on capital and operational improvements to the Master Plan of Arterial Highways. The Comprehensive Transportation Funding Programs guidelines provide the mechanism for the administration of the annual calls for projects for these various competitive programs. Staff has prepared modifications to the guidelines, funding estimates, and included the schedule for the 2014 Regional Capacity Program and Regional Traffic Signal Synchronization Program calls for projects. Guideline modifications and authorization to issue the 2014 calls for projects are presented for Board of Directors' review and approval.

Recommendations

- A. Approve the proposed modifications to the Comprehensive Transportation Funding Programs guidelines.
- B. Authorize staff to issue the 2014 annual call for projects for the Regional Capacity Program for approximately \$35 million.
- C. Authorize staff to issue the 2014 annual call for projects for the Regional Traffic Signal Synchronization Program for approximately \$12 million.

Background

Measure M2 includes a number of competitive grant programs that provide funding for regional streets and roads projects. The Regional Capacity Program (RCP), in combination with matching funds, provides a funding

source for improvements to the Orange County Master Plan of Arterial Highways. The program also provides for intersection improvements and other projects to help improve street operations and reduce congestion. The Regional Traffic Signal Synchronization Program (RTSSP) provides funding for multi-agency, corridor-based signal synchronization throughout Orange County. These programs allocate funds through a competitive process and target projects that improve traffic by considering factors such as degree of congestion relief, cost effectiveness, project readiness, etc. On March 22, 2010, the Orange County Transportation Authority (OCTA) Board of Directors (Board) approved guidelines for the Comprehensive Transportation Funding Programs (CTFP) which serves as the mechanism for administration of the RCP and RTSSP. The CTFP Guidelines provide the procedures necessary for Orange County agencies to apply for funding and seek reimbursement for projects that have been allocated funds. Three annual calls for projects (calls) have been issued to date for both the RCP and RTSS and, collectively, OCTA has provided \$157 million for approximately 118 projects. In preparation for the 2014 annual calls, updates to the guidelines have been prepared.

Discussion

In anticipation of the RCP and RTSSP 2014 annual calls, staff has worked with the Technical Advisory Committee (TAC) to determine areas of the call process and scoring criteria that need to be adjusted. With the completion of the third call, staff has sufficient project and application data to analyze the overall effectiveness of the project ranking process. As a result of this analysis, some minor adjustments were made to the scoring criteria for the RCP arterial capacity enhancement category, as well as the intersection capacity enhancement category. The freeway arterial/street transitions category remains unchanged. Similar minor adjustments were made to RTSSP scoring criteria.

A copy of the CTFP Guidelines manual with the proposed modifications is included in Attachment A. In addition, a general summary of the proposed modifications by program is provided below.

RCP (\$35 million funding target)

- Increase points given for a completed final design package, putting additional emphasis on projects that are “shovel ready.”
- Adjust the point ranges on the economic effectiveness category. Additional points will be awarded to projects that achieve higher levels of economic effectiveness.
- Lower the threshold for overmatch points. Projects with a minimum five percent overmatch will receive a point.

- Assign additional points to some facets of the operational efficiencies category. Project improvements such as the addition of new bike lanes and the removal of on-street parking will net an additional point each. For intersection improvements, additional efficiencies such as free right turns and protected/permissive turns will be added.
- Adjust the point scale for the existing level of service (LOS) range to focus more points on projects with higher levels of congestion. Additionally, adjust the point scale for LOS improvement. Projects must now meet a minimum improvement to receive points.

RTSSP (\$12 million funding target)

- Change the calculation of the signals being retimed category from a per mile calculation to an overall corridor evaluation, emphasizing the regional aspect of the program.
- Add "uninterruptible power sources" as an eligible cost as part of intersection system modernization and replacement.

Additional formatting and clerical adjustments have been made throughout the guidelines. The proposed modifications were approved by the TAC on June 26, 2013, with unanimous support.

Next Steps

With Board approval, staff anticipates sending out announcement letters to the local agencies regarding the calls by August 12, 2013. Project applications would be due to OCTA by October 25, 2013. Staff, in conjunction with the TAC, will prioritize the applications based on the selection criteria in the CTFP Guidelines and will return with programming recommendations for final Board approval in spring 2014. Programming allocations would be effective with Board approval and available on July 1, 2014. Some projects may be programmed in subsequent fiscal years (FY) (FY 2015-16 and FY 2016-17), based on schedules provided by local agencies.

Summary

Measure M2 provides funds for intersection and arterial improvements and signal synchronization in an effort to enhance street operations and reduce congestion. The Comprehensive Transportation Funding Program serves as the mechanism Orange County Transportation Authority uses to administer the competitive Regional Capacity Program and Regional Traffic Signal Synchronization Program. Staff is seeking approval of proposed modifications to the guidelines and authorization to release the 2014 annual calls for projects.

Attachment

- A. Comprehensive Transportation Funding Programs August 2013 Guidelines

Prepared by:



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Approved by:



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



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Comprehensive Transportation Funding
Programs -2014 Annual Calls for Projects**

Attachment A



A HALF-CENT GOES A LONG WAY

COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS AUGUST 2013 GUIDELINES

ORANGE COUNTY TRANSPORTATION AUTHORITY

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I. Overview

On November 6, 1990, Orange County voters approved Measure M, a 20-year half-cent local transportation sales tax. All major transportation improvement projects and programs included in the original Measure M have been completed or are currently underway.

Expected growth demands in Orange County over the next 30 years will require agencies to continue to invest in transportation infrastructure projects. A collaborative effort between County leaders and OCTA identified additional projects to fund through an extension of the Measure M program. Voters approved Renewed Measure M on November 7, 2006. Ordinance No. 3 outlines all programs.

Background

A robust freeway network, high occupancy vehicle & toll lanes, a master plan of arterial highways, extensive fixed route and demand response bus service, commuter rail, and bicycle/pedestrian facilities comprise Orange County's transportation system. Future planning efforts are considering high speed rail service as part of a statewide system. Separate agencies manage and maintain each transportation component with a common purpose: mobility.

Orange County Transportation Authority (OCTA) is responsible for planning and coordination of county regional transportation components. Local agencies generally oversee construction and maintenance of roadway improvements using a combination of regional and local funding sources derived from grants and formula distributions.

The Comprehensive Transportation Funding Programs (CTFP) represents a collection of competitive grant programs offered to local agencies. OCTA administers a variety of additional funding sources including Renewed Measure M, state/federal gas taxes and Transportation Development Act (TDA) revenues.

Guidelines Overview

This document provides guidelines and procedures necessary for Orange County agencies to apply for funding of transportation projects contained within the CTFP through a simplified and consistent process. Each program has a specific objective, funding source and set of selection criteria detailed in separate chapters contained

Comprehensive Transportation Funding Programs



within these guidelines. OCTA may add, modify, or delete non-Measure M programs over time to reflect legislative action and funding availability.



II. Funding Sources

Renewed Measure M

Renewed Measure M (M2) is a 30-year, multi-billion dollar program extension of the original Measure M (approved in 1990) with a new slate of planned projects and programs. These include improvements to the County freeway system, streets and roads network, expansion of the Metrolink system, more transit services for seniors and the disabled as well as funding for the cleanup of roadway storm water runoff.

OCTA shall select projects through a competitive process for Project O (Regional Capacity Program), Project P (Regional Signal Synchronization), and the transit program (Projects S, T, V and W). Each program has a specific focus and evaluation criteria as outlined in the guidelines.

OCTA shall distribute Local Fair Share Program (Project Q) funds on a formula basis to eligible jurisdictions. The program receives eighteen percent (18%) of Net Revenues. The formula is based upon three components:

- Fifty percent (50%) based upon population
- Twenty-five percent (25%) based upon centerline miles on the existing Master Plan of Arterial Highways (MPAH)
- Twenty-five percent (25%) based upon jurisdictions share of countywide taxable sales

Projects that ~~receive~~ are wholly funded by M2 Fair Share revenues and/or local sources are not subject to a competitive process. However, program expenditures must maintain certain eligibility criteria as outlined in the M2 Eligibility Guidance Manual. Jurisdictions must conform to annual eligibility requirements in order to receive fair share funding and participate in the CTFP funding process. Key requirements include:

- Timely use of funds (expend within three years of receipt)
- Meet maintenance of effort requirements
- Use of funding on transportation activities consistent with Article XIX of State Constitution
- Include project in seven-year capital improvement plan (CIP)
- Consistency with MPAH, Pavement Management Program, and Signal Synchronization Master Plan

Comprehensive Transportation Funding Programs



As indicated above, M2 Fair Share revenues are subject to timely use of funds provisions (must be expended within three years of receipt). If an agency is unable to meet this provision, an extension of up to 24 months can be granted. Requests for extension on the timely use of M2 Fair Share revenues will be made as part of the Semi-Annual Review process. In addition to a written request, the agency will also submit an expenditure plan of how the funds will be expended.

State/Federal Programs

OCTA participates in state and federal transportation funding programs based on competitive and formula distributions. OCTA typically earmarks this funding for major regional transportation projects. From time to time, OCTA may set aside funding, where permitted, for use by local jurisdictions through a competitive selection process. Arterial Highway Rehabilitation Program (AHRP), Transportation Corridor Improvement Funds (TCIF) and Regional Surface Transportation Program (RSTP) are examples of this funding distribution approach.

Call for Projects

OCTA issues calls for projects annually or on an as needed basis. Secure revenues sources, such as M2, will provide funding opportunities on an annual basis. OCTA will update program guidelines and selection criteria ~~on even-numbered years~~ periodically. OCTA ~~will~~ may offer limited opportunity funding, such as a state-wide bond issuance or federal earmark, consistent with funding source requirements. OCTA may conduct concurrent calls for projects when necessary. Detailed funding estimates, application submittal processes and due dates will be updated for each call for projects and will be included in section V of these guidelines.



III. Definitions

1. "Competitive funds" refers to funding allocations received through the CTFP.
2. Renewed Measure M and M2 shall be used interchangeably to refer to the November 2006 voter extension of Measure M.
3. The term "complete project" is inclusive of acquiring environmental documents, preliminary engineering, right-of-way acquisition, construction, and construction engineering.
4. The term "funding allocation," "allocation," "project funding," "competitive funds," "phase" or any form thereof shall refer to the three project phases OCTA funds in the CTFP. Additionally, the "engineering phase" shall include the preparation of environmental documents, preliminary engineering, and right-of-way engineering; ~~and the~~ "right-of-way phase" shall include right-of-way acquisition, and the "construction phase" shall include construction and construction engineering.
5. The term "project phase completion" refers to the date all final 3rd party contractor invoices have been paid and any pending litigation has been adjudicated for either 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 Measure M2 Ordinance, Attachment B, Section III.A.9.
6. The term "Master Funding Agreements" or any form thereof shall refer to cooperative funding agreements described in Precept 4.
7. The term "agency," "agencies," or any form thereof shall refer to jurisdictions described in precept two.
8. Implementing agency is the lead agency for any proposed project.
9. Work Force Labor Rates (WFLR) include salaries plus fringe benefits.
10. Fully Burdened Labor Rates include WFLR plus up to 30 percent overhead allocation in accordance with the Cost Accounting Policies and Procedures Manual of the California Uniform Public Construction Cost Accounting Commission.
11. Match Rate refers to the match funding that a lead agency is pledging through the competitive process.

Comprehensive Transportation Funding Programs



12. Escalation is the inflationary adjustment added to the application funding request (current year basis) for ROW and construction phases. OCTA will base escalation rates on the Engineering News Record (ENR) Construction Cost Index (CCI) 20-city average.
13. Excess Right of Way (ROW) is ROW acquired for projects and deemed excess to the proposed transportation use. Excess ROW designation shall be acknowledged by applicant during the grant application process.
14. The term “Gap Closure” shall refer to the construction of a roadway to its full MPAH build-out for the purpose of connecting two existing ends of that roadway by filling in a missing segment or for completing the terminus of an MPAH roadway. This applies to increased roadway capacity only as it relates to vehicular traffic.
15. The term “reasonable” in reference to project costs shall refer to a cost that, in its nature and amount, does not exceed that which would normally be incurred under the circumstances prevailing at the time the decision was made to incur the cost. Factors that influence the reasonableness of costs: whether the cost is of a type generally recognized as ordinary and necessary for the completion of the work effort and market prices for comparable goods or services.
16. The term “Fast Track” shall refer to projects that apply for both planning and implementation phase funding in a single competitive application/call for projects.



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IV. Precepts

1. The Orange County Transportation Authority (OCTA) Board of Directors (Board) approved these guidelines on March 22, 2010. ~~This~~ ~~The~~ ~~edition~~ ~~of~~ ~~the~~ guidelines ~~were~~ ~~subsequently~~ ~~have~~ ~~been~~ amended and ~~subsequently~~ approved by the Board ~~on~~ ~~as~~ ~~needed~~. The purpose is to provide procedures that assist in the administration of the CTFP under M2 where other superseding documents lack specificity. OCTA, or an agent acting on the authority's behalf, shall enforce these guidelines.
2. All eligible Orange County cities and the County of Orange may participate in the M2 competitive programs and federal funding programs included in the CTFP.
3. To participate in the CTFP, OCTA must declare that an agency is eligible to receive M2 Net Revenues which include local fair share distributions. Failure to meet minimum eligibility requirements after programming of funds will result in deferral or cancellation of funding.
4. The lead agency must execute a Master Funding Agreement with the OCTA. OCTA and lead agencies will periodically amend the agreement via letter to reflect funding changes through competitive calls for projects.
5. A separate cooperative funding agreement will be issued for any OCTA-led Regional Traffic Signal Synchronization Program projects.
6. An agency must have a fully executed letter agreement prior to the obligation of funds. Local agencies may be granted pre-award authority for M2 funded projects once the letter agreement is executed. Local agencies, at their own risk, may use this pre-award authority to advance an M2 funded project prior to the programmed year. Reimbursement will be available in the Board approved programmed year according to approved guidelines contained in Chapter 10 of this guidelines manual.
7. Local agencies shall scope projects, prepare estimates, and conduct design in cooperation with and in accordance with the standards and procedures required by the jurisdictions involved with the project (e.g., Caltrans, County, state/federal resource agencies).
8. Agencies should select consultants based upon established contract management and applicable public contracting practices, with qualification based selection for architectural/engineering (A/E) services, as well as competitive bidding

Comprehensive Transportation Funding Programs



environments for construction contracts in accordance with the Public Contracts Code. Agencies must meet procurement and contracting requirements of Non-Measure M funding sources which may exceed those identified in the CTFP.

9. Based upon funding availability, a “Call for Projects” shall be considered annually but may be issued less frequently.
10. OCTA shall program projects for a three year period, based upon an estimate of available funds.
11. OCTA will base funding allocations on project cost estimates including up to 10 percent contingency for construction. During the programming process, OCTA adds an inflationary adjustment.
12. OCTA shall escalate project allocations for years two and three for ROW and construction phases only. OCTA will base escalation rates on the Engineering News Record (ENR) Construction Cost Index (CCI) 20-city average.
13. Match rate commitments identified by implementing agencies in the project grant application shall remain constant throughout the project. This includes projects where the programming has been escalated for future years. OCTA and implementing agencies shall not reduce match rate commitments or split the match rate by phase.
14. OCTA shall program funds by fiscal year for each phase of a project.
15. An allocation for a specific project shall lapse if the funds are not obligated and a contract is not awarded for that specific project within the fiscal year those funds are programmed.
16. Implementing agencies may request a **one-time** delay of up to 24 months per project allocation. Agencies shall justify this request, receive City Council/Board of Supervisor concurrence, and seek approval of OCTA staff, the TSC, and the TAC as part of the semi-annual review process. Extension requests are not permitted for projects that seek “fast track” allocations.
17. Funds that have been obligated shall be used in a timely fashion. In the case of the engineering or construction phases, funds will expire after 36 months from date of contract award. For the right of way phase, funds will expire after 36 months from the date of the first offer letter. A one-time extension of 20 months may be granted through the SAR. For the ROW phase, any delays that require one additional 20 month extension will be considered on a case by case basis.

Comprehensive Transportation Funding Programs



18. For all construction projects awarded CTFP funds in excess of \$500,000 and/or exceeding a 90 day construction period schedule, the local agency shall install and remove signage in accordance with OCTA specifications during the construction period. The implementing agency may request OCTA furnished signage or it may choose to provide agency furnished signage so long as said signage conforms to OCTA specifications as follows: Signage shall include a Measure M2 logo that is a minimum of 12" tall, an OCTA logo that is a minimum of 3" tall (image files provided by OCTA upon request), verbiage stating "Street Improvements Funded by Measure M" in Myriad Pro, bold condensed font at 256 pt. and "Your dollars at Work" in Myriad Pro, bold condensed font at 180 pt.
19. OCTA shall reprogram funds derived from savings or project cancellation based upon final project status. A lead agency may request to transfer 100% of savings of M2 funds between the phases within a project with approval from the Technical Advisory Committee (TAC) and Board of Directors. Funds can only be transferred to a phase that has already been awarded competitive funds. Such requests must be made within 180 days of project phase completion and prior to the acceptance of a final report. The requests must be submitted as part of the semi-annual review process. M1 funded savings can only be transferred to another M1 funded allocation within the same project. SLPP funds are not eligible for the transfer of savings. Agencies may only use savings as an aid for unanticipated cost overruns.
20. Where a project experiences savings, the local match percentage must be maintained.
21. Where the functional classification of a roadway differs from the MPAH classification, OCTA shall use the functional classification for the purposes of competitive scoring. An agency may appeal to the TAC to request that the functional classification used be adjusted/reconsidered.
22. For the purpose of calculated level of service (LOS), the capacity used in the volume over capacity calculation shall be 100 percent capacity, or LOS level "E". Intersection Capacity Utilization (ICU) calculations shall use 1,700 vehicles per hour per lane with a .05 clearance interval.
23. OCTA shall consider matching fund credit(s) for an implementing agency's proposed projects current and applicable environmental clearance expenditures. OCTA will review and consider these expenditures on a case by case basis at the time of funding approval.

Comprehensive Transportation Funding Programs



24. An approved CTFP project may be determined ineligible for funding at any time if it is found that M2 funding has replaced all or a portion of funds or commitments that were to be provided by other sources such as: development conditions of approval, development deposits, fee programs, redevelopment programs or other dedicated local funding sources (i.e., assessment districts, community facilities districts, bonds, certificates of participation, etc.). Appeals may be made in accordance with the Appeals section discussed later in this chapter.
25. OCTA may fund environmental mitigation as required for the proposed roadway improvement and as contained in the environmental document. Environmental mitigation shall not exceed 50 percent of the total eligible construction costs.
26. Construction Engineering, Construction Management and/or Project Management shall not exceed 15 percent of the total eligible project cost.
27. OCTA shall evaluate “whole” projects during the initial review process. Subsequent phase application reviews shall not include prior phases in the evaluation unless locally funded and pledged as a match and are subject to OCTA verification. The criteria for ranking project applications is included in these guidelines as part of each program component chapter.
28. Projects that receive competitive CTFP funds shall not use other competitive funds as a match source. Lead agencies may request project consolidation. The TAC and OCTA Board of Directors must approve consolidation requests. OCTA shall use the average match rate of the consolidated project’s individual segments.
29. OCTA shall conduct a semi-annual review of all active CTFP projects. All agencies shall participate in these sessions through a process established by OCTA. Currently, OCTA administers program through OCFundtracker. OCTA shall: 1) verify project schedule, 2) confirm project’s continued viability, 3) discuss project changes to ensure successful and timely implementation, and 4) request sufficient information from agencies to administer the CTFP.
30. For any project experiencing cost increases exceeding 10% of the originally contracted amount, a revised cost estimate must be submitted to OCTA as part of the semi-annual review process. This is applicable even if the increase is within the overall grant allocation amount.
31. Agencies shall submit payment requests to OCTA in a timely fashion. Agencies may request an initial payment for M2 (up to 75 percent of programmed amount as described in Chapter 10) once a contract has been awarded or once an agency



initiates right-of-way activities. The final 25 percent of the available programmed balance will be released upon the submission of an approved final report.

32. The final report retention shall be capped at \$500,000 per project phase, but shall in no case be less than 10 percent of the allocation or the contract amount, whichever is less. Should the 75/25 payment distribution ratio result in a final payment retention that exceeds \$500,000, the payment percentages will be adjusted to meet the \$500,000 cap until the 10 percent threshold is reached. At no time will the final payment retention be less than 10 percent.
33. An agency shall provide final accounting in an approved final report format (see Chapter 10 of the guidelines) within 180 days of project phase completion. Delinquent final reports will be handled per the guidelines in Chapter 10. Failure to provide a final accounting shall result in repayment of applicable M2 funds received for the project phase in a manner consistent with the Master Funding Agreement. Projects funded with M2 funding require a project final report within six months of project phase completion as part of eligibility compliance. Failure to meet eligibility requirements, including submittal of final reports within six months (180 days) may result in suspension of all net revenues including fair share funds.
34. When a project phase is complete, an agency shall notify OCTA in writing within 30 days of completion. The date of project phase completion will begin the 180 day requirement for the submission of a project final report as required by the Measure M2 Ordinance, Attachment B, Section III.A.9.
35. The payment distribution ratio referenced in Precept no. ~~20-31~~ may be modified to a reimbursement process, at the discretion of the OCTA Board of Directors, in the event that financing or bonding is required to meet OCTA's cash flow needs.
36. The OCTA Board of Directors may grant time extensions for special circumstances that are beyond the control of the implementing agency. An agency shall make a formal request for a time extension to OCTA as early as possible, preferably during a semi-annual review, but no later than June 30 of the fiscal year in which OCTA programs the allocation.
37. Agencies may appeal to the TAC on issues that the agency and OCTA staff cannot resolve. An agency may file an appeal by submitting a brief written statement of the facts and circumstances to OCTA staff. The appellant agency must submit a written statement which proposes an action for TAC consideration. The TSC shall recommend specific action for an appeal to the TAC. The OCTA Board of Directors shall have final approval on appeals.





V. **2014** Call for Projects – Regional Capacity Program

The **2014** Call for Projects (call) will be the third annual call for Project O – the Regional Capacity Program (RCP) – under M2. Through Measure M2 funds, this call will provide approximately **\$35 million** for streets and roads improvements across Orange County.

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

For this call, OCTA shall program projects for a three year period, based upon the current estimate of available funds. For specifics on the funding policies that apply to this call, refer to the Program Precepts as found in Section IV of these guidelines.

Applications

In order for OCTA to consider a project for funding, applications will be prepared by the local agency responsible for the project implementation. OCTA shall require agencies to submit both online and hardcopy applications for the **2014** call for projects by **5:00 p.m. on Friday, October 25, 2013**. Late submittals will not be accepted.

The agency must submit the application and any supporting documentation via OCFundtracker as outlined in Chapter 9 (page 9-1). Additionally, **three (3) unbound hardcopies** of the application and any supporting documentation must be submitted to OCTA by the application deadline. Hardcopy applications can be mailed to:

OCTA
Attention: Roger Lopez
550 S. Main Street
P.O. Box 14184
Orange, CA 92863-1584

Hardcopy applications can be hand delivered to:

600 S. Main Street
Orange, CA 92868

Comprehensive Transportation Funding Programs



Detailed evaluation criteria for the ACE, ICE, and FAST programs can be found in Chapter 7 of these guidelines.

Application Review Process

Once applications are reviewed and ranked according to the OCTA Board of Directors (Board) approved scoring criteria, a recommended funding program will be developed by OCTA staff. These programming recommendations will be presented to the TAC for review and comment. The TAC approved programming recommendations will then be presented to the OCTA Highways Committee and Board for review and final approval.

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

Board authorization to issue call: August 2013
Applications due to OCTA: October 25, 2013
TSC/TAC Review: February/March 2014
Committee/Board approval: May 2014

M2 Project O Funding

M2 Project O funding will be used for this call.

State-Local Partnership Program Requirements (For Projects Granted Funds Under Prior Calls)

For the 2011 and 2012 calls, SLPP funds supplemented the available M2 revenues. Any construction phase award through these calls for **\$2 million or more** included SLPP funds. Projects utilizing SLPP funds are subject to the specific SLPP requirements and guidelines, which differ from the requirements for M2 funding as detailed in these guidelines. These are enumerated below.

1. *Additional Application Requirements:* All project submittals that are requesting \$2 million or more for the construction phase of the project must complete all required Project Programming Request forms and other related documents.
2. *California Transportation Commission (CTC) required documentation:* For project(s) granted SLPP funds, the project is subject to additional allocation procedures. Request for CTC allocation requests must include the following documentation:

Comprehensive Transportation Funding Programs



- a. Submittal of the California Environmental Quality Act (CEQA) environmental document to the CTC for consideration of funding.
 - b. Certification of 100 percent design completion.
 - c. Right-of-Way Certification concurrence by the California Department of Transportation (Caltrans), in accordance with the California Department of Transportation (Caltrans) Local Procedures Manual (LAPM) Chapter 13.
3. *Procurement Requirements:* For procurement requirements information, see Chapter 15 and 16 of the Caltrans Local Assistance Procedures Manual (LAPM). The local agency is responsible to comply with all local, state, and if applicable, federal requirements for procurement.
4. *Timely Use of Funds Requirements:* **Construction contracts cannot be awarded prior to CTC allocation or Letter of No Prejudice (LONP) approval.** Once a project is allocated by the CTC, it will have six months from the date of allocation to award a contract. If a LONP is approved the implementing agency must begin reporting on contract award within 4 months of the CTC approval.
5. *Required Contracts:*
- a) Master agreement between agency and OCTA which incorporates SLPP requirements.
 - b) Caltrans Master agreement and Caltrans program supplement between OCTA and Caltrans.
 - c) Construction Contracts (unless work is being carried out by the City directly).
- OCTA and the local agencies will work together to ensure the appropriate contracts are in place and are in compliance with timely use of funds requirements.
6. *Invoicing Requirements:* Invoicing Caltrans for the SLPP projects will be carried out by OCTA. The requirements for the SLPP projects are the same as the STIP and state reimbursement project requirements. The general requirements are listed below.
- a) Exhibit 5-F on Agency letterhead. Located on page 5-41 of the LAPM
 - b) Caltrans Program Supplement.
 - c) SLPP Project Baseline Agreement, which may require local agency authorization in addition to OCTA's authorization

Comprehensive Transportation Funding Programs



- d) CTC allocation and confirmation of allocation on the CTC vote list.
- e) Master agreement between the agency and OCTA incorporating state requirements and the Caltrans Program Supplement requirements.
- f) Verification that the project has been included in the Federal Transportation Improvement Program (FTIP).
- g) Documentation of expenditure including copies of invoices and local agency cancelled checks.

OCTA will require this back up documentation from the local agency in order to submit invoices to Caltrans. For more information on invoicing requirements, see Caltrans Local Assistance Programming Manual Chapter 5.

7. *Quarterly Reports:* Implementing agencies with SLPP funded projects must submit quarterly reports to Caltrans. Under these guidelines, projects are required to include:
- a) Description of scope of work.
 - b) Updates on estimated project costs.
 - c) Updates on schedule.
 - d) Any variances in scope, schedule or cost from the Caltrans Baseline Agreement and any required corrective corrections that have been taken or will be taken.

The CTC and Caltrans will review the progress reports to ensure that projects are executed in a timely fashion and remain within the original scope and budget of the project. If project scope, costs, and schedule changes, the implementing agency must provide a plan for minimizing the change. If cost requirements increase the implementing agency must down scope the project to remain within budget, or identify additional funding sources. The local agency will be required to submit reports to Caltrans with copies to OCTA.

8. *Caltrans Final Delivery Report:* In addition to semiannual reports, a final report must be filed within six months of the project becoming operable. This should include:
- a) Scope of completed project.
 - b) Final costs as compared to approved project budget.
 - c) Duration of completion compared to approved schedule.

Comprehensive Transportation Funding Programs



- d) Performance outcomes derived from project compared to outcomes in project agreement.

The local agencies will be required to submit the Caltrans final report with copies to OCTA.

- 9. *Project Inclusion in FTIP*: OCTA will work with the local agency to list each project individually in the FTIP or to develop a group listing for CTFP/SLPP funded projects.

- 10. *Auditing Requirements*: SLPP projects will require two audit reports conducted by Caltrans:

- a) Semi-final audit report within 6 months of the final delivery report.
- b) Final audit report within 12 months after the final delivery report.

Please see the Caltrans Local Assistance SLPP Accountability Implementation Plan for more information.

State-Local Partnership Program Reporting Assistance

The additional requirements enumerated above represent an increase to the reporting expected as part of the use of M2 funds. Therefore, for projects allocated SLPP funding, OCTA will provide consultant services to assist in the gathering and preparation of the required documentation. These services will be made available at no cost to the agency.



Chapter 1 – Eligibility

Overview

To apply for the Comprehensive Transportation Funding Programs (CTFP), local agencies must fulfill an annual eligibility process. OCTA established this process to ensure that improvements are consistent with regional plans. Under previous County funding programs (e.g., AHFP, BPF) agencies had to meet similar requirements to be eligible for funding. The cities and county approved a process reflecting the eligibility criteria found in Measure M. Eligibility packages are due to OCTA by June 30 of each year.

In order to receive CTFP and M2 Fair Share funds, OCTA must deem agencies as eligible. OCTA shall annually distribute an eligibility information package to local agencies. Below is a brief list of requirements:

- Adoption of a Capital Improvement Program
- Adoption of a General Plan Circulation Element which does not preclude implementation of the MPAH
- Adoption of a local Pavement Management Program
- Adoption of a Local Traffic Signal Synchronization Plan
- Satisfied Maintenance of Effort requirements
- Approved Agreement to expend funds within three years of receipt
- Adopt an annual Expenditure report
- Submit Project Final Report for all Net Revenue projects

The M2 Eligibility Preparation Manual outlines the eligibility requirements in detail. OCTA updates the Eligibility Preparation Manual annually and encourages agencies to use it as a reference when preparing items to meet eligibility requirements. Agencies will submit a CIP through an electronic database application. OCTA develops a manual and workshop to prepare local agency staff for the annual eligibility process. OCTA will make both the manual and workshop information available on its website and forwards the link to all local agencies.

Additional Information Regarding MPAH

The agency's General Plan Circulation Element must be consistent with the Orange County MPAH. In order for an agency's circulation element to be consistent with the MPAH, it shall have a planned-carrying capacity equivalent to the MPAH for all MPAH links within the agency'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 are not considered "inconsistent" as a result of existing capacity limitations on arterials which are not yet constructed to the circulation element design.



Chapter 1 – Eligibility

The agency must also submit a resolution attesting that no unilateral reduction in lanes has been made on any MPAH arterials. For a sample resolution, see the Renewed Measure M Eligibility Guidelines, Appendix E.

MPAH Consistency Review and Amendment Process

Through a transfer agreement with the County of Orange, OCTA assumed responsibility for administering the MPAH starting in mid-1995. As the administrator, OCTA is responsible for maintaining the integrity of the MPAH through coordination with cities and the County and shall determine an agency's consistency with the MPAH. In order to provide a mechanism to communicate MPAH policies and procedures, OCTA prepared the *Guidance for the Administration of the Orange County Master Plan of Arterial Highways*. The guidance document is to assist OCTA, the County, and the cities of Orange County to maintain the MPAH as a vital component of transportation planning in the County. The guidance document outlines, in detail, the MPAH consistency review and amendment process. Agencies can find contact information for OCTA staff assigned to MPAH administration in the manual.



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Chapter 2 – Project Programming

Program Consolidation

M2 Regional Capacity Program improvement categories will combine projects into one application review and allocation process. The programs of the CTFP will act as the project funding source. The consolidation of programs will help eliminate confusion among the various requirements and allow the greatest flexibility for programming projects. Other funding programs such as M2 Transit (Projects S, T, V, and W) and AHRP have similar eligibility requirements, but OCTA will evaluate and approve these projects through a separate process.

Sequential Programming Process

Timely and efficient use of funding is a critical success factor for the CTFP. Historically, agencies were encouraged to develop long term projects spanning three or more years which often led to delays in implementing final project phases. This dynamic led to larger-than-anticipated funding program cash balances and an inability to fund smaller time sensitive projects in the interim.

In response to concerns raised by the OCTA Board of Directors and the Taxpayers Oversight Committee responsible for M2 oversight, OCTA will use a shorter term and sequential funding approach for M2 projects. OCTA expects this new approach to aid in a more timely use of funding and limit the potential for unanticipated project completion delays inherent with long lead time projects.

Sequential funding is a two step process. Step One, also known as the planning phase, includes funding requests for planning/environmental, engineering and right of way engineering activities. Step Two, also known as the implementation phase, includes right of way engineering/acquisition and construction activities. Right of way engineering can be requested in either the planning or implementation phases. Projects must complete the planning phase before an agency requests implementation phase funding during a call for projects. Exceptions to this rule include the following:

- An agency may request implementation funding prior to completion of the planning phase if the jurisdiction can demonstrate that the planning phase activities are underway and the agency will complete the activities within six months of the programmed year.

OR

- An agency may request a Fast Track approach, seeking implementation funding as part of the planning phase. The if the agency can must demonstrate that the



Chapter 2 – Project Programming

policy variance is necessary for timely implementation. The agency will waive the opportunity to request a project delay under this approach.

Each call for projects will cover a three-year period which overlaps subsequent future cycles. Funding targets for each cycle are based upon prior funding commitments, anticipated revenues, reprogramming of unused allocations (cancellations and savings), and a set aside for future funding cycles. The first year of each cycle will distribute 100% of expected revenues less prior commitments. The second year of each cycle will allocate 75% of projected revenues less prior commitments. The third year of each cycle will allocate 50% of projected revenues less prior commitments. The partial allocation of funding for years two and three preserve funding for future projects and act as a hedge against unanticipated revenue shortfalls that could jeopardize project delivery.

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

Funding Projections – Call for Projects

Revenue estimates for M2 are updated annually. Programming decisions are based upon conservative economic assumptions provided by Southern California academic institutions. In the future, OCTA will add project cancellations and realized savings from completed projects to anticipated revenues for redistribution in the first year of each funding cycle. The M2 program is new and no project cancellation or savings exist for reprogramming.

Project Cost Escalation

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

Programming Adjustments

OCTA bases funding allocations on cost estimates that agencies provide and that OCTA validates against industry norms during the evaluation process. Agencies must provide estimates in current year dollars. ~~OCTA will apply a construction cost index (CCI)~~



Chapter 2 – Project Programming

~~adjustment to the first year of the funding cycle for implementation activities (right-of-way and construction) and is not subject to further adjustment.~~

Projects programmed in Year Two or Year Three of each funding cycle include a CCI-based adjustment factor for the right-of-way and construction phases only. Agencies shall not receive allocation increases. Cost overruns are the responsibility of agencies and may count against agencies' match commitment for eligible activities. Agencies may request scope adjustments to meet budget shortfalls when the agency can demonstrate substantial consistency and attainment of proposed transportation benefits compared to the original project scope.

When agencies are preparing applications, **all cost estimates must be in current year dollars with Month and Year cited**. OCTA will review each cost estimate thoroughly and will escalate right-of-way and construction costs based on the year OCTA programs the project allocation. For example, if an agency's cost estimate lists construction costs for a project and OCTA programs the project for year 3 of the funding cycle, then OCTA will escalate the costs by the CCI-based adjustment factor, compounded annually, beginning in year 1 of the funding cycle.

Project Cost Escalation

~~OCTA will escalate approved projects in years two and three. Match rate commitments identified by implementing agencies in the project grant application shall remain constant throughout the project. This includes projects where the programming has been escalated for future years. OCTA will base escalation rates for future years on Engineering News-Record (ENR) Construction Cost Index (CCI) escalation rates.~~

~~Each March, OCTA shall validate the escalation rate that will be used for projects programmed in the next fiscal year beginning on July 1st. Agencies should be aware that the rate established by OCTA each March may be greater or less than the "planning" rate used when projects were originally approved for funding.~~

Project Readiness

Assembly Bill (AB) 1012, Chapter 783, Statutes of 1999, established firm "use it or lose it" deadlines for federal funds. Under AB 1012, if an agency does not obligate funds in a timely fashion then the county loses the funds and the state reprograms them. Large or complex projects are particularly vulnerable to AB 1012 implementation rules.

In an effort to better utilize project funding and maintain project schedules, programming of funding for CTFP under the tiered approach has been revised. In



Chapter 2 – Project Programming

general, to program allocations for right-of-way or construction phases, a project must either have:

1. Approval for environmental clearance (CEQA for Measure M programs, NEPA and CEQA for federally funded programs), or;
2. Exempt (categorically or statutorily) under CEQA and/or NEPA (as applicable).

OCTA may consider exceptions to these programming rules, on a case by case basis, if an agency can confirm that a project will receive environmental clearance prior to the scheduled start of right-of-way and construction. OCTA will not approve payment requests for right-of-way and construction until a project receives environmental clearance.

Programming Policies

OCTA will not increase phase allocations after the initial programming for each phase except through project savings transfers, where applicable.

In order to receive right-of-way and construction allocations, a project must have all environmental clearances in place. OCTA shall not release final payment for the planning stage (includes final design) until confirmation of environmental clearance is provided.

Agencies are responsible for costs that exceed the project allocation, maintaining the project schedule, and maintaining the project scope.

An agency's allocation will lapse if the agency does not obligate the funds within the programmed fiscal year. An agency may request a delay in accordance with the time extension policy described at the end of this chapter.

An agency must have a fully executed Letter Agreement prior to the obligation of funds.

As stated above, an agency's allocation is based on the project's cost as requested and programmed with established escalation rates. **If project costs escalate beyond original estimates and the agency is unable to cover additional costs, a request to reduce the project scope or limits will be considered where feasible.** All requests for changes in scope and limits must be submitted to OCTA in advance of the change. This request will be evaluated on a case-by-case basis and must be approved by the TAC and OCTA Board of Directors prior to initiation of the change by the lead agency. The agency must submit a letter to OCTA no later than June 30th of the year in which funds are programmed stating the reasons for cost increases, a proposal for project scope



Chapter 2 – Project Programming

or limit reduction, and an explanation of why approval of the request is warranted. The review process is similar to the appeals process mentioned above.

Schedule change requests

Allocations approved as part of the CTFP process are subject to timely delivery requirements. Implementation schedules are determined by the lead agency (applicant). Contract work must be awarded prior to the end of the programmed fiscal year to encumber the funds. If work cannot be initiated within this time frame, a request to defer funding may be submitted to OCTA for consideration. Project status is reviewed every six months during the semi-annual review (SAR) process. Expired project funding is subject to reprogramming in a subsequent call for projects.

Funding deferrals (delays) must be submitted to OCTA in conjunction with the SAR process. These reviews are typically held in Fall and Spring. Emergency extensions after the Spring SAR may be considered on a case by case basis. The M2 Ordinance No. 3 permits a delay for up to 24 months. Implementing agencies may request a one-time delay of up to 24 months per project allocation. Agencies shall justify this request, receive City Council/Board of Supervisor concurrence, and seek approval of OCTA staff, the TSC, TAC, and OCTA Board as part of the semi-annual review process. Projects that are expected to incur extensive delays beyond the parameters of the program should consider cancellation and reapplication at a future date. Advancement requests may be considered during the review process and may be approved subject to funding availability.

Timely use of funds

In the case of the engineering or construction phases, funds expire after 36 months from the date of contract award. For the right of way phase, funds will expire after 36 months from the date of the first offer letter. A onetime extension of 20 months may be granted through the SAR. For the ROW phase, any delays that require one additional 20 month extension will be considered on a case by case basis.

Project Advancements

Agencies wishing to advance a project by one fiscal year or more may request project advancement. The agency must demonstrate that a contract will be awarded or that funds will be obligated in the year which funds are requested to be advanced to. The allocation will be de-escalated according to the original escalation rate.



Chapter 2 – Project Programming

Requests can be submitted at any time during the fiscal year or as part of the semi-annual review process. All advancements will be reviewed by the TAC and approved by the OCTA Board. If approved, the agency and project will be required to meet the new fiscal year award or obligation deadline.

Should OCTA be unable to accommodate an advancement request for a project funded through Measure M, due to cash flow constraints, the agency may still move forward with the project using local funding. (See Precept no. 5) The lead agency must have a fully executed letter agreement prior to beginning work. The lead agency may subsequently seek reimbursement of CTFP funds in the fiscal year in which funds are programmed. Reimbursement shall follow the standard CTFP process described in Chapter 10.

Semi-Annual Review

OCTA staff will conduct a comprehensive review of CTFP projects on a semi-annual basis to determine the status of projects. These project updates will be provided by the local agencies and uploaded to OCFundtracker. Follow-up meetings to these updates will be held as needed. Semi-annual project reviews are usually scheduled to occur in September and March of each year.

Projects are reviewed to:

1. Update project cost estimates. For any project experiencing cost increases exceeding 10% of the originally contracted amount, a revised cost estimate must be submitted to OCTA. This is applicable even if the increase is within the overall grant allocation amount.
2. Review the project delivery schedule
3. Determine the project's continued viability
4. Verify project operations and maintenance expenditures (Environmental Cleanup Program)

Prior to each review meeting, OCTA staff will distribute a list of active projects to each local agency. Each agency will be contacted and asked to participate in the upcoming review where each agency's project schedules, cost estimates, and scope will be reviewed. Agencies will be given the opportunity to request program changes (e.g., delaying and advancing funds from one fiscal year to another) and each adjustment will be considered on a case-by-case basis. The agency should be prepared to explain any changes and provide all necessary supporting documentation. Generally, the local agency is responsible for the implementation of the projects as approved by OCTA, however consideration will be given for circumstances beyond the lead agency's control that affect scope, cost or schedule.



Chapter 2 – Project Programming

Based on the semi-annual meetings, OCTA staff will develop and present recommendations for project adjustments to the TSC and TAC. Requests for project changes (delays, advancements, scope modifications) will be considered on an individual basis. The following action plan has been developed for the semi-annual review process:

- Require jurisdictions to submit status reports, project worksheets, and supporting documentation to OCTA for all project adjustments.
- Require local agencies to abide by **Time Extension Policy**:
 - Agencies may request a delay of up to 24 months per allocation. Jurisdictions will be required to justify this request and seek approval of OCTA staff, Technical Steering Committee (TSC), and the TAC as part of the semi-annual review process.
 - Approved schedule changes will require an update of the local jurisdiction's seven-year CIP and the OCTA cooperative funding agreement.
 - Evidence of Council approval (resolution, minute order, or notification) must be provided prior to OCTA Board approval of delays.
 - An administrative extension may be granted for expiring M2 funds for a project phase that is clearly engaged in the procurement process (advertised but not yet awarded).
 - Agencies that have requested Fast Track funding cannot request time extensions.

Environmental Cleanup Program Operations and Maintenance Reporting

For Tier 1 of the Environmental Cleanup Program, ongoing operations and maintenance of the project can be pledged as a match (page 12-6). As part of the SAR reporting process, OCTA will verify local agency operations and maintenance expenditures to ensure local match commitments are being met. Local agencies must complete Form 10-17 ([see sample in chapter 10](#)) for each ECP grant as part of their SAR updates.



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Chapter 3 – Arterial Highway Rehabilitation Program



Program Overview

The Arterial Highway Rehabilitation Program (AHRP) has been developed to address long term pavement maintenance in Orange County. Specifically, the AHRP is designed to fund pavement rehabilitation and/or reconstruction projects on Master Plan of Arterial Highway (MPAH) arterial roadways throughout Orange County.

Eligible Expenditures

The following general type of projects will be eligible under this program:

- Overlay
- Rehabilitation
- Reconstruction

For each of these projects the following expenditures will be eligible:¹

- Engineering
- Construction
- Construction Engineering
- Bike lanes (striping only, must be on the Master Plan of County-wide Bikeways)
- Bus Turnouts (resurfacing only, must be on an OCTA route)
- Portland Cement Concrete (PCC) Base Pads
- Replacement of parking lanes, curbs, gutters, catch basins, and minor profile revisions (i.e., curb to curb) as required by project
- Use of alternative materials such as rubberized asphalt, PCC, etc.
- Construction or modification of curb ramps within the limits of the project as necessary to satisfy Americans with Disabilities Act (ADA) requirements

Potentially Eligible Expenditures

Items that are potentially eligible under AHRP are:

- Sidewalks if mandated for ADA type improvement/upgrade and only up to 10% of the total improvement costs.

Ineligible Expenditures

Items that are not eligible under AHRP are:

- Landscaping
- New parking lanes, new curb and gutter

¹ For federally funded projects, expenditures prior to approval of the E-76 form will not be eligible.



Chapter 4 – Transit Extensions to Metrolink (Project S)

Overview

This Measure M2 (M2) Program establishes a competitive process to enable local jurisdictions to enhance regional transit capabilities through creation of new connections to the existing Metrolink system. Projects must meet specific criteria in order to compete for funding through this program. In addition, local jurisdictions will be required to demonstrate the ability to fund the local share of operations and maintenance on an ongoing basis using non-Orange County Transportation Authority (OCTA) resources. Public-private partnerships² are encouraged but not required.

Objectives

- Expand multi-modal transit options for regional travel by establishing new transit connections to existing Metrolink stations
- Provide new service on a defined route with primary ridership derived from Metrolink patronage

NO CHANGE TO THIS CHAPTER

Project Participation Categories

Metrolink provides a vital transit option for travel throughout southern California. Orange County is home to 12 Metrolink stations currently serving residents and commuters for employment, education, and pleasure-based trips. These stations serve diverse destination and trip origination needs. Efficient and convenient access enables the system to thrive and the overall transportation network (all motorized and non-motorized modes) to operate effectively.

Transit needs may differ from one location to the next and projects pursued under this program have significant latitude in how the challenge of delivering enhanced transit service to/from existing Metrolink stations are addressed. The program categories listed below identify key project elements that can be pursued through the Project S funding source. Fixed guideway projects are capital intensive. Additional funding sources may be required to supplement M2 for maximum investment opportunities. Selection criteria will parallel Federal Transportation Administration (FTA) programs such as New Starts or Small Starts wherever possible to aid in streamlining the competitive process. The program categories eligible for funding through Project S are:

- Fixed guideway systems including rolling stock acquisition
- Station/stop improvements (includes signage, furniture, and shelters)

² Public-private partnerships are defined as direct financial contributions or sponsorships for eligible program activities.



Chapter 5 – Metrolink Gateways (Project T)

Overview

This M2 program establishes a competitive process for local jurisdictions to convert Metrolink stations into regional gateways for enhanced operations related to high-speed rail service. Projects must meet specific criteria in order to compete for funding through this program. In addition, local agencies will be required to demonstrate the ability to fully fund operations on an ongoing basis using non-OCTA resources. Public-private partnerships¹ are encouraged but not required.

Objectives

- Convert Metrolink station(s) to regional gateways that connect Orange County with planned future high-speed rail systems.
- Deliver improvements that are necessary to connect planned future high-speed rail systems to station(s) on the Orange County Metrolink route.

Project Participation Categories

Multi-modal transit facilities provide expanded transportation options for regional and long distance travel. These “hubs” provide a vital link in the mobility chain. Availability of viable stations is a critical consideration for high speed rail service implementation. Each host community has unique needs and expectations related to high-speed rail systems. Conditions will differ from one location to the next and projects pursued under this program have significant latitude in how they address the challenge of delivering supporting facilities for high speed rail services. Converting a station may include modifying and/or relocating the station. The program categories listed below identify key project elements that can be pursued through the Project T funding source. Public-private partnerships and local funding sources may be used to leverage these elements.

- Station and passenger facilities necessary to support planned high-speed rail system²
- Parking structures related to expanded high-speed rail service
- Track improvements (e.g., track, switching, signal equipment)
- Traffic control enhancements for ingress/egress from public roadways
- Aesthetics limited to 10% of the Project T funds (specifically limited to: landscaping, non-standard lighting, and on-site signage)
- On-site public art expenses limited to one percent of Measure M funds in order to improve the appearance and safety of the facility
- Off-site improvements cannot exceed 5% of Measure M funding request³
- Bond financing costs

Chapter 6 – Community Based Transit/Circulators (Project V)



Overview

This M2 project establishes a competitive program for local jurisdictions to develop local bus transit services such as community based circulators, shuttles and bus trolleys that complement regional bus and rail services, and meet needs in areas not adequately served by regional transit.

Program funding guidelines and project selection criteria are being developed. A transit call for projects will be issued in the future.

**NO CHANGE TO
THIS CHAPTER**



Chapter 7 – Regional Capacity Program

Introduction

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

Although each improvement category described in this chapter has specific eligible activities, the use of RCP funding is restricted to and must be consistent with the provisions outlined in Article XIX of the State Constitution. In the case of any ambiguity related to Article XIX, the California State Controllers Gas Tax Guidelines will provide additional clarification.

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

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

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

Also included under the RCP is the Rail Grade Separation Program (RGSP), which is meant to address vehicle delays and safety issues related to at-grade rail crossings. Seven rail crossing projects along the Master Plan of Arterial Highways (MPAH) network were identified by the California Transportation Commission (CTC) to receive Trade Corridors Improvement Funds (TCIF). These TCIF allocations required an additional local funding commitment. To meet this need, the Board approved the commitment of \$160 million in Regional Capacity Program funds to be allocated from M2. The RGSP



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captures these prior funding commitments. Future calls for projects for grade separations are not anticipated.

Funding Estimates

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



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Chapter 7 – Regional Capacity Program

Section 7.1 – Arterial Capacity Enhancements (ACE)

Overview

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

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

Objectives

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

Project Participation Categories

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

- Gap closures – the construction of a roadway to its full MPAH build-out for the purpose of connecting two existing ends of that roadway by filling in a missing segment or for completing the terminus of an MPAH roadway. This applies to increased roadway capacity only as it relates to vehicular traffic.
- Roadway widening where additional capacity is needed
- New roads / extension of existing MPAH facility

Eligible Activities

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



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Potentially Eligible Items

- Direct environmental mitigation [for projects funded by ACE](#)
- Storm drains/catch basins/detention basins/bioswales
- Sound walls (in conjunction with roadway improvement mitigation measures)
- Aesthetic improvements including landscaping within the project ROW (eligible improvements up to 25% of construction costs, provided costs are reasonable for the transportation benefit)
- ITS infrastructure (advance placement in anticipation of future project)
- Rehabilitation and/or resurfacing of existing pavement when necessitated by proposed improvement (such as change in profile and cross section)
- Utility relocation

Environmental mitigation will be allowed only as required for the proposed roadway improvement, and only as contained in the environmental document. Program participation in environmental mitigation shall not exceed ~~50~~25% of the total eligible construction costs.

Longitudinal storm drains are eligible for program participation when, in the opinion of the TAC, the storm drain is an incidental part (cost is less than ~~50~~25% of the total eligible ~~improvement-construction~~ cost) of an eligible improvement. Program participation shall not exceed ~~25~~10% of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in ACE Program funding.

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

Soundwalls are eligible only if they are required as part of the environmental mitigation for the proposed project. Aesthetic enhancements and landscaping in excess of minimum environmental mitigation requirements are subject to limitations described in this section above.

Utility Relocations

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

- The relocation is made necessary by the proposed improvements.
- The facility to be relocated is within the project right of way.



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- It has been determined that the local agency is legally liable for either a portion of or all of the relocation costs.

Liability can be determined by property rights, franchise rights/agreements, state and local statutes/ordinances, permits, or a finding by the local agency's counsel. Documentation providing proof of the local agency's liability for the costs of utility relocation must be submitted with an initial payment request (see Chapter 10).

If a relocation is eligible to be reimbursed, and to be performed by the utility owner or by the utility owner's contractor, the work should be included in the ROW phase costs and clearly identified in the project application submittal. For eligible relocations to be performed during the construction phase by the local agency's contractor, the work should be included in the plans and specifications like any other construction activity.

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

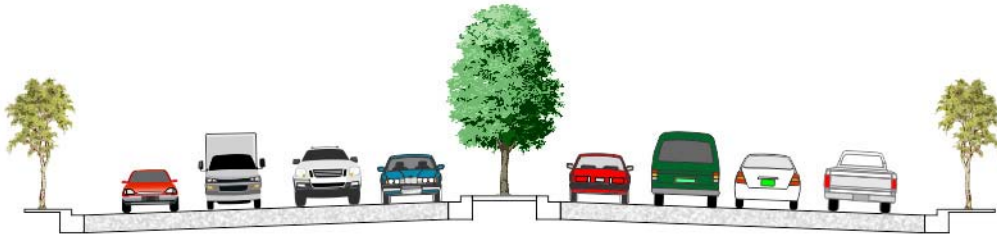
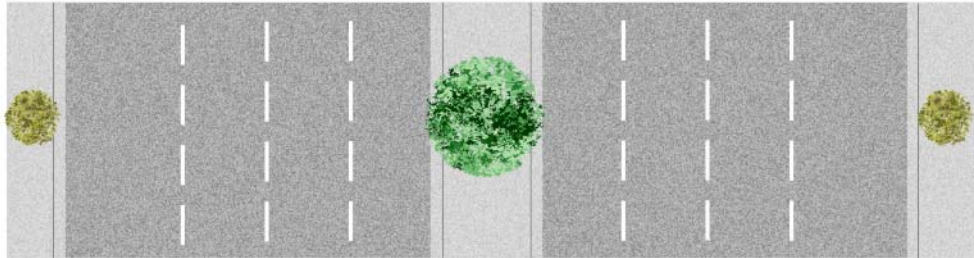
Ineligible Expenditures

Items that are not eligible under the ACE Program are:

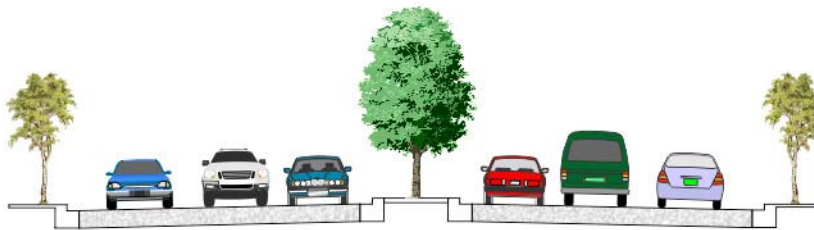
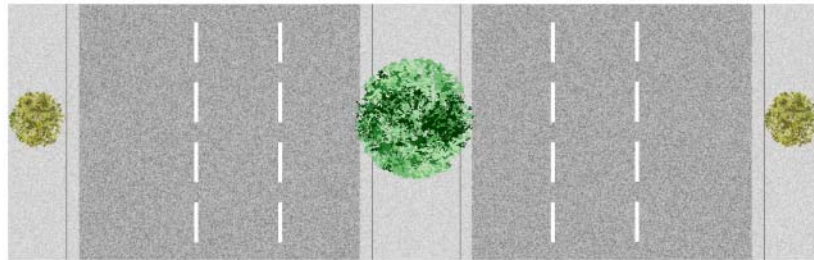
- Rehabilitation (unless performed as component of capacity enhancement program)
- Reconstruction (unless performed as component of capacity enhancement project)
- Grade Separation Projects
- Enhanced landscaping and aesthetics (landscaping that exceeds that necessary for normal erosion control and ornamental hardscape)
- Right of way acquisition and construction costs for improvements greater than the typical right of way width for the applicable MPAH Roadway Classification. (See standard MPAH cross sections in Exhibit 7-1) Eligibility for additional right of way to accommodate significant pedestrian volumes or bikeways shown on a Master Plan of Bikeways or in conjunction with the "Complete Streets" effort will be considered for reimbursement on a case by case basis. Where full parcel acquisitions are necessary to meet typical right of way requirements for the MPAH classification, any excess parcels shall be disposed of in accordance with the provisions of these guidelines and State statutes.
- Utility Betterments



Exhibit 7-1 Standard MPAH Cross Sections



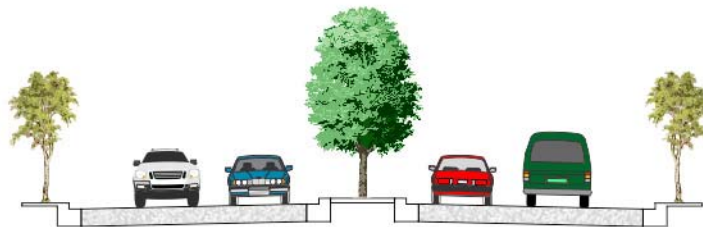
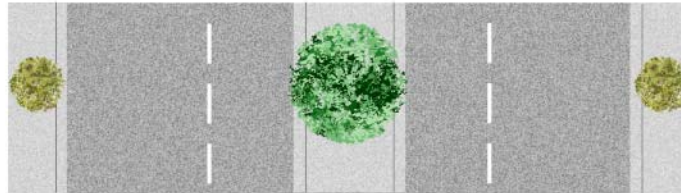
PRINCIPAL
144 FT
(8 LANES, DIVIDED)



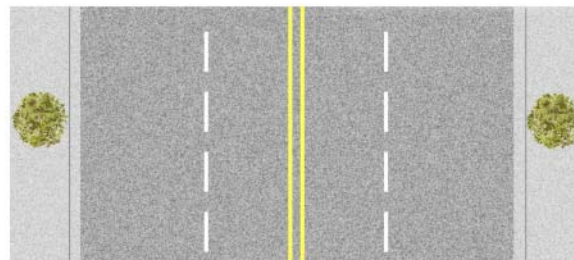
MAJOR
120FT
(6 LANES, DIVIDED)



Exhibit 7-1 *continued* Standard MPAH Cross Sections



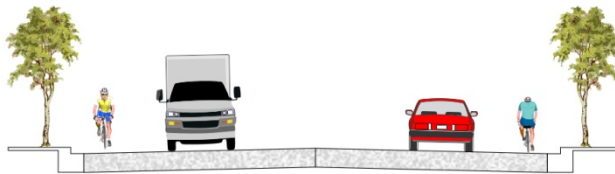
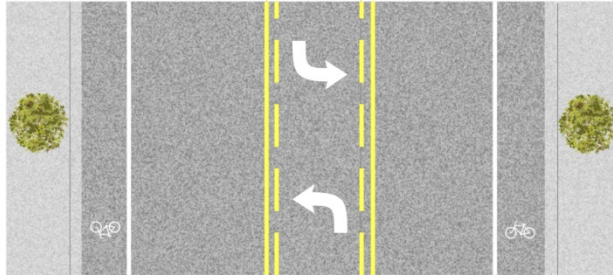
PRIMARY
100 FT
(4 LANES, DIVIDED)



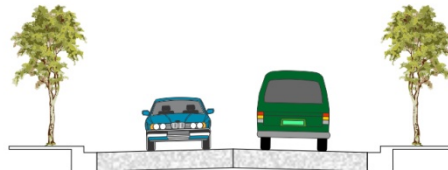
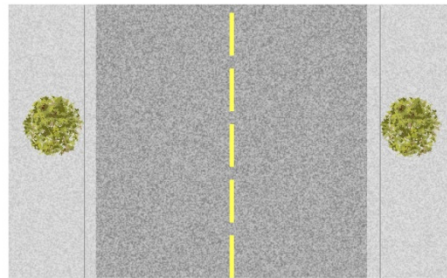
SECONDARY
80 FT
(4 LANES, UNDIVIDED)



**Exhibit 7-1 *continued*
Standard MPAH Cross Sections**



DIVIDED COLLECTOR
80 FT
(2 LANES, DIVIDED)



COLLECTOR
56 FT
(2 LANES, UNDIVIDED)



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Master Plan of Arterial Highway Capacities

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

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

Note: Values are maximum Average Daily Traffic

Funding Estimates

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

Selection Criteria

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

Projected/Current Average Daily Trips (ADT): Current ADT is the preferred method of measuring congestion. However, traffic counts projected to the year of opening for the project will be allowed as part of the competitive evaluation. These must be submitted along with current 24-hour traffic counts or current OCTA Traffic Flow Map data for the proposed segment for comparison purposes. The agency must submit the project



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projected ADT, current ADT, the delta, as well as a justification of the increase. Regarding “current” counts, these are defined as those taken for a typical mid-week period within the preceding 12-month period. Regarding “current” OCTA Traffic Flow Map data, it is defined as counts provided within the preceding 36 months. Projects submitted without “current counts” will be considered incomplete and non-responsive. New facilities will be modeled through OCTAM and requests should be submitted to OCTA with sufficient time to generate report prior to submittal of application.

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

Vehicle Miles Travelled (VMT): Centerline length of segment proposed for improvement multiplied by the existing ADT for the proposed segment length. Measurement must be taken proximate to capacity increase.

Current Project Readiness: This category is additive. Points are earned for each satisfied readiness stage at the time applications are submitted. Right of Way (All easements and titles) applies where no ROW is needed for the project or where all ROW has been acquired/dedicated). Right of Way (all offers issued) applies where offers have been made for every parcel where acquisition is required and/or offers of dedication have been received by the jurisdiction. Final Design (PS&E) applies where the jurisdiction's City engineer or other authorized person has approved the final design. Preliminary design (35% level) will require certification from the City Engineer and is subject to verification. Environmental Approvals applies where all environmental clearances have been obtained on the project.

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

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

Transportation Significance: Roadway classification as shown in the current Master Plan of Arterial Highways (MPAH).

MPAH Needs Assessment Category: Segment designation as shown in the Regional Capacity Program Assessment study.

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

- Pedestrian Facilities: Placement of a new sidewalk where none currently exists along entire segment of proposed project.
- Meets MPAH configuration: Improvement of roadway to full MPAH standard for the segment classification.
- Active Transit Route(s): Segments served by fixed route public transit service.
- Bus Turnouts: Construction of bus turnouts.
- Bike Lanes: Installation of new bike lanes (Class I or II)
- Median (Raised): Installation of a mid-block raised median where none exists today. Can be provided in conjunction with meeting MPAH standards.
- Remove On-street Parking: Elimination of on-street parking in conjunction with roadway widening project. Can be provided in conjunction with meeting MPAH standards and installation of new bike lanes.
- Other (Golf cart paths in conformance with California Vehicle Code and which are demonstrated to remove vehicle trips from roadway).

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

- Gap Closures: the construction of a roadway to its full MPAH build-out for the purpose of connecting two existing ends of that roadway by filling in a missing segment or for completing the terminus of an MPAH roadway. This applies to increased roadway capacity only as it relates to vehicular traffic.
- New Facility/Extensions: Construction of new roadways.
- Bridge crossing: Widening of bridge crossing within the project limits.
- Adds capacity: Addition of through traffic lanes.
- Improves traffic flow: Installation of a median, restricting cross street traffic, adding midblock turn lanes, or elimination of driveways.

Level of Service (LOS) Improvement: This category is a product of the existing or projected LOS based upon volume/capacity– or v/c -- and LOS improvement “with project”. **Projects must meet a minimum existing or projected LOS of “D” (.81 v/c) “without project” condition to qualify for priority consideration for funding.** Projects that do not meet the minimum LOS “D” can be submitted, but are not guaranteed consideration as part of the competitive process.

If during the competitive process, it is determined that additional programming capacity exists after all eligible projects with LOS “D” have been funded, a consideration of projects with a minimum LOS “C” (.71 v/c) may be undertaken. Such consideration will

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be at the discretion of OCTA. Projects with an LOS better than "C" (.70 v/c) will not be considered.



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Application Process

Project allocations are determined through a competitive application process. Local agencies seeking funding must complete a formal application and provide supporting documentation that will be used to evaluate the project proposal as outline below. Detailed instructions and checklists are provided in Chapter 9.

- Complete application
 - Funding needs by phase and fiscal year
 - Match funding source
 - Supporting technical information (including current traffic counts)
 - Project development and implementation schedule
 - Right of way status and strategy for acquisition /disposal of excess ROW
 - Any additional information deemed relevant by the applicant
- Allocations subject to Master Funding Agreement

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

Applications will be reviewed by the Authority for consistency, accuracy and concurrence. Once applications have been completed in accordance with the program requirements, the projects will be scored, ranked and submitted to the TSC, TAC and Board of Directors for consideration and funding approval.

Minimum Eligibility Requirements

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

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

New Facilities

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



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

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

Matching Funds

Local agencies are required to provide match funding for each phase of the project. As prescribed by Ordinance No. 3, the minimum local match requirement is 50% with potential to reduce this amount if certain eligibility requirements are met.

Other Application Materials

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

Council Approval: A Council Resolution or Minute Order action authorizing request for funding consideration with a commitment of project match funding (local sources) must be provided with the project application. **If a draft copy of the resolution is provided, the local agency must also provide the date the resolution will be finalized by the local agency’s governing body.**

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



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Pavement Management Supporting Documentation: The Measure M2 ordinance provides for a 10% reduction in the required local match if the agency can demonstrate a measurable improvement in PCI (1 point increase or greater) over the previous reporting period, or if the agency can demonstrate a PCI that is within the highest 20% of the scale (PCI of 75 or greater). If an agency is electing to take the 10% match reduction, supporting documentation indicating either the PCI improvement or PCI scale must be provided.

Project Summary Information: With each application, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. Should the project submitted be recommended for funding, agency staff should be prepared to present the PowerPoint to the TSC.

Reimbursements

This program is administered on a reimbursement basis for capital improvements, planning, design, and right-of-way acquisition. Reimbursements will be disbursed upon review and approval of an acceptable initial payment submittal, final report and consistency with Master Funding Agreement or cooperative agreement if federal funds are awarded. The reimbursement process is more fully described in Chapter 10 of this manual.

Project Cancellation

Projects deemed infeasible during the planning phase will be cancelled and further expenditures will be prohibited (except where necessary to conclude the current phase). Right of way acquired for projects that are cancelled prior to construction will require repayment to the contributing funding program(s) within a reasonable time as determined by the OCTA Board of Directors.

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

Audits

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



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repayment, reduction in overall allocation, and/or other sanctions to be determined. Audits shall be conducted by OCTA's Internal Audit department or other authorized agent either through the normal annual process or on a schedule to be determined by the OCTA Board of Directors. See Chapter 11 for detailed independent audit requirements.

Proceeds from the sale of excess right of way acquired with program funding must be paid back to the project fund as described in Chapter 10 and described in the Master Funding Agreement.



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TABLE 7-1

**Regional Capacity Program
Street Widening**

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



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Table 7-2
Point Breakdown for Arterial Capacity Enhancement Projects
Maximum Points = 100

Facility Usage		Points: 25	Facility Importance		Points: 20
Existing ADT			Transportation Significance		
Range		Points	Range		Points
45+	thousand	10	Principal or CMP Route	5	
40-44	thousand	8	Major	4	
35 - 39	thousand	6	Primary	3	
30 - 34	thousand	5	Secondary	2	
25 - 29	thousand	4	Collector	1	
20 - 24	thousand	3			
15 - 19	thousand	2	MPAH Assessment Category		
10-14	thousand	1	Range	Points	
<10	thousand	0	Category 1	10	
			Category 2	8	
			Category 3	6	
			Category 4	4	
			Category 5	2	
VMT			Operational Efficiencies		Maximum 5 points
Range		Points	Characteristics (i.e.)		Points
31+	thousand	10	Pedestrian Facilities (New)	3	
26-30	thousand	8	Meets MPAH Configs.	3	
22-25	thousand	6	Active Transit Route(s)	2	
18-21	thousand	5	Bus Turnouts	2	
14-17	thousand	4	Bike Lanes (New)	3	
11-13	thousand	3	Median (Raised)	2	
8-10	thousand	2	Remove On-Street Parking	2	
4-7	thousand	1	Other	2	
<4,000	thousand	0			
Current Project Readiness		Max Points: 5	Benefit:		Points: 35
Range		Points	Improvement Characteristics		Points
Environmental Approvals		1	Gap Closure		10
Preliminary Design (35%)		1	New Facility/Extension		8
Right Of Way (All offers issued)		1	Bridge Crossing		8
Right Of Way (All easement and titles)		3	Adds Capacity		6
Final Design (PS&E)		2	Improves Traffic Flow		2
Points are additive, Design and ROW limited to highest qualifying designation			LOS Improvement		Max Points: 25
Economic Effectiveness		Points: 20	Calculation: LOS Imp x LOS Starting Pt.		
Cost Benefit (Total \$/ADT)			Existing LOS Starting Point		
Range*		Points	Range		Points
<25		15	1.01+	5	
25-49		13	.96 - 1.00	4	
50 - 99		11	.91 - .95	3	
100 - 149		9	.86-.90	2	
150 - 199		7	.81-.85	1	
200 - 249		5			
250 - 299		4	LOS Improvement W/Project (exist. volume)		
300 - 349		3	Range	Points	
350 - 399		2	.20+	5	
400 - 499		1	.16 - .19	4	
500+		0	.1 - .15	3	
Funding Over-Match (local match/project cost) minus minimum local match requirement			.05 - .09	2	
Range*		Points	.01 - .05	1	
25+	%	5			
20 - 24	%	4			
15 - 19	%	3			
10 - 14	%	2			
5-9	%	1			
0-4	%	0			
*Range refers to % points above agency minimum requirement					



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Chapter 7 – Regional Capacity Program

Section 7.2 – Intersection Capacity Enhancements (ICE)

Overview

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

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

For the purposes of the ICE improvement category, the limits of an intersection shall be defined as the area that includes all necessary (or planned) through lanes, turn pockets, and associated transitions required for the intersection. Project limits of up to 600 feet for each intersection leg is recommended.

Objectives

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

Project Participation Categories

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

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

Eligible Activities

- Planning, environmental clearance
- Design (plans, specifications, and estimates)



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- Right of way acquisition
- Construction (including bus turnouts, curb ramps, median, and striping)

Potentially Eligible Items

- Storm drains/catch basins
- Aesthetic improvements including landscaping within the project ROW (eligible improvements up to 25% of construction costs, provided costs are reasonable for the transportation benefit)
- Signal equipment (as incidental component of program)

Ineligible Items

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

Environmental mitigation will be allowed only as required for the proposed roadway improvement, and only as contained in the environmental document. Program participation in environmental mitigation shall not exceed 50 percent of the total eligible project costs.

Longitudinal storm drains are eligible for program participation when, in the opinion of the TAC, the storm drain is an incidental part (cost is less than 50 percent of the total eligible improvement cost) of an eligible improvement. Program participation shall not exceed 25 percent of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in ICE improvement category funding.

Soundwalls are eligible only if they are required as part of the environmental clearance for the proposed project. Program participation for soundwalls shall not exceed 50 percent of the total eligible project costs.

Funding Estimates



Chapter 7 – Regional Capacity Program (ICE)

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

Selection Criteria

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

Projected/Current Average Daily Trips (ADT): Current ADT is the preferred method of measuring congestion. However, traffic counts projected to the year of opening for the project will be allowed as part of the competitive evaluation. These must be submitted along with current 24-hour traffic counts or current OCTA Traffic Flow Map data for the proposed segment for comparison purposes. The agency must submit the project projected ADT, current ADT, the delta, as well as a justification of the increase. Regarding “current” counts, these are defined as those taken for a typical mid-week period within the preceding 12-month period. Regarding “current” OCTA Traffic Flow Map data, it is defined as counts provided within the preceding 36 months. Project applications without “current” counts will be deemed incomplete and non-responsive. Average ADT for the east and west legs of the intersection will be added to the average ADT for the north and south legs.

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

Current Project Readiness: This category is additive. Points are earned for each satisfied readiness stage at the time applications are submitted. Right of Way (All easements and titles) applies where no ROW is needed for the project or where all ROW has been acquired/dedicated). Right of Way (all offers issued) applies where offers have been made for every parcel where acquisition is required and/or offers of dedication have been received by the jurisdiction. Final Design (PS&E) applies where the jurisdiction's City Engineer or other authorized person has approved the final design. Preliminary design (35% level) will require certification from the City Engineer and is subject to verification. Environmental Approvals applies where all environmental clearances have been obtained on the project.



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

Funding Over-Match: The percentages shown apply to match rates above a jurisdiction's minimum match requirement. M2 requires a 50% local match for RCP projects. This minimum match can be reduced by up to 25 percentage points if certain eligible components are met. If a jurisdiction's minimum match target is 30% and a local match of 45% is pledged, points are earned for the 15% over-match.

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

Transportation Significance: Roadway classification as shown in the current Master Plan of Arterial Highways (MPAH).

MPAH Needs Assessment Category: Segment designation as shown in the Regional Capacity Program Assessment study.

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

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

Level of Service (LOS) Improvement: This category is a product of the existing or projected LOS based upon volume/capacity– or v/c -- and LOS improvement “with project” using Intersection Capacity Utilization (ICU) calculation with 1,700 vehicles per lane per hour and a .05 clearance interval. Calculations will be based upon “current”



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arterial link and turning movement counts projected to opening year. **Projects must meet a minimum existing or projected LOS of "D" (.81 v/c) to qualify for priority consideration for funding.** Projects that do not meet the minimum LOS "D" can be submitted, but are not guaranteed consideration as part of the competitive process.

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



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Application Process

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

- Complete application
 - Funding needs by phase and fiscal year
 - Match funding source
 - Supporting technical information (including current arterial link and turning movement counts)
 - Project development and implementation schedule
 - Right of way status and strategy for acquisition
 - Any additional information deemed relevant by the applicant
- Allocations subject to master funding agreement

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

Applications will be reviewed by the Authority for consistency, accuracy and concurrence. Once applications have been completed in accordance with the program requirements, the projects will be scored, ranked and submitted to the TSC, TAC and Board of Directors for consideration and funding approval.

Minimum Eligibility Requirements

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

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

Matching Funds

Local agencies are required to provide match funding for each phase of the project. As prescribed by Ordinance No. 3, the minimum local match requirement is 50% with potential to reduce this amount if certain eligibility requirements are met.



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Other Application Materials

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

Council Approval: A Council Resolution or Minute Order action authorizing request for funding consideration with a commitment of project match funding (local sources) must be provided with the project application. **If a *draft* copy of the resolution is provided, the local agency must also provide the date the resolution will be finalized by the local agency's governing body.**

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

Pavement Management Supporting Documentation: The Measure M2 ordinance provides for a 10% reduction in the required local match if the agency can demonstrate a measurable improvement in PCI (1 point or greater) over the previous reporting period, or if the agency can demonstrate a PCI that is within the highest 20% of the scale (PCI of 75 or greater). If an agency is electing to take the 10% match reduction, supporting documentation indicating either the PCI improvement or PCI scale must be provided.

Project Summary Information: With each application, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. Should the project submitted be recommended for funding, agency staff should be prepared to present the PowerPoint to the TSC.

Reimbursements

This program is administered on a reimbursement basis for capital improvements, planning, design, and right of way acquisition. Reimbursements will be disbursed upon review and approval of an acceptable initial payment submittal, final report and consistency with master funding agreement or cooperative agreement if federal funds



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are awarded. [The reimbursement process is more fully described in Chapter 10 of this manual.](#)

Project Cancellation

Projects deemed infeasible during the planning phase will be cancelled and further expenditures will be prohibited except where necessary to bring the current phase to a logical conclusion. Right of way acquired for projects which are cancelled prior to construction will require repayment to the contributing funding program(s) within a reasonable time as determined by the OCTA Board of Directors.

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

Audits

All M2 payments are subject to audit. Local agencies must follow established accounting requirements and applicable laws regarding the use of public funds. Failure to submit to an audit in a timely manner may result in loss of future funding. Misuse or misrepresentation of M2 funding will require remediation which may include repayment, reduction in overall allocation, and/or other sanctions to be determined. Audits shall be conducted by OCTA's Internal Audit department or other authorized agent either through the normal annual process or on a schedule to be determined by the OCTA Board of Directors. See Chapter 11 for detailed independent audit requirements.

Proceeds from the sale of excess right of way acquired with program funding must be paid back to the project fund as described in Chapter 10 and described in the Master Funding Agreement.



TABLE 7-3

**Regional Capacity Program
Intersection Improvement**

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



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Table 7-4
Point Breakdown for Intersection Capacity Enhancement Projects
Maximum Points = 100

<table border="0"> <tr> <td>Facility Usage</td> <td align="right">Points: 20</td> </tr> <tr> <td>ADT</td> <td></td> </tr> <tr> <td><u>Range*</u></td> <td align="right"><u>Points</u></td> </tr> <tr> <td>60+ thousand</td> <td align="right">15</td> </tr> <tr> <td>55 - 59 thousand</td> <td align="right">13</td> </tr> <tr> <td>50 - 54 thousand</td> <td align="right">11</td> </tr> <tr> <td>45 - 49 thousand</td> <td align="right">9</td> </tr> <tr> <td>40 - 44 thousand</td> <td align="right">7</td> </tr> <tr> <td>35 - 39 thousand</td> <td align="right">5</td> </tr> <tr> <td>30 - 34 thousand</td> <td align="right">3</td> </tr> <tr> <td>25 - 29 thousand</td> <td align="right">1</td> </tr> <tr> <td colspan="2">* Sum of AVG ADT for all four legs based upon OCTA Traffic Flow Map</td> </tr> <tr> <td>Current Project Readiness</td> <td align="right">Max Points: 5</td> </tr> <tr> <td><u>Range*</u></td> <td align="right"><u>Points</u></td> </tr> <tr> <td>Environmental Approvals</td> <td align="right">1</td> </tr> <tr> <td>Preliminary Design (35%)</td> <td align="right">1</td> </tr> <tr> <td>Right Of Way (All offers issued)</td> <td align="right">1</td> </tr> <tr> <td>Right Of Way (All easement and titles)</td> <td align="right">3</td> </tr> <tr> <td>Final Design (PS&E)</td> <td align="right">2</td> </tr> <tr> <td colspan="2">Points are additive, Design and ROW limited to highest qualifying designation</td> </tr> <tr> <td>Economic Effectiveness</td> <td align="right">Points: 25</td> </tr> <tr> <td>Cost Benefit (Total \$/ADT)</td> <td></td> </tr> <tr> <td><u>Range*</u></td> <td align="right"><u>Points</u></td> </tr> <tr> <td><10</td> <td align="right">15</td> </tr> <tr> <td>11-20</td> <td align="right">12</td> </tr> <tr> <td>21-30</td> <td align="right">9</td> </tr> <tr> <td>31-50</td> <td align="right">7</td> </tr> <tr> <td>51-75</td> <td align="right">5</td> </tr> <tr> <td>76-100</td> <td align="right">3</td> </tr> <tr> <td>>100</td> <td align="right">1</td> </tr> <tr> <td colspan="2">* = total cost / average ADT</td> </tr> <tr> <td>Funding Over-Match (local match/project cost) minus minimum local match requirement</td> <td></td> </tr> <tr> <td><u>Range</u></td> <td align="right"><u>Points</u></td> </tr> <tr> <td>25+ %</td> <td align="right">5</td> </tr> <tr> <td>20 - 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.16-.19	4																																																																																																																																																																														
.1-.15	3																																																																																																																																																																														
.05-.09	2																																																																																																																																																																														
<.05	1																																																																																																																																																																														



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Chapter 7 – Regional Capacity Program

Section 7.3 – Freeway Arterial/Streets Transitions (FAST)

Overview

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

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

Objectives

- Improve transition to and from Orange County freeways
- Provide timely investment of M2 revenues

Project Participation Categories

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

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

Eligible Activities

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



Chapter 7 – Regional Capacity Program (FAST)

Potentially Eligible Items

- Aesthetic improvements including landscaping within the project ROW (eligible improvements up to 10% of construction costs, provided costs are reasonable for the transportation benefit)
- Auxiliary lanes if necessitated by interchange improvements
- Soundwalls as mitigation for project

Environmental mitigation will be allowed only as required for the proposed roadway improvement, and only as contained in the environmental document. Program participation in environmental mitigation shall not exceed ~~50~~25% of the total eligible project costs.

Longitudinal storm drains are eligible for program participation when, in the opinion of the TAC, the storm drain is an incidental part (cost is less than ~~50~~25% of the total eligible improvement cost) of an eligible improvement. Program participation shall not exceed ~~25~~10% of the cost of storm drain longitudinal/parallel and main lines. Storm drain inlets, connectors, laterals and cross culverts shall have full participation in FAST improvement category funding.

Soundwalls are eligible only if they are required as part of the environmental clearance for the proposed project. Program participation for soundwalls shall not exceed 50 percent of the total eligible project costs.

Ineligible Projects

- Seismic retrofit projects (unless combined with eligible capacity enhancements)
- Enhanced landscaping and aesthetics

~~Funding Estimates~~

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



Chapter 7 – Regional Capacity Program (FAST)

Selection Criteria

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

Projected/Current Average Daily Trips (ADT): Current ADT is the preferred method of measuring congestion. However, traffic counts and ramp volumes projected to the year of opening for the project will be allowed as part of the competitive evaluation. These must be submitted along with current 24-hour traffic counts or current OCTA Traffic Flow Map data for the proposed segment for comparison purposes. The agency must submit the project projected ADT, current ADT, the delta, as well as a justification of the increase. Regarding “current” counts, these are defined as those taken for a typical mid-week period within the preceding 12-month period. Regarding “current” OCTA Traffic Flow Map data, it is defined as counts provided within the preceding 36 months. Project applications without “current” counts will be deemed incomplete and non-responsive. Average ramp intersection volume for each interchange ramp will be used for the current counts. New facilities will rely on projected ramp volume based upon Caltrans approved projection.

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

Current Project Readiness: This category is additive. Points are earned for each satisfied readiness stage at the time applications are submitted. Right of Way (all easements and titles) applies where no ROW is needed for the project or where all ROW has been acquired/dedicated). Right of Way (all offers issued) applies where offers have been made for every parcel where acquisition is required and/or offers of dedication have been received by the jurisdiction. Final Design (PS&E) applies where the jurisdiction's City engineer or other authorized person has approved the final design. Preliminary design (35% level) will require certification from the City engineer and is subject to verification. Project Approvals/Environmental Documentation (PA/ED) applies where a Project Report-level analysis has been completed and environmental approvals have been attained.

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



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Funding Over-Match: The percentages shown apply to match rates above a jurisdiction's minimum match requirement. M2 requires a 50% local match for RCP projects. This minimum match can be reduced by up to 25 percentage points if certain eligible components are met. If a jurisdiction's minimum match target is 30% and a local match of 45% is pledged, points are earned for the 15% over-match.

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

Transportation Significance: Roadway classification as shown in the current Master Plan of Arterial Highways (MPAH).

MPAH Needs Assessment Category: Segment designation as shown in the Regional Capacity Program Assessment study.

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

- Eliminate left turn conflicts: Ramp intersection reconfiguration which does not permit left turns onto ramps.
- Coordinated signal: Ramp intersections within a coordinated corridor where coordination did not previously exist.
- Add turn lanes: Increase in number of turn lanes on arterial.
- Add traffic control: Signalization of ramp intersection.
- Enhanced ramp storage: Extension or widening of existing ramp to improve~~ment~~ off-street storage capacity.
- Pedestrian facilities: Add crosswalk and or sidewalk to ramp or bridge crossing within context of interchange improvements.

Level of Service (LOS) Improvement: This category is a product of the existing or projected LOS based upon volume/capacity– or v/c -- and LOS improvement “with project”. **Projects must meet a minimum existing or projected LOS of “D” (.81 v/c) to qualify for priority consideration for funding.** Projects that do not meet the minimum LOS “D” can be submitted, but are not guaranteed consideration as part of the competitive process.

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



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

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

Application Process

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

- Complete application
 - Funding needs by phase and fiscal year
 - Match funding source
 - Supporting technical information
 - Project development and implementation schedule
 - Right of way status and strategy for acquisition
 - Any additional information deemed relevant by the applicant
- Allocations subject to master funding agreement or cooperative agreement if federal funds are awarded

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

Applications will be reviewed by the Authority for consistency, accuracy and concurrence. Once applications have been completed in accordance with the program requirements, the projects will be scored, ranked and submitted to the TSC, TAC and Board of Directors for consideration and funding approval.

Minimum Eligibility Requirements

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



Chapter 7 – Regional Capacity Program (FAST)

Caltrans is not eligible to submit applications or receive payment under this program. Only cities or the County of Orange may submit applications and receive funds. This program was designed to benefit local jurisdictions. However, the Orange County Transportation Authority wants to ensure that Caltrans facilities are not negatively affected.

Matching Funds

Local agencies are required to provide match funding for each phase of the project. As prescribed by Ordinance No. 3, a 50% minimum match is required. A lower local match may be permitted if certain eligibility criteria are met.

Reimbursements

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

Caltrans Coordination

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

Agencies submitting projects for this program must have confirmation from Caltrans that the proposed improvement is consistent with other freeway improvements.

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

Project Cancellation



Chapter 7 – Regional Capacity Program (FAST)

Projects deemed infeasible during the planning phase will be cancelled and further expenditures will be prohibited (except where necessary to bring the current phase to a logical conclusion. Right of way acquired for projects which are cancelled prior to construction will require repayment to the contributing funding program(s) within a reasonable time as determined by the OCTA Board of Directors.

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

Audits

All M2 payments are subject to audit. Local agencies must follow established accounting requirements and applicable laws regarding the use of public funds. Failure to submit to an audit in a timely manner may result in loss of future funding. Misuse or misrepresentation of M2 funding will require remediation which may include repayment, reduction in overall allocation, and/or other sanctions to be determined. Audits shall be conducted by OCTA's Internal Audit department or other authorized agent either through the normal annual process or on a schedule to be determined by the OCTA Board of Directors. See Chapter 11 for detailed independent audit requirements.

Proceeds from the sale of excess right of way acquired with program funding must be paid back to the project fund as described in Chapter 10 and described in the Master Funding Agreement.

Other Application Materials

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

Council Resolution: A Council Resolution authorizing request for funding consideration with a commitment of project match funding (local sources) must be provided with the project application. **If a *draft* copy of the resolution is provided, the local agency must also provide the date the resolution will be finalized by the local agency's governing body.**

Project Documentation: If proposed project has completed initial planning activities (such as PSR or equivalent, EIR, or design), evidence of approval should be included with the application. Satisfactory evidence includes project approval signature page, engineer-stamped site plan, or other summary information to demonstrate completion



Chapter 7 – Regional Capacity Program (FAST)

of planning phases. The applicant will be asked for detailed information only if necessary to adequately evaluate the project application.

Pavement Management Supporting Documentation: The Measure M2 ordinance provides for a 10% reduction in the required local match if the agency can demonstrate a measurable improvement in PCI (1 point or greater) over the previous reporting period, or if the agency can demonstrate a PCI that is within the highest 20% of the scale (PCI of 75 or greater). If an agency is electing to take the 10% match reduction, supporting documentation indicating either the PCI improvement or PCI scale must be provided.

Project Summary Information: With each application, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate. Should the project submitted be recommended for funding, agency staff should be prepared to present the PowerPoint to the TSC.



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TABLE 7-5

**Freeway/Arterial Street Transitions
Interchange Improvements**

	Category	Points Possible	Percentage
Facility Usage	Existing ADT	10	10%
	Current Project Readiness	10	10%
Economic Effectiveness	Cost Benefit	10	10%
	Matching Funds	10	10%
	Coordination with Freeway Project	5	5%
Facility Importance	Transportation Significance	5	5%
	MPAH Assessment Category	10	10%
	Operational Efficiencies	10	10%
Benefit	Existing LOS	10	10%
	LOS Reduction W/Project	10	10%
	Improvement Characteristics	10	10%
TOTAL		100	100%



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Chapter 7 – Regional Capacity Program (FAST)

TABLE 7-6

Point Breakdown for Freeway/Arterial Street Transitions Program
Maximum Points = 100

Facility Usage		Points: 20	Facility Importance		Points: 25
ADT (Arterial plus daily exist volume)			Transportation Significance		
range		points	range		points
55+	thousand	10	Principal or CMP Route		5
50 - 54	thousand	9	Major		4
45 - 49	thousand	8	Primary		3
40 - 44	thousand	6	Secondary		2
35 - 39	thousand	4	Collector		1
30 - 34	thousand	3	MPAH Assessment Category		
25 - 29	thousand	2	range		points
20 - 24	thousand	1	Category 1		10
15 - 19	thousand	0	Category 2		8
10-14	thousand	0	Category 3		6
<10	thousand	0	Category 4		4
Current Project Readiness		Max. 10 pts.	Category 5		2
range		points	Operational Efficiencies		Max. 10 pts.
Right Of Way (All easement and titles)		6	characteristic(s)		points
Right Of Way (All offers issued)		4	Eliminate left turn conflict		3
Final Design (PS&E)		3	Coordinated signal		2
PA/ED		2	Add turn lanes		3
Project Study Report or Equiv.		1	Add traffic Control		1
Points are additive, ROW is highest qualifying designation			Enhanced ramp storage		3
			Pedestrian Facilities (New)		3
			*contains a combination of the above		
Economic Effectiveness		Points: 25	Benefit		Points: 30
Cost Benefit (Total \$/ADT)			LOS Improvement		Max: 20
range		points	Calculation: Ave LOS Imp + Ave LOS Starting Pt.		
<20		10	LOS Reduction W/Project (exist. volume)		
20-39		8	range		points
40-79		6	.20+		10
80-159		4	.16 - .19		8
160-319		2	.1 - .15		6
320-640		1	.05 - .09		4
>640		0	<.05		2
Funding Over-Match (local match/project cost) minus			Existing LOS		
minimum local match requirement			range		points
range		Points	1.06+		10
30+ %		10	1.01 - 1.05		8
25-29 %		8	.96 - 1.00		6
20-24 %		6	.91 - .95		4
15-19 %		4	.86 - .90		2
10-14 %		2	.81 - .85		1
0-9 %		1	Improvement Characteristics		
Range refers to % points above agency min. req.			characteristic(s)		points
			New facility (full interchange)		10
Coordination w ith Freeway Project			New facility (partial interchange)		8
Range		Points	Interchange reconstruction		6
yes		5	Ramp reconfiguration		4
no		0	Ramp metering		2



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Chapter 7 – Regional Capacity Program

Section 7.4 – Regional Grade Separation Program (RGSP)

Background

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

Future calls for projects for grade separations are not anticipated.



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Chapter 8 – Regional Traffic Signal Synchronization Program



Overview

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

The Project P/ Regional Traffic Signal Synchronization Program is based on the Traffic Signal Synchronization Master Plan (Master Plan). The OCTA Board of Directors adopted the Master Plan as an element of the MPAH on July 26, 2010. The Master Plan defines the foundation of the Regional Traffic Signal Synchronization Program. The Master Plan consists of the following components:

- Regional signal synchronization network
- Priority corridors for accelerated signal synchronization
- Definition of Traffic Forums
- Model agreements presenting roles and responsibilities for Project P
- Signal synchronization regional assessment every three years

The Master Plan will be reviewed and updated by OCTA every three years and will provide details on the status and performance of the traffic signal synchronization activities over that period. Local jurisdictions are required to adopt and maintain a Local Traffic Signal Synchronization Plan (Local Plan) that is consistent with the Master Plan and shall issue a report on the status and performance of its traffic signal synchronization activities by December 31, 2010. Details on both the Master Plan and requirements for Local Plan development are available in the "Guidelines for the Preparation of Local Signal Synchronization Plans" document dated September 15, 2010. A hard copy of these guidelines can be requested from OCTA.

~~This The~~ remainder of this chapter details the key components of Project P/ Regional Traffic Signal Synchronization Program:

- Funding guidelines for the competitive call for projects
- Reimbursements and reporting requirements as described in Chapter 10
- ~~2013-2014~~ Call for Projects

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

Chapter 8 – Regional Traffic Signal Synchronization Program



Section 8.1 – Funding Guidelines

Objectives

- Synchronize traffic signals across jurisdictions
- Monitor and regularly improve the synchronization
- Synchronize signals on a corridor basis reflecting existing traffic patterns

Project Definition

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

Projects must consist of a corridor along the priority corridor network, signal synchronization network, or the Master Plan of Arterial Highways (MPAH). ~~Figure 1 shows the signal synchronization network corridors eligible for funding as part of the 2013-2014 call for projects.~~ Projects previously awarded RTSSP funding must be complete with a final report submitted and approved by OCTA¹. Projects can be the full length of the corridor or a segment that complies with the project requirements identified later in the chapter. Note, communication system improvements that directly benefit signal synchronization along the project corridor limits, but are not physically within the project corridor, are eligible for inclusion in a project.

Eligible Activities

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

- Signal Coordination
 - Developing and implementing new signal synchronization timing and parameters based on current travel patterns

¹ Also eligible will be corridors previously granted RTSSP funding that cancel the existing allocation prior to funding award.

Chapter 8 – Regional Traffic Signal Synchronization Program



- Monitor (minimum quarterly/maximum monthly) and regularly improve the signal synchronization timing and parameters after project signal timing is implemented for remainder of the project
- “Before” and “after” studies for the project using travel times, average speeds, green lights to red lights, average stops per mile, and green house gases

In addition to developing optimized signal timing, a project may include other improvements as long as they contribute to the goal of multi-agency signal synchronization of corridors throughout Orange County. These improvements are restricted to the signal synchronization project limits, with the exception of communications that are installed from a central location to the project corridor. All improvements must be designed to enhance the specific project. The following are a list of potentially eligible items as part of a signal coordination project:

- New or upgraded detection
 - Upgrade detection along the signal synchronization corridors to ensure necessary conditions for signal synchronization: inductive loops, video detection, other types of detection systems
- New or upgraded communication systems
 - Contemporary communication system improvements (e.g. Ethernet)
 - Replacement fiber optic or copper cabling for network communication
 - Software and hardware for system traffic control
 - Control and monitoring interconnect conduit (including upgrades or replacement of existing systems)
- Communications and detection support (~~maximum three years~~)
 - Monitor, maintain, and repair communication and detection along synchronized corridors to ensure necessary conditions for signal synchronization including interconnect and communications equipment
- Intersection/field system modernization and replacement
 - Traffic signal controller replacement of antiquated units
 - Controller cabinet replacements that can be shown to enhance signal synchronization
 - Closed circuit television (CCTV)
 - Uninterruptible power supply (UPS) for field equipment
- Minor signal operational improvements (new)
 - Emergency vehicle preempt (signal equipment only)

Chapter 8 – Regional Traffic Signal Synchronization Program



- Transit signal priority (signal equipment only)
- Channelization improvements required for traffic signal phasing but not requiring street construction
- Traffic signal phasing improvements that will improve traffic flow and system performance including protective permissive left turns
- Improvements to comply with new federal or state standards for traffic signal design as related to signal synchronization
- Traffic management center (TMC)/traffic operations centers (TOC) and motorist information
 - New TMCs or TOCs (any project funded under this category must be planned or built to be center-to-center communication “ready” with nearby agencies and/or OCTA)
 - Upgrades to existing TMCs or TOCs (any project funded under this category must be planned or built to be center-to-center communication “ready” with nearby agencies and/or OCTA)
 - Motorist information systems (up to 10 percent of total project costs)
 - Video display equipment, including wall monitors, screens, mounting cabinets, and optical engines (up to 10 percent of total project costs)
- Real-time traffic actuated operations and demonstration projects
 - Adaptive traffic signal systems
- Caltrans encroachment permits
 - Includes eligible Caltrans labor, capital, environmental and permitting expenses

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

Ineligible Expenditures

- Isolated traffic signal improvements
- Traffic hardware (pole, mast arms, lights, electrical, signs, etc.)
- Regular signal operation and maintenance (such as replacement of light bulbs)
- Field display equipment (signal heads)
- Feasibility studies
- Relocation of utilities
- Battery backup systems for TMC
- Right-of-way

Chapter 8 – Regional Traffic Signal Synchronization Program



Funding Estimates

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

The Program targets over 2,000 intersections across Orange County for coordinated operations. Because of the limited amount of funds available for Project P, project cap of \$60,000 per signal or \$200,000 per project corridor mile included as part of each project (whichever is higher) has been established for the call for projects.

Selection Criteria

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

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

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

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

Cost Benefit: Total project cost ~~Existing VMT~~ divided by Existing VMT ~~total project cost (including unfunded phases)~~. (maximum: 15 points)

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

Transportation Significance: Points are earned based on the corridor being on the priority corridor network or the signal synchronization network. (maximum: 10 points)

Chapter 8 – Regional Traffic Signal Synchronization Program



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

Project Scale: Points are earned for including more intersections along priority corridor network, signal synchronization network, or MPAH as part of the project. (maximum: 10 points)

Number of Jurisdictions: Points are earned for including multiple jurisdictions as part of the project. (maximum: 20 points)

Current Project Readiness: Points are earned based on the start date of the project. (maximum: 5 points)

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

Chapter 8 – Regional Traffic Signal Synchronization Program



Table 8-1
RTSSP Selection Criteria for Eligible Projects
Maximum Points = 100

Vehicle Miles Travelled (VMT)		Points: 20	Project Scale		Points: 10
VMT			Number of Signals Coordinated by Project		
Range		Points	Range		Points
250+	thousand	20	50+		5
200 - 249	thousand	15	40 - 49		4
150 - 199	thousand	10	30 - 39		3
100 - 149	thousand	6	20 - 29		2
50 - 99	thousand	3	10 - 19		1
0 - 49	thousand	1	< 10		0
Calculation: ADT x segment length (Applies only to coordinated segments of project)			AND		
Economic Effectiveness		Points: 15	Percent of Corridor Signals Being Retimed		
Cost Benefit (Total \$/VMT)			Range		Points
Range*		Points	90% or above		5
< 3		15	80 - 89%		4
3 - 5		13	70 - 79%		3
6 - 8		11	60 - 69%		2
9 - 11		9	50 - 59%		1
12 - 14		7	< 50%		0
15 - 17		5	Calculation: Number of signals in project divided by total signals in full corridor length		
18 - 20		3	Number of Jurisdictions		Points: 20
21 - 23		2	Total Number of Involved Jurisdictions		
24 - 26		1	Range		Points
27+		0	5 or more		20
Project Characteristics		Points: 10	4		16
Project Feature		Points	3		12
TMC/TOC and motorist information		2	2		8
New or upgraded communications systems		2	1		0
New or upgraded detection		2	OR		
Intersection/field system modernization		2	% of Priority Corridor Jurisdictions Involved		
Minor signal operational improvements		2	Range		Points
New Protected/Permissive signals		3	100%		20
Adaptive traffic and demonstration projects		3	75 - 99%		12
Points are additive to maximum of 10 points			50 - 75%		6
Transportation Significance		Points: 10	< 50%		0
Corridor Type		Points	Current Project Readiness		Points: 5
Priority Corridor		10	Estimated Project Start		
Signal Synchronization Corridor		5	Within 12 months		5
Local TSSP Route / MPAH		0	Within 24 months		3
Maintenance of Effort		Points: 5	Within 36 months		1
MOE after Grant Period		Points	Funding Match		Points: 5
3 years		5	Overall Match %		Points
2 years		3	50+%		5
1 year		1	40 - 49%		4
None		0	35 - 39%		3
ADT: Average Daily Traffic			30 - 34%		2
MPAH: Master Plan of Arterial Highways			25 - 29%		1
TMC/TOC: Traffic management center/traffic operations center			<25%		0

Chapter 8 – Regional Traffic Signal Synchronization Program



Application Process

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

- Funding needs by phase and fiscal year
- Percent match including funds type, source, and description (minimum 20%)
- Lead agency Option 1 (default – local agency) or Option 2 (OCTA)
- Lead and supporting agencies names
- Supporting technical information
- Project development and implementation schedule
- Environmental clearances and other permits
- Any additional information deemed relevant by the applicant

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

Applications will be reviewed by OCTA for consistency, accuracy, and concurrence. Once applications have been completed in accordance with the Program requirements, the projects will be scored, ranked, and submitted to the Technical Steering Committee, Technical Advisory Committee, and the Board for consideration and funding approval. OCTA reserves the right to evaluate submitted project costs for reasonableness as part of the review and selection process and suggest potential revisions to make the cost more appropriate. Allocations will be subject to funding agreements with OCTA.

Application Instructions

An application should be submitted for a single corridor project. Multiple corridors, related systems of corridors, and corridors that form a “grid” must be submitted as separate corridor projects. The following instructions should be used in developing project applications.

OCFundtracker Application Components

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

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includes the following categories of information (see “Project P Funding Guidelines” for additional information):

- Vehicle Miles Traveled
- Benefit/Cost Ratio **Cost Benefit**
- Project Characteristics
- Transportation Significance
- Maintenance of Effort
- Project Scale
- Number of Jurisdictions
- Current Project Readiness
- Funding Over-Match

Minimum Eligibility Requirements

All M2 eligible Orange County cities and the County of Orange may participate in this Program. Caltrans facilities are eligible for this Program, but Caltrans cannot act as the lead agency. Agencies will be required to provide a minimum of 20 percent matching funds for eligible projects (see definition of matching funds below).

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

1. Be on a street segment that is part of the priority corridor network, signal synchronization network, or the MPAH. The project must be consistent with Local Signal Synchronization Plans and support the Regional Traffic Signal Synchronization Master Plan goals.
2. Be multi-jurisdictional, have documented support from all participating jurisdictions (cities, County, or Caltrans) and a minimum of 20 signals

or

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

or

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

or

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

Matching Funds

Local agencies along the corridor are required to provide minimum match funding of 20 percent for each project. As prescribed by Ordinance Number 3, this includes local sources, ~~Measure M turn-back~~ M2 Fair Share, and other public or private sources (herein referred to as a “cash match”). Projects can designate matching funds as cash match, in-kind match provided by local agency staff and equipment, or a combination of both.

In-kind match is defined as those actions that local agencies will do in support of the project including staffing commitment and/or new signal system investment related to improved signal synchronization. Examples of staffing commitment include, but are not limited to, implementation of intersection or system timing parameters, review of timing documentation, meeting participation, conducting or assisting in before/after studies, and other similar efforts. Allowable signal system investment would be improvements that are “eligible activities” per the funding guidelines, which can be shown to improve signal synchronization and would not include any prior investments made by the agency.

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

Project category	Type of matching allowed*
Signal coordination	In-kind** or cash match
New or upgraded detection	In-kind** or cash match
New or upgraded communications systems	In-kind** or cash match
Communications and detection support	In-kind** or cash match
Intersection/field system modernization and replacement	In-kind** or cash match
Minor signal operational improvements	In-kind** or cash match
Traffic management center/traffic operations centers and motorist information systems	Cash match only

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Real-time traffic actuated operations and demonstration projects	Cash match only
--	-----------------

* Project ~~over~~-match beyond 20% is limited to ~~dollar~~-cash match only

** In-kind services are subject to audit.

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

- Staffing commitment
 - staff position
 - number of hours
 - hourly (fully burdened) rate
 - total cost
- New signal system investment
 - cost of any signal system investment
 - benefit to project

Projects submitted as OCTA lead require a 20% cash match for Primary Implementation activities. Operations and Maintenance activities will be permitted soft match only for local agency oversight functions. Contract activities will require cash match.

OCTA staff will review in detail the presented cash and in-kind match by local agency for reasonableness. Additional requirements on in-kind match as part of the upcoming call are provided in Section 8.2.

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Other Application Materials

Supporting documentation is required to fully consider each project application. A Supplemental Application Template ~~is included in Exhibit 8-1 that~~ is required to be completed for each project application. The template is distributed with other application materials at the issuance of the Call for Projects. In addition to the funding plan described above, local agencies will be required to submit the following materials:

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

Participating Agencies: All participating agencies must be identified.

Council Approval: A Council Resolution or Minute Order action authorizing request for funding consideration with a commitment of project match funding (local sources) must be provided with the project application from all participating agencies.

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

Lead Agency

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

Local Agency Lead: If a local city is the lead agency, then only the lead agency will receive payments in accordance to the Comprehensive Transportation Funding Guidelines regarding payment for costs related to project for optimized signal timing development, capital improvements, planning, and related design. Payments will be disbursed consistent with ~~M2 guidelines regarding payment~~ Chapter 10 of this manual. The lead agency is responsible for reimbursing other agencies as part of the effort. Additionally, the lead agency is also responsible for ensuring that all agencies participating in the project provide the match proposed in the project application.

OCTA Lead: OCTA ~~will~~ may, at the request of the involved local agencies, act as the lead agency for regionally significant signal synchronization projects with the approval of the local agencies involved. If the involved local agencies would like OCTA to implement a project on the signal synchronization network, the local agency shall work cooperatively with OCTA to develop the scope of work and cost elements of the project. The lead

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local agency shall contact OCTA with a written request by September 76, 20122013. The application will be scored using the criteria outlined in the previous sections. Based on local agency interest and OCTA resource availability, a limited number of projects will be developed and implemented by OCTA. Recent Calls for Projects have resulted in OCTA implementing seven projects per year.

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

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

- Primary Implementation (12 months)
 - Project Administration - Each local agency traffic engineer or equivalent participates in approximately 10-15 hours per month of project administration (meetings, review of reports, minutes, and other administration).
 - Signal Synchronization Timing - Each local agency traffic engineer or equivalent reviews consultant developed draft and final timing plans for intersections within the local agency, approximately 2-4 hours per local agency intersection.
 - Before and After Study - Each local agency traffic engineer or equivalent reviews consultant developed draft and final project Before and After Study, approximately 2-5 hours per local agency.
 - Engineering design/review - Each local agency traffic engineer or equivalent reviews consultant developed engineer design within the local agency, approximately 2-4 hours per affected local agency intersection.
 - System integration - Each local agency traffic engineer or equivalent provides support for this function (hours vary depending on improvements).

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

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

Special Project P Certification

The Combined Transportation Funding Program (CTFP) Guideline includes provisions for payment for projects under M2. Project P requires additional provisions beyond those specified in ~~the CTFP Guidelines~~ [Chapter 10](#). Specifically, Project P eligible activities will require certification of completion to be presented at the time of the semi-annual review. A template of the certification document will be provided at a later date.

Project Cancellation

Projects deemed infeasible will be cancelled and further expenditures will be prohibited (except where necessary to bring the current phase to a logical conclusion).

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

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

Project delays will be dealt with in accordance to Precept #15 in the CTFP Guidelines.

Audits

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All M2 payments are subject to audit. Local agencies must follow established accounting requirements and applicable laws regarding the use of public funds. Failure to submit to an audit in a timely manner may result in loss of future funding. Misuse or misrepresentation of M2 funding will require remediation which may include repayment, reduction in overall allocation, and/or other sanctions to be determined. Audits shall be conducted by OCTA Internal Audit Department or other authorized agent either through the normal annual process or on a schedule to be determined by the OCTA Board.

Data Compatibility

All count data collected as part of any funded project shall be provided to OCTA in one of the two following digital formats: 1) NDS/Southland Car Counters style Excel spreadsheet; or 2) JAMAR comma separated value style text file. Any count data provided to OCTA shall be consistent with one of these two formats. The data shall then be able to be loaded into the OCTA Roadway Operations and Analysis Database System (ROADS). Any data files containing numeric intersection or node identifiers shall use the same node identification (ID) numbers as is stored in the ROADS database. OCTA shall provide a listing of intersections and corresponding unique node ID numbers. Each count data file shall adhere to the following file naming or csv. As an example, a turning movement count file for the intersection of Harbor Boulevard and Wilson Street in Costa Mesa would be given the filename CostaMesa_Harbor-Wilson_4534.csv.

All traffic signal synchronization data collected and compiled as part of any funded project for both existing (before) and final optimized (after) conditions shall be provided to OCTA in Synchro version 6 csv Universal Traffic Data Format (UTDF) format and version 7 combined data UTDF format. This data shall include the network layout, node, link, lane, volume, timing, and phase data for all coordinated times. All such data shall be consistent with the OCTA ROADS database.

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Section 8.2 – ~~2013-2014~~ Call for Projects

The following information provides an overview of the ~~2013~~-RTSSP Call for Projects.

1. For this ~~initial~~-RTSSP Call for Projects, projects totaling up to \$15 million in Measure M2 funds will be available to local agencies.
2. Projects must result in new, optimized, and field-implemented coordination timing.
3. Project must be a single contiguous corridor. Multiple corridors, related systems of corridors, and corridors that form a “grid” must be submitted as separate corridor projects.
4. Projects selected will be programmed after July 1st of the programmed year.
5. Project delays resulting in an-a time extension requests will fall within the process outlined in the CTFP Guidelines.
6. Projects are funded for a grant period of three (3) years and are divided into two phases:
 - a. Primary Implementation – includes the required implementation of optimized signal timing as well as any signal improvements proposed as part of a project. As an exception to Precept no. 16, Primary Implementation of the project must be completed within one (1) year of the initial payment.
 - b. Ongoing Maintenance and Operations – includes the required monitoring and improving optimized signal timing in addition to any optional communications and detection support. Ongoing Maintenance and Operations will begin after the Primary Implementation of the project is completed and be required for the remainder of the project. ~~(Typically typically 2 Years).~~ A project final report is required at the conclusion of this phase.
7. Projects shall include a Before and After Study. This study shall collect morning and evening peak period using travel times, average speeds, green lights to red lights, stops per mile, and the derived corridor system performance index (CSPI) metric. This information shall be collected both before any signal timing changes have been made and after the Primary Implementation. The study shall compare

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the information collected both before and after the timing changes. Comparisons shall identify the absolute and percent differences for the entire corridor, by segment, direction, and time period. Segments will be defined by major traffic movements as observed during the project (e.g. commuting segments between freeways, pedestrian-friendly segments in a downtown area, etc.). The Before and After Study shall be submitted after the Primary Implementation phase is completed.

8. Any corridor or portion of a corridor funded through this Project P Call for Projects cannot re-apply for Project P funding until the three year grant period or commitment to operate signal synchronization beyond the three year grant period is completed, whichever ends later.
9. Section 8.1 (Funding Guidelines) identifies the Project P selection criteria for projects, eligible activities, minimum project requirements, data compatibility required as part of any funded project, and other key information.

Applications

In order for OCTA to consider a project for funding, applications will be prepared by the local agency responsible for the project application. OCTA shall require agencies to submit applications for the ~~2013~~ call for projects by **5:00 p.m. on Friday, October 26, 2012**, ~~2012~~ **25, 2013**. Late submittals will not be accepted. The local agency responsible for the project application must submit the application and any supporting documentation via OCFundtracker as outlined below.

Project Submittal

A separate application package must be completed for each individual project and uploaded to OCFundtracker. **Three unbound printed copies** of each complete application shall also be mailed or delivered to:

Orange County Transportation Authority
550 South Main Street
P.O. Box 14184
Orange, California 92863-1584
Attn: ~~Anup Kulkarni~~ Roger Lopez

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Application Review and Program Adoption

1. OCTA staff will conduct a preliminary review of all applications for completeness and accuracy, may request supplemental information for projects during initial staff evaluations, and prepare a recommended program of projects for the OCTA Technical Steering Committee (TSC). In addition, OCTA may hire a consultant(s) to verify information within individual applications including, but not limited to, project scope, cost estimates, vehicle miles traveled, and average daily traffic.
2. The TSC will receive and evaluate the project applications and funding allocations.
3. Based on recommendations from the TSC, a program will be presented to the TAC for review and endorsement.
4. Recommendations from the TAC will be presented to the OCTA Board of Directors, who will approve projects for funding under the CTFP.
5. OCTA shall distribute copies of the approved program to each participating local jurisdiction with any qualifying conditions stipulated for the jurisdiction's funded project(s).

~~Application Instructions~~

~~An application should be submitted for a single corridor project. Multiple corridors, related systems of corridors, and corridors that form a "grid" must be submitted as separate corridor projects. The following instructions should be used in developing project applications.~~

~~OCFundtracker Application Components~~

~~Final applications MUST be submitted via OCFundtracker and in hard copy format. Selection criteria must be inputted as part of the OCFundtracker online application and includes the following categories of information (see "Project P Funding Guidelines" for additional information):~~

- ~~Vehicle Miles Traveled~~
- ~~Benefit/Cost Ratio~~
- ~~Project Characteristics~~
- ~~Transportation Significance~~
- ~~Maintenance of Effort~~

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- ~~• Project Scale~~
- ~~• Number of Jurisdictions~~
- ~~• Current Project Readiness~~
- ~~• Funding Over Match~~

~~Additional Application Documentation~~

~~In addition to the selection criteria information, the following additional documentation shall be included with the completed project application:~~

- ~~1. Key technical information such as diagrams, aerial photos, and maps:
 - ~~a. Project limits of the corridor to synchronize~~
 - ~~b. Designation of the corridor to synchronize: priority corridor, signal synchronization network corridor, or master plan of arterial highways corridor~~
 - ~~c. Project start date and end date, including any commitment to operate signal synchronization beyond the three year grant period~~
 - ~~d. Signalized intersections that are part of the project~~
 - ~~e. Traffic Forum members: Traffic Forums are project based, working group sessions that are a requirement of M2 and are equivalent to a project team. The local agency seeking funding should identify all the agencies participating (e.g., the agency seeking funding, other participating cities, California Department of Transportation, OCTA, etc.).~~~~
- ~~2. Lead agency option: The local agency seeking funding shall indicate the lead agency to *implement* the project. The default is the local agency applying for funding. If the involved local agencies would like OCTA to implement a project on the signal synchronization network, the lead local agency must make a written request to OCTA by September 7, 2012. OCTA will review and concur with the application scope and cost elements based on discussion with the participating agencies.~~
- ~~3. Provide a resolution of support from each member of the project Traffic Forum/ participating local agencies.~~
- ~~4. Preliminary plans for the project. The plans shall include details about both phases of the project: Primary Implementation and the Ongoing Maintenance and Operation. The plan shall be organized using the following setup:

Primary Implementation shall include details about the following:
 - ~~a. Project administration (required)~~~~

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- ~~b. Developing and implementing optimized signal synchronization timing (required)~~
- ~~c. Producing a Before and After Study for the project (required)~~
- ~~d. Engineering design of signal improvements for the project (optional)~~
- ~~e. System integration (optional)~~
- ~~f. Proposed signal improvements, construction support, and contingency (optional):~~
 - ~~i. New or upgraded detection~~
 - ~~ii. New or upgraded communication systems~~
 - ~~iii. Intersection/field system modernization and replacement~~
 - ~~iv. Minor signal operation improvements~~
 - ~~v. Traffic management centers~~
 - ~~vi. Real-time traffic actuated operations and demonstration projects~~
- ~~g. Contingencies (optional) 10% may be included as contingency as part of the cost estimates and should be clearly identified as part of the cost.~~
- ~~h. Construction Management (optional)~~

~~Ongoing Maintenance and Operations will begin after the Primary Implementation of the project is completed. It shall include details the following:~~

- ~~a. Monitoring and improving optimized signal timing (required)~~
- ~~b. Communications and detection support (optional)~~
- ~~c. Final report (required)~~

- ~~5. Funding needs/costs for the project by task (with a total cost clearly identified) and fiscal year:~~

~~Clearly include a listing of all expenditures and costs for the project by task (as included in the previous item). In the Primary Implementation, costs associated with project administration, developing timing, Before and After Study, engineering design, system integration, signal improvements, contingencies, and construction management, must be identified specifically. Ongoing Maintenance and Operation items must be included over the three-year grant period.~~

- ~~6. Project schedule by task~~

- ~~7. Identification of local agency funding match type (e.g., in-kind or cash), source, and description including any match over twenty percent (20%). In-kind match may only account up to 20% of a project. Match beyond 20% must be cash. Additional requirements on the match type are included in the CTFP Guidelines.~~

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~~In-kind match must be defined for each local agency as part of the supplemental application. The supplemental application template will include a section to input in-kind match by task and type: staffing commitment or new signal system investment. Additional data related to the staffing commitment (staff position, number of hours, hourly burdened rate, total cost) and/or new signal system investment (description of signal system investment, cost, anticipated date of implementation, and benefit to project) must also be provided. OCTA staff will review in detail the presented in-kind match by local agency for reasonableness.~~

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

- ~~• Primary Implementation (12 months)
 - ~~○ Project Administration – Each local agency traffic engineer or equivalent participates in approximately 10-15 hours per month of project administration (meetings, review of reports, minutes, and other administration).~~
 - ~~○ Signal Synchronization Timing – Each local agency traffic engineer or equivalent reviews consultant developed draft and final timing plans for intersections within the local agency, approximately 2-4 hours per local agency intersection.~~
 - ~~○ Before and After Study – Each local agency traffic engineer or equivalent reviews consultant developed draft and final project Before and After Study, approximately 2-5 hours per local agency.~~
 - ~~○ Engineering design/review – Each local agency traffic engineer or equivalent reviews consultant developed engineer design within the local agency, approximately 2-4 hours per affected local agency intersection.~~
 - ~~○ System integration – Each local agency traffic engineer or equivalent provides support for this function (hours vary depending on improvements).~~
 - ~~○ Construction management – Each local agency traffic engineer or equivalent provides construction management support including inspection (hour vary depending on improvements).~~~~

- ~~• Ongoing Maintenance and Monitoring (24 months) – Each local agency traffic engineer or equivalent participates in continued project level~~

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~~meetings of 2-5 hours per local agency per month to review consultant traffic engineering progress of Ongoing Maintenance and Monitoring. In addition, each local agency traffic engineer or equivalent reviews consultant developed draft and final project report.~~

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

~~8. Environmental clearances and other permits.~~

~~9. Calculations used to develop the VMT, benefit cost ratio, project scale, and all other submissions as part of the OCFundtracker online application.~~

~~10. Any additional information deemed relevant by the applicant.~~

Exhibits

Project P Supplemental Application Template

~~The "Project P Regional Traffic Signal Synchronization Program Application Template" has been provided (Exhibit 8-1). The application template shall be used and included as part of an application for funding as part of the program.~~

Checklist Guide

The "Project P Regional Traffic Signal Synchronization Program Application Checklist" has been provided for the Project P/RTSSP (Exhibit 8-21). The checklist identifies the basic documentation required for the program. In addition to items required at the time of project submittal, additional items that are not specified may be requested later. The checklist should be provided as a cover sheet for **each** application submitted. For any items that are required for the candidate project or program that are missing or incomplete, an explanation should be included in a cover letter with the application.

Sample Resolution Form

A resolution or minute action must be approved by the local jurisdiction's governing body. A sample resolution is included as Exhibit 8-2. The mechanism selected shall

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serve as a formal request for Project P funds and states that matching funds will be provided by the agency, if necessary. All project requests (i.e., multiple corridors proposed for Project P funds) must be included in this action.

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Exhibit 8-12

Project P Regional Traffic Signal Synchronization Program Application Checklist

Project P Application Checklist	Included
RTSSP Online Application – submitted through OCFundTracker 1. Vehicle Miles Traveled 2. Benefic Cost Ratio 3. Project Characteristics 4. Transportation Significance 5. Maintenance of Effort 6. Project Scale 7. Number of Jurisdictions 8. Current Project Readiness 9. Funding Over-Match	
Section 1: Key technical information a. Project limits of the corridor to synchronize b. Designation of the corridor to synchronize: priority corridor, signal synchronization network corridor, or master plan of arterial highways corridor c. Project start date and end date, including any commitment to operate signal synchronization beyond the three year grant period d. Signalized intersections that are part of the project e. Traffic Forum members	
Section 2: Lead agency	
Section 3: Resolutions of support from the project's Traffic Forum members	
Section 4: Preliminary plans for the proposed project The plans shall include details about both phases of the project: <u>Primary Implementation</u> and the <u>Ongoing Maintenance and Operation</u> . The plan should be organized using the following setup. <u>Primary Implementation</u> shall include details about the following: a. Developing and implementing optimized signal synchronization timing (required) b. Producing a Before and After Study for the proposed project (required) c. Proposed signal improvements (optional): i. New or upgraded detection ii. New or upgraded communication systems iii. Intersection/field system modernization and replacement iv. Minor signal operation improvements v. Traffic management centers vi. Real-time traffic actuated operations and demonstration projects <u>Ongoing Maintenance and Operation</u> will begin after the <u>Primary Implementation</u> of the project is completed. It shall include details about the following: a. Monitoring and improving optimized signal timing (required) b. Communications and detection support (optional)	
Section 5: Total Proposed Project Cost by Task	
Section 6: Project Schedule by Task for the 3 Year Grant Period	
Section 7: Matching Funds	
Section 8: Environmental clearances and other permits	
Section 9: Calculations used to Develop Selection Criteria Inputs	
Section 10: Any additional information deemed relevant by the applicant	

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Exhibit 8-23

Sample Resolution for Candidate Orange County Regional Transportation Signal Synchronization Program Projects

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

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

- (a) WHEREAS, the Measure M2 Regional Traffic Signal Synchronization Program targets over 2000 signalized intersections across Orange County to maintain traffic signal synchronization, improve traffic flow, and reduce congestion across jurisdictions; and
- (b) WHEREAS, the City of _____ has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive revenues as part of Measure M2; and
- (c) WHEREAS, the City of _____ has a currently adopted a Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local agencies' efforts to synchronizing traffic signals across local agencies' boundaries; and
- (d) WHEREAS, the City of _____ will provide matching funds for each project as required by the Comprehensive Transportation Funding Programs Procedures Manual; and
- (e) WHEREAS, the City of _____ will not use Measure M funds to supplant Developer Fees or other commitments; and
- (f) WHEREAS, the City of _____ desires to implement multi-jurisdictional signal synchronization listed below; and

NOW, THEREFORE, BE IT RESOLVED THAT:

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

ADOPTED BY THE CITY COUNCIL on _____, 20____.

SIGNED AND APPROVED on _____, 20____.

City Clerk Mayor



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Project Submittal

RCP and RTSSSP calls for projects is planned annually. A separate application package must be completed for each individual project and uploaded to OCFundtracker. Only one application may be submitted for each individual project. Multiple variations of the same application (e.g. with different local match rates) will not be considered. **Three (3) unbound copies** of each application should also be mailed to:

OCTA
Attention: Roger Lopez
550 S. Main Street
P.O. Box 14184
Orange, CA 92863-1584

Hardcopy applications can be hand delivered to:

Attention: Roger Lopez
600 S. Main Street
Orange, CA 92868

Application Review and Program Adoption

1. OCTA staff will conduct a preliminary review of all applications for completeness and accuracy, request supplemental information (i.e., plans, aerial/strip maps, CEQA forms) for projects that appear to rank well during initial staff evaluations, and prepare a recommended program for the TSC. In addition, OCTA may hire a consultant(s) to verify information within individual applications such as, but not limited to, project scope, cost estimates, ADT and Levels of Service (LOS). These applications will be selected through a random process.
2. The TSC will receive and evaluate the project applications and funding allocations.
3. Based on recommendations from the TSC, a program will be presented to the TAC for review and endorsement.
4. Recommendations from the TAC will be presented to the OCTA Board of Directors, who will approve projects for funding under the CTFP.



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5. OCTA shall distribute copies of the approved program to all participating local jurisdictions with any qualifying conditions stipulated for the jurisdiction's funded project(s).

Project Guidelines

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

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



Chapter 9 – Application Materials

Application Instructions

A single application should be submitted for each phase of a project. **If funding is requested under multiple program components for a single project (i.e., arterials and intersections) a separate application must be prepared for each request.** Final applications MUST be submitted via OCFundtracker and in hard copy format.

Checklist Guide

Since each funding program has slightly different application requirements, an "Internal Application Checklist Guide" has been provided for the three programs under the RCP (Exhibits 9-1, 9-2, and 9-3). The checklist guide identifies the basic forms and documentation required for each of the program components. In addition, items required at the time of project submittal are differentiated from supplemental items due later. The appropriate checklist should be provided as a cover sheet for **each** application submitted. For any items that are required for the candidate project or program that are missing or incomplete, an explanation should be included in a cover letter with the application. In addition to this checklist guide, please review the **Attachments/Additional Information** section of each program component for a description of supplementary documentation which may be required to support your agency's project application in specific cases.

Attachments

~~"Priority List of Projects" Form – OC Fundtracker GTFP Application~~

Agencies must submit a ~~"Priority List of Projects" with~~ copy of the OCFundtracker application and scoring information with all the application submittals. This document is created within the ~~GTFP-OC Fundtracker web-based a~~ application. ~~Although no points are assigned to your top project priorities, this information may be useful in the programming decision process.~~

"Project Cost Estimate" Form

Include a separate attachment listing all expenditures and costs for the project. Accurate unit prices and a detailed description of work, including design, will be critical when the candidate project is reviewed. For example, design applications should include major tasks that will be performed. ROW cost estimate should include parcel information (including project area needed), improvements taken, severance damages,



Chapter 9 – Application Materials

ROW engineering, appraisal and legal costs. Construction should include a listing of all bid items including a maximum 10% allowance for contingencies and a maximum 15% allowance for construction engineering/project management. The anticipated disbursement of costs (e.g., Agency, Other, Non-Eligible) must also be completed. Agencies should reference the program from which funding is expected to be allocated when completing this portion of the form. Each of the funding programs described in these guidelines may have differing matching fund requirements.

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

"Sample Resolution" Form

A resolution or minute action must be approved by the local jurisdiction's governing body. A sample resolution is included as Exhibit 9-4. The mechanism selected shall serve as a formal request for CTFP funds and states that matching funds will be provided by the agency, if necessary. All project requests must be included in this action. **If a *draft copy of the resolution is provided, the local jurisdiction must also provide the date the resolution will be finalized by the local jurisdiction's governing body.***

Pavement Management Supporting Documentation

The Measure M2 ordinance provides for a 10% reduction in the required local match if the agency can demonstrate a measurable improvement in PCI (1 point or greater) over the previous reporting period, or if the agency can demonstrate a PCI that is within the highest 20% of the scale (PCI of 75 or greater). If an agency is electing to take the 10% match reduction, supporting documentation indicating either the PCI improvement or PCI scale must be provided.

Project Summary Information

With each application, the agency shall submit a PowerPoint presentation summarizing the pertinent project information for review and discussion purposes. The presentation shall be no more than three (3) slides and should contain, at a minimum, a project description, project benefits, location map, and cost estimate.



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Additional Information

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

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

1. Letters of support for the candidate project (optional).
2. Geotechnical\materials reports for all applicable candidate projects (e.g., widening, intersection improvement, new roadway). The reports should contain sufficient detail for an accurate assessment of improvements needed and costs, since funding will be jeopardized if a project is unable to meet proposed schedule and costs.
3. Preliminary plans, if available for the project. The plans (1"=40' preferred) should include:
 - a. Existing and proposed right-of-way (include plat maps and legal descriptions for proposed acquisitions).
 - b. Agency boundaries, dimensions and station numbers.
 - c. Existing and proposed project features such as: pavement width and edge of pavement, curb, gutter and sidewalk, raised median, driveway reconstruction, signal pole locations, etc.
 - d. Typical cross sections.
 - e. Proposed striping.
 - f. Structural sections per the materials report.
 - g. Proposed traffic signals, storm drains, bridges, railroad crossing improvements, safety lighting, etc.
 - h. If requesting funds for traffic signals, include a traffic signal warrant(s) prepared by the City Traffic Engineer or City Engineer.



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- i. If the project includes construction, relocation, alteration or widening of any railroad crossing or facility, include a copy of the letter of intent sent to the railroad, a copy of which must be sent to the Public Utilities Commission (PUC). Any project including work of interest to a railroad will not be considered for eligibility until the railroad and PUC have been notified.
- j. If the project is proposed as a staged project and additional funds will be necessary in subsequent calls for projects, the preliminary project statement should be accompanied with a complete preliminary estimate and schedule for the completion of the entire project.
- k. If the project is proposed as a safety improvement, provide justifying accident data for the past three years and show the expected decrease in intersection or mid-block accident rate.

4. Current 24-hour traffic counts (taken for a typical mid-week period within the preceding 12-month period) for the proposed segment. In lieu of current traffic counts, current OCTA Traffic Flow Map data for the proposed segment will be used, provided it has been updated based on local agency provided counts within the preceding 36 months. Projects submitted without "current counts" will be considered incomplete and non-responsive.



Chapter 9 – Application Materials

Exhibit 9-1 Arterial Capacity Enhancement (ACE) CTFP Application Checklist Guide

Planning – Environmental & Engineering

- CTFP Online Application – submitted through OCFundTracker
- Project Description, Scope of Work and Project Limits
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
- General Application Sample Resolution (refer to page 9-7)
- Peak Hour Turning Movement Counts and LOS Calculations
- Aerial Photo w/ Proposed Improvements Shown

Right of Way (ROW)

- CTFP Online Application – submitted through OCFundTracker
- Project Description Detail (include plat maps and legal descriptions for proposed acquisitions)
- Potential ROW Acquisition Plan
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
 - Estimated ROW Cost by Parcel (Land, Improvements Taken, Severance, Goodwill, Incidental Expenses)*
- General Application Sample Resolution (refer to page 9-7)
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Aerial Strip Map w/ Existing and Proposed Improvements Shown
 - Include ROW Improvements and Parcels to be Acquired
- Preliminary Construction Layout Plans*

Construction

- CTFP Online Application – submitted through OCFundTracker
- Project Construction Specifications
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
- General Application Sample Resolution (refer to page 9-7)
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Project Development Documents - Project Report or Materials Report *
- Approved Project Construction Plans*

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

1.—PCI for Arterial System

2.—PCI for Local Street System

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



Chapter 9 – Application Materials

Exhibit 9-2 Intersection Capacity Enhancement (ICE) CTFP Application Checklist Guide

Planning – Environmental & Engineering

- CTFP Online Application – submitted through OCFundTracker
- Project Description, Scope of Work and Project Limits
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
- General Application Sample Resolution (refer to page 9-7)
- Peak Hour Turning Movement Counts and LOS Calculations
- Aerial Photo w/ Proposed Improvements Shown

Right of Way (ROW)

- CTFP Online Application – submitted through OCFundTracker
- Project Description Detail (include plat maps and legal descriptions for proposed acquisitions)
- Potential ROW Acquisition Plan
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
 - Estimated ROW Cost by Parcel (Land, Improvements Taken, Severance, Goodwill, Incidental Expenses)*
- General Application Sample Resolution (refer to page 9-7)
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Aerial Strip Map w/ Existing and Proposed Improvements Shown
 - Include ROW Improvements and Parcels to be Acquired
- Preliminary Construction Layout Plans*

Construction

- CTFP Online Application – submitted through OCFundTracker
- Project Construction Specifications
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
- General Application Sample Resolution (refer to page 9-7)
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Project Development Documents - Project Report or Materials Report *
- Approved Project Construction Plans*

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

1.—PCI for Arterial System

2.—PCI for Local Street System

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



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Exhibit 9-3 Freeway Arterial/Streets Transition (FAST) CTFP Application Checklist Guide

Planning – Environmental & Engineering

- CTFP Online Application – submitted through OCFundTracker
- Project Description, Scope of Work and Project Limits
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
- General Application Sample Resolution (refer to page 9-7)
- Peak Hour Turning Movement Counts and LOS Calculations
- Caltrans Letter of Support
- Aerial Photo w/ Proposed Improvements Shown

Right of Way (ROW)

- CTFP Online Application – submitted through OCFundTracker
- Project Description Detail (include plat maps and legal descriptions for proposed acquisitions)
- Potential ROW Acquisition Plan
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
 - Estimated ROW Cost by Parcel (Land, Improvements Taken, Severance, Goodwill, Incidental Expenses)*
- General Application Sample Resolution (refer to page 9-7)
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Aerial Strip Map w/ Existing and Proposed Improvements Shown
 - Include ROW Improvements and Parcels to be Acquired
- Preliminary Construction Layout Plans*

Construction

- CTFP Online Application – submitted through OCFundTracker
- Project Construction Specifications
- Cost Estimate ~~Form~~ for Complete Project - ALL PHASES (refer to page 10-31)
- General Application Sample Resolution (refer to page 9-7)
- CEQA Compliance Form (CE, Negative Declaration, EIR)
- Project Development Documents - Project Report or Materials Report *
- Approved Project Construction Plans*

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

1.—PCI for Arterial System

2.—PCI for Local Street System

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



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Exhibit 9-4
Sample Resolution for Candidate Orange County
Comprehensive Transportation Programs Projects

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

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

(a) WHEREAS, the City of _____ desires to implement the transportation improvements listed below; and

(b) WHEREAS, the City of _____ has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive Measure M "turnback" funds; and

(c) WHEREAS, the City's Circulation Element is consistent with the County of Orange Master Plan of Arterial Highways; and

(d) WHEREAS, the City of _____ will provide matching funds for each project as required by the Orange County Comprehensive Transportation Funding Programs Guidelines; and

(e) WHEREAS, the Orange County Transportation Authority intends to allocate funds for transportation improvement projects within the incorporated cities and the County; and

(f) WHEREAS, the City of _____ will not use Measure M funds to supplant Developer Fees or other commitments; and

NOW, THEREFORE, BE IT RESOLVED THAT:

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

ADOPTED BY THE CITY COUNCIL on _____, 20____.

SIGNED AND APPROVED on _____, 20____.

City Clerk

Mayor



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Procedures for Receiving Funds

An implementing agency must obligate funds OCTA allocates to a project phase within the fiscal year of the phase allocation. Prior to the obligation of funds, an agency must have a fully executed letter agreement with OCTA. An agency obligates funds by awarding a contract, completing the appraisal for one parcel of right-of-way, or by providing expense reports to prove an agency's workforce costs, provided that the agency intends to complete the phase with agency staff. OCTA shall consider the primary contract or the contract with the largest dollar amount, associated with the phase's tasks, when an agency uses a contract to show obligation of CTFP funds. Once an agency obligates CTFP funds for a phase, it can begin the process for receiving payment of the funds.⁴

OCTA will release funds through two payments. The initial payment will constitute 75 percent of the contract award or programmed amount, whichever is less. OCTA will disburse the final payment, 25 percent of eligible funds, after it approves the final report.

The final report retention shall be capped at \$500,000 per project phase, but shall in no case be less than 10 percent of the allocation for that phase. Should the 75/25 payment distribution ratio result in a final payment retention that exceeds \$500,000, the payment percentages will be adjusted to meet the \$500,000 cap until the 10 percent threshold is reached. At no time will the final payment retention be less than 10 percent.

Agencies shall submit payment requests to OCTA in a timely fashion. The M2 Ordinance requires the submittal of a final report within 180 days of the project phase completion date. Failure to submit a final report within the 180 day time frame will result in an agency being found ineligible to receive net revenues. Per the M2 Ordinance, no provision for extension is allowed. The project completion date refers to the date all final invoices have been paid and any pending litigation has been adjudicated for either the engineering phase or for the right-of-way phase, and all liens/claims have been settled for the construction phase.

Agencies must submit payment requests through OCTA's online database, OCFundtracker: <http://ocfundtracker.octa.net>. Detailed instructions for OCFundtracker are available online. Staff is also available to assist agencies with this process. Agencies must upload appropriate backup documentation to the database. OCTA may request hardcopy payment requests.

⁴ Funds from state and federal sources funds will undertake a separate process. Local agencies must contact Caltrans local assistance for reimbursement.



Chapter 10 – Reimbursements and Reporting

Availability of Funds

The funds allocated by OCTA for each phase will be available on July 1, the first day of the fiscal year. After bids are opened and a contractor is selected, the final allocation will be the lesser amount of the original allocation or the revised project cost estimate.

Cancellation of Project

If a local agency decides to cancel a project, for whatever reason, the agency shall notify OCTA as soon as possible. Projects deemed infeasible during the planning phase shall bring that phase to a logical conclusion, file a final report, and cancel remaining phases so that remaining funds can be reprogrammed without penalty. ROW funding received for property acquisition prior to cancellation shall be repaid upon cancellation. Construction funding received prior to cancellation shall be repaid upon cancellation.



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Chapter 10 – Reimbursements and Reporting

Section 10.1 – Regional Capacity Program Initial Payment

Payment Requests

An agency shall use the report and checklist provided in Form 10-1 (**Form 10-1A** for Engineering and Construction, **Form 10-1B** for Right of Way) in order to determine the reporting and documentation requirements for initial payment requests. Staff may request additional documentation that is not listed on the checklist prior to approving the request. The interactive electronic versions of the forms provided as samples in this chapter can be downloaded via OCFundtracker.

OCTA will release the remaining balance, approximately 25% of CTFP funds, when the project is complete and OCTA accepts the final report. The balance is determined based on final costs for CTFP eligible program expenditures. Prior to submitting the report, review the section in these guidelines discussing the final report process.

Measure M informational “Funded By” sign removal costs should be requested in the Final Report. OCTA will reimburse costs associated with the Measure M informational signs (fabrication, installation and removal) and do not count against a project’s allocation.

Below is additional information regarding the documentation requirements of payment requests:

1. Invoice – For initial payments, an agency shall invoice for 75% of the contract amount or programmed amount, whichever is less. For final payments, an agency shall invoice for the remaining balance of the contract amount or programmed amount, whichever is less. Final payment request invoices shall normally be approximately 25% of the eligible funds. Interest earned by an agency for initial payments received shall be applied to and deducted from the final payment balance amount.
2. Project Certification Letter – The public works director, or appropriate equivalent, shall submit a certification letter, with applicable statements, using **Form 10-2**.
3. Minutes – The agency shall submit a minute order, agency resolution, or other council/board action showing award of the contract and the contract amount. The city clerk, clerk of the board, or appropriate equivalent shall certify minutes. Agencies that use on-call consultants shall submit a purchase order that includes the scope of work for the contractor.



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4. Revised Cost Estimate – The agency shall use the format provided in **Form 10-3**.
5. Work Schedule – OCTA prefers a complete project schedule, but an agency may provide as little as the expected start and completion dates for preliminary engineering, final engineering, right-of-way, and construction phases.
6. Right-of-Way Documents – Each parcel shall include an appraiser's invoice, written offer letter, plat map, and legal description. Agencies attempting to acquire five or more parcels for a project shall include a parcel location map.
7. Plans, Specifications, & Estimate (PS&E) Certification – Agencies shall submit a PS&E certification using **Form 10-4**. The agency engineer shall certify that the local agency properly prepared and approved plans and specifications in accordance with authorized procedures and adopted standards, followed approved scope of work, and incorporated materials report.
8. Layout Plans – An agency shall not submit layout plans that print on paper larger than 11 inches by 17 inches.
9. Documentation of Decision to Use Local Agency Forces – For all construction phase work performed by local agency forces, in lieu of a primary contract, local agency must document that local agency forces could perform the work more cost effectively or timely than a contractor; and documentation of this decision can be supplied in case of audit.
10. Documentation Supporting Local Agency Liability for Utility Relocation Costs – Local agency liability can be supported by the documentation of property rights, franchise rights/agreements, state and local statutes/ordinances, permits, or a finding by the local agency's counsel.

Samples of the forms listed above are included on the pages to follow. Electronic copies of the forms can be downloaded from OCFundtracker.

Project Advancement

Agencies that wish to expedite a CTFP project by one or more fiscal years may request a programming advancement. The agency must demonstrate that it will award a contract during the fiscal year it is requesting the advance. Advancement requests will be considered if program funds are available. If approved, OCTA shall de-escalate the allocation for the project to remove inflation adjustments made for the original program year.



Chapter 10 – Reimbursements and Reporting

Agencies shall request advances during the semi-annual review. The TAC and OCTA Board of Directors shall approve advances. If approved, the agency must meet the new obligation deadline.

If OCTA is unable to accommodate programming advancement requests due to cash flow constraints, an agency may initiate the project using local funds and seek reimbursement during the fiscal year OCTA programmed the funds. (See Precept no. 5) The lead agency must have a fully executed letter agreement prior to beginning work.

Reimbursement

OCTA shall not reimburse for a project prior to the beginning of the fiscal year of the allocation. If an agency receives an advancement and begins work prior to the start of the fiscal year of the allocation, the agency may request an initial payment against the allocation. If an agency receives an advancement and completes a project prior to the start of the fiscal year of the allocation, OCTA shall disburse the allocation in a single payment. OCTA must approve the final report prior to issuing a payment.

Calculation of Payment

Once an agency obligates Measure M funds, the agency may request a maximum of 75% of the contract award amount or programmed amount, whichever is less. Examples of calculating the initial funding request are described below.

Example A - **Contract** is awarded for **less than** the estimated construction cost.

Given:

\$200,000 = Total CTFP funds programmed for Project X

~~— \$200,000 = Estimated construction cost (CTFP share)~~

\$160,000 = Construction contract award (CTFP share)

Calculations:

75% of contract amount = $\$160,000 \times 0.75 = \underline{\underline{\$120,000}}$.

Example B - **Contract** is awarded for **more than** the estimated construction cost.

Given:



Chapter 10 – Reimbursements and Reporting

\$200,000 = Total CTFP funds programmed for Project Y

~~\$200,000 = Estimated construction cost (CTFP share)~~

\$280,000 = Construction contract award (CTFP share)

Calculations:

Construction costs = \$280,000

Since this amount exceeds \$200,000 programmed, the initial payment is limited to 75% of the programmed amount.

75% of contract amount = $\$200,000 \times 0.75 = \underline{\$150,000}$.



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Chapter 10 – Reimbursements and Reporting



Form 10-1A



Comprehensive Transportation Funding Program
Engineering & Construction Phase Initial Report

Form 10-1A

Date:

1	Project Number		Lead Agency			
	Project Title					
	Grant Request:		Select Payment Type			Select Phase
		<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Engineering		<input type="checkbox"/> Construction	
2	Agency Contact	Contact Title		Contact Phone	Contact E-mail	
	3					
Project Schedule					Phase Completion Date Length of Improvements (mi):	
		Start Date		Completion Date		
		Month	Year	Month		Year
Engineering		Jan	2010	Jan		2010
Right-of-Way		Jan	2010	Jan		2010
Construction		Jan	2010	Jan	2010	
Document Checklist						
<u>All Phases</u>						
4 <input type="checkbox"/> Initial Report Form (Form 10-1A)		9 <input type="checkbox"/> Work Schedule				
5 <input type="checkbox"/> Project Certification Letter (Form 10-2)						
6 <input type="checkbox"/> Revised Cost Estimate (Form 10-3)		<u>Construction</u>				
7 <input type="checkbox"/> Invoice		10 <input type="checkbox"/> PS&E Certification (Form 10-4)				
8 <input type="checkbox"/> Contract Authorization		11 <input type="checkbox"/> Layout Plans (Half Size)				
12	Division of Costs				a Phase Allocation	
		CTFP Funds	Matching Funds	Local Fairshare	Other Funds	Total Amount
	Match Rate	b				
	Contract Costs					c
	Extra Work/ Change Orders					d
	Agency Expenses					e
	TOTAL		g		f	

Form 10-1A - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-1A (continued)


Comprehensive Transportation Funding Program		Engineering & Construction Initial Report	
Project Number		Form 10-1A	
		Page 2	
Payment Type		<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Engineering <input type="checkbox"/> Construction
13	Scope of Work/Description of Improvements:		
SAMPLE			
14	Remarks:	Engineer In Charge:	

Form 10-1A - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-1B



OCTA

Comprehensive Transportation Funding Program

Right-of-Way Phase Initial Report

Form 10-1B

Date: _____

1 Project Number _____ Lead Agency _____

Project Title _____

Grant Request: Select Payment Type Select Phase

Initial Right-of-Way

2 Agency Contact _____ Contact Title _____ Contact Phone _____ Contact E-mail _____

3 Project Schedule

	Start Date		Completion Date		Phase Completion Date
	Month	Year	Month	Year	
Engineering	Jan	2010	Jan	2010	Length of Improvements (mi): _____
Right-of-Way	Jan	2010	Jan	2010	
Construction	Jan	2010	Jan	2010	

Document Checklist

<p>4 <input type="checkbox"/> Initial ROW Report Form (Form 10-1B)</p> <p>5 <input type="checkbox"/> Project Certification Letter (Form 10-2)</p> <p>6 <input type="checkbox"/> Revised Cost Estimate (Form 10-3)</p> <p>7 <input type="checkbox"/> Invoice</p> <p>8 <input type="checkbox"/> Contract Authorization</p> <p>9 <input type="checkbox"/> Work Schedule</p>	<p>10 <input type="checkbox"/> Written Offer Letters</p> <p>11 <input type="checkbox"/> Parcel Plat Maps</p> <p>12 <input type="checkbox"/> Parcel Legal Descriptions</p> <p>13 <input type="checkbox"/> ROW Parcel Location Map</p> <p style="text-align: center;"><u>As Applicable</u></p> <p>14 <input type="checkbox"/> Orders of Immediate Possession</p>
--	---

15 Division of Costs **a** Phase Allocation

	CTFP Funds	Matching Funds	Local Fairshare	Other Funds	Total Amount
Match Rate		b			
Contract Costs					c
Extra Work/ Change Orders					d
Agency Expenses					e
TOTAL	g		f		

Form 10-1B - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-1B (continued)

Comprehensive Transportation Funding Program		Right-of-Way Initial Report Form 10-1B Page 2
Project Number	Payment Type	<input checked="" type="checkbox"/> Initial <input checked="" type="checkbox"/> Right-of-Way
16	Scope of Work/Description of Improvements:	
SAMPLE		
17	Remarks:	Engineer in Charge:
SAMPLE		

Form 10-1B - Revised 08/10



Chapter 10 – Reimbursements and Reporting

Form 10-1B (continued)

Comprehensive Transportation Funding Program

Right-of-Way Initial Report
Form 10-1B
Page 3

Project Number _____

Payment Type Initial
 Right-of-Way

18	APN	Grantor	Location	Permanent ROW (SQFT)	Temporary Easement (SQFT)	Appraised Value	Offer Price	Final Price	Acquisition Status
SAMPLE									
Page Total									

Form 10-1B - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-1B (continued)

Comprehensive Transportation Funding Program		Right-of-Way Initial Report Form 10-1B Page 4
Project Number	Payment Type	<input checked="" type="checkbox"/> Initial <input checked="" type="checkbox"/> Right-of-Way
SAMPLE		
A	ASSESSOR'S PARCEL NUMBER	
	Grantor(s)	
	Address	
	DEBITS	
B	Amount for Land:	
C	Relocation Costs:	
D	Operation Expenses:	
E	Moving or Restoring Improvements:	
F	CREDITS:	
	TOTAL:	
G	Appraised Value	
H	Remarks:	
A	ASSESSOR'S PARCEL NUMBER	
	Grantor(s)	
	Address	
	DEBITS	
B	Amount for Land:	
C	Relocation Costs:	
D	Operation Expenses:	
E	Moving or Restoring Improvements:	
F	CREDITS:	
	TOTAL:	
G	Appraised Value	
H	Remarks:	

Form 10-1B - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-2



Comprehensive Transportation Funding Program

Form 10-2

Project Certification Letter

Date:

Project Number	Lead Agency
Project Title	
Select Payment Type Select Phase	
Grant Request: <input type="checkbox"/> Initial <input type="checkbox"/> Final <input type="checkbox"/> Engineering <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Construction	
I, _____, _____ for the _____, do hereby certify that:	
SAMPLE	
1 The project is designed to city/county and other participating jurisdictions' standards.	Check one: <u>Yes</u> <u>No</u> <u>N/A</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2 The project contract was awarded on _____.	
3 The total cost of the contract based on award is _____.	
4 The city/county has committed matching funds to the project.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5 Right-of-way was acquired in conformance with city/county procedures.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6 All required environmental documentation is complete and certified.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7 A final report and payment request will be submitted in accordance with the guidelines.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8 An updated project schedule is included with the payment request.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
_____ Signed	_____ Date

Please include a project certification letter for each project phase.

Form 10-1B - Revised 08/10



Chapter 10 – Reimbursements and Reporting

Form 10-3 (continued)

Comprehensive Transportation Funding Program
 Revised Cost Estimate
 Form 10-3
 Page 2

Project Number _____

Phase
 Engineering
 Right-of-way
 Construction

4 No.	Description	Unit Price	Unit Measure	CTFP Funds		Matching Funds		Other/Non-eligible		Total	
				Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
SAMPLE											
Page Sub-total											

Form 10-3 - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-4



Comprehensive Transportation Funding Program
Plans, Specifications, and Estimate Certification

Form 10-4

Date: _____

Project Number	Lead Agency
Project Title	
Select Payment Type Select Phase	
Grant Request: <input type="checkbox"/> Initial <input type="checkbox"/> Final <input type="checkbox"/> Engineering <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Construction	
The _____ hereby certifies in connection with the above project that:	
1 All proposed work is within existing right-of-way and no additional right-of-way is necessary.	
2 Existing improvements (check which apply):	
<input type="checkbox"/> No building improvements or utility conflicts in the right-of-way area.	
<input type="checkbox"/> The following improvements exist in the right-of-way area, but will be removed before the contractor enters to perform the construction:	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
<input type="checkbox"/> Utilities which have prior rights and will require relocation are:	
<div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
3 Plans and Specifications for the project have been properly prepared and approved in accordance with authorized procedures.	
4 The division of costs as shown in the Engineer's Estimate has been based on the Transportation Funding Program scope of work as approved by OCTA.	
_____ Signed	_____ Date

Form 10-4 - Revised 08/10



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Chapter 10 – Reimbursements and Reporting

Section 10.2 – Regional Capacity Program Final Report and Payment Process

The remaining 25% of CTFP funds are made available to the lead agency following completion of the final reporting process. This balance is determined based upon final costs of CTFP eligible expenditures as stated in each applicable program less interest earned against the any related initial payment. Prior to submitting the Final Report, review the following section which includes items important to the final reporting process.

Project Cost Changes

If the contract price is lower than the amount programmed and the agency requested additional items and/or change orders during construction/study, OCTA may approve the additional costs during the review of the final report. OCTA will review these reports to:

1. Determine that the agency submitted proper justification for the change order(s)
2. Determine if the items are eligible for reimbursement
3. Confirm that expenses are within the project's original scope of work
4. The lead agency should provide information supporting the need for the change orders in the final report. Changes in project limits for construction projects are not eligible for reimbursement.

Additional Documentation Requirements

The items listed below are to be submitted to complete the final reporting process. If the local jurisdiction has not submitted a final report for any previous phases of the project, the reporting requirements outlined in Section 10.1 must be followed in addition to the Final Report requirements listed below.

1. Final Report Form – The local agency shall prepare a final report form as provided in Form 10-6 (**Form 10-5A** for construction and engineering projects, **Form 10-5B** for right-of-way projects).
2. OCTA shall distribute general lump sum pay items, appraisal cost, design, and construction engineering in the same ratio as the total right-of-way acquisition or construction costs.



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3. Proof of Project Payment and Division of Costs – For proof of project payment, this documentation will include approved contract invoices and may also include, but is not limited to, supportive material for agency work forces, equipment, and material. For the division of costs, original contract bid item lists can be supplied. If these are not available **Form 10-6** can be used. Supportive material shall equal the division of costs totals that are located in the final report form.
4. Summary of Right-of-Way Acquisition – Agencies shall submit a summary of right-of-way acquisition as described in Form 10-5B.
5. Notice of Completion – An agency may submit a recorded Notice of Completion (NOC) or where a NOC is not typically used, **Form 10-7** may be used to certify the phase completion date.
6. Before and After Project Photos – photographs showing the project before and after the improvements.

Samples of the forms listed above are included on the pages to follow. Electronic copies of the forms can be downloaded from OCFundtracker.

Delinquent Final Report

OCTA will work with jurisdictions to ensure the timeliness of final reports by utilizing the following procedures:

1. Require jurisdictions to notify OCTA of the project phase completion date within 30 days of completion.
2. Require all jurisdictions to file a final report within 180 days of project phase completion date.
3. Issue a reminder notice to the public works directors or TAC representative(s) 90 days after the project completion date to remind jurisdictions that the final report is due in 90 days. The reminder notice should also include an offer from OCTA to assist in preparation of the final report by using consultant services. The agency shall reimburse OCTA for the consultant services.
4. Issue a final notice letter to the public works directors or TAC representative(s) with a copy to the agency's management and finance director if OCTA does not receive the final report or a request for an extension within 180 days of the



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project completion date. The final notice letter should inform the jurisdictions that if OCTA does not receive a response to the final notice letter then OCTA shall assume that the agency cancelled the project and OCTA shall request that the agency return disbursed funds.

5. Require OCTA to issue the final payment to jurisdictions within 60 days of receiving the final report and all supporting documentation.

Failure to Submit Final Report

Agencies who fail to submit a Final Report will be required to repay applicable M2 funds received for the project in a manner consistent with the master funding agreement and will be found ineligible to receive M2 net revenues.

Excess Right-of-Way

Agencies that use Net Revenues (through CTFP or Local Fair Share programs) to acquire project right-of-way shall dispose of land deemed in excess of the proposed transportation use. Excess land sold by the lead agency will be in accordance with the process established in Government Code, Article 8, Surplus Land, Section 54220-54232, et. Seq., and the agency shall return proceeds from the sale to OCTA. OCTA shall return the funds to the program of origin for future use.

Proceeds from the sale of excess right-of-way shall be returned to OCTA in proportion to the amount of M2 funds used in the purchase.

Agencies shall submit right-of-way documents for all parcels utilizing M2 Net Revenues. Agencies must submit the following documents:

- Summary of the right-of-way required for the project
- Plat maps and legal descriptions for right-of-way acquisitions
- Parcel location map
- Identification of anticipated excess right-of-way, if any
- Appraisal reports for excess right-of-way

OCTA shall consider excess right-of-way with a value of \$10,000.00 or less as an unsalable remnant. OCTA shall determine if excess right-of-way is an unsalable remnant.

The agency shall submit a fair market value appraisal report for the excess land of each parcel. Appraisers must conduct appraisals in accordance with the Uniform Standards



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of Professional Appraisal Practice (USPAP). If an agency suspects that the excess right-of-way has a value of \$10,000.00 or less, the agency may conduct a limited fair market value appraisal to confirm the value of the excess right-of-way. The agency shall submit the appraisals with the right-of-way final report.

OCTA shall retain from the final payment the value of excess right-of-way that is proportional to OCTA's percentage match rate to the project up to OCTA's match rate of right-of-way allocation.

An agency may include incidental expenditures from the disposal of property in their final report for the right-of-way allocation.

An agency shall begin the process to sell excess right-of-way within 60 days after acceptance of the construction improvements.

OCTA shall not close-out the right-of-way allocation or construction allocation until the agency and OCTA resolve questions regarding excess right-of-way.

Example:

OCTA's right-of-way (ROW) allocation: \$500,000
OCTA allocation match rate 75%

Parcel Costs:
Cost – Parcel 1: \$300,000
Cost – Parcel 2: \$380,000
Cost – Parcel 3: \$120,000
Cost – Parcel 4: \$100,000
Total ROW Costs: \$900,000

Payment with no excess ROW: \$500,000

Excess right-of-way:
Value of excess ROW for parcel 1: \$200,000
Value of excess ROW for parcel 2: \$105,000
Value of excess ROW for parcel 3: \$ 0
Value of excess ROW for parcel 4: \$ 0
Total Value of excess ROW: \$305,000

OCTA contribution to ROW acquisition:
CTFP ROW contribution ÷ Agency total cost of ROW
\$500,000 ÷ \$900,000 = 56%



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OCTA's shall reduce the final ROW payment by:

Parcel 1:	\$200,000 x 56% =	\$112,000
Parcel 2:	\$105,000 x 56% = +	<u>\$ 58,800</u>
Total:		\$170,800

Payment (incorporating excess ROW):	\$500,000
	<u>\$170,800</u>
	\$329,200

Agency Workforce and Equipment Rental

An agency must provide supporting documentation for work completed by agency staff. The agency shall multiple the fully burdened labor rate by the number of hours for each staff person assigned to the project. An agency may add actual overhead costs at an allowable rate up to 30% of payroll and fringe benefits. Where an agency due to size cannot calculate its specific overhead rate, an agency may refer to the Cost Accounting Policies and Procedures Manual of the California Uniform Public Construction Cost Accounting Commission, which allows for a fixed overhead rate billing dependant on city size. Where an agency has actual overhead costs that exceed 30%, these will be accepted when a fully audited cost allocation plan is provided.

An agency must provide supporting documentation for equipment used by local agency staff. An agency may use local agency or Caltrans surcharge and equipment rental rates.

Technical and/or Field Review

Once an agency submits a final report for a project, OCTA shall review the report for compliance with the CTFP guidelines and may conduct a technical and/or field review. As part of the technical/field review of a CTFP project, OCTA may:

- review right-of-way acquisitions and the potential for excess right-of-way
- compare hourly breakdown of staff time compared to staff time sheets
- conduct a project field review – ensure improvements are within scope
- review items that agencies self-certify
- verification of the reasonableness of project costs

OCTA may review all phases of the project.



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OCTA will use the project cost estimate forms submitted with the application and revised where appropriate, project accounting records and the final report as the primary items to conduct the review. Agencies must maintain separate records for projects (i.e., expenditures, interest) to ensure compliance. OCTA will only reimburse eligible CTFP items listed on the cost estimate.

See Chapter 11 for independent audit requirements beyond the technical/field review.

Reporting of Local Fair Share

For the purposes of reporting non-project work (maintenance, repair, and other non-project related costs) funded by Measure M local fair share funds, the Measure M expenditure report cited Measure M Ordinance No. III, Section III(B)(8) shall satisfy reporting requirements. If local fair share funds are used for projects, the local agency shall also include a list of those funds and/or other Measure M funds in the Project Final Report cited in Section III(B)(9).




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Chapter 10 – Reimbursements and Reporting



Form 10-5A



OCTA

Comprehensive Transportation Funding Program

Engineering & Construction Phase Final Report

Form 10-5A

Date: _____

1 Project Number _____ Lead Agency _____

Project Title _____

Select Payment Type Select Phase

Grant Request: Final Engineering Construction

2 Agency Contact _____ Contact Title _____ Contact Phone _____ Contact E-mail _____

Public Works Director _____ Contractor _____

3 Project Schedule

	Start Date		Completion Date		Phase Completion Date
	Month	Year	Month	Year	
Engineering	Jan	2010	Jan	2010	Length of Improvements (mi): _____
Right-of-Way	Jan	2010	Jan	2010	
Construction	Jan	2010	Jan	2010	

Document Checklist

<p><u>All Phases</u></p> <p>4 <input type="checkbox"/> Project Certification Letter (Form 10-2)</p> <p>5 <input type="checkbox"/> Revised Cost Estimate (Form 10-3)</p> <p>6 <input type="checkbox"/> PS&E Certification (Form 10-4)</p> <p>7 <input type="checkbox"/> Final Report Form (Form 10-5A)</p> <p>8 <input type="checkbox"/> Division of Costs Schedule (Form 10-6)</p> <p>9 <input type="checkbox"/> Certification of Phase Completion (Form 10-7)</p>	<p>10 <input type="checkbox"/> Invoice</p> <p>11 <input type="checkbox"/> Contract Authorization</p> <p>12 <input type="checkbox"/> Proof of Project Payment</p> <p>13 <input type="checkbox"/> Project Expenditure Certification</p> <p>14 <input type="checkbox"/> Work Schedule</p> <p><u>Final Construction</u></p> <p>15 <input type="checkbox"/> Layout Plans (Half Size)</p>
--	---

16 Project Expenditures Certification

I hereby certify that the information contained in this report is a true and correct statement of the work performed and costs incurred on the above project.

Signed _____ Date _____

Form 10-5A - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-5A (continued)

Comprehensive Transportation Funding Program Engineering & Construction Final Report
 Form 10-5A
 Page 2

Project Number _____

Payment Type Final Engineering Construction

17 Division of Costs	a Phase Allocation				
	CTFP Funds	Matching Funds	Local Fairshare	Other Funds	Total Amount
Match Rate b					
Contract Costs					c
Extra Work/ Change Orders					d
Agency Expenses					e
TOTAL g					f

18 Scope of Work/Description of Improvements:


19 Remarks: _____ Engineer in Charge: _____

Form 10-5A - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-5B



OCTA

Comprehensive Transportation Funding Program

Right-of-Way Phase Final Report

Form 10-5B

Date: _____

1 Project Number _____ Lead Agency _____

Project Title _____

Grant Request: Select Payment Type Select Phase

Final Right-of-Way

2 Agency Contact Contact Title Contact Phone Contact E-mail

Public Works Director Contractor

3 Project Schedule

	Start Date		Completion Date		Phase Completion Date
	Month	Year	Month	Year	
Engineering	Jan	2010	Jan	2010	Length of Improvements (mi): _____
Right-of-Way	Jan	2010	Jan	2010	
Construction	Jan	2010	Jan	2010	

Document Checklist

<p>4 <input type="checkbox"/> Project Certification Letter (Form 10-2)</p> <p>5 <input type="checkbox"/> Revised Cost Estimate (Form 10-3)</p> <p>6 <input type="checkbox"/> Final Report Form (Forms 10-5B)</p> <p>7 <input type="checkbox"/> Division of Costs Schedule (Form 10-6)</p> <p>8 <input type="checkbox"/> Certification of Phase Completion (Form 10-7)</p> <p>9 <input type="checkbox"/> Invoice</p> <p>10 <input type="checkbox"/> Contract Authorization</p> <p>11 <input type="checkbox"/> Proof of Phase Payments</p>	<p>12 <input type="checkbox"/> Written Offer Letters</p> <p>13 <input type="checkbox"/> Parcel Plat Maps</p> <p>14 <input type="checkbox"/> Legal Descriptions</p> <p>15 <input type="checkbox"/> ROW Parcel Location Map</p> <p>16 <input type="checkbox"/> Project Expenditure Certification</p> <p>17 <input type="checkbox"/> Work Schedule</p> <p><u>As Applicable</u></p> <p>18 <input type="checkbox"/> Orders of Immediate Possession</p>
--	--

19 Project Expenditures Certification

I hereby certify that the information contained in this report is a true and correct statement of the work performed and costs incurred on the above project.

Signed _____ Date _____

Form 10-5B - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-5B (continued)

Comprehensive Transportation Funding Program

Right-of-Way Final Report
Form 10-5B
Page 2

Project Number _____

Payment Type Final Right-of-Way

20	Division of Costs	a Phase Allocation				Total Amount
		CTFP Funds	Matching Funds	Local Fairshare	Other Funds	
	Match Rate b					
	Contract Costs					c
	Extra Work/ Change Orders					d
	Agency Expenses					e
	TOTAL g			f		

21 Scope of Work/Description of Improvements

22 Remarks: _____ Engineer in Charge: _____

Form 10-5B - Revised 08/10



Chapter 10 – Reimbursements and Reporting

Form 10-5B (continued)

Comprehensive Transportation Funding Program
Right-of-Way Final Report
Form 10-5B
Page 3

Project Number _____
Payment Type Final Right-of-Way

23	APN	Grantor	Location	Permanent ROW (SQFT)	Temporary Easement (SQFT)	Appraised Value	Offer Price	Final Price	Acquisition Status
SAMPLE									
Page Total									

Form 10-5B - Revised 04/10

Chapter 10 – Reimbursements and Reporting



Form 10-5B (continued)

Comprehensive Transportation Funding Program		Right-of-Way Final Report Form 10-5B Page 4
Project Number		
A	ASSESSOR'S PARCEL NUMBER	
	Grantor(s)	
	Address	
	DEBITS	
B	Amount for Land:	
C	Relocation Costs:	
D	Operation Expenses:	
E	Moving or Restoring Improvements:	
F	CREDITS:	
	TOTAL:	
G	Appraised Value	
H	Remarks:	
A	ASSESSOR'S PARCEL NUMBER	
	Grantor(s)	
	Address	
	DEBITS	
B	Amount for Land:	
C	Relocation Costs:	
D	Operation Expenses:	
E	Moving or Restoring Improvements:	
F	CREDITS:	
	TOTAL:	
G	Appraised Value	
H	Remarks:	

SAMPLE

Form 10-5B - Revised 04/10

Chapter 10 – Reimbursements and Reporting



Form 10-6



Comprehensive Transportation Funding Program
 Engineering and Construction Final Report Division of Costs Schedule

Form 10-6

Date: _____

1	Project Number	Lead Agency
	Project Title	
	<u>Select Payment Type</u>	<u>Select Phase</u>
	Grant Request: <input checked="" type="checkbox"/> Final	<input type="checkbox"/> Engineering <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Construction
2	Contract Costs	
	Item No.	Item of Work
	Quantity	Unit Price
	A	B
	C	D
	Total Amt.	Ineligible Amt.
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
	x	=
	-	-
3	. . . . . ▶ Column Totals	
4	. . . . . ▶ Sub-total Eligible Contract Expenses =	

Form 10-6 - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-6 (continued)

Comprehensive Transportation Funding Program Payment Type Project Number
 Final
 Engineering
 Right-of-Way
 Construction

Final Report Division of Costs Schedule **10 Page**
 Form 10-6


Total Contract Costs					
11	Add all lines 3 & 8, Column C	▶	Total Contract Expenses		
12	Add all lines 4 & 9, Column D	▶	Total Ineligible Contract Expenses		
13	Line 4 or line 9 from preceding page	▶	Total Eligible Contract Expenses		
14 Change Orders & Extra Work					
		A	B	C	D
CO No.	Item of Work	Quantity	Unit Price	Total Amt.	Ineligible Amt.
		x	=	-	
		x	=	-	
		x	=	-	
		x	=	-	
		x	=	-	
		x	=	-	
		x	=	-	
		x	=	-	
15	. . . . . ▶ Column Totals			-	
16	. . . . . ▶ Total Change Orders & Extra Work Expenses =				
Total Change Orders & Extra Work					
17	Line 15, Column C	▶	Total Contract Expenses		
18	Line 15, Column D	▶	Total Ineligible Contract Expenses		
19	Line 16	▶	Total Eligible Contract Expenses		
20 Labor					
		A	B	C	D
Position Title	Hours	Rate	Overhead	Total Amt.	Ineligible Amt.
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
	x	+	=	-	
21	. . . . . ▶ Column Totals			-	
22	. . . . . ▶ Total Labor Expenses =				

Form 10-6 - Revised 08/10

Chapter 10 – Reimbursements and Reporting



Form 10-7

	Comprehensive Transportation Funding Program Certification of Phase Completion	Form 10-7
		Date: _____
Project Number	Lead Agency	
Project Title		
Select Payment Type		Select Phase
Grant Request: <input checked="" type="checkbox"/> Final <input type="checkbox"/> Engineering <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Construction		
I, _____, do hereby certify that:		
1 The date of completion of the work hereinafter described is _____.		
2 The owner of the work of improvements is _____.		
3 The nature of the owner's interest or estate is Fee title of the herein described real property and improvements.		
4 The work of improvements and limits are as follows:		
<div style="border: 1px solid black; height: 30px;"></div>		
5 The name of the contractor for the work of improvements is: _____		
6 A general statement of the kind of work done or material furnished by the aforesaid contractor is as follows:		
<div style="border: 1px solid black; height: 80px;"></div>		
Signed _____		Date _____
Please include a Certification of Phase Completion for each project phase.		
Form 10-7 - Revised 08/10		



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Chapter 10 – Reimbursements and Reporting

Section 10.3 – Regional Traffic Signal Synchronization Program Reimbursements and Reporting Requirements

The previous sections of this chapter outline the process and requirements regarding reimbursements and reporting for all competitive programs that are part of Measure M2. A lead agency shall also use the following additional reporting and documentation requirements specific to any competitive project funded through Project P as part of the reimbursement process.

Procedures for Receiving Funds

Regional Traffic Signal Synchronization Program funds projects with a three (3) year grant. Projects are divided into two components for the purposes of reimbursements and reporting: Primary Implementation and Ongoing Maintenance and Operations. The Primary Implementation of the project must be completed within one (1) year of the initial payment. Ongoing Maintenance and Operations will begin after the Primary Implementation of the project is completed and be required for the remainder of the project and last for a minimum of two (2) years.

Primary Implementation includes the following:

- Project administration (required)
- Developing and implementing optimized signal synchronization timing (required)
- Producing a Before and After Study for the proposed project (required)
- Engineering design of signal improvements for the project (optional)
- System integration (optional)
- Proposed signal improvements, construction support, and contingency (optional):
 - New or upgraded detection
 - New or upgraded communication systems
 - Intersection/field system modernization and replacement
 - Minor signal operation improvements
 - Traffic management centers
 - Real-time traffic actuated operations and demonstration projects
- Contingencies (optional)
- Construction management (optional)

Ongoing Maintenance and Operation will begin after the Primary Implementation of the project is completed. Includes the following:

- Monitoring and improving optimized signal timing (required)
- Communications and detection support (optional)



Chapter 10 – Reimbursements and Reporting

- Final report (required)

A lead agency must obligate funds OCTA allocates to a project within the fiscal year of the allocation and after funding agreements with OCTA are executed. A lead agency obligates funds by awarding a contract or providing expense reports to prove the lead or a participating agency's workforce costs, provided that the lead agency intends to complete the Primary Implementation with lead agency or participating agency staff. Once an agency obligates Project P funds for Primary Implementation, it can begin the process for receiving payment of the funds. Note that only the lead agency will receive payment of funds from OCTA. Any funds that due participating agencies are the responsibility of the lead agency and not OCTA.

The project lead agency must submit payment requests through OCTA's online database, OCFundtracker: <http://ocfundtracker.octa.net>. Additional details about the retention caps, timely payment requests, project closeout, and payment are available in Chapter 10 of the CTFP Guidelines.

Availability of Funds

The funds allocated for projects will be available to project lead agencies July 1st of the programmed year and after funding agreements with OCTA are executed.

Initial Payment Requests for Primary Implementation

The initial payment will cover 75% of funds for the Primary Implementation of the project. The following information specific to the Regional Traffic Signal Synchronization Project is provided regarding the documentation requirements for initial payment of Primary Implementation after an agency obligates funds for the project.

Form 10-8 has been provided so a lead agency can determine the reporting and documentation required for an initial payment request. Staff may request additional documentation that is not listed on Form 10-8 prior to approving the request. The electronic versions of the forms are available through the OCFundtracker.

Below is additional information updating Section 10.1 of this chapter regarding documentation requirements for Project P payment requests:

- Invoice - For initial payments, the lead agency shall invoice for 75% of the contract amount or programmed amount of the project's Primary Implementation, whichever is less. For final payments of the Primary Implementation, the lead agency shall invoice the remaining balance of the



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project's Primary Implementation phase contract amount or programmed amount, whichever is less. (Form 10-8)

- Project Certification Letter. (Form 10-9)
- Revised Cost Estimate. (Form 10-10)
- Plans, Specifications, and Estimate (PS&E) Certification (Form 10-11)
- Certification of Phase (Form 10-12)
- Final Report Submission (Form 10-13)
- Division of Cost Schedule (Form 10-14)
- Work Schedule - OCTA requires a complete project schedule, including expected start and completion dates for tasks in the Primary Implementation and Ongoing Maintenance and Operation phases
- Right-of-Way Documents - No requirements as Right-of-Way is not a part of Project P

Detail on other aspects on Initial Payment Requests for Primary Implementation including project advancement and reimbursement is available in Chapter 10 of the CTFP Guidelines.

Final Payment Requests for Primary Implementation

OCTA will release the remaining balance to the lead agency, approximately 25% of funds for the Primary Implementation, when the project's Primary Implementation phase is complete and OCTA receives the project Before and After Study. The balance is determined based on the final costs for the eligible Project P expenditures. The Before and After Study is defined as the following:

This study shall at minimum collect morning and evening peak period using travel times, average speeds, green lights to red lights, stops per mile, and the derived corridor system performance index (CSPI) metric. In addition, greenhouse gas and gasoline savings should be identified. This information shall be developed both before any signal timing changes have been made and after the Primary Implementation. The study shall compare the information collected both before and after the timing changes. Comparisons shall identify the



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absolute and percent differences for the entire corridor, by segment, direction, and time period. Segments will be defined by major traffic movements as observed during the project (e.g. commuting segments between freeways, pedestrian-friendly segments in a downtown area, etc.).

A template for the before and after study is available. The Before and After Study for Project P shall be included as a requirement at the end of the Primary Implementation phase and as part of the Final Report for reimbursement purposes as outlined in this chapter.

Payment Requests for Ongoing Maintenance and Operations

The payments for the Ongoing Maintenance and Operations portion of the project award will cover the remainder of the three (3) year grant period after Primary Implementation is completed and will be paid as a reimbursement upon proof of work/payment and receipt of invoice. The invoice should include details on the ongoing maintenance and operation work done including on the required (1) work monitoring and improving optimized signal timing; and optional (2) communications and detection support.

Project Final Report

The project final report shall be completed in accordance with all CTFP Guidelines upon the end of the three year grant period. In addition, the final report shall summarize the full project through the three-year grant period, include the Before and After Study from the Primary Implementation phase, and report on additional updates/information that result from the Ongoing Maintenance and Operation phase.



Chapter 10 – Reimbursements and Reporting

Example of Reimbursement

\$1,000,000 = Total Project P funds programmed for Example Street Signal Synchronization allocated in Fiscal Year 2011/2012. The grant period is for three years.

\$900,000 for Primary Implementation – This amount of the project award is subject to the 75% initial payment and 25% final payment split as defined in the CTFP Guidelines.

Initial Payment = $\$900,000 \times 0.75 = \$675,000$

Final Payment upon completion, submission, and acceptance by OCTA of project Before and After Study to OCTA

Approximate Final Payment = $\$900,000 \times 0.25 = \$225,000$

\$100,000 for Ongoing Maintenance and Operation – This amount of the project award will cover the remainder of the three year grant period after Primary Implementation is completed and will be paid upon proof of payment and receipt of invoice.

Samples of the forms are included on the pages to follow. Electronic copies of the forms can be downloaded from OCFundtracker.

Chapter 10 – Reimbursements and Reporting



Form 10-8A



Comprehensive Transportation Funding Program
 Regional Traffic Signal Synchronization Program
 Project P Primary Implementation Report Form

Form 10-8A

Date:

1 Project Number:		Lead Agency:			
Project Title:					
Phase 1: Primary Implementation			Payment Type: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Final		
2 Agency Contact:		Title:		Phone:	E-mail:
3 Project Schedule:					
	Start Date		Completion Date		Number of Intersections:
	Month	Year	Month	Year	
Primary Implementation:					Length of project corridor: _____ miles
4 Document Checklist:					
a. <input type="checkbox"/> Project P Primary Implementation Report Form (8-1A)		f. <input type="checkbox"/> Work Schedule			
b. <input type="checkbox"/> Project P Primary Implementation Certification Letter (8-2)		g. <input type="checkbox"/> Project P PS&E Certification (8-4)			
c. <input type="checkbox"/> N/A		h. <input type="checkbox"/> N/A			
d. <input type="checkbox"/> Invoice & supporting documents (proof of payment, etc.)		i. <input type="checkbox"/> SYNCHRO, Timing, TruTraffic, and other ROADS data			
e. <input type="checkbox"/> Contract Authorization/Council Approval		j. <input type="checkbox"/> N/A			
5 Division of Costs:				*Payment Amount: \$0	
				Phase Allocation:	
	CTFP Funds	Matching Funds	Other Funds	Total Amount	
Match Rate	1				
Contract Costs	\$ -	\$ -	\$ -		
Extra Work/Change Orders	\$ -	\$ -	\$ -	\$ -	
Agency Expenses	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	

**For Primary Implementation, requested initial payment is allowed for up to 75% of the M2 funds*

Form 10-8A - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-8B

Form 10-8B



Comprehensive Transportation Funding Program
 Regional Traffic Signal Synchronization Program
 Project P Ongoing Monitoring / Maintenance Report Form

Date:

1 Project Number:		Lead Agency:				
Project Title:						
Phase 2: Ongoing Monitoring / Maintenance		Year: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3* <input type="checkbox"/> 4* <input type="checkbox"/> 5*		Payment: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2		
2 Agency Contact:		Title:		Phone:	E-mail:	
3 Project Schedule:						
		Start Date		Completion Date		
		Month	Year	Month	Year	
Ongoing Maintenance/Monitoring:						
					Number of Project Intersections	
					Length of project corridor: _____ miles	
4 Document Checklist:						
a. <input checked="" type="checkbox"/> Project P Ongoing Monitoring / Maintenance Report Form (8-1B)			d. <input type="checkbox"/> Work Schedule			
b. <input type="checkbox"/> Work Summary			e. <input type="checkbox"/> SYNCHRO, Timing, TruTraffic, and other ROADS data			
c. <input type="checkbox"/> Invoice & supporting documents (proof of payment, etc.)			f. <input type="checkbox"/> Direct Labor Documentation			
5 Division of Costs:						
				Payment Amount**:		
				Phase Allocation:		
	CTFP Funds	Matching Funds	Other Funds	Total Amount		
Match Rate	1					
Contract Costs	\$ -	\$ -	\$ -			
Extra Work/Change Orders	\$ -	\$ -	\$ -			
Agency Expenses	\$ -	\$ -	\$ -			
Total	\$ -	\$ -	\$ -	\$ -		
Payment Tracker:						
		Year 1	Year 2	Year 3*	Year 4*	Year 5*
Payment 1	Amount					
	Invoice #					
Payment 2	Amount					
	Invoice #					
Annual Total to date:		\$ -	\$ -	\$ -	\$ -	\$ -

*if applicable
 **Payment can only be requested every 6 months

Form 10-8B - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-8B (continued)

Comprehensive Transportation Funding Program

Project Number: 0

Form 10-8B
Page 2

5 cont.	Agency	Direct Dollar Match	In Lieu/Soft Match	Total Match
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
	TOTALS:	\$ -	\$ -	\$ -

6 Scope of Work/Description of Improvements:

7 Remarks: Engineer in Charge:

Chapter 10 – Reimbursements and Reporting



Form 10-8C

Form 10-8C



Comprehensive Transportation Funding Program
 Regional Traffic Signal Synchronization Program
 Project P Ongoing Monitoring / Maintenance Final Report Form

Date:

1 Project Number:		Lead Agency:				
Project Title:						
Phase 2: Ongoing Monitoring / Maintenance			Final Payment Request Amount*: \$ _____			
2 Agency Contact:		Title:	Phone:	E-mail:		
3 Project Schedule:						
		Start Date		Completion Date		
		Month	Year	Month	Year	
Ongoing Maintenance/Monitoring:						
					Number of Project Intersections: _____	
					Length of project corridor: _____ miles	
4 Document Checklist:						
a. <input checked="" type="checkbox"/> Project P OMM Final Report Form (8-1C)		e. <input type="checkbox"/> Project P PS&E Certification (8-4)		f. <input type="checkbox"/> Project P Certification of Phase Completion (8-5)		
b. <input type="checkbox"/> Division of Cost Schedule (8-7)		g. <input type="checkbox"/> Project Final Report Submission (8-6)		h. <input type="checkbox"/> SYNCHRO, Timing, TruTraffic, and other ROADS data		
c. <input type="checkbox"/> Invoice & supporting documents (proof of payment, etc.)		d. <input type="checkbox"/> Work Schedule		e. <input type="checkbox"/> Work Summary		
5 Division of Costs:						
				*Payment Amount:		
				Phase Allocation:		
	CTFP Funds	Matching Funds	Other Funds	Total Amount		
Match Rate	1					
Contract Costs	\$ -	\$ -	\$ -			
Extra Work/Change Orders	\$ -	\$ -	\$ -			
Agency Expenses	\$ -	\$ -	\$ -			
Total	\$ -	\$ -	\$ -	\$ -		
Payment Tracker:						
		Year 1	Year 2	Year 3**	Year 4**	Year 5**
Payment 1	Amount					
	Invoice #					
Payment 2	Amount					
	Invoice #					
<i>Annual Total to date:</i>		\$ -	\$ -	\$ -	\$ -	\$ -

**Last 6 months of Ongoing Monitoring/Maintenance payment can only be requested after OMM is completed and within 180 days of completion
 **If applicable*

Form 10-8C - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-9

Form 10-9



**Comprehensive Transportation Funding Program
Regional Traffic Synchronization Program**
Project P Primary Implementation Certification Letter

Date: _____

1	Project Number	Lead Agency
	Project Title	
	Phase 1: Primary Implementation	Payment Type: <input checked="" type="checkbox"/> Initial
2	I, _____, do hereby certify that:	
	for the _____, do hereby certify that:	
		Check one: <u>Yes</u> <u>No</u> <u>N/A</u>
3	The project is designed to city/county and other participating jurisdictions' standards, as required.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4	The project contract was awarded on _____.	
5	The total cost of the contract based on award is _____.	
6	The city/county has committed matching funds to the project.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7	All required environmental documentation is complete and certified.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8	All final report and payment request will be submitted in accordance with the guidelines.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9	An updated project schedule is included with the payment request.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10	Implementation/construction will be completed as outlined in the scope of work.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11	Primary implementation will be completed within one (1) year of the initial payment.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12	On-going monitoring/maintenance will begin after the completion of the Primary Implementation and will be required for the remainder of the project.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
13	An updated Revised Cost Estimate (Form 8-3) in conformance with the latest CTFP Guidelines will be submitted.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
14	A "Before" and "After" Study will be submitted prior to submitting the Final Payment Request.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	_____	_____
	0	Date
	0	

Form 10-9 - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-11

Form 10-11



Comprehensive Transportation Funding Program
 Regional Traffic Synchronization Program
 Project P Plans, Specifications, and Estimate Certification

Date:

1	Project Number	Lead Agency
Project Title		
Phase 1: Primary Implementation Submission Type: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Resubmission		
2	The _____ 0 _____ hereby certifies in connection with the above project that:	
3	All proposed work is within existing right-of-way and no additional right-of-way is necessary.	
4	Existing improvements (check all that apply):	
	<input type="checkbox"/> No building improvements or utility conflicts in the right-of-way area.	
	<input type="checkbox"/> All jurisdictional permits for implementation has been documented and are available for inspection, if requested, by OCTA.	
	<input type="checkbox"/> The following improvements exist in the right-of-way area, but will be removed before the contractor enters to perform in the construction.	
	<input type="checkbox"/> Utilities which have prior rights and will require relocation are:	
5	Plans and specifications for the project have been or will be properly prepared and approved in accordance with authorized procedures.	
6	The division of costs as shown in the Revised Cost Estimate (Form 8-3) has been based on the Regional Traffic Signal Synchronization Program scope of work as approved by OCTA.	
7	The work is true to the proposed/approved scope of work and any deviations required will remain consistent with the goals of the project and are justified.	
	_____ (Insert Name) (Insert Title) (Insert Agency)	_____ Date

Form 10-11 - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-12

Form 10-12



Comprehensive Transportation Funding Program
 Regional Traffic Signal Synchronization Program
 Project P Certification of Phase Completion

Date: _____

1	Project Number	Lead Agency
Project Title		
Phase: <input checked="" type="checkbox"/> Primary Implementation <input type="checkbox"/> Ongoing Maintenance/Monitoring		
2	I, _____, do hereby certify that:	
3	The date of completion of the work hereinafter described is _____.	
4	The agency has recorded a Notice of Acceptance for Project Completion.	Check one: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5	A description of the work and limits are attached.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6	The name of the consultant for the work of improvements is: _____	
7	A general statement of the kind of work done or material furnished by the aforesaid consultant is as follows:	
0		Date
0		

Form 10-12 - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-13

Form 10-13



Comprehensive Transportation Funding Program
 Regional Traffic Signal Synchronization Program
 Project P Final Report Submission Form

Date: _____

1	Project Number: _____	Lead Agency: _____		
	Project Title: _____			
	Report Type: <input checked="" type="checkbox"/> Project Implementation* <input type="checkbox"/> Project Completion**		Submission Type: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Resubmission	
	<i>*includes Before/After Study</i>		<i>**includes final OMM report</i>	
2	Agency Contact: _____	Title: _____	Phone: _____	E-mail: _____
3	Document Checklist: a. <input checked="" type="checkbox"/> Project P Final Report Submission Form b. <input checked="" type="checkbox"/> One (1) electronic copy of the Project Final Report, as specified above, including all appendices, on a CD/DVD. c. <input checked="" type="checkbox"/> Two (2) physical copies of the Project Final Report, as specified above, including all appendices, (1 bounded and 1 unbounded)			
4	I, _____, _____ for the _____, do hereby certify that the Project Final Report, as specified above, includes all the components required by the Comprehensive Transportation Funding Program (CTFP) Guidelines. <div style="display: flex; justify-content: space-between; margin-top: 20px;"> _____ _____ </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> 0 Date </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> 0 </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> 0 </div>			

Form 10-13 - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-14

Form 10-14



Comprehensive Transportation Funding Program
 Regional Traffic Signal Synchronization Program
 Project P Final Report Division of Costs Schedule

Date:

1	Project Number:	Lead Agency:			
	Project Title:				
	<u>Payment Type</u>		<u>Phase</u>		
	Grant Request:	<input checked="" type="checkbox"/> Final	<input type="checkbox"/> Primary Implementation	<input type="checkbox"/> Ongoing Monitoring/Maintenance	
2	Contract Costs:				
		A	B	C	D
Item No.	Item of Work	Quantity	Unit Price	Total Amount	Ineligible Amount
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
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		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
		x	= \$	-	-
3			▶ Column Totals	\$	-
4			▶ Sub-total Eligible Contract Expenses	=	-

Form 10-14 - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-14 (continued)

Comprehensive Transportation Funding Program

Final Report Division of Costs Schedule

Form 10-14

Page 3

Project Number

0

Payment Type: Primary Implementation Ongoing Monitoring/Maintenance

9 Total Contract Costs:					
10	Add all lines 3 & 7, Column C	▶	Total Contract Expenses	\$0	
11	Add all lines 3 & 7, Column D	▶	Total Ineligible Contract Expenses	\$0	
12	Subtract line 11 from line 10	▶	Total Eligible Contract Expenses	\$0	
13 Change Orders & Extra Work:					
		A	B	C	D
CO No.	Item of Work	Quantity	Unit Price	Total Amount	Ineligible Amount
		x	= \$	- -	
		x	= \$	- -	
		x	= \$	- -	
		x	= \$	- -	
		x	= \$	- -	
		x	= \$	- -	
		x	= \$	- -	
		x	= \$	- -	
14	. . . . .		▶	Column Totals \$	- - \$ -
15	. . . . .		▶	Sub-total Change Orders & Extra Work Expenses = \$	-
16 Total Change Orders & Extra Work:					
17	Line 14, Column C	▶	Total Contract Expenses	\$	-
18	Line 14, Column D	▶	Total Ineligible Contract Expenses	\$	-
19	Line 15	▶	Total Eligible Contract Expenses	\$	-
20 Labor:					
		A	B	C	D
	Position Title	Hours	Rate	Overhead	Total Amount
		x	+	= \$	- -
		x	+	= \$	- -
		x	+	= \$	- -
		x	+	= \$	- -
		x	+	= \$	- -
		x	+	= \$	- -
		x	+	= \$	- -
		x	+	= \$	- -
21	. . . . .		▶	Column Totals \$	- - \$ -
22	. . . . .		▶	Total Labor Expenses = \$	-

Form 10-14 - Revised 04/12

Chapter 10 – Reimbursements and Reporting



Form 10-14 (continued)

Comprehensive Transportation Funding Program

Final Report Division of Costs Schedule

Form 10-14

Page 4

Project Number

Payment Type: Primary Implementation

Ongoing Monitoring/Maintenance

23 Materials:		A	B
Company	Item	Total Amount	Ineligible Amount
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
24	..... ▶ Column Totals	\$ -	\$ -
25	..... ▶ Total Material Expenses	=	\$ -
26 Equipment:		A	B
Company	Item	Total Amount	Ineligible Amount
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
			-
27	..... ▶ Column Totals	\$ -	\$ -
28	..... ▶ Total Equipment Expenses	=	\$ -
29 Total Agency Expenses:			
30	Add Line 21, Column C and Lines 24 & 27, Column C	▶ Total Agency Expenses	\$ -
31	Add Line 21, Column D and Lines 24 & 27, Column D	▶ Total Ineligible Agency Expenses	\$ -
32	Add together Lines 22, 25 & 28	▶ Total Eligible Agency Expenses	\$ -

Form 10-14 - Revised 04/12



Chapter 10 – Reimbursements and Reporting

Section 10.4 – Environmental Cleanup Program Reimbursements and Reporting Requirements

Sections 10.1 and 10.2 of this chapter outline the process and requirements regarding reimbursements and reporting for the Regional Capacity Program. These processes are applicable to the Tier 1 and Tier 2 Grant Programs with the following exceptions:

- For an initial payment, Forms 10-15 and 10-17 (along with Forms 10-2, 10-3, and 10-4) must be submitted.
- For a final payment, Forms 10-16 and 10-17 (along with Forms 10-2, 10-4, 10-5A and 10-7) must be submitted. Supporting documentation for O & M costs (if used as match) and location maps must also be submitted.
- A final report must be filed within 180 days of the project being completed with information as shown in Form 10-16.
- Additionally, an exception to Precept #29: agencies may appeal to the ECAC and the OCTA Board on any issues that the agency and OCTA cannot resolve, as such are the approving bodies for this program.

For Tier 1 of the Environmental Cleanup Program, ongoing operations and maintenance of the project can be pledged as a match. (page 12-6) As part of the semi-annual review reporting process, OCTA will verify local agency operations and maintenance expenditures to ensure local match commitments are being met. Local agencies must complete Form 10-17 (sample on page 10-59) for each ECP grant as part of their SAR updates.

Samples of the forms are included on the pages to follow. Electronic copies of the forms can be downloaded from OCFundtracker.

Chapter 10 – Reimbursements and Reporting



Form 10-15



Comprehensive Transportation Funding Programs

Form 10-15

Environmental Cleanup Program - Initial Payment Form

I. Project Title	II. Submittal Date

III. Lead Agency Information	
<i>Project Administrator/Person with day-to-day responsibility for implementing project</i>	
Name	Title
Agency	
Address	
Phone	E-Mail

IV. Contractor Information	
Company	
Address	
Phone	E-Mail

V. Project Schedule		
	Start Date	End Date
Permitting (if applicable)		
Construction		

VI. Division of Cost			
Category	ECP Funds	Funding Match*	Funding Match Expended
Capital Purchases	\$ -	\$ -	\$ -
Construction Costs (Installation)	\$ -	\$ -	\$ -
Direct Project Administration Costs	\$ -	\$ -	\$ -
Other Costs (Supplies, Materials, Equipment)	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -

* Agency shall meet match rate commitments on a proportional basis as identified in the project application and certified in the project certification letter.

Chapter 10 – Reimbursements and Reporting



Form 10-15 (continued)



Comprehensive Transportation Funding Programs

Form 10-15

Environmental Cleanup Program - Initial Payment Form

VIII. Itemized Costs

CAPITAL COSTS					
Item #	Description	Unit	Quantity	Unit Price	Amount
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
CONSTRUCTION COSTS (INSTALLATION)					
Item #	Description	Unit	Quantity	Unit Price	Amount
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
OTHER COSTS (SUPPLIES, MATERIALS, AND EQUIPMENT)					
Item #	Description	Unit	Quantity	Unit Price	Amount
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -

Chapter 10 – Reimbursements and Reporting



Form 10-16



Comprehensive Transportation Funding Programs

Form 10-16

Environmental Cleanup Program - Final Report Form

I. Project Title	II. Submittal Date

III. Lead Agency Information	
<i>Project Administrator/Person with day-to-day responsibility for implementing project</i>	
Name	Title
Agency	
Address	
Phone	E-Mail

IV. Contractor Information	
Company	
Address	
Phone	E-Mail

V. Project Schedule		
	Start Date	End Date
Permitting (if applicable)		
Construction		

VI. Division of Cost			
<u>Category</u>	ECP Funds	Funding Match*	Funding Match Expended
Capital Purchases	\$ -	\$ -	\$ -
Construction Costs (Installation)	\$ -	\$ -	\$ -
Direct Project Administration Costs	\$ -	\$ -	\$ -
Other Costs (Supplies, Materials, Equipment)	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -

* Agency shall meet match rate commitments on a proportional basis as identified in the project application and certified in the project certification letter.

Chapter 10 – Reimbursements and Reporting



Form 10-16 (continued)



Comprehensive Transportation Funding Programs

Form 10-16

Environmental Cleanup Program - Final Report Form

VIII. Itemized Costs

Copies of invoices are to be provided

CAPITAL COSTS					
Item #	Description	Unit	Quantity	Unit Price	Amount
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
CONSTRUCTION COSTS (INSTALLATION)					
Item #	Description	Unit	Quantity	Unit Price	Amount
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
OTHER COSTS (SUPPLIES, MATERIALS, AND EQUIPMENT)					
Item #	Description	Unit	Quantity	Unit Price	Amount
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -
				\$ -	\$ -



Form 10-16 (continued)



Comprehensive Transportation Funding Programs

Form 10-16

Environmental Cleanup Program - Final Report Form

VI. Location of Installation

Please provide on a separate sheet the location of all installations (catch basin ID and nearest cross-section), inclusive of depicting locations within a GIS map.

VII. Project Results

Information should be provided describing the benefits, successes, and shortcomings related to the completed project.

Chapter 10 – Reimbursements and Reporting



Form 10-17



Comprehensive Transportation Funding Program

Form 10-17

Environmental Cleanup Program (Tier 1 only) In-Kind Service O&M Report

Date:

A	Project Number:	Lead Agency:	Reporting Period:			
			<input type="checkbox"/> July 1 _____ to Dec 31 _____ <input checked="" type="checkbox"/> Jan 1 _____ to June 30 _____			
Project Title:						
B	Agency Contact:	Title:	Phone:	E-mail:		
C In-Kind Services (O&M only)						
	Staff Position	Hours	Hourly Rate	Burden	Overhead*	Total Cost
1						
2						
3						
4						
5						
6						
Sub-Total						\$ -
Other (e.g. consultant services.):		Description				Total Cost
1						
2						
					Sub-Total	\$ -
					Totals	\$ -
D Operations & Maintenance (O&M) Expenditures:						
Match rate						
Implementation phase reimbursements		\$	-			
O&M this reporting period		\$	-			
O&M previous period		\$	-			
Total O&M expended to date		\$	-			
E Remarks:						
F Project Expenditures Certification:						
I hereby certify that the information contained in this report is a true and correct statement of the work performed and costs incurred on the above project.						
_____ (Insert Signing Authority Name)			_____ Date			
(Insert Title)						

*must be actual costs, maximum of 30% of hourly rate.

Form 10-17 - Revised 2/06/13



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Independent Audit Process Overview

Independent audits of CTFP projects may be initiated by OCTA's Internal Audit Department (or agent thereof). The project information on file at OCTA will serve as the primary source of information for each audit. However, additional information may be requested of local jurisdictions.

Accurate records detailing specific expenditures for each CTFP project must be maintained by local jurisdictions. These records must show that proper accounting and cash management procedures were followed, the project was completed in accordance with the application and the CTFP guidelines, and that all records and documentation related to the project were adequately maintained. Consistent with the Measure M ordinance, local jurisdictions must also establish a separate fund accounting system for Measure M funds transactions and expenditures.

Local jurisdictions must cooperate with OCTA or its agent during the audit process and comply with the recommendations of the M2 financial and compliance audits. Project records must be maintained for five (5) years after final payment.

Record Requirements to Demonstrate Compliance

A description of the required records is given below.

Contracts

For all contract expenses the following records must be maintained:

1. The original executed contract
2. Evidence the procurement of contracted public works and architectural and engineering services followed applicable state laws and local agency procurement requirements
3. All contractor invoices received
4. All contract change order documents
5. Proof of payment to contractors
6. Project "as built" or other final plans
7. Sign-off on completion by Local Agency (letter of acceptance)

Materials and other

For all materials and other miscellaneous expenses charged to the Comprehensive Transportation Programs project, the following records must be maintained:

1. Original invoice and purchase order
2. Proof of delivery



Chapter 12 – Environmental Cleanup Program

Overview

The Environmental Cleanup Program (ECP) provides for Measure M2 (M2) revenues to improve overall water quality in Orange County from transportation-generated pollution. Specifically, the Orange County Local Transportation Authority's Ordinance No. 3 (M2 Ordinance) dated July 24, 2006; provides 2 percent of gross M2 revenue dedicated to protecting Orange County beaches and waterways from the conveyance of urban runoff associated with transportation generated pollution. The M2 Environmental Cleanup Program (ECP) ensures that funds will be used on a countywide, competitive basis to meet federal Clean Water Act standards for controlling transportation-generated pollution by funding nationally recognized Best Management Practices (BMPs).

As required by the M2 Ordinance, an Environmental Cleanup Allocation Committee (ECAC), representing a broad cross-section of the water quality community, was formed in October 2007 to provide guidance on program design and funding. The goal of the ECP is to fund projects on a countywide, competitive basis. This will assist the County of Orange and Orange County cities in reducing transportation-related water quality pollution by meeting Clean Water Act standards for local waterways and beaches.

Proposed projects must demonstrate a direct nexus (connection) to a reduction of transportation-related pollution as developed and defined by the ECAC in conformity with the M2 Ordinance. All proposing agencies must demonstrate an understanding of how their proposed projects meet the following transportation pollution nexus definition:

- *Transportation-related activities can be a contributor of pollutants and/or impairments to receiving waters via aerial deposition, storm, and non-storm water discharges. Transportation-related activities are associated with the operation, construction, and maintenance of public roads, highways, and other ground transportation systems.*
- *The conveyance of transportation-related pollutants to surface and groundwater can occur from precipitation, runoff, and leaching entering or discharging from public roads, highways, and other ground transportation systems via drainage systems; such as catch basins, curbs, gutters, ditches, manmade channels, retention basins, or storm drains. The quality and quantity of these discharges vary considerably and are affected by hydrology, geology, land use, season, and sequence and discharge of hydrologic events.*
- *Pollutant sources can encompass right-of-way, properties, facilities, and activities related to motor vehicles, highway maintenance, construction site runoff, maintenance facility runoff, illegal dumping, spills, and landscaping care.*



COMMITTEE TRANSMITTAL

August 12, 2013

To: Members of the Board of Directors

From: Wendy Knowles, Clerk of the Board *WK*

Subject: Capital Programs Division – Fourth Quarter Fiscal Year 2012-13 and Planned Fiscal Year 2013-14 Capital Action Plan Performance Metrics

Executive Committee meeting of August 5, 2013

Present: Chairman Winterbottom and Directors Bates, Eastman, Hennessey, Nguyen, and Spitzer

Absent: Vice Chairman Nelson and Murray

Committee Vote

No action was taken on this item.

Staff Recommendation

Receive and file as an information item.



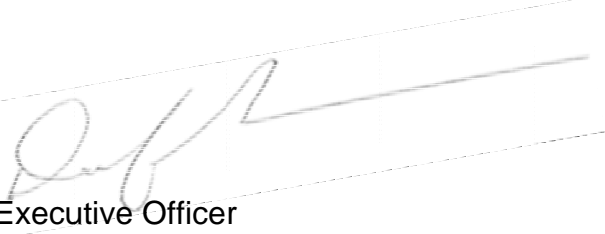
ORANGE COUNTY TRANSPORTATION AUTHORITY

**Capital Programs Division - Fourth Quarter Fiscal Year
2012-13 and Planned Fiscal Year 2013-14 Capital Action
Plan Performance Metrics**

Staff Report



August 5, 2013

To: Executive Committee 

From: Darrell Johnson, Chief Executive Officer

Subject: Capital Programs Division - Fourth Quarter Fiscal Year 2012-13 and Planned Fiscal Year 2013-14 Capital Action Plan Performance Metrics

Overview

The Orange County Transportation Authority's 2011 Strategic Plan key strategies and objectives to achieve the goals for Mobility and Stewardship include delivery of all Capital Action Plan projects on time and within budget. The Capital Action Plan is used to create a performance metric to assess capital project delivery progress on highway, grade separation, rail, and facility projects. This report provides an update on the Capital Action Plan delivery and performance metrics.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) Capital Programs Division is responsible for project development and delivery of highway, grade separation, rail, and facility projects from the beginning of the environmental phase to construction completion. Project delivery commitments reflect defined project scope, costs, and schedules. Project delivery commitments shown in the Capital Action Plan (CAP) are key strategies and objectives to achieve Strategic Plan goals for Mobility and Stewardship.

This report provides a CAP update and reports on the CAP performance metrics, which are the fiscal year (FY) snapshot of the planned CAP milestones in the budgeted FY. The Capital Programs Division also provides separate quarterly Metrolink commuter rail system ridership, revenue, and on-time performance reports and metrics which are posted on the OCTA dashboard website.

Discussion

The Capital Programs Division objective is to deliver projects on schedule and within the approved project budget. Key projects' cost and schedule commitments are captured in the CAP which is regularly updated with new projects and project status (Attachment A). The CAP is categorized into four key groupings of projects; freeway projects, grade separation projects, rail and station projects, and key facility projects. Simple milestones represent the plan, progress, and performance for capital project delivery. CAP performance metrics provide a FY snapshot of the milestones targeted for delivery in the budgeted FY, and provide both transparency and measurement of annual capital project delivery performance.

CAP project costs represent the total cost of the project across all phases of project delivery, including support costs, and right-of-way and construction capital costs. The approved or planned budget cost is shown in comparison to the actual or forecast cost. Budget or planned total project costs may be shown as to-be-determined (TBD) if project scoping studies or other approval documents have not been approved, and may be updated as project milestones are achieved. Actual or forecast costs represent the total project cost across all phases of project delivery as the project progresses. Measure M2 (M2) projects are identified with the corresponding project letter and the M2 logo. The CAP update is also included in the M2 Quarterly Report.

The CAP summarizes the very complex capital project critical path schedules into eight key delivery milestones.

Begin Environmental	The date work on the environmental clearance, project report, or preliminary engineering phase begins.
Complete Environmental	The date environmental clearance and project approval is achieved.
Begin Design	The date final design work begins, or the date when a design-build contract begins.
Complete Design	The date final design work is 100 percent complete and approved.

Construction Ready	The date contract bid documents are ready for advertisement, including certification of right-of-way, all agreements executed, and contract constraints cleared.
Advertise for Construction	The date a construction contract is advertised for bids.
Award Contract	The date the construction contract is awarded.
Construction Complete	The date all construction work is completed, and the project is open to public use.

These delivery milestones reflect progression across the project delivery phases shown below.



Project schedules reflect the approved milestone dates in comparison to the forecast or actual milestone dates. Milestone dates may be shown as TBD if project scoping or approval documents have not been finalized and approved, or if the delivery schedule has not been negotiated with the agency or consultant implementing the specific phase of a project. Planned milestone dates can be revised to reflect new dates from approved baseline schedule changes. Actual dates will be updated when milestones are achieved, and forecast dates will be updated to reflect project delivery status.

Key Findings

Fourth quarter FY 2012-13 milestones achieved in the CAP include:

Freeway Projects

- Final design was completed for the Interstate 5 (I-5) widening project to add carpool lanes from Avenida Vista Hermosa to Pacific Coast Highway (PCH).

- The project to widen I-5 to add carpool lanes from PCH to San Juan Creek Road became construction ready and is planned to be advertised for construction in August 2013.
- The landscape replacement project on State Route 91 (SR-91), from State Route 55 (SR-55) to State Route 241 (SR-241), became construction ready and will be advertised for construction on July 22, 2013. This is a follow-up project to the recently completed widening project within the same project limits.
- The SR-91 westbound widening project, from SR-55 to Tustin Avenue, was planned to be advertised for construction in August 2013. The construction contract was advertised early on June 17, 2013.

Grade Separation Projects

- The Lakeview Avenue railroad grade separation project became construction ready. The construction contract advertisement is pending the California Transportation Commission (CTC) allocation of construction funding.
- The State College Boulevard railroad grade separation project became construction ready. The CTC allocated the construction funding in June 2013.

Rail and Station Projects

- The San Clemente beach trail railroad crossing safety enhancement project construction contract was awarded through the execution of a cooperative agreement with Metrolink to perform the construction.

The following project milestones missed the planned delivery in FY 2012-13.

Freeway Projects

- The complete environmental, complete design, construction ready, and advertise construction milestones for the carpool lane continuous access striping conversion project on Interstate 405 (I-405), from I-5 to SR-55, continues to be delayed due to additional studies, scope changes, and changes in design standards required to be implemented by the California Department of Transportation (Caltrans). The environmental approval will not be achieved until October 2013. Design work is

continuing concurrently with the environmental clearance, and the design is now forecast to be completed in July 2014.

- The begin design milestone for the I-405 Improvement Project, from SR-55 to Interstate 605, was not achieved due to cumulative delays in the environmental approval process. A supplemental traffic study required for the draft environmental document was released for public review, and additional options for a design variation and alternative are being studied for presentation to the Board of Directors (Board) in September 2013. Additionally, the certainty of obtaining the required authorizing design-build legislation has been delayed.
- The complete design milestone for the State Route 57 landscape replacement project, from Orangethorpe Avenue to Lambert Road, was not achieved due to delays in finalizing cooperative agreement terms with Caltrans for design oversight. This is not anticipated to affect the start of the landscape construction since this work cannot begin until the roadway construction contracts are completed and accepted.
- The construction ready milestone for the project to widen I-5 to add carpool lanes from Avenida Vista Hermosa to PCH was not achieved due to previously reported design changes required for the installation of reflective sound attenuation panels on certain soundwalls. Special Caltrans design approvals were required for these panels, and design was completed on May 24, 2013. The forecast for the project to be construction ready is now October 2013.
- The advertise construction milestone for the landscape replacement project on SR-91, from SR-55 to SR-241, was not met due to additional processing time required for Caltrans to implement newly delegated authority to advertise the construction contract in Caltrans District 12, in Orange County. However, the project was advertised for construction on July 22, 2013.

Grade Separation Projects

- The construction ready and advertise for construction milestones for the Raymond Avenue railroad grade separation project were not achieved due to final right-of-way certification update delays and the need to align the construction schedule with the adjacent State College Boulevard railroad grade separation project. However, right-of-way certification was

achieved in July 2013, and the forecast advertisement for construction by the City of Fullerton is in September 2013.

- The advertise construction milestone for the State College Boulevard railroad grade separation project was not achieved due to previously reported delays to the right-of-way certification. However, the right-of-way has now been certified, funding was allocated by the CTC, and the City of Fullerton will advertise the construction contract in August 2013.
- The advertise construction and award contract milestones for the Lakeview Avenue railroad grade separation project continue to be delayed. In June 2013, the CTC deferred the construction funding allocation pending the resolution of concerns regarding the lack of federal Buy America requirements in utility agreements executed with Southern California Edison. Staff has been working with Caltrans to resolve these concerns and currently anticipates the CTC to allocate the construction funding in August 2013. Construction contract advertisement is intended to immediately follow the CTC funding allocation and Federal Highways Administration approval of the federal construction funding obligation.

Rail, Station, and Facility Projects

- The complete environmental and begin final design milestones for the San Juan Capistrano Passing Siding project were not achieved. The City of San Juan Capistrano requested design modifications to address project impacts to Camino Capistrano, and time is being allowed for the Federal Transit Authority (FTA) to review the federal environmental clearance. The new forecast to complete environmental clearance work is in February 2014.
- The forecast complete environmental milestone for the Santa Ana/ Garden Grove Fixed-Guideway project was not achieved. The City of Santa Ana is finalizing the environmental document, and the cities' target schedule for the selection of the locally preferred alternative (LPA) and environmental approval is now forecast to be in November 2013.
- The forecast complete environmental milestone for the Orange Metrolink Parking Expansion Project was not achieved. The City of Orange is

working to finalize the environmental document. Environmental approval is now forecast to be in February 2014.

- The forecast construction ready and advertise construction milestones for the Placentia Metrolink Station were not achieved. The City of Placentia is currently leading the effort to obtain a federal environmental clearance and has experienced delays in obtaining FTA approval due to historic structure impacts. Additionally, as part of this environmental effort, the City of Placentia is working to finalize studies on a mixed-use commuter/business district parking structure. OCTA staff is discussing recovery plans with the city. The project schedule is currently under review and will be re-baselined to reflect the recovery plan.
- The complete construction milestone for the Laguna Niguel/Mission Viejo Metrolink Station surface parking expansion project was not met because of field condition conflicts that required design modifications and Metrolink concurrence prior to issuing the notice to proceed. Construction is forecast to be completed in October 2013.

The new milestone forecasts for these projects are included in the CAP and the FY 2013-14 performance metrics.

Recap of FY 2012-13 performance metrics

The performance metrics snapshot provided at the beginning of FY 2012-13 reflects 49 major project delivery milestones planned to be achieved for delivery of the substantial program of projects contained in the CAP. The final FY 2012-13 performance metrics has been updated to reflect both milestones achieved and missed in FY 2012-13 (Attachment B). Milestone schedules were met on 29 of the planned 49 milestones, and one milestone was delivered early.

Summary

Significant capital project delivery progress has been achieved and reflected in the CAP. The planned FY 2013-14 performance metrics created from current project forecast schedules have been compiled and will be used as a general project delivery performance indicator (Attachment C). There are 36 major project milestones planned to be accomplished in FY 2013-14. Staff will continue to manage project costs and schedules across all project phases

to meet project delivery commitments. The updated CAP and planned FY 2013-14 performance metrics will be posted on OCTA's website in August 2013.

Attachments

- A. Capital Action Plan, Status Through June 2013
- B. Final Closeout of Capital Program Division, Fiscal Year 2012-13 Performance Metrics
- C. Capital Programs Division, Fiscal Year 2013-14 Performance Metrics

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ORANGE COUNTY TRANSPORTATION AUTHORITY










**Capital Programs Division - Fourth Quarter Fiscal Year
2012-13 and Planned Fiscal Year 2013-14 Capital Action
Plan Performance Metrics**

Attachment A

Capital Action Plan

Status Through June 2013















Updated: July 18, 2013

Capital Projects	Cost	Schedule							
	Budget/Forecast (millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
Freeway Projects:									
 I-5, Pico to Vista Hermosa	\$113.0	Jun-09	Dec-11	Jun-11	Oct-13	Feb-14	Oct-14	Jan-15	Feb-18
Project C	\$113.0	Jun-09	Oct-11	Jun-11	Sep-13	Mar-14	Jul-14	Oct-14	Oct-17
 I-5, Vista Hermosa to Pacific Coast Highway	\$75.6	Jun-09	Dec-11	Jun-11	Feb-13	Jun-13	Oct-13	Dec-13	Jan-16
Project C	\$75.6	Jun-09	Oct-11	Jun-11	May-13	Oct-13	Feb-14	May-14	May-16
 I-5, Pacific Coast Highway to San Juan Creek Road	\$70.7	Jun-09	Dec-11	Jun-11	Jan-13	May-13	Aug-13	Oct-13	Nov-15
Project C	\$69.5	Jun-09	Oct-11	Jun-11	Jan-13	Apr-13	Aug-13	Oct-13	Nov-15
 I-5, I-5/Ortega Interchange	\$90.9	Sep-05	Jun-09	Jan-09	Nov-11	Mar-12	Jun-12	Aug-12	Sep-15
Project D	\$81.0	Sep-05	Jun-09	Jan-09	Dec-11	Apr-12	Jun-12	Aug-12	Sep-15
 I-5, I-5/Ortega Interchange (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project D	N/A	N/A	N/A	Jul-14	Dec-14	Apr-15	Jun-15	Aug-15	Aug-16
I-5, Avenida Vaquero Soundwall	\$3.0	N/A	N/A	Feb-08	Jan-09	Mar-09	Aug-10	Nov-10	Oct-11
	\$2.2	N/A	N/A	Feb-08	Mar-09	Apr-09	Aug-10	Nov-10	Aug-11
I-5, El Camino Real Soundwall	\$5.3	N/A	N/A	Jan-08	Jan-09	Mar-09	Aug-10	Dec-10	Feb-12
	\$4.5	N/A	N/A	Jan-08	Jan-09	Apr-09	Aug-10	Dec-10	Apr-12
 I-5, SR-73 to El Toro Road	TBD	Sep-11	Jun-14	TBD	TBD	TBD	TBD	TBD	TBD
Project C & D	\$534.6	Oct-11	May-14	May-14	Jun-17	Dec-17	Jan-18	Apr-18	May-22
 I-5, I-5/El Toro Road Interchange	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project D	TBD	Aug-14	Jul-17	TBD	TBD	TBD	TBD	TBD	TBD
 I-5, I-405 to SR-55	TBD	Sep-13	Jun-16	TBD	TBD	TBD	TBD	TBD	TBD
Project B	TBD	Nov-13	Jul-16	TBD	TBD	TBD	TBD	TBD	TBD
 I-5, SR-55 to SR-57	TBD	Jul-11	Jun-13	TBD	TBD	TBD	TBD	TBD	TBD
Project A	\$46.3	Jun-11	Mar-14	May-14	Jan-16	May-16	Jul-16	Sep-16	Oct-18
I-5, SR-91 to Los Angeles (LA) County Line	\$335.8	N/A	Dec-99	Sep-99	Jun-04	Dec-04	Jan-05	Apr-05	Mar-11
	\$328.0	N/A	Dec-99	Sep-99	Jul-05	Aug-05	Sep-05	Apr-06	Jan-11
I-5, SR-91 to LA County Line (Landscape)	N/A	N/A	N/A	Jan-08	Jul-10	Sep-10	Nov-10	Feb-11	Apr-12
	N/A	N/A	N/A	Jan-08	Jul-10	Sep-10	Nov-10	Feb-11	Apr-12
I-5, Continuous High-Occupancy Vehicle (HOV) Lane Access	TBD	Jul-11	Mar-12	Feb-12	Jan-13	Apr-13	May-13	Aug-13	Dec-13
	\$7.7	Aug-11	May-14	Mar-12	May-15	Sep-15	Oct-15	Jan-16	Feb-17
SR- 22, Additional Soundwalls	\$4.0	N/A	N/A	Mar-08	Jan-09	Mar-09	Apr-09	Jun-09	Mar-11
	\$2.9	N/A	N/A	Mar-08	Jun-09	Nov-09	Dec-09	Apr-10	Mar-11

Capital Action Plan

Status Through June 2013












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Capital Projects	Cost	Schedule							
	Budget/Forecast	Plan/Forecast							
	(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
SR-55, Continuous HOV Lane Access	\$1.5	May-10	Aug-10	May-10	Oct-10	Dec-10	Dec-10	Feb-11	Jun-11
	\$0.9	May-10	Oct-10	May-10	Oct-10	Dec-10	Dec-10	Feb-11	May-11
 SR-55, I-405 to I-5	TBD	Feb-11	Nov-13	TBD	TBD	TBD	TBD	TBD	TBD
Project F	\$274.6	May-11	Oct-14	Dec-14	Oct-17	Apr-18	Jun-18	Aug-18	Aug-21
 SR-55, I-5 to SR-91 (Draft)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project F	TBD	Jan-15	Jun-17	TBD	TBD	TBD	TBD	TBD	TBD
 SR-57 Northbound (NB), Orangewood to Katella (Draft)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project G	TBD	Jul-15	Jun-17	TBD	TBD	TBD	TBD	TBD	TBD
 SR-57 (NB), Katella to Lincoln	\$78.7	Apr-08	Jul-09	Jul-08	Nov-10	Mar-11	May-11	Aug-11	Sep-14
Project G	\$38.5	Apr-08	Nov-09	Aug-08	Dec-10	Apr-11	Jul-11	Oct-11	Sep-14
 SR-57 (NB), Katella to Lincoln (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project G	N/A	N/A	N/A	May-09	Jul-10	Nov-14	Dec-14	Mar-15	Mar-16
 SR-57 (NB), Orangethorpe to Yorba Linda	\$80.2	Aug-05	Dec-07	Feb-08	Dec-09	Apr-10	Jun-10	Oct-10	Mar-14
Project G	\$57.5	Aug-05	Dec-07	Feb-08	Jul-09	Dec-09	May-10	Oct-10	Mar-14
 SR-57 (NB), Yorba Linda to Lambert	\$79.3	Aug-05	Dec-07	Feb-08	Dec-09	Apr-10	Jun-10	Oct-10	Jul-14
Project G	\$56.5	Aug-05	Dec-07	Feb-08	Jul-09	Mar-10	May-10	Oct-10	Dec-13
 SR-57 (NB), Orangethorpe to Lambert (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project G	N/A	N/A	N/A	Sep-09	Apr-14	Jul-14	Sep-14	Nov-14	Nov-15
 SR-57 (NB), Lambert to Tonner Canyon (Draft)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project G	TBD	Jun-16	May-19	TBD	TBD	TBD	TBD	TBD	TBD
 SR-91 Westbound (WB), I-5 to SR-57	\$78.1	Jul-07	Apr-10	Oct-09	Feb-12	Jul-12	Aug-12	Nov-12	Apr-16
Project H	\$68.3	Jul-07	Jun-10	Mar-10	Apr-12	Aug-12	Oct-12	Jan-13	Apr-16
 SR-91, SR-57 to SR-55	TBD	Feb-14	Sep-16	TBD	TBD	TBD	TBD	TBD	TBD
Project I	TBD	Feb-14	Sep-16	TBD	TBD	TBD	TBD	TBD	TBD
 SR-91 (WB), Tustin Interchange to SR-55	\$49.9	Jul-08	Jul-11	Jul-11	Mar-13	Jul-13	Aug-13	Oct-13	Jul-16
Project I	\$48.7	Jul-08	May-11	Jun-11	Feb-13	Apr-13	Jun-13	Oct-13	Jul-16
 SR-91, SR-55 to SR-241	\$128.4	Jul-07	Jul-09	Jun-09	Jan-11	Apr-11	Jun-11	Sep-11	Dec-12
Project J	\$81.5	Jul-07	Apr-09	Apr-09	Aug-10	Dec-10	Feb-11	May-11	Mar-13
 SR-91, SR-55 to SR-241 (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project J	N/A	N/A	N/A	May-12	Feb-13	Apr-13	Jul-13	Oct-13	Oct-14

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Capital Projects	Cost	Schedule							
	Budget/Forecast	Plan/Forecast							
	(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
 SR-91 Eastbound, SR-241 to SR-71 Project J	\$104.5	Mar-05	Dec-07	Jul-07	Dec-08	Mar-09	May-09	Jul-09	Nov-10
	\$57.8	Mar-05	Dec-07	Jul-07	Dec-08	May-09	Jun-09	Aug-09	Jan-11
I-405, Continuous HOV Lane Access	TBD	Jul-11	Apr-12	Mar-12	Jan-13	Apr-13	May-13	Aug-13	Nov-13
	\$4.2	Aug-11	Oct-13	Mar-12	Jul-14	Oct-14	Dec-14	Mar-15	Sep-15
 I-405, I-5 to SR-55 (Draft) Project L	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Sep-14	May-17	TBD	TBD	TBD	TBD	TBD	TBD
 I-405 Southbound, SR-133 to University Drive (Draft) Project L	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Nov-14	Sep-15	Feb-16	Dec-16	Mar-17	Jun-17	Aug-17	Sep-18
 I-405, SR-55 to I-605 (Design-Build) Project K	TBD	Mar-09	Mar-13	TBD	TBD	TBD	TBD	TBD	TBD
	\$1,299.1	Mar-09	Aug-14	Aug-13	Oct-14	Jan-15	Jan-15	Sep-15	Oct-19
I-405/SR-22 HOV Connector	\$195.9	N/A	N/A	Sep-07	Sep-09	Mar-10	May-10	Aug-10	Aug-14
	\$120.1	N/A	N/A	Sep-07	Jun-09	Sep-09	Feb-10	Jun-10	Feb-15
I-405/I-605 HOV Connector	\$260.4	N/A	N/A	Sep-07	Sep-09	Mar-10	May-10	Oct-10	Jan-15
	\$169.4	N/A	N/A	Sep-07	Sep-09	Feb-10	May-10	Oct-10	Jan-15
I-405/SR-22/I-605 HOV Connector (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	Jun-08	May-09	Jun-15	Aug-15	Oct-15	Nov-16
 I-605, I-605/Katella Interchange (Draft) Project M	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Feb-16	Jan-18	TBD	TBD	TBD	TBD	TBD	TBD
Grade Separation Projects:									
 Sand Canyon Grade Separation Project R	\$55.6	N/A	Sep-03	Jan-04	Jul-10	Jul-10	Oct-10	Feb-11	May-14
	\$55.6	N/A	Sep-03	Jan-04	Jul-10	Jul-10	Oct-10	Feb-11	Aug-14
 Raymond Grade Separation Project O	\$77.2	Feb-09	Nov-09	Mar-10	Aug-12	Nov-12	Feb-13	May-13	Mar-16
	\$98.1	Feb-09	Nov-09	Mar-10	Dec-12	Aug-13	Sep-13	Dec-13	Oct-16
 State College Grade Separation (Fullerton) Project O	\$73.6	Dec-08	Jan-11	Jul-06	Aug-12	Nov-12	Feb-13	May-13	Mar-16
	\$80.3	Dec-08	Apr-11	Jul-06	Feb-13	May-13	Aug-13	Nov-13	Sep-16
 Placentia Grade Separation Project O	\$78.2	Jan-01	May-01	Jan-09	Mar-10	May-10	Mar-11	Jun-11	Nov-14
	\$69.4	Jan-01	May-01	Jan-09	Jun-10	Jan-11	Mar-11	Jul-11	Aug-14
 Kraemer Grade Separation Project O	\$70.4	Jan-01	Sep-09	Jan-09	Jul-10	Jul-10	Apr-11	Aug-11	Oct-14
	\$66.6	Jan-01	Sep-09	Feb-09	Jul-10	Jan-11	Jun-11	Sep-11	Jul-14
 Orangethorpe Grade Separation Project O	\$117.4	Jan-01	Sep-09	Feb-09	Dec-11	Dec-11	Feb-12	May-12	Sep-16
	\$107.2	Jan-01	Sep-09	Feb-09	Oct-11	Apr-12	Sep-12	Jan-13	Sep-16

Capital Action Plan

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Capital Projects	Cost	Schedule								
	Budget/Forecast	Plan/Forecast								
	(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction	
 Tustin/RoseGrade Separation	\$103.0	Jan-01	Sep-09	Feb-09	Dec-11	Mar-12	May-12	Aug-12	May-16	
Project O	\$91.3	Jan-01	Sep-09	Feb-09	Jul-11	Jun-12	Oct-12	Feb-13	May-16	
 Lakeview Grade Separation	\$70.2	Jan-01	Sep-09	Feb-09	Oct-11	Oct-12	Feb-13	May-13	Sep-15	
Project O	\$104.6	Jan-01	Sep-09	Feb-09	Jan-13	Apr-13	Oct-13	Jan-14	Jun-16	
 Ball Grade Separation	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Project R	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
 17th Street Grade Separation	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Project R	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Rail and Station Projects:										
 Rail-Highway Grade Crossing Safety Enhancement	\$94.4	Jan-08	Oct-08	Jan-08	Sep-08	Sep-08	Sep-08	Aug-09	Dec-11	
Project R	\$94.4	Jan-08	Oct-08	Jan-08	Sep-08	Sep-08	Sep-08	Aug-09	Dec-11	
 San Clemente Beach Trail Safety Enhancements	\$6.0	Sep-10	Jul-11	Feb-12	Apr-12	Apr-12	Jul-12	Oct-12	Jan-14	
Project R	\$6.0	Sep-10	Jul-11	Feb-12	Jun-12	Jun-12	Oct-12	May-13	Jan-14	
 Metrolink Service Expansion Program	\$134.0	May-07	Apr-08	Jul-07	Mar-09	Mar-09	Sep-08	Mar-09	Jun-12	
	\$134.0	May-07	Apr-08	Jul-07	Mar-09	Mar-09	Sep-08	Mar-09	Sep-12	
San Juan Capistrano Passing Siding	TBD	Aug-11	Jan-13	TBD	TBD	TBD	TBD	TBD	TBD	
	\$26.9	Aug-11	Feb-14	Sep-14	Aug-15	Aug-15	Sep-15	Dec-15	Feb-18	
 Anaheim Rapid Connection	TBD	Jan-09	Oct-14	TBD	TBD	TBD	TBD	TBD	TBD	
Project S	TBD	Jan-09	Nov-14	TBD	TBD	TBD	TBD	TBD	TBD	
 Santa Ana/Garden Grove Fixed-Guideway	TBD	Aug-09	Mar-12	TBD	TBD	TBD	TBD	TBD	TBD	
Project S	\$252.0	Aug-09	Jan-14	Jul-14	Jul-16	Oct-16	Nov-16	Jan-17	Mar-19	
Placentia Metrolink Station and Parking Structure	TBD	Jan-03	May-07	Oct-08	Jan-11	Aug-12	Aug-12	Nov-12	Jan-15	
	TBD	Jan-03	May-07	Oct-08	Feb-11	TBD	TBD	TBD	TBD	
Orange Station Parking Expansion	TBD	Dec-09	Dec-12	Nov-10	Apr-13	TBD	TBD	TBD	TBD	
	TBD	Dec-09	Feb-14	Nov-10	Jun-14	Jun-14	Jun-14	Sep-14	Jan-16	
Tustin Station Parking Expansion	\$17.6	Apr-07	Nov-07	Apr-09	Mar-10	Mar-10	Apr-10	Aug-10	Sep-11	
	\$15.4	Apr-07	Nov-07	Apr-09	May-10	May-10	Jun-10	Aug-10	Sep-11	
Fullerton Transportation Center Parking Expansion	\$42.0	Jul-06	Mar-07	Sep-07	Aug-09	Aug-09	May-10	Aug-10	Apr-12	
	\$30.4	Jul-06	Mar-07	Sep-07	Aug-09	Aug-09	May-10	Aug-10	Jun-12	
Laguna Niguel/Mission Viejo Station Parking Lot	\$4.3	Sep-07	Dec-07	Apr-12	Aug-12	Aug-12	Oct-12	Jan-13	Oct-13	
	\$4.3	Jul-07	Dec-07	Apr-12	Aug-12	Aug-12	Nov-12	Jan-13	Oct-13	

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Capital Projects	Cost	Schedule							
	Budget/Forecast (millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
Anaheim Regional Transportation Intermodal Center	\$227.4	Apr-09	Feb-11	Jun-09	Feb-12	Feb-12	May-12	Jul-12	Nov-14
Project R & T	\$227.4	Apr-09	Feb-12	Jun-09	May-12	May-12	May-12	Sep-12	Nov-14
LOSSAN Fiber Optic Communications	\$24.6	N/A	N/A	Oct-07	Mar-10	Mar-10	Apr-10	Dec-10	Aug-12
	\$24.6	N/A	N/A	Oct-07	Sep-10	Sep-10	Oct-10	Dec-10	Sep-12
Tustin Station Video Surveillance System (VSS) (Design-Furnish-Install)	\$0.8	N/A	N/A	Mar-11	Jun-11	Jun-11	N/A	N/A	Oct-11
	\$0.5	N/A	N/A	Apr-11	Jun-11	Jun-11	N/A	N/A	Dec-11
Santa Ana Station VSS (Design-Furnish-Install)	\$0.8	N/A	N/A	Jan-11	Feb-11	Feb-11	N/A	N/A	Sep-11
	\$0.7	N/A	N/A	Jan-11	Feb-11	Apr-11	N/A	N/A	Nov-11
Fullerton Transportation Center VSS (Design-Furnish-Install)	\$0.8	N/A	N/A	Apr-11	Aug-11	Aug-11	N/A	N/A	Jun-12
	\$0.8	N/A	N/A	Jun-11	Aug-11	Aug-11	N/A	N/A	Jun-12

Note: Costs associated with landscape projects are included in respective freeway projects.

Grey = Milestone achieved

Green = Forecast milestone meets or exceeds plan

Yellow = Forecast milestone is one to three months later than plan

Red = Forecast milestone is over three months later than plan

Begin Environmental: The date work on the environmental clearance, project report, or preliminary engineering phase begins.

Complete Environmental: The date environmental clearance and project approval is achieved.

Begin Design: The date final design work begins, or the date when a design-build contract begins.

Complete Design: The date final design work is 100 percent complete and approved.

Construction Ready: The date contract bid documents are ready for advertisement, including certification of right-of-way, all agreements executed, contract constraints are cleared.

Advertise for Construction: The date a construction contract is both funded and advertised for bids.

Award Contract: The date the construction contract is awarded.

Construction Complete: The date all construction work is completed and the project is open to public use.

Acronyms

I-5 - Santa Ana Freeway (Interstate 5)

SR-73 - San Joaquin Freeway (State Route 73)

SR-55 - Costa Mesa Freeway (State Route 55)

SR-57 - Orange Freeway (State Route 57)

SR-91 - Riverside Freeway (State Route 91)

SR-133 - Laguna Freeway (State Route 133)

SR-22 - Garden Grove Freeway (State Route 22)

I-405 - San Diego Freeway (Interstate 405)

SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)

I-605 - San Gabriel River Freeway (Interstate 605)

LOSSAN - Los Angeles - San Diego - San Luis Obispo



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Capital Programs Division - Fourth Quarter Fiscal Year
2012-13 and Planned Fiscal Year 2013-14 Capital Action
Plan Performance Metrics**

Attachment B

Final Closeout of Capital Programs Division Fiscal Year 2012-13 Performance Metrics

ATTACHMENT B

June 30, 2013

Begin Environmental

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
None currently planned in fiscal year (FY) 2012-13									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

Complete Environmental

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
I-405, Continuous High-Occupancy Vehicle (HOV) Lane Access			X						(missed)
San Juan Capistrano Passing Siding					X				(missed)
Santa Ana/Garden Grove Fixed-Guideway					X				(missed)
Orange Metrolink Station Parking Expansion							X		(missed)
Total Forecast/Actual	0	0	1	0	2	0	1	0	4

Begin Design

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
San Juan Capistrano Passing Siding			X						(missed)
I-405, SR-55 to I-605 (Design-Build)							X		(missed)
Total Forecast/Actual	0	0	1	0	0	0	1	0	2

Complete Design

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Laguna Niguel/Mission Viejo Metrolink Station Parking Lot	X	✔							
Raymond Grade Separation	X			✔					
SR-91, SR-55 to SR-241 Landscape			X			✔			
State College Grade Separation			X			✔			
Lakeview Grade Separation			X			✔			
SR-57 Northbound, Orangethorpe to Lambert Landscape			X						(missed)
I-5, Vista Hermosa to Pacific Coast Highway					X			✔	
I-5, Pacific Coast Highway to San Juan Creek Road					X	✔			
I-405, Continuous HOV Lane Access					X				(missed)
SR-91 Westbound (WB), Tustin Interchange to SR-55						✔	X		
Total Forecast/Actual	2	1	4	1	3	5	1	1	10

Construction Ready

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Laguna Niguel/Mission Viejo Metrolink Station Parking Lot	X	✔							
SR-91 (WB), I-5 to SR-57	X	✔							
Lakeview Grade Separation			X					✔	
Raymond Grade Separation					X				(missed)
State College Grade Separation					X			✔	
I-5, Vista Hermosa to Pacific Coast Highway							X		(missed)
I-5, Pacific Coast Highway to San Juan Creek Road							X	✔	
SR-91 (WB), Tustin Interchange to SR-55								✔	
SR-91, SR-55 to SR-241 Landscape							X	✔	
I-405, Continuous HOV Lane Access							X		(missed)
Placentia Metrolink Station and Parking Structure							X		(missed)
Total Forecast/Actual	2	2	1	0	2	0	5	5	10

Final Closeout of Capital Programs Division Fiscal Year 2012-13 Performance Metrics

ATTACHMENT B

June 30, 2013

Advertise Construction

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Orangethorpe Grade Separation	X	✔							
Tustin/Rose Grade Separation	X			✔					
SR-91 (WB), I-5 to SR-57	X			✔					
Laguna Niguel/Mission Viejo Metrolink Station Parking Lot			X	✔					
San Clemente Beach Trail Safety Enhancements			X	✔					
Lakeview Grade Separation					X				(missed)
Raymond Grade Separation							X		(missed)
State College Grade Separation							X		(missed)
SR-91 (WB), Tustin Interchange to SR-55								✔	
SR-91, SR-55 to SR-241 Landscape							X		(missed)
I-405, Continuous HOV Lane Access							X		(missed)
Placentia Metrolink Station and Parking Structure							X		(missed)
Total Forecast/Actual	3	1	2	4	1	0	5	1	11

Award Contract

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Anaheim Regional Transportation Intermodal Center	X	✔							
I-5 Ortega Highway Interchange	X	✔							
SR-91 (WB), I-5 to SR-57			X			✔			
Orangethorpe Grade Separation			X			✔			
Tustin/Rose Grade Separation			X			✔			
San Clemente Beach Trail Safety Enhancements			X					✔	
Laguna Niguel/Mission Viejo Metrolink Station Parking Lot					X	✔			
Lakeview Grade Separation							X		(missed)
Total Forecast/Actual	2	2	4	0	1	4	1	1	8

Complete Construction

Project Description	FY 13 Qtr 1		FY 13 Qtr 2		FY 13 Qtr 3		FY 13 Qtr 4		FY 13
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Metrolink Service Expansion Program	X	✔							
SR-91, SR-55 to SR-241			X			✔			
LOSSAN Fiber Optic Communications		✔	X						
Laguna Niguel/Mission Viejo Metrolink Station Parking Lot							X		(missed)
Total Forecast/Actual	1	2	2	0	0	1	1	0	4

Begin Environmental: The date work on the environmental clearance, project report, or preliminary engineering phase begins.

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Award Contract: The date the construction contract is awarded.

Construction Complete: The date all construction work is completed and the project is open to public use.

Acronyms

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- SR-91 - Riverside Freeway (State Route 91)
- SR-22 - Garden Grove Freeway (State Route 22)
- I-405 - San Diego Freeway (Interstate 405)
- SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)
- I-605 - San Gabriel River Freeway (Interstate 605)
- LOSSAN - Los Angeles - San Diego - San Luis Obispo

X = milestone forecast in quarter
✔ = milestone accomplished in quarter



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Capital Programs Division - Fourth Quarter Fiscal Year
2012-13 and Planned Fiscal Year 2013-14 Capital Action
Plan Performance Metrics**

Attachment C

Capital Programs Division
Fiscal Year 2013-14 Performance Metrics

ATTACHMENT C

July 18, 2013

Begin Environmental

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
I-5, I-405 to SR-55			X						
SR-91, SR-57 to SR-55					X				
Total Forecast/Actual	0	0	1	0	1	0	0	0	2

Complete Environmental

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
I-405, Continuous High-Occupancy Vehicle (HOV) Lane Access			X						
I-5, SR-55 to SR-57					X				
San Juan Capistrano Passing Siding					X				
Santa Ana/Garden Grove Fixed-Guideway					X				
Orange Metrolink Station Parking Expansion					X				
I-5, SR-73 to El Toro Road							X		
I-405, Continuous HOV Lane Access							X		
Total Forecast/Actual	0	0	1	0	4	0	2	0	7

Begin Design

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
I-5, SR-73 to El Toro Road							X		
I-5, SR-55 to SR-57							X		
Total Forecast/Actual	0	0	0	0	0	0	2	0	2

Complete Design

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
I-5, Pico to Vista Hermosa	X								
SR-57 Northbound (NB), Orangethorpe to Yorba Linda (Landscape)							X		
Orange Metrolink Station Parking Expansion							X		
Total Forecast/Actual	1	0	0	0	0	0	2	0	3

Construction Ready

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Raymond Grade Separation	X								
I-5, Vista Hermosa to Pacific Coast Highway			X						
I-5, Pico to Vista Hermosa					X				
Orange Metrolink Station Parking Expansion							X		
Total Forecast/Actual	1	0	1	0	1	0	1	0	4

Advertise Construction

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Raymond Grade Separation	X								
State College Grade Separation (Fullerton)	X								
I-5, Pacific Coast Highway to San Juan Creek Road	X								
SR-91, SR-55 to SR-241 Landscape	X								
Lakeview Grade Separation			X						
I-5, Vista Hermosa to Pacific Coast Highway					X				
Orange Metrolink Station Parking Expansion							X		
Total Forecast/Actual	4	0	1	0	1	0	1	0	7

**Capital Programs Division
Fiscal Year 2013-14 Performance Metrics**

July 18, 2013

Award Contract

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
I-5, Pacific Coast Highway to San Juan Creek Road			X						
SR-91 Westbound, Tustin Interchange to SR-55			X						
SR-91, SR-55 to SR-241 Landscape			X						
Raymond Grade Separation			X						
State College Grade Separation (Fullerton)			X						
Lakeview Grade Separation					X				
I-5, Vista Hermosa to Pacific Coast Highway							X		
Total Forecast/Actual	0	0	5	0	1	0	1	1	7

Complete Construction

Project Description	FY 14 Qtr 1		FY 14 Qtr 2		FY 14 Qtr 3		FY 14 Qtr 4		FY 14
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst
Laguna Niguel/Mission Viejo Metrolink Station Parking Lot			X						
SR-57 (NB), Yorba Linda to Lambert			X						
SR-57 (NB), Orangethorpe to Yorba Linda					X				
San Clemente Beach Trail Safety Enhancements					X				
Total Forecast/Actual	0	0	2	0	2	0	0	0	4

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X = milestone forecast in quarter

✔ = milestone accomplished in quarter



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M1 Progress Report for the Period of April 2013
Through June 2013 and Closeout Overview**

Staff Report



August 26, 2013

To: Members of the Board of Directors

From: Darrell Johnson, Chief Executive Officer

Subject: Measure M1 Progress Report for the Period of April 2013 Through June 2013 and Closeout Overview

Overview

Staff has prepared a Measure M1 progress report for the period of April 2013 through June 2013 for review by the Orange County Transportation Authority Board of Directors. Measure M1 closeout activities continue to proceed in a number of areas.

Recommendation

Receive and file as an information item.

Background

Local Transportation Ordinance No. 2 (Measure M1 [M1]) and the Traffic Improvement and Growth Management Plan became effective on April 1, 1991, following approval of a ballot measure in November 1990. Over the 20-year period in which M1 was in effect, the Orange County Transportation Authority (OCTA) received approximately \$4 billion in sales tax revenue available for projects described in the M1 Plan. Through effective project management, strategic use of bonding, and acquisition of state and federal funds, OCTA successfully fulfilled its promise to voters. OCTA managed to complete an additional freeway project and has a small remaining balance of funds.

On March 31, 2011, the collection of sales tax revenue under M1 concluded; however, there are still expenditures that remain to complete M1 commitments. In March 2011, the Board of Directors (Board) approved a plan to wrap-up M1 activities. The plan addressed use of three types of M1 proceeds: those that had been committed to projects but that remain unspent (planned expenditures); those remaining funds that are over and above any current

M1 obligations (remaining balance); and the interest earned on retained M1 funds until those funds are fully expended.

Discussion

M1 net sales tax revenues continue to be monitored, with the final amount still estimated to be approximately \$4.076 billion. All M1 projects have an estimated cost at completion; however, actual costs will vary pending closeout of remaining open agreements. The current estimate for unprogrammed M1 revenues stands at \$92.3 million. Approximately \$12.9 million of this balance is from the freeway program, another \$425,000 is from the streets and roads program, and \$79 million is from the transit program.

Per prior Board direction, these remaining balances will be used for Measure M2 projects that are in the same category and that are related to the original M1 Expenditure Plan. Specifically, the freeway funds will be directed at the Interstate 5 widening project between Avenida Pico and Pacific Coast Highway and/or the State Route 57 widening between Katella Avenue and Lincoln Avenue. The streets and roads funds will be applied to street improvement projects through future OCTA competitive calls for projects, and the transit funds will be deposited into OCTA's long-term operating fund for the provision of Metrolink service. More details on project activities during the quarter are included in Attachment A.

Use of the funds is tracked similarly to grants to ensure that funds are used only for M1-intended projects. The latest M1 schedule of revenues and expenditures summary report, as of June 30, 2013, is included as Attachment B. The numbers included in this report have additional assumptions based on oversight costs, anticipated project progress, sale of excess property, and potential increases or decreases in scope and schedule. Additionally, the forecast of M1 net tax revenues includes future interest earnings on a diminishing fund balance while allowing for ongoing program administration costs, quarterly reporting, annual financial reports, and oversight and audit functions.

Summary

Measure M1 has concluded and fulfilled the promise of congestion relief to the voters. Remaining fund balances are being finalized, and actions for closing out the program continue. The plan is to use the available balances to advance Measure M2 freeway, streets and roads, and rail projects. Further review on the closeout progress will continue to be provided with the Measure M1 quarterly updates.

Attachments

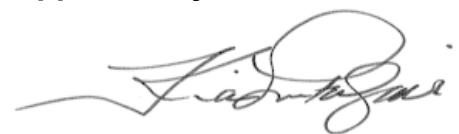
- A. Measure M1 Closeout and Quarterly Update
- B. Measure M1 – Schedule of Revenues, Expenditures and Changes in Fund Balance as of June 30, 2013

Prepared by:



Tamara Warren
Manager, Program Management Office
(714) 560-5590

Approved by:



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



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M1 Progress Report for the Period of April 2013
Through June 2013 and Closeout Overview**

Attachment A

Measure M1 Closeout and Quarterly Update

Interest Earnings on Funds During Closeout Phase

Measure M (M1) funds continue to earn interest until fully expended; something that will continue to occur over the next couple of years, currently estimated to be through 2014. The amount of interest earned will decrease each year as remaining payments are made. Interest earned on the M1 fund balance is M1 revenue and will continue to be managed according to the formula set forth in the M1 Ordinance. The interest earned will be distributed to the four M1 categories on the following ordinance-required percentage basis: freeways – 43 percent; regional streets and roads – 11 percent; local streets and roads – 21 percent; and transit – 25 percent.

Freeways

On March 14, 2011, the Board of Directors (Board) approved a plan to use the balance of M1 freeway funds for portions of Measure M2's (M2) Project C – widening of Interstate 5 (I-5) between Avenida Pico and Pacific Coast Highway, and Project G – widening of State Route 57 between Katella Avenue and Lincoln Avenue. The Board subsequently deferred immediate use of the funds for M2 projects as a hedge against uncertainty of the state's ability to meet the cash flow needs of the West County Connectors (WCC) Project, which relies on state bonds for construction. In 2011, the state implemented a process to meet the cash flow requirements of bond-funded projects and as such, in 2012, \$15 million of the \$27.9 million remaining balance was allocated to M2 – Project C, as authorized by the Board. The remaining M1 freeway balance of \$12.9 million includes anticipated proceeds from the sale of eight excess parcels along the I-5, in the cities of Anaheim and Buena Park, appraised at approximately \$11.3 million. Currently, the Orange County Transportation Authority (OCTA) is finalizing a sale on one of these parcels with the City of Buena Park. No immediate allocation of these funds is anticipated due to the timing for receipt of the right-of-way (ROW) sales proceeds, as well as potential construction risks on the WCC Project. Other activities during this period include:

I-5 Gateway Project – The California Department of Transportation (Caltrans) successfully closed out the one remaining construction change order with the I-5 Gateway Project contractor. Administrative coordination is ongoing with Caltrans, various utility companies, and the City of Buena Park to close out the project. Construction activity this quarter is for landscape plant establishment maintenance, which will continue until April 2015.

WCC Project – OCTA and Caltrans are well under way with construction on the WCC Project to link high-occupancy vehicle lanes (HOV)/carpool lanes on Interstate 405 (I-405) with those on State Route 22 (SR-22) and Interstate 605 (I-605) to create a seamless HOV connection among the three freeways. The construction is divided into two segments.

On the east segment, construction of the new southbound I-405 to the eastbound SR-22 freeway connector is ongoing and scheduled to be completed in late July 2013. The demolition of the old connector is scheduled for mid-August 2013. Construction of the east segment is anticipated to be completed in early-2015.

On the west segment, the reconstruction of the west half of the Seal Beach Boulevard bridge, over the I-405 freeway, is ongoing and scheduled to be completed in late 2013. On the new I-405/I-605 HOV connector, the bridge columns are near completion and falsework for the new bridge structure is well underway. Construction of the west segment is anticipated to be completed in early 2015.

Funded almost entirely with federal and state funds, the WCC Project has \$10 million of M1 funds allocated to the project to cover construction elements not eligible for federal funding. Currently, all of the \$10 million of this amount has been designated for specific items.

The first phase of the College Park West soundwall is nearly complete. The schedule and cost for the second phase (extending the soundwall) is currently being determined, and progress will be reported next quarter. It is likely that the cost of this soundwall may exceed the assumed budget of \$2 million. If this is the case, additional funding from the remaining freeway balance may be needed to cover this cost increase. The WCC projects, both east and west segments, are anticipated to be complete by late 2014/early 2015.

Streets and Roads

On November 23, 2009, the Board approved the use of M1 streets and roads funds to be used towards a future M2 call for projects. The remaining balance of M1 regional and local streets and roads funds is estimated to be \$425,000. This assumes a \$10 million transfer currently being processed to the 2013 M2 call for projects, consistent with prior Board direction to utilize M1 savings. The remaining \$425,000 balance will be applied towards streets and roads projects awarded under the Combined Transportation Funding Program (CTFP). An update on streets and roads activities this quarter is included below.

Substantial funding to cities and the County was provided by the various programs within the M1 local and regional streets and roads programs through OCTA's CTFP. Funds were awarded on a competitive basis within the guidelines of each program and are being used to fund a wide range of transportation projects. Since March 2013, the CTFP provided more than \$4.6 million in payments towards streets and roads projects throughout the County and closed out 11 project phases. The result of issuing final payments in the amount of \$4.6 million is the complete closeout of project allocations valued at \$19.9 million.

The current status of the program (as of June 30, 2013) is reflected in the table below. Of the \$679.3 million in total project allocations, there is a remaining balance of \$48.8 million in outstanding payments to open projects. Staff anticipates completion of the M1 competitive program by the end of 2014.

Status	Definition	Allocations* (in millions)
Completed	Project work is complete, final report is filed, approved, and the final payment has been made	\$ 552.9
Pending	Project work has been completed and only final report submittal/approval is pending	\$ 66.9
Started	Project has begun and the funds have been obligated	\$ 59.5
	Total Project Allocations	\$ 679.3

* Includes semi-annual review adjustments through March 31, 2013

Transit

The 1990 M1 Transit Program is focused on developing a backbone rail system that includes protection of ROW and commuter train service to Los Angeles and Riverside counties. A key to continued delivery of this objective has been the establishment of the Commuter Urban Rail Endowment (CURE) to fund ongoing operations. The Board has previously taken action to designate remaining M1 Transit Program fund balances for Metrolink operations and for the Metrolink Service Expansion Program (MSEP). The OCTA Comprehensive Business Plan assumes that unspent M1 transit funds will be used for ongoing Metrolink operations.

Consistent with prior Board action on November 25, 2005, the M1 transit category balance will be transferred into the CURE account. The current M1 transit balance is estimated to be \$79 million. Additional M1 funding for a CURE transfer may be identified once the remaining active contracts are finalized and closed. The balance will remain in M1 transit projects until such time. All projects are anticipated to be completed by March 2014. The Transit Program continues, with significant progress in the various programs. These include:

Several parking expansion projects at Metrolink stations are underway to support the MSEP.

The City of Anaheim continues moving forward on the Anaheim Regional Transportation Intermodal Center. Construction is underway, with activities from this past quarter including completion of the bridge supports for the concourse bridge, installation of the pedestrian and baggage tunnels, grading of bus facilities, and other preparation work for the terminal building. Amendment No. 2 to Cooperative Agreement No. C-9-0448, which was approved by the OCTA Board on February 25, 2013, was brought to the Anaheim City Council, who also approved the agreement on April 30, 2013. Construction is on schedule and is anticipated to be complete by late 2014.

OCTA is the lead for a parking lot expansion project at the Laguna Niguel/Mission Viejo Metrolink Station on OCTA-owned land. Construction began on the project in April 2013 which will add a surface parking lot with 176 spaces. The new parking lot will be adjacent to the existing 284 spaces at the station, for a total of 460 parking spaces. Construction is scheduled to be complete in October 2013.

The City of Orange is the lead on a parking expansion project to add a parking structure to an existing surface parking lot located on Lemon Street, between Chapman Avenue and Maple Street. The design of the five-level parking structure is expected to be completed in late 2014. Engineer's estimates for the cost of the structure should be available August 2013. OCTA will enter into a cooperative agreement with the City of Orange for the construction funding at that time.

The City of Fullerton has been the lead agency for the construction of an 814-space design-build parking structure, which was completed and opened on June 19, 2012. The project included stairs on Harbor Boulevard that connected the two existing station platforms. This part of the project was completed in April 2013. The project is in the closeout stage.

City-Initiated Transit Extensions to Metrolink

Project development continued with the two Board-approved Go Local fixed-guideway projects, one in the City of Anaheim, and the other in the cities of Santa Ana and Garden Grove.

OCTA staff prepared information for Board review regarding the policy decisions associated with the Project S Program, along with a comparison of capital costs for peer streetcar projects. Additionally, the City of Anaheim prepared information on the Anaheim Rapid Connection (ARC) Project costs and benefits supported by the ARC Alternatives Analysis Report completed last fall. OCTA and the City of Anaheim presented this information to the Board in April and June 2013. OCTA will return to the Board in July to continue the discussion on ARC Project milestones.

OCTA staff and the Santa Ana-Garden Grove project team reviewed and addressed comments received from the Federal Transit Administration (FTA) on the draft environmental assessment/environmental impact report for the Santa Ana-Garden Grove Fixed Guideway Project. OCTA and the project team held a conference call with FTA in June to review the last remaining comments. Upon final approval from FTA, the report will be released to the public for review and comment. Next quarter, the cities of Santa Ana/Garden Grove will be presenting an overview of the project, along with a schedule of anticipated milestone completion dates.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M1 Progress Report for the Period of April 2013
Through June 2013 and Closeout Overview**

Attachment B

Measure M1
Schedule of Revenues, Expenditures and Changes in Fund Balance
as of June 30, 2013

(\$ in thousands)	Quarter Ended June 30, 2013	Year to Date June 30, 2013 (A)	Period from Inception through June 30, 2013 (B)
Revenues:			
Sales taxes	\$ -	\$ -	\$ 4,003,972
Other agencies' share of Measure M1 costs:			
Project related	2,200	22,048	575,148
Non-project related	-	-	620
Interest:			
Operating:			
Project related	-	693	1,745
Non-project related	(250)	2,529	269,605
Bond proceeds	-	-	136,067
Debt service	-	-	82,054
Commercial paper	-	-	6,072
Orange County bankruptcy recovery	-	-	42,268
Capital grants	-	-	156,434
Right-of-way leases	83	323	6,331
Proceeds on sale of assets held for resale	-	-	24,575
Miscellaneous:			
Project related	-	-	26
Non-project related	-	-	776
Total revenues	2,033	25,593	5,305,693
Expenditures:			
Supplies and services:			
State Board of Equalization (SBOE) fees	-	-	56,883
Professional services:			
Project related	696	2,452	206,214
Non-project related	121	443	35,547
Administration costs:			
Project related	239	1,015	23,339
Non-project related	151	1,947	96,086
Orange County bankruptcy loss	-	-	78,618
Other:			
Project related	58	109	2,069
Non-project related	2	18	15,971
Payments to local agencies:			
Turnback	-	-	594,009
Other	(5,127)	21,982	931,695
Capital outlay	5,847	21,799	2,089,913
Debt service:			
Principal payments on long-term debt	-	-	1,003,955
Interest on long-term debt and commercial paper	-	-	561,842
Total expenditures	1,987	49,765	5,696,141
Excess (deficiency) of revenues over (under) expenditures	46	(24,172)	(390,448)
Other financing sources (uses):			
Transfers out:			
Project related	-	-	(383,264)
Non-project related	-	-	(5,116)
Transfers in: project related	-	-	1,829
Bond proceeds	-	-	1,169,999
Advance refunding escrow	-	-	(931)
Payment to refunded bond escrow agent	-	-	(152,930)
Total other financing sources (uses)	-	-	629,587
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	\$ 46	\$ (24,172)	\$ 239,139

Measure M1
Schedule of Calculations of Net Tax Revenues and Net Bond Revenues (Debt Service)
as of June 30, 2013

<i>(\$ in thousands)</i>	Quarter Ended June 30, 2013 (actual)	Year Ended June 30, 2013 (actual) (C.1)	Period from Inception through June 30, 2013 (actual) (D.1)	Period from July 1, 2013 forward (forecast) (E.1)	Total (F.1)
Tax revenues:					
Sales taxes	\$ -	\$ -	\$ 4,003,972	\$ -	\$ 4,003,972
Other agencies' share of Measure M1 costs	-	-	620	-	620
Operating interest	(250)	2,529	269,605	1,464	271,069
Orange County bankruptcy recovery	-	-	20,683	-	20,683
Miscellaneous, non-project related	-	-	776	-	776
Total tax revenues	<u>(250)</u>	<u>2,529</u>	<u>4,295,656</u>	<u>1,464</u>	<u>4,297,120</u>
Administrative expenditures:					
SBOE fees	-	-	56,883	-	56,883
Professional services, non-project related	121	443	26,686	-	26,686
Administration costs, non-project related	151	1,947	96,086	4,602	100,688
Transfers out, non-project related	-	-	5,116	-	5,116
Orange County bankruptcy loss	-	-	29,792	-	29,792
Other, non-project related	2	18	6,871	-	6,871
Total administrative expenditures	<u>274</u>	<u>2,408</u>	<u>221,434</u>	<u>4,602</u>	<u>226,036</u>
Net tax revenues	<u>\$ (524)</u>	<u>\$ 121</u>	<u>\$ 4,074,222</u>	<u>\$ (3,138)</u>	<u>\$ 4,071,084</u>
Bond revenues:					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 1,169,999	\$ -	\$ 1,169,999
Interest revenue from bond proceeds	-	-	136,067	-	136,067
Interest revenue from debt service funds	-	-	82,054	-	82,054
Interest revenue from commercial paper	-	-	6,072	-	6,072
Orange County bankruptcy recovery	-	-	21,585	-	21,585
Total bond revenues	<u>-</u>	<u>-</u>	<u>1,415,777</u>	<u>-</u>	<u>1,415,777</u>
Financing expenditures and uses:					
Professional services, non-project related	-	-	8,861	-	8,861
Payment to refunded bond escrow	-	-	153,861	-	153,861
Bond debt principal	-	-	1,003,955	-	1,003,955
Bond debt interest expense	-	-	561,842	-	561,842
Orange County bankruptcy loss	-	-	48,826	-	48,826
Other, non-project related	-	-	9,100	-	9,100
Total financing expenditures and uses	<u>-</u>	<u>-</u>	<u>1,786,445</u>	<u>-</u>	<u>1,786,445</u>
Net bond revenues (debt service)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (370,668)</u>	<u>\$ -</u>	<u>\$ (370,668)</u>

Measure M1
Schedule of Revenues and Expenditures Summary
as of June 30, 2013

Project Description (G)	Net Tax Revenues Program to date Actual (H)	Total Net Tax Revenues (I)	Project Budget (J)	Estimate at Completion (K)	Variance Total Net Tax Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures Quarter Ended June 30, 2013 (N)	Reimbursements Quarter Ended June 30, 2013 (O)	Expenditures through June 30, 2013 (P)	Reimbursements through June 30, 2013 (Q)	Net Project Cost (R)	Percent of Budget Expended (S)
Freeways (43%)												
Interstate 5 (I-5) between Interstate 405 (I-405) and Interstate 605 (I-605)	\$ 982,395	\$ 981,638	\$ 810,010	\$ 789,022	\$ 192,616	\$ 20,988	\$ 96	\$ 15	\$ 879,893	\$ 65,710	\$ 794,183	98.0%
I-5 between I-5/I-405 Interchange and San Clemente	68,754	68,701	72,862	74,962	(6,261)	(2,100)	-	-	70,294	10,358	59,936	82.3%
I-5/I-405 Interchange	87,265	87,198	72,802	73,075	14,123	(273)	-	-	98,157	25,082	73,075	100.4%
State Route 55 (SR-55) between I-5 and State Route 91 (SR-91)	58,177	58,132	44,511	49,349	8,783	(4,838)	-	-	55,514	6,172	49,342	110.9%
State Route 57 (SR-57) between I-5 and Lambert Road	29,088	29,066	24,128	22,758	6,308	1,370	-	-	25,617	2,859	22,758	94.3%
SR-91 between Riverside and Los Angeles county lines	125,609	125,512	116,136	105,388	20,123	10,747	-	-	123,995	16,606	105,389	90.7%
SR-22 between SR-55 and Valley View Street	400,627	400,318	313,297	310,943	89,375	2,354	5,581	1,595	655,851	342,848	313,005	99.9%
Net (Bond Revenue)/Debt Service	1,751,915	1,750,565	1,453,746	1,425,498	325,067	28,248	5,677	1,610	1,909,321	491,633	1,417,688	
	-	-	311,917	311,917	(311,917)	-	-	-	311,917	-	311,917	
Total Freeways	\$ 1,751,915	\$ 1,750,565	\$ 1,765,663	\$ 1,737,415	\$ 13,150	\$ 28,248	\$ 5,677	\$ 1,610	\$ 2,221,238	\$ 491,633	\$ 1,729,605	45.1%
Regional Street and Road Projects (11%)												
Smart Streets	\$ 153,656	\$ 153,638	\$ 151,129	\$ 151,129	\$ 2,409	\$ -	\$ 937	\$ -	\$ 157,492	\$ 11,939	\$ 145,553	96.3%
Regionally Significant Interchanges	89,633	89,564	89,564	89,564	-	-	-	-	78,915	146	78,769	87.9%
Intersection Improvement Program	128,047	127,948	127,948	127,948	-	-	-	-	109,535	3,720	105,815	82.7%
Traffic Signal Coordination	64,023	63,974	63,974	63,974	-	-	23	-	67,111	3,662	63,449	99.2%
Transportation Systems Management and Transportation Demand Management	12,805	12,795	12,795	12,795	-	-	-	-	9,674	149	9,525	74.4%
Net (Bond Revenue)/Debt Service	448,164	447,819	445,410	445,410	2,409	-	960	-	422,727	19,616	403,111	
	-	-	2,409	2,409	(2,409)	-	-	-	2,409	-	2,409	
Total Regional Street and Road Projects	\$ 448,164	\$ 447,819	\$ 447,819	\$ 447,819	\$ -	\$ -	\$ 960	\$ -	\$ 425,136	\$ 19,616	\$ 405,520	10.6%

Measure M1
Schedule of Revenues and Expenditures Summary
as of June 30, 2013

Project Description (G)	Net Tax Revenues Program to date Actual (H)	Total Net Tax Revenues (I)	Project Budget (J)	Estimate at Completion (K)	Variance		Expenditures Quarter Ended June 30, 2013 (N)	Reimbursements Quarter Ended June 30, 2013 (O)	Expenditures through June 30, 2013 (N)	Reimbursements through June 30, 2013 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
					Total Net Tax Revenues to Est at Completion (L)	Project Budget to Est at Completion (M)						
Local Street and Road Projects (21%)												
Master Plan of Arterial Highway Improvements	\$ 160,751	\$ 160,550	\$ 160,550	\$ 160,550	\$ -	\$ -	\$ 3,810	\$ -	\$ 140,171	\$ 99	\$ 140,072	87.2%
Streets and Roads Maintenance and Road Improvements	594,636	594,378	594,378	594,378	-	-	-	-	594,025	-	594,025	99.9%
Growth Management Area Improvements	100,000	100,000	100,000	100,000	-	-	242	-	94,916	431	94,485	94.5%
Subtotal Projects	855,597	854,928	854,928	854,928	-	-	4,052	-	829,112	530	828,582	
Net (Bond Revenue)/Debt Service	-	-	-	-	-	-	-	-	-	-	-	
Total Local Street and Road Projects	\$ 855,597	\$ 854,928	\$ 854,928	\$ 854,928	\$ -	\$ -	\$ 4,052	\$ -	\$ 829,112	\$ 530	\$ 828,582	
%				21.1%							21.6%	
Transit Projects (25%)												
Pacific Electric Right-of-Way	\$ 19,714	\$ 19,699	\$ 15,000	\$ 14,000	\$ 5,699	\$ 1,000	\$ 49	\$ 68	\$ 17,452	\$ 3,318	\$ 14,134	94.2%
Commuter Rail	367,708	367,410	367,410	360,117	7,293	7,293	-	-	411,438	60,806	350,632	95.4%
High-Technology/Advanced Rail Transit	446,850	446,508	446,508	440,688	5,818	5,818	(9,548)	605	457,177	153,420	303,757	68.0%
Elderly and Handicapped Fare Stabilization	20,000	20,000	20,000	20,000	-	-	-	-	20,000	-	20,000	100.0%
Transitways	164,283	164,157	146,381	126,625	37,532	19,756	523	-	163,276	36,765	126,511	86.4%
Subtotal Projects	1,018,555	1,017,772	995,297	961,430	56,342	33,867	(8,976)	673	1,069,343	254,309	815,034	
Net (Bond Revenue)/Debt Service	-	-	56,342	56,342	(56,342)	-	-	-	56,342	-	56,342	
Total Transit Projects	\$ 1,018,555	\$ 1,017,772	\$ 1,051,639	\$ 1,017,772	\$ -	\$ 33,867	\$ (8,976)	\$ 673	\$ 1,125,685	\$ 254,309	\$ 871,376	
%				25.1%							22.7%	
Total Measure M1 Program	\$ 4,074,221	\$ 4,071,084	\$ 4,120,049	\$ 4,057,934	\$ 13,150	\$ 62,115	\$ 1,713	\$ 2,283	\$ 4,601,171	\$ 766,088	\$ 3,835,083	



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Progress Report for April 2013 Through June
2013**

Staff Report



August 26, 2013

To: Members of the Board of Directors
From: Darrell Johnson, Chief Executive Officer
Subject: Measure M2 Progress Report for April 2013 Through June 2013

Overview

Staff has prepared a Measure M2 Progress Report for the period of April 2013 through June 2013 for review by the Orange County Transportation Authority Board of Directors. Implementation of Measure M2 continues at a fast pace. This report highlights progress on Measure M2 projects and programs and will be available to the public via the Orange County Transportation Authority website.

Recommendation

Receive and file as an information item.

Background

On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the renewal of the Measure M Plan (Plan) one half-cent sales tax for transportation improvements. The Plan provides a 30-year revenue stream for a broad range of transportation and environmental improvements, as well as an operating ordinance which defines all the requirements for implementing the Plan. The ordinance designates the Orange County Transportation Authority (OCTA) as responsible for administering the Plan and ensuring OCTA's contract with the voters is followed.

The Measure M2 (M2) transportation ordinance and investment plan, Ordinance No. 3, requires quarterly status reports regarding the major projects detailed in the ordinance be filed with the OCTA Board of Directors (Board). All M2 progress reports are posted online for public review.

Discussion

This quarterly report reflects current activities and progress within the overall M2 Program for the period of April 1, 2013 through June 30, 2013 (Attachment A).

The quarterly report is designed to be easy to navigate and public friendly, reflecting OCTA's Strategic Plan transparency goals. The report includes budget and schedule information included in the Capital Action Plan, Local Fair Share and Senior Mobility Program payments made to cities this quarter, as well as total payments from M2 inception to June 2013.

This quarter, the M2020 section was updated to provide further progress/status towards meeting the 14 objectives and managing the ten major risks outlined in the M2020 Plan.

Quarter Highlights

- On May 1, 2013, OCTA and the California Department of Transportation broke ground on State Route 91 (SR-91) between the Interstate 5 and State Route 57 (Project H), third series of "A Better 91" projects. Construction has started which will add a new, four-mile westbound general purpose lane to a key stretch of the SR-91 in the cities of Anaheim and Fullerton.
- Final design and right-of-way phases for the SR-91 between State Route 55 and the Tustin Avenue interchange (Project I) were completed in April 2013, and the project was advertised on June 17, 2013.
- Grade separation projects on Tustin Avenue/Rose Drive and Orangethorpe Avenue started construction this quarter to bridge the vehicular traffic over railroad tracks and eliminate the need for traffic to stop at crossings.
- The recirculation of a supplemental draft environmental impact report (EIR)/environmental impact statement for Interstate 405 (Project K) began on June 28, 2013, and is scheduled to complete on August 12, 2013. Also, on April 22, 2013, the Board approved the exploration of Concept A (two general purpose lanes in each direction plus conversion of the existing high-occupancy vehicle lane to a high-occupancy toll/express lane in each direction) and Concept B (two general purpose lanes in each direction, but truncating the second general purpose lane in the northbound direction at Valley View Street). Staff is in the process of screening the two concepts and will return to the Board in September 2013 for further discussion. The planned completion of the environmental process will occur one month later than previously expected.
- Five applications from the cities of Dana Point, Huntington Beach, La Habra, Laguna Beach, and Lake Forest were approved by the Transit

Committee for Project V (Community-Based Transit/Circulators) on June 13, 2013.

- On June 19, 2013, a second Tier 2 call for projects was released. This second call will conclude on September 20, 2013. Staff will be holding workshops and meetings with potential applicants to provide early feedback on projects.
- To improve traffic flow on city streets, OCTA is working with local jurisdictions to synchronize signals and improve roadways. Eighteen applications were received, and the Board approved 14 projects for funding on April 8, 2013. These 14 projects cover 108.5 miles with 829 intersections, at a cost totaling \$19,424,226.
- The two fixed-guideway projects continue to make progress. The City of Anaheim and OCTA presented the Anaheim Rapid Connection's (ARC) project costs and benefits supported by the ARC Alternatives Analysis Report to the Board in April and June 2013. The Santa Ana/Garden Grove project team and OCTA reviewed and addressed comments received from the Federal Transit Administration (FTA) on the draft environmental assessment/EIR. Staff also held a conference call with the FTA in June to review the last remaining comments. Upon final approval from the FTA, the report will be released for public review and comments.
- The organizational assessment to ensure OCTA's success in delivering the M2020 Plan is continuing to focus on the program level assessment, and the final review will cover overall organizational readiness. Findings resulting from the study are expected to be presented to the Board by the end of the year.
- The final report of the second M2 Performance Assessment for the time period of July 1, 2009 through June 30, 2012, was completed and presented to the Board on April 8, 2013, and to the Taxpayers Oversight Committee on April 9, 2013. The 12 findings will be addressed and implemented over the course of the year.

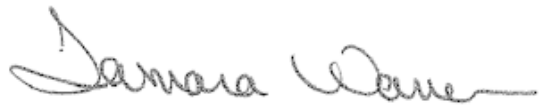
Summary

As required by M2 Ordinance No. 3, a quarterly report covering activities from April 2013 through June 2013 is provided to update progress in implementing the M2 Transportation Investment Plan. The above information and the attached details indicate significant progress on the overall M2 Program. To be cost-effective and to facilitate accessibility and transparency of information available to stakeholders and the public, the M2 progress report is presented on the OCTA website. Hard copies are available by mail upon request.

Attachment

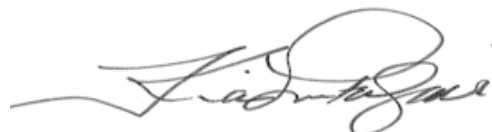
- A. Measure M2 Progress Report – Fourth Quarter of Fiscal Year 2012-13 – April 1, 2013 through June 30, 2013

Prepared by:



Tamara Warren
Manager, Program Management Office
(714) 560-5590

Approved by:



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



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Progress Report for April 2013 Through June
2013**

Attachment A



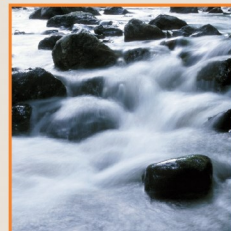
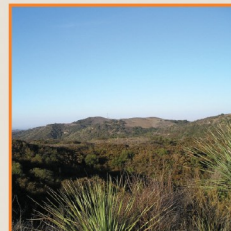
Fourth Quarter Highlights:

- Freeway Projects
- Streets and Roads
- Environmental Cleanup & Water Quality
- Freeway Mitigation Program
- Finance Matters
- Program Management Office
- Summary

Measure M2

Progress Report

Fourth Quarter of Fiscal Year 2012-13
 April 1, 2013 through June 30, 2013



Measure M2

Progress Report



PROGRESS REPORT

SUMMARY



As required by the Measure M2 (M2) Ordinance No. 3, a quarterly report covering activities from April 1, 2013 through June 30, 2013 is provided to update progress in implementing the M2 Transportation Investment Plan.

To be cost effective and to facilitate accessibility and transparency of information available to stakeholders and the public, the M2 progress report is presented on the Orange County Transportation Authority (OCTA) website. Hard copies are mailed upon request.

Measure M2

Progress Report



Section	Project	Page
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State Route 57 (SR-57) Projects	{G}	9
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Measure M2

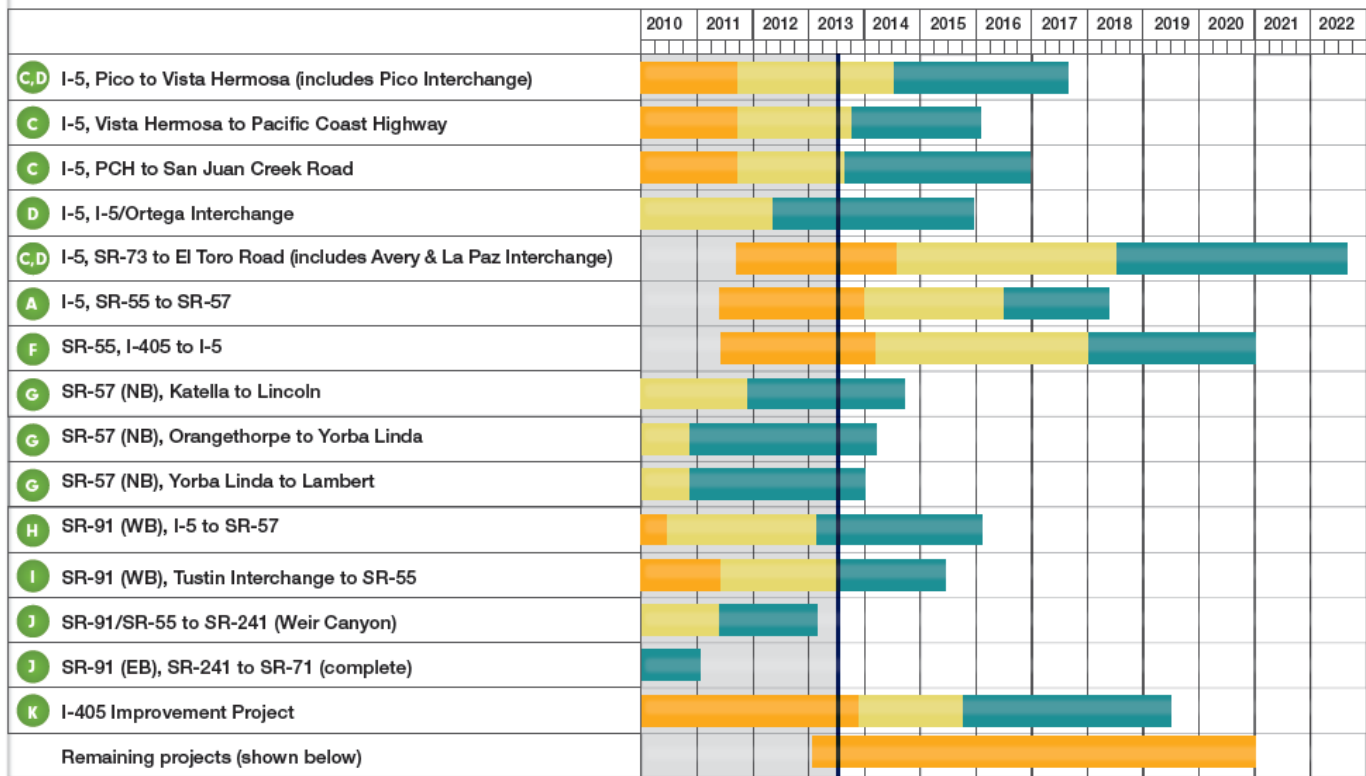
Progress Report



M2020 Projects

Environmental ■ Design/Right of Way ■ Construction ■

M2020 Freeway Projects Through Construction



M2020 Freeway Projects Through Environmental Phase

- B** I-5 Widening (SR-55 to I-405)
- I** SR-91 Widening (SR-57 to SR-55)
- D** I-5 / El Toro Road Interchange Improvements
- J** SR-91 Widening (SR-241 to I-15)*
- F** SR-55 Widening (I-5 to SR-22)
- L** I-405 Widening (SR-55 to I-5)
- G** SR-57 NB Widening (Orangethorpe Avenue to Katella Avenue)
- M** I-605 / Katella Ave. Interchange Improvements
- G** SR-57 NB Widening (Lambert Road to County Line)

* Project environmentally cleared as part of the Riverside County Transportation Commission's Corridor Improvement Project.



M2020 UPDATE

M2020 Plan

M2020 Plan

On September 10, 2012, the Board of Directors approved the M2020 Plan; an eight-year plan that outlines projects and programs for all modes of transportation to be delivered on an expedited schedule between now and the year 2020. The plan also positions OCTA on a course to go beyond the early implementation projects if additional external funds can be accessed sooner. Below is a summary of our progress towards meeting the eight-year objectives, including a summary of the risks identified in the adopted plan.

Contact: Tami Warren, PMO
(714) 560-5590

Progress Update

The M2020 Plan identified 14 objectives. Significant progress has been made, with many projects advancing to construction.

Although funded separately, the M2020 Plan also includes a provision for issuing bicycle and pedestrian calls for projects, contingent on available Congestion Mitigation Air Quality (CMAQ) funds. One call has been held to date, providing up to \$9.4 million in funding for 21 projects. The next call for projects is anticipated to be released in fall 2013, pending Board approval in August.

A summary of the progress to date for each of the 14 objectives identified in the Plan is outlined below.

M2020 Plan Objectives

1. Deliver 14 M2 freeway projects.

Two of the 14 projects are already complete; this includes two segments of Project J (SR-91) between SR-55 and SR-241 and between SR-241 and SR-71, and Project E (SR-22 Access Improvements). Additionally, five projects are currently in construction; three on SR-57 between Katella Avenue and Lambert Road (see timeline on previous page), one on the I-5 at Ortega Highway, and one on SR-91 between the I-5 and SR-57. All 14 projects will either be in construction or complete by 2020 as planned.

2. Complete environmental phase for 9 remaining M2 freeway projects.

One of the nine projects (SR-91 between SR-241 and SR-71) is already cleared environmentally through RCTC's Corridor Improvement Program. The environmental phase for Project B (I-5, SR-55 to SR-133) is anticipated to begin in September 2013. Additionally, four more projects are scheduled to begin the environmental phase in 2014. As planned, all nine projects will complete the environmental phase by 2020.

3. Invest \$1.2 billion for Streets and Roads projects (Projects O, P, and Q).

To date, nearly \$2 million in projects are complete, with more than \$30 million currently in construction; as well as significant portions of the \$455 million committed to the OC Bridges grade separation projects currently in construction. This accounts for the Project O and P portion of the proposed \$1.2 billion to date. In addition, approximately \$89 million of Local Fair Share funds (Project Q) has already been distributed to local agencies, with approximately \$50 million expected to be distributed yearly through 2020.



4. Synchronize 2,000 traffic signals across Orange County (Project P).

Through the three M2 Calls for Projects so far, more than 2,000 signals have been designated for improvements. Development of agreements with local agencies are in progress, and are expected to be completed by the end of 2013. It is also anticipated that over the next three years, more than half of the 2,000 signals will be synchronized. These are in addition to the 829 signals already synchronized to date. All 2,000 signals will be synchronized as planned by 2020.

5. Expand Metrolink peak capacity and improve rail stations and operating facilities (Project R).

Although well underway before the M2020 Plan was adopted, part of Project R (Metrolink Grade Crossing Improvements) was completed as part of the Metrolink Service Expansion Plan (MSEP). This enhanced 52 Orange County rail-highway grade crossings with safety improvements, whereby the cities of Anaheim, Tustin, Orange, Santa Ana, Irvine, and San Clemente established quiet zones at respective crossings. Additionally, OCTA is reviewing plans to determine the best approach for peak capacity service expansion. This includes a determination on how to re-deploy a number of the trains for improved service results.

6. Expand Metrolink service into Los Angeles (Project R).

Part of OCTA's re-deployment consideration (as mentioned above) involves possible options to provide new trips from Orange County to Los Angeles and San Diego counties, contingent on available funding and cooperation with involved counties. OCTA is currently working with Burlington Northern Santa Fe (BNSF) and the Los Angeles County Metropolitan Transportation Authority (Metro) to address any track-sharing issues, and plans to return to the Board with an update in fall 2013.

7. Provide up to \$575 million to implement fixed-guideway projects (Project S).

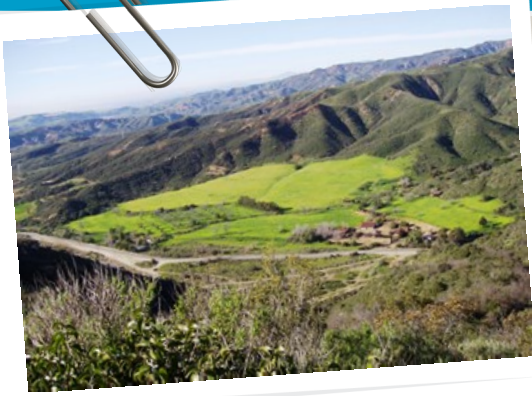
At this time, two fixed-guideway projects are in the process of being implemented: the Anaheim Rapid Connection (ARC) Project and the Santa Ana-Garden Grove Fixed-Guideway project. To date, the Board has awarded funding for preliminary engineering of approximately \$18 million to the City of Anaheim and \$10.98 million to the City of Santa Ana, totaling approximately \$29 million. This total is not included in the proposed \$575 million amount.

8. Deliver improvements that position Orange County for connections to planned high-speed rail projects (Project T).

The City of Anaheim continues moving forward on the Anaheim Regional Transportation Intermodal Center (ARTIC) with construction underway. Activities this past quarter included completion of the bridge supports for the concourse bridge, installation of the pedestrian and baggage tunnels, and grading of bus facilities and other preparation work for the terminal building. Construction is on schedule and is anticipated to be complete in late 2014.

Measure M2

Progress Report



9. Provide up to \$75 million of funding to expand mobility choices for seniors and persons with disabilities (Project U).

To date, over \$9.1 million has been provided to local agencies and the County of Orange for the Senior Non-Emergency Medical Transportation and Senior Mobility Programs.

10. Provide up to \$50 million of funding for community-based transit services (Project V).

The first call for projects for \$28 million closed on March 29, 2013. The Board approved five applications from the Cities of Dana Point, Huntington Beach, La Habra, Laguna Beach, and Lake Forest, for a total of up to \$9.8 million on June 13, 2013. Projects slated for implementation over the next year include a variation of: vanpool connections from local employment centers to transportation hubs, special event and seasonal transportation services, and local community circulators to shopping, medical, and transportation-related centers.

11. Acquire and preserve 1,000 acres of open space, establish long-term land management, and restore approximately 180 acres of habitat in exchange for expediting the permit process for 13 of the M2 freeway projects (Projects A-M).

The Freeway Mitigation Program is proceeding as planned, with five properties acquired (950 acres), and five of the 11 restoration projects approved by the Board underway (totaling 400 acres). The Board has authorized \$42 million for property acquisitions, \$10.5 million to fund habitat restoration activities, and \$2.5 million for conservation plan development and program support, for a total of approximately \$55 million.

12. Complete resource management plans to determine appropriate public access on acquired properties.

The draft interim resource management plans are under preparation concurrent with the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and Draft Environmental Impact Report/Statement (DEIR/DEIS). Public release of the draft NCCP/HCP and DEIR/DEIS is expected to take place in fall 2013, with continued biological monitoring of acquired properties ongoing. The public will have an opportunity to weigh in on the NCCP/HCP, DEIR/DEIS, and draft interim resource management plans before they are finalized.

13. Implement water quality improvements of up to \$20 million to prevent flow of roadside trash into waterways (Project X).

Screens and inserts for water quality improvement projects have been funded at various locations throughout Orange County. Sixty-seven Tier 1 projects have been authorized by the OCTA Board, totaling \$5.6 million. These projects will be completed within a one- to two-year timeframe.

14. Provide up to \$38 million to fund up to three major regional water quality improvement projects as part of the Environmental Cleanup Program (Project X).

Eight Tier 2 projects have been authorized by the OCTA Board totaling \$12.71 million. These projects are expected to be in construction by June 2014.



Key:



On Track



At Risk



One to Watch



Status Pending

M2020 Risk Update

The M2020 Plan identified 10 major risks as a result of the aggressive advancement of M2 projects and programs. OCTA recognized that these risks need to be actively addressed to ensure delivery of the plan by 2020. The 10 major risks are listed below with the actions taking place to address them.

M2020 - Major Risks

	Organizational Risk	Proposed Action	Explanation
	1 Organizational readiness to tackle multi-billion dollar capital program considering scale of projects.	An organizational assessment of M2 with a special emphasis on organizational structure necessary to deliver M2020 is currently underway. The study is on target to be completed in summer 2013.	Early findings indicate some resource needs and adjustments but no blanket fatal flaws.
	2 Realistic assessment of delivery schedules and required resources.	The organizational assessment will include a report on best practices and peer agency approaches to project schedule and resource analysis.	Early findings indicate that OCTA's use of Project Controls is very effective in this area. The addition of a Project Controls function in the PMO department will provide added value.
	3 Availability of specialized staff given the scope of right-of-way (ROW) activities - between 202 and 365 parcels affected (includes temporary construction easements) by the I-405 alone depending on the alternative selected.	The organizational assessment currently underway is assessing the ROW department's resources, capabilities, and workload, and developing recommendations to address the needs of M2 and the M2020 Plan.	Early findings have indicated an issue with the current ROW resources. The final assessment is expected to have recommendations on how this peak load can be best addressed. Additionally, the pool of ROW consultant resources is limited due to the high demand for ROW activities. This will require close monitoring to ensure qualified assistance is available.
	4 Availability of management and technical capabilities to deliver/operate future rail guideway projects.	Prepare a report on guideway project delivery and operation management plans concurrent with completion of the respective environmental phase.	The current project status has not yet reached the point to move forward with initiating the management plans. Early findings from the Organizational Assessment indicate the need for additional resources if OCTA decides to move forward as the owner/operator of the guideway projects.
	5 Exposure to added bond costs due to schedule changes.	A Plan of Finance to address the optimal finance dates and structure was developed and approved by the Board on November, 26, 2012. The plan includes a conservative approach with three debt issuance dates which allows for flexibility in how much debt to incur and when.	The adopted Plan of Finance is in line with current project and program plans. Staff is currently conducting a review of the M2020 Plan and the Plan of Finance. An update with any (if needed) recommended changes will be provided to the Board next quarter.



	Organizational Risk	Proposed Action	Explanation
6	Delay in project phases affecting overall costs and ability to deliver M2020.	Identify critical program activities and develop strategies to minimize delays.	A critical factor in delivering the M2020 Plan is based on keeping project costs and schedules on target. The recirculation of the I-405 (Project K) has the potential to impact the delivery schedule. As of now, the project remains deliverable within the current schedule. Any further delay may impact the cost of the project.
7	Changes in priorities over the life of the program.	Implement a defined process to assess tradeoffs of changes in priorities.	The Plan of Finance adopted by the Board in 2012 included M2020 Plan Priorities and Commitments with 12 core principles to guide the Board in the event of a needed change.
8	Legislative authority to use design/build (D/B) for delivery methods.	OCTA has sponsored legislation to allow for the delivery of the I-405 improvements utilizing a design/build delivery method. Assemblyman Tom Daly is the author of this bill (AB 401).	The bill is pending in the senate and is anticipated to be heard in August. In order to be considered this year, the bill must pass the senate and go to the Governor by September 13, 2013.
9	Internal/external agency functional units not available, overloaded, or have competing priorities.	The current organizational assessment is conducting a workload analysis to determine what is required for staffing and contracting out to deliver the M2020 Plan. The review is particularly focused on contracting, project management, project controls, and accounts payable resources. Proposed actions also include partnering with Caltrans to align priorities and resources, and ensuring timely implementation of Breaking Down Barriers objectives.	Initial findings of the Organizational Assessment recommend department structure changes and resource needs. In addition to ROW, resource needs are identified in CAMM and PMO departments. Consultant resources are also a concern as neighboring agencies are competing for the same limited pool of resources. A series of workshops is being scheduled with OCTA and Caltrans to discuss priorities and resource allocations.
10	Ability of local agencies to balance pavement management needs with new capacity and transit project funds for matching requirements.	Provide a comprehensive overview in a workshop setting of all funding opportunities to local agencies to support strategic decision making at the local level.	OCTA conducted a workshop in June 2013 providing local agencies with information to help them make informed decisions.

Staff will continue to provide updates on the progress of the M2020 Plan and the associated risks in these quarterly reports.



FREEWAY PROJECTS

Interstate 5 (I-5) Projects

PROJECT A

I-5 Between SR-55 and SR-57

Status: Environmental Study Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: This quarter, OCTA continued conducting an environmental study to add lanes to the I-5 between SR-55 and SR-57 in Santa Ana. The study will evaluate options to add capacity to the existing high-occupancy vehicle (HOV) lanes and improve traffic circulation within the I-5/SR-55 interchange. The study is expected to be completed in late 2013. During the quarter, OCTA staff held a community meeting with the Park Santiago neighborhood, and continued to meet with the City of Santa Ana and the Discovery Science Center to gain support for Project A. In addition, Staff has been working with Caltrans to address their comments and to obtain approval on the design exception fact sheet.

PROJECT B

I-5 Between the SR-55 and SR-133

Status: Project Study Report (PSR) Approved

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: Project B will improve traffic flow and operations along the I-5 within the cities of Irvine and Tustin. During the quarter, a consultant was selected to prepare the Project Report and Environmental Document, and work is anticipated to begin in September of 2013.

PROJECT C & PART OF PROJECT D

I-5 Between SR-73 and El Toro Road and
I-5 Between Avenida Pico and San Juan Creek Road

Status: I-5 (SR-73 and El Toro Road) Segment – Environmental Study Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: An environmental study continued during the quarter for improvements along the I-5 between SR-73 and El Toro Road in the cities of Lake Forest, Laguna Hills, and Mission Viejo. The study evaluates lane additions and interchange improvements to improve traffic flow through this area. These improvements include reconstruction of the La Paz Road and



Avery Parkway interchanges (part of Project D). The Draft Project Report and Draft Initial Study/Environmental Assessment were submitted to Caltrans for review. During the quarter, staff has been responding to Caltrans comments. It is expected that Caltrans will complete their review and approve the draft document in August 2013. The Environmental Study is expected to be completed in early-2014.

Status: I-5 (Avenida Pico and San Juan Creek Road) Segment – Final Design Underway **Contact:** Rose Casey, Capital Projects (714) 560-5729

Summary: Project C and part of Project D will widen the I-5 to add a northbound and southbound HOV lane between Avenida Pico and San Juan Creek Road in the cities of San Clemente, Dana Point, and San Juan Capistrano; also including major interchange improvements to Avenida Pico (as part of Project D). Final design is being done in three segments, with two completed this quarter and the final segment expected in early 2014. During the quarter, Ready to List status was obtained for both Segments 2 and 3 and Cooperative Agreement with Caltrans for Segment 3 construction phase was executed. Construction is anticipated to begin in 2014.

PROJECT D

I-5/El Toro Road and I-5/Ortega Highway Interchanges

Status: I-5 / El Toro Road Interchange – Draft PSR Complete and in Review **Contact:** Charlie Larwood, Planning (714) 560-5683

Summary: Project D will update and improve key I-5 interchanges to relieve street congestion around older interchanges and on ramps. The I-5/El Toro Road Interchange study includes alternatives that consider modifications to the existing interchange to provide a new access ramp to El Toro Road and two alternate access points adjacent to the interchange. The draft study is now complete and was submitted to Caltrans for review in May 2013.

Status: I-5/Ortega Highway Interchange – Construction Underway **Contact:** Rose Casey, Capital Projects (714) 560-5729

Summary: This two-year, \$86 million project will reconstruct the SR-74 Ortega Highway bridge over the I-5 freeway to improve local traffic flow along SR-74 and Del Obispo Street in the City of San Juan Capistrano. During the quarter, Caltrans Right-of-Way Contractor, Flatiron, completed



demolition of five businesses at the I-5/Ortega Highway Interchange to prepare for the widening project. Partial bridge demolition is scheduled to take place in August 2013.

While Caltrans' outreach team continues its efforts in promoting and educating the public about its upcoming construction efforts, OCTA staff continues to meet with the City's Economic Preservation Committee (EPC) on a weekly basis to develop and support programs to encourage residents and tourists to "Make it Your Mission to Experience San Juan Capistrano" the theme developed by the group. The project is anticipated to be complete by the end of 2014.

State Route 22 (SR-22) Project

PROJECT E

SR-22 Access Improvements



Status: SR-22 interchanges at Brookhurst Street, Euclid Street, and Harbor Boulevard – **Project Complete**

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: Completed in 2007, Project E added improvements at key SR-22 interchanges to reduce freeway and street congestion in the area. The project was completed early as part of a "bonus project" provided by the original Measure M (M1).

State Route 55 (SR-55) Projects

PROJECT F

SR-55 Between I-405 and SR-91

Status: SR-55 (I-405 to I-5) Segment – Environmental Study Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The purpose of this project is to increase capacity on SR-55 in the cities of Irvine, Santa Ana, and Tustin. OCTA is finalizing technical studies and preparing the Draft Project Report and Draft Environmental document. The administrative draft report was submitted to Caltrans and the Draft Environmental document is scheduled to be completed by the end of August 2013. The Environmental study will evaluate the addition of general purpose lanes, carpool lanes,



and auxiliary lanes. The study is expected to be completed in early 2014.

Status: SR-55 (I-5 to SR-91) Segment – PSR Underway

Contact: Charlie Larwood, Planning
(714) 560-5683

Summary: OCTA is developing a PSR to add capacity between the I-5 and SR-22, and provide operational improvements between SR-22 and SR-91 in the cities of Orange, Santa Ana, Tustin, and Anaheim. This quarter, the Project Study Team refined the alternatives and associated technical reports, and is now prepared to finalize which alternatives to recommend for further study in the next phase. The study is anticipated to be complete in fall of 2013.

State Route 57 (SR-57) Projects

PROJECT G

SR-57 Improvements between Orangethorpe to Lambert, Katella to Lincoln, and Orangewood to Katella

Status: SR-57 Northbound – Construction Underway

Contact: Charlie Larwood, Planning
(714) 560-5683

Summary: Construction is underway on three segments of the SR-57 freeway to add a new northbound general purpose lane through the cities of Anaheim, Brea, Fullerton, and Placentia. Caltrans is overseeing construction, which continued during the quarter.

SR-57 northbound, Katella Avenue to Lincoln Avenue: Crews are pulverizing the existing shoulder and widening the Katella Avenue and Douglas Road bridges. The project is on schedule to open by end of 2014.

SR-57 northbound, Orangethorpe Avenue to Yorba Linda Boulevard: Crews are conducting paving operations and are preparing to reconstruct on and off ramps. The project is on schedule to open by early 2014.

SR-57 northbound, Yorba Linda Boulevard to Lambert Road: Crews have shifted K-rail and are working to reconstruct on and off ramps. The project is on schedule to open by early 2014.



Status: SR-57 northbound from Orangewood Avenue to Katella Avenue – Project Study Report Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: OCTA initiated a PSR to add capacity in the northbound direction of SR-57 in the cities of Anaheim and Orange. This quarter, OCTA met with study stakeholders and developed a draft PSR/Project Development Support (PDS) document for submittal to Caltrans. The study team also initiated appropriate supporting documents including the Transportation Engineering Performance Assessment; Storm Water Data Report; and Preliminary Environmental Analysis Report. The study is anticipated to be complete in approximately 18 months (early 2014).

State Route 91 (SR-91) Projects

PROJECT H

SR-91 Between SR-57 and I-5

Status: Construction Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: OCTA and Caltrans broke ground on this third series of “A Better 91” projects on May 1, 2013. Since then, construction crews have been laying the ground work for major construction operations, including re-striping the project area, installing concrete safety barriers, installing storm water protection measures and erecting project and directional signage. On the public communications front, staff has conducted briefings and presentations for city officials, as well as hosted neighborhood meetings in key residential communities. When completed in late 2015, this \$75 million freeway improvement project will add a new, four-mile westbound general purpose lane to a key stretch of SR-91 located between Anaheim and Fullerton. In addition to the new lane, the project will deliver several other capital and operational improvements.

PROJECT I

SR-91 Between SR-57 and SR-55

Status: SR-91 Between SR-55 and Tustin Avenue Interchange – Project Is Being Advertised

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: This project will improve traffic flow at the SR-55/SR-91 interchange. During the quarter, the final design and right-of-way phases were concluded in April, and the project was advertised



on June 17, 2013. Bids are scheduled to open on August 8, 2013, and construction is planned to start in late 2013.

Status: SR-91 Between SR-57 to SR-55 — Project Study Report Under Review

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: OCTA initiated a PSR/PDS to increase freeway capacity by adding an eastbound general purpose lane between SR-57 and SR-55, a westbound general purpose lane between Kraemer Boulevard and State College Boulevard, and by making freeway-to-freeway connector improvements in the northbound direction between SR-57 and SR-91. During the quarter, OCTA provided the draft PSR to Caltrans for their review and approval in May 2013. Approval of the PSR/PDS is expected in September 2013.

PROJECT J

SR-91, Between Interstate 5 (I-5) and Riverside County Line



Status: SR-91, Between State Route 241 (SR-241) and State Route 71 (SR-71) – **Project Complete**

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: This completed project added six miles through a key stretch of the SR-91 between the SR-241 and SR-71 in Riverside County. The project improves mobility and operations by reducing traffic weaving from traffic exiting at the SR-71 and Green River Road. Because this project was shovel-ready, OCTA was able to obtain American Recovery and Reinvestment Act (ARRA) funding for this M2 project – saving M2 revenues for future projects.



Status: SR-91, Between SR-55 and SR-241 – **Project Complete**

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: This completed project added six miles in the westbound and eastbound direction to a key stretch of SR-91 between SR-55 and SR-241, in the cities of Anaheim and Yorba Linda. In addition to adding twelve lane miles to SR-91, the project also delivered a much needed second eastbound exit lane at the Lakeview Avenue, Imperial Highway and Yorba Linda Boulevard/Weir Canyon Road off-ramps. Beyond these capital improvements, crews completed work on safety barriers, striping and soundwalls. Completion of this project



means a total of eighteen lane miles have been added to SR-91 since December 2010.

Status: SR-91, Between SR-241 and I-15 – Environmental Study Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The purpose of this project is to extend the 91 Express Lanes eastward from its current terminus in the city of Anaheim to I-15 in Riverside County. This project will also add one general purpose lane in each direction of SR-91, from SR-241 to I-15. While the portion of this project between SR-241 and the Orange County/Riverside County line is part of Project J, the matching segment between the county line and SR-71 is part of the Riverside County Transportation Commission (RCTC)'s Measure A. During the quarter, OCTA continued working with RCTC to develop the Environmental Study. RCTC selected a design-build contractor on May 8, 2013. Final design will be completed through the remainder of 2013 and early 2014, and construction is planned to start in early 2014. With RCTC's focus on extending the 91 Express Lanes, construction of the additional general purpose lane will take place post-2025. To maintain synchronization, the matching general purpose lane improvements on the Orange County side will be scheduled to ensure coordinated delivery of both portions of the project, and will provide a continuous segment that stretches from SR-241 to SR-71. This action is consistent with the 2012 SR-91 Implementation Plan.

Interstate 405 (I-405) Projects

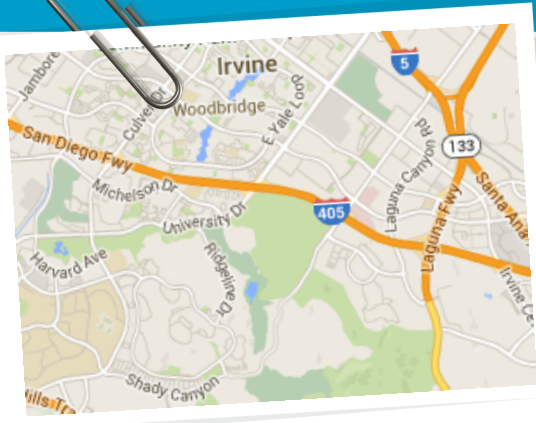
PROJECT K

I-405, Between SR-55 and I-605

Status: Draft Environmental Impact Statement/Draft Environmental Impact Report (EIS/EIR) Released

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: OCTA is preparing an environmental study to widen the I-405 through the cities of Costa Mesa, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Seal Beach, and Westminster. These improvements will add mainline capacity and improve the local interchanges along the corridor. The OCTA Board selected Alternative One as the Locally Preferred Alternative on October 22, 2012, and selected Parsons Transportation Group, Inc. to act as the Program Management Consultant for the Project on December 10, 2012.



On April 22, 2013, Staff presented to the Board a path forward to advance delivery of the M2 project, but also opportunities for the Board to weigh in on alternatives and explore new concepts. On April 22, 2013, the Board approved the exploration of Concept A (two general purpose lanes in each direction plus conversion of the existing HOV lane to a HOT/Express lane in each direction), and Concept B (two general purpose lanes in each direction, but truncating the second general purpose lane in the northbound direction at Valley View Street). Staff is in the process of screening the two concepts and will return to the Board in September 2013 for further discussion of existing alternatives and to present analysis findings of the new concepts.

At the request of the City of Long Beach, recirculation of a Supplemental Draft EIR/EIS began on June 28, 2013, and is scheduled to be complete on August 12, 2013. The Supplemental Draft EIR/EIS includes additional traffic information within the Long Beach/South Los Angeles County area. The Preferred Alternative is scheduled to be selected by the Project Development Team after the recirculation of the Supplemental Draft EIR/EIS is complete in October 2013.

PROJECT L

I-405 Between SR-55 and the El Toro “Y”

Status: Draft Project Study Report Complete

Contact: Charlie Larwood, Planning
(714) 560-5683

Summary: The draft PSR for Project L includes alternatives that consider the addition of one or two general purpose lanes to I-405 between Culver Drive and SR-133, and operational improvements at the I-405 and SR-133 interchange. The draft study was submitted to Caltrans for review in May 2013.

Interstate 605 (I-605) Projects

PROJECT M

I-605 Interchange Improvements

Status: Project Study Report Underway

Contact: Charlie Larwood, Planning
(714) 560-5683

Summary: This project will improve freeway access and arterial connection to I-605 at Katella Avenue in the City of Los Alamitos and the County of Orange. Planned improvements may include enhancements at the on/off ramps in addition to operational improvements on Katella Avenue



at the I-605 interchange. Preliminary engineering is expected to begin July 2013.

PROJECT N

Freeway Service Patrol

Status: Service On-going

Contact: Sue Zuhlke, Motorist Svcs.
(714) 560-5574

Summary: Freeway Service Patrol (FSP) funded by M2 began operation June 2012. During the quarter, the mid-day service provided assistance to 1,434 motorists, weekend service provided assistance to 736 motorists, and construction service provided assistance to 540 motorists.

In January 2013, a new FSP tracking and data collection application was launched. When data was compiled for the last M2 quarterly report (January—March 2013), non-M2 funded construction service was mistakenly included in the mid-day and weekend assist information, resulting in higher reporting. Actual assistance for mid-day service should have been reported as 1,304, with weekend service reported as 753, and construction service reported as assisting 464 motorists.

Also during the quarter, interviews were held for the dedicated FSP Public Safety Dispatcher position, and the position was filled on May 1, 2013.



STREETS & ROADS

PROJECT O

Regional Capacity Program

Status: Regional Capacity Program – Call for Projects Underway

Contact: Roger Lopez, Planning
(714) 560-5438

Summary: The programming recommendations stemming from the 2013 Regional Capacity Program Call for Projects was approved by the Board on April 8, 2013. The Board approval included 10 projects with approximately \$35 million in funding. Along with the local match component, this amounted to approximately \$97 million in road improvements across the County. All projects are scheduled to begin over the next three years. Preparation for the next Call for Projects has begun, with Board approval to release the Call scheduled for August 2013.

Status: Raymond Grade Separation – Design 100% Complete

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Raymond Avenue Railroad (RR) crossing will grade separate the local street from railroad tracks in the City of Fullerton by taking vehicular traffic under the railroad crossing. On August 13, 2012, the Board approved an amendment to the Cooperative Agreement with the City of Fullerton, making OCTA the lead agency for property acquisition and tenant relocation. This right-of-way lead agency change was made as a result of a request made by the City of Fullerton. Required right-of-way acquisition agreements have been executed or are being negotiated. The City has procured a contract for construction management services and will release the advertisement for construction in the fall of 2013. Construction is anticipated to begin by late 2013/early 2014 and is expected to be completed by early-2017.

Status: State College Grade Separation – Design 100% Complete

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at State College Boulevard RR crossing will grade separate the local street from railroad tracks in the City of Fullerton by taking vehicular traffic under the railroad crossing. On August 13, 2012, the Board approved an amendment to the cooperative agreement with the City of Fullerton, making OCTA the lead agency for property acquisition and tenant relocation. This right-of-way lead agency change was made as a result of a request made by the City. Required right of way acquisition agreements have been executed. OCTA

Measure M2

Progress Report



obtained right of way certification on June 3, 2013. The City began procurement for a construction manager in May 2013, and will release the advertisement for construction by fall 2013. Construction is anticipated to begin by late 2013/early 2014 and expected to be completed by mid-2016.

Status: Placentia Grade Separation – Construction Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Placentia RR crossing will grade separate the local street from railroad tracks in the City of Placentia by building an underpass for vehicular traffic. OCTA is overseeing construction, which continued during the quarter. The main elements of work this quarter included construction of the pump station and retaining walls, completion of the bridge, and beginning construction of new railroad tracks on the bridge. Construction progress is approximately 60 percent complete, and the project is expected to be completed by summer 2014.

Status: Kraemer Grade Separation – Construction Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Kraemer RR crossing will grade separate the local street from railroad tracks in the City of Placentia by building an underpass for vehicular traffic. OCTA is overseeing construction which continued during the quarter. The main elements of work this quarter included construction of the pump station, retaining walls, sound walls, and large drainage facilities, in addition to the completion of the bridge, and beginning construction of new railroad tracks on the bridge. Construction progress is approximately 60 percent complete and the project is expected to be completed by summer 2014.

Status: Tustin / Rose Grade Separation – Construction Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Tustin Avenue/Rose Drive RR crossing will grade separate the local street from railroad tracks in the Cities of Placentia and Anaheim by building a bridge for vehicular traffic over the railroad crossing. During the quarter, a Limited Notice to Proceed was issued to the contractor on April 22, 2013 to commence construction. The main elements of work included construction administration and project set-up, mobilization of materials and equipment, and utility relocation. Construction is anticipated to be completed by mid-2016.

Measure M2

Progress Report



Status: Lakeview Grade Separation – Design 100% Complete

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Lakeview Avenue RR crossing will grade separate the local street from railroad tracks in the Cities of Anaheim and Placentia by building a bridge for vehicular traffic over the railroad crossing. The design is complete, and construction bid packages are being finalized for advertisement. OCTA is working with Southern California Edison (SCE) to address Buy America compliance issues, which must be resolved for the California Transportation Commission to allocate Trade Corridor Improvement Funds and for OCTA to obtain federal approval to advertise the project. Required right-of-way acquisition agreements have been executed or are being negotiated. Construction is anticipated to begin by the end of 2013, and expected to be completed by early-2016.

Status: Orangethorpe Grade Separation – Construction Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Orangethorpe Avenue RR crossing will grade separate the local street from railroad tracks in the Cities of Placentia and Anaheim by building a bridge for vehicular traffic over the railroad tracks. During the quarter, a limited and full notices to proceed were issued to the contractor, and construction began on April 25, 2013. The main elements of work included construction administration and project set-up, mobilization of materials and equipment, and utility relocation. Construction is anticipated to be completed by mid-2016.

PROJECT P

M2 Regional Traffic Signal Synchronization Program (RTSSP)

Status: Construction Underway

Contact: Ron Keith, Planning
(714) 560-5990

Summary: Projects funded as part of the fiscal year (FY) 2011-12 Regional Traffic Signal Synchronization Program (RTSSP) Call for Projects are all underway with some having finished construction, and are in the 2 year Operations and Maintenance phase. These projects cover 157 miles with 563 intersections.

OCTA awarded 24 projects totaling over \$9,696,236 as part of the FY 2012–13 RTSSP Call for Projects in April 2012. These projects cover 141 miles with 534 intersections. All participants are implementing their respective projects. OCTA was designated to act as lead agency for seven of these projects that began in July 2012. All interagency agreements have been



executed and Contract Task Orders have been executed with start of construction in June 2013.

The most recent FY 2013-14 RTSSP Call for Projects applications were received on October 26, 2012. Eighteen applications were received that exceeded the allocated budget for the first time since the inception of the program. Fourteen projects were approved by the Board of Directors on April 8, 2013. Fifteen million dollars was allocated for RTSSP projects for FY 2013-14. OCTA is the lead administrator of nine of the fourteen projects. These 14 projects cover 108.5 miles with 829 intersections at a cost totaling \$19,424,226.

A separate project that works in tandem with the RTSSP projects is the update to the Intelligent Transportation Systems (ITS) Strategic Deployment Plan (SDP) or ITS – SDP. The ITS – SDP is a long range planning document that communicates strategies for ITS deployment for all modes of transportation (auto, mass transit, bicycle, and pedestrian) within Orange County. This update is conducted every five years and has been reviewed internally and is currently out for review to the local agencies.

PROJECT Q

Local Fair Share Program

Summary: All local agencies have been found eligible to receive M2 Local Fair Share funds. On a bi-monthly basis, 18 percent of net revenues are allocated to local agencies by formula. As of June 30, 2013, approximately \$88.6 million in Local Fair Share payments have been provided to local agencies.

Contact: Vicki Austin, Finance
(714) 560-5692

See page 38 for funding allocation by local agency.



TRANSIT PROGRAMS

PROJECT R

High Frequency Metrolink Service



Status: Metrolink Grade Crossing Improvements – **Project Complete**

Contact: Dinah Minter, Rail
(714) 560-5740

Summary: Enhancement of the designated 52 Orange County at-grade rail-highway crossings was completed as part of the Metrolink Service Expansion Program (MSEP). Completion of the safety improvements provides each corridor city with the opportunity to establish a “quiet zone” at their respective crossings. Quiet zones are intended to prohibit the sounding of train horns through designated crossings, except in the case of emergencies, construction work, or safety concerns identified by the train engineer. The cities of Anaheim, Tustin, Orange, Santa Ana, Irvine, San Juan Capistrano, Dana Point, and San Clemente have established quiet zones within their communities.

Status: MSEP – Service Ongoing

Contact: Dinah Minter, Rail
(714) 560-5740

Summary: Following the completion of Metrolink Service Expansion Program (MSEP) improvements in 2011, OCTA deployed a total of ten new Metrolink intra-county trains operating between Fullerton and Laguna Niguel/Mission Viejo, primarily during mid-day and evening hours. Despite reduced price day passes and extensive marketing efforts, ridership on the intra-county MSEP trains remains lower than desired. As a result, OCTA is moving forward with eliminating the OC Link day pass as of July 1, 2013. In addition, OCTA is currently considering options to re-deploy a number of the trains in order to maximize ridership without significantly impacting operating costs, including providing new trips from Orange County to Los Angeles and San Diego counties. OCTA is working with Burlington Northern Santa Fe (BNSF) and the Riverside County Transportation Commission (RCTC) to address any track-sharing issues, and plans to return to the Board with an update in fall 2013. During the quarter, a meeting took place in June with OCTA, BNSF, and RCTC to continue discussing track-sharing issues.

Status: Sand Canyon Grade Separation – Construction Underway

Contact: Rose Casey, Capital Projects
(714) 560-5729

Summary: The project located at Sand Canyon Avenue RR crossing will grade separate the local street from railroad tracks in the City of Irvine by building an underpass for vehicular traffic. OCTA is



overseeing construction, which continued during the quarter. The main elements of work this quarter included construction of the bridge and pump station, completion of the bridge, and beginning construction of new railroad tracks on the bridge. Construction is approximately 65 percent complete and the project is expected to be completed by mid-2014.

PROJECT S

Transit Extensions to Metrolink

Summary: Metrolink Commuter Rail service provides a high-capacity system that links Orange County, with two-thirds of the county's population within a four-mile radius of a station. Project S establishes a competitive program for local agencies to extend the benefits of rail service by improving transit connectivity to Metrolink stations.

Status: Anaheim Rapid Connection (ARC) Project – Locally Preferred Alternative Presented to OCTA Board

Contact: Kelly Hart, Rail
(714) 560-5725

Summary: OCTA prepared information for Board review regarding the policy decisions associated with the Project S Program along with a comparison of capital costs for peer streetcar projects. Additionally, the City of Anaheim prepared information on ARC project costs and benefits supported by the ARC Alternatives Analysis Report completed last fall. OCTA and the City of Anaheim presented this information to the Board in April and June 2013. OCTA will return to the Board in July to continue the discussion on ARC project milestones.

Status: Santa Ana-Garden Grove Fixed-Guideway Project – Development of Revised Environmental Assessment (EA)/ Environmental Impact Report (EIR)

Contact: Kelly Hart, Rail
(714) 560-5725

Summary: OCTA and the Santa Ana-Garden Grove project team reviewed and addressed comments received from the Federal Transit Administration (FTA) on the Draft EA/EIR for the project. OCTA and the project team held a conference call with FTA in June to review the last remaining comments. Upon final approval from FTA, the report will be released to the public for review and comment. Next quarter, the cities of Santa Ana/Garden Grove will be presenting an overview of the project, along with a schedule of anticipated milestone completion dates.

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Status: Bus and Station Van Extension Projects – Services Ongoing for Oakley Vanpool and Anaheim Canyon Connection; Services Pending for Panasonic Vanpool Connection and Cancelled for Invensys Vanpool Connection

Contact: Roger Lopez, Planning
(714) 560-5915

Summary: Four applications were received for the 2012 Project S Call for Project, and all four connections (three van routes plus one bus route) were approved by the Board on July 23, 2012. Service for the Oakley Vanpool connection from Irvine Station began in December 2012, with the Anaheim Canyon Bus Connection (Route 20) from the Anaheim Canyon Metrolink Station beginning on February 25, 2013. As of last quarter, all cooperative agreements between OCTA and the Cities of Lake Forest and Anaheim were fully executed.

During the quarter, the City of Lake Forest requested to delay beginning service for the Panasonic Vanpool connection from Irvine Station until January 2014. Staff will review the request for delay during the September semi-annual review. On May 5, 2013, Invensys Incorporated indicated that they would not be moving forward with the proposed vanpool service from the Irvine Station. Funds specifically allocated to the City of Lake Forest for this service will be returned to the program for use in future calls for projects.

PROJECT T

Convert Metrolink Stations to Regional Gateways that Connect Orange County with High-Speed Rail Systems

Status: Construction Underway

Contact: James Kramer, Rail
(714) 560-5866

Summary: The City of Anaheim continues moving forward on the Anaheim Regional Transportation Intermodal Center (ARTIC). Construction is underway, with activities from this past quarter including completion of the bridge supports for the concourse bridge, installation of the pedestrian and baggage tunnels, grading of bus facilities and other preparation work for the terminal building.

Amendment 2 to Cooperative Agreement C-9-0448, approved by OCTA's Board on February 25, 2013, was brought to the Anaheim City Council who also approved the agreement on April 30, 2013. Construction is on schedule and is anticipated to be complete by late 2014.



PROJECT U

Expand Mobility Choices for Seniors and Persons with Disabilities

Status: Senior Mobility Program – Distributing Funds to City Agencies

Contact: Dana Wiemiller, ACCESS
(714) 560-5718

Summary: More than \$523,000 in M2 Project U funding was disbursed to 26 Senior Mobility Program (SMP) participants during the quarter. Collectively, the cities provided nearly 60,000 trips this quarter for seniors traveling to medical appointments, nutrition programs, shopping destinations, and senior and community center activities. OCTA hosted a Senior Mobility Program Forum in May with 24 cities participating. In addition, more than \$598,000 was disbursed to the County of Orange to support the Office on Aging Senior Non-Emergency Medical Transportation Program (SNEMT). In total, more than \$4.5 million in Project U funding has been provided this fiscal year (FY 2012-13) to support the SMP and SNEMT programs.

Status: Fare Stabilization Program – In Progress

Contact: Sean Murdock, Finance
(714) 560-5685

Summary: To stabilize fares for seniors and persons with disabilities, 1 percent of net revenues are dedicated for this purpose. To date, \$5.5 million (through June 2013) has been allocated to stabilize fares for seniors and persons with disabilities. The M2 Ordinance requires that funds be allocated “in an amount equal to the percentage of partial funding of fares for seniors and persons with disabilities as of the effective date of the Ordinance.” As projected revenues declined due to the recession, there was a concern that 1 percent of net revenues would not be sufficient to meet the Ordinance requirements. When the Board approved the Project U guidelines, the Board authorized that any revenues generated by the SMP not claimed by the cities could be used for the Fare Stabilization Program. Since there are four local agencies that do not participate in the SMP, \$0.6 million is available to be transferred from the SMP to the Fare Stabilization Program.

In February 2013, staff provided the Board with a report which indicated the Fare Stabilization Program funding levels may only be sufficient until FY 2019-20. Staff will continue to provide annual updates on the status of the Fare Stabilization Program to the Board, and any necessary amendments to the Fare Stabilization Program will be considered as part of the Ten-Year Comprehensive Program Review which is scheduled to take place in 2016. The next annual update is scheduled to be provided to the Board in December 2013.



PROJECT V

Community Based Transit / Circulators

Status: Call for Projects Applications Approved

Contact: Roger Lopez, Planning
(714) 560-5438

Summary: Program Guidelines for Project V were approved by the Board on November 26, 2012, and the first Call for Projects (issuing up to \$28 million) closed last quarter on March 29, 2013. Five applications were received from the Cities of Dana Point, Huntington Beach, La Habra, Laguna Beach, and Lake Forest. The Board approved all five applications on June 24, 2013, for a total of up to \$9.8 million. The funding will be used to begin new community based transit services slated to be implemented over the next year. These include: vanpool services from local employment centers to transportation hubs; special event and seasonal services that operate during heavy traffic periods; and local community circulators that carry passengers between various shopping, medical, and transportation related centers. The next Project V Call for Projects will be held in 2016.

PROJECT W

Safe Transit Stops

Summary: Staff has been meeting to develop guiding principles on how to allocate the funding provided to Project W. To assist with this effort, staff has developed a definition for “busiest bus stops” based on total boardings at each bus stop, completed an inventory of the 100 busiest stops documenting assets in place, commenced an industry review of “best practices” and technology, and initiated multi-disciplinary review of improvements. It is anticipated that staff bring guidelines to the Board in early 2014.

Contact: Scott Holmes, Transit
(714) 560-5710



ENVIRONMENTAL

PROJECT X

Environmental Cleanup

Summary: The M2 Allocation Committee is charged with making recommendations to the Board on the allocation of funds for the Environmental Cleanup Program (Project X). These funds are allocated on a countywide competitive basis to assist agencies in meeting the Clean Water Act standards for controlling transportation-related pollution. Project X is composed of a two-tiered funding process focusing on early priorities (Tier 1), and to prepare for more comprehensive capital investments (Tier 2).

Contact: Dan Phu, Planning
(714) 560-5907

The OCTA Board approved release of the third Tier 1 Call for Projects in March 2013, which concluded in May 2013. Approximately \$2.7 million will be available for the third Tier 1 Call for Projects; anticipated to be approved by the Board in late summer. In June 2013, the Board approved a second Tier 2 Call for Projects, for release on June 19, 2013. This second Call will conclude on September 20, 2013. Staff will be holding workshops and meetings with potential applicants to provide early feedback on their project.

PART OF PROJECTS (A-M)

Freeway Mitigation Program

Summary: The Freeway Mitigation Program provides higher-value environmental benefits such as habitat protection, wildlife corridors, and resource preservation in exchange for streamlined project approvals and greater certainty in the delivery of the 13 M2 freeway projects (A-M).

Contact: Dan Phu, Planning
(714) 560-5907

Restoration Update

To date, the Board has approved 11 restoration projects for funding totaling approximately 400 acres. The five round one projects are currently underway and staff is engaged in the review process as well as facilitating the implementation of these projects.

During the quarter, staff continued to work with the four second round project sponsors (for six different projects), on the technical documents, and draft restoration plans. Upon completion of these technical documents and draft restoration plans, staff will coordinate with the Army Corps of Engineers, State Water Resources Control Board, Calif. Department of Fish & Wildlife (CDFW), and the U.S. Fish and Wildlife Service (USFWS), to achieve consensus for each of the restoration projects. CDFW and USFWS provided concurrence on several of the



restoration plans during this quarter. These included the Irvine Ranch Conservancy and Laguna Canyon Foundation projects for which staff will be executing contracts.

Acquisition Update

As of this quarter, OCTA has acquired approximately 950 acres of open space property in the Trabuco Canyon area and in Brea. From the original \$42 million allocated for the purchase of open space, approximately \$8.5 million (inclusive of the long-term management cost) remains for additional acquisitions, and the funds are expected to be allocated within the next several months. After updating appraisals of the remaining Group 1 (high biological value) properties, staff will engage the Environmental Oversight Committee in determining which properties should receive offers using the remaining funds. Staff is currently finalizing an offer for an additional property. If the transaction is successful, the purchase will be announced near the end of 2013.

Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) Update

OCTA staff continues to work towards the release of the draft NCCP/HCP and draft EIR/EIS. Public release of the document is expected to take place in fall 2013 with an anticipated completion of the final NCCP/HCP by 2014.

OCTA began the NCCP/HCP process in summer 2010, and has been working very closely and diligently with the Wildlife Agencies since the early development stages of the NCCP/HCP. Historically, the NCCP/HCP planning process can take between five to 10 years between the initiation and approval of the final documents. OCTA is on target to complete the NCCP/HCP in a shorter timeframe than usual. Typically, an NCCP/HCP is completed prior to acquiring properties or restoring habitat as mitigation measures, but OCTA accelerated the mitigation process by acquiring more than 950 acres of open space lands and funding approximately 400 acres of habitat restoration prior to the completion of the NCCP/HCP. This allowed for protection and restoration of more mitigation properties at lower cost, but also means the acquired lands and funded habitat restoration projects will need to be integrated into the draft NCCP/HCP. This requires investing more time upfront, but will save time and effort toward the end of the NCCP/HCP planning process, and will result in a better outcome. CDFW and USFWS are nearing completion with their review of the draft NCCP/HCP and draft EIR/EIS documents.



PROGRAM MGMT

PROGRAM MANAGEMENT OFFICE

Summary: The Measure M (M1 and M2) Program Management Office (PMO) provides interdivisional coordination for all M-related projects and programs. To ensure agency-wide compliance, the PMO also holds a bi-monthly committee meeting made up of executive directors and key staff from each of the divisions that meets to review key issues and activities within the Measure M programs.

Contact: Tami Warren, PMO
(714) 560-5590

In the fourth quarter, the focus of the PMO has been on several key items. These include:

OCTA Organizational Readiness Assessment

To ensure successful delivery of the Board approved M2020 Plan, an Organizational Readiness Study was initiated in November 2012. The consultant team is anticipated to provide a draft report to staff in the next quarter. The findings to date remain positive, and recommendations are centered around process improvements, staff resource modifications and adjustments to department structure to reflect changes in the work effort as a result of the progression of projects and programs within M2.

2009-12 M2 Performance Assessment

The M2 Ordinance No. 3 requires a performance assessment be conducted every three years to determine how OCTA is performing in terms of delivering the M2 Program. The consultant team worked internally and externally to gather information and review OCTA's performance with regard to M2 for the time period of July 1, 2009 through June 30, 2012. Overall the assessment commends OCTA's commitment to the effective management and delivery of the M2 Program. The final report was completed in early March and was presented to the Board on April 8, 2013, and to the Taxpayers Oversight Committee on April 9, 2013. The assessment included recommendations for improvement and those are being implemented and are anticipated to be in place by the end of the year.

M2 Document Management

The M2 Document Center site is designed to provide a unified approach to saving M2 project and program files. Progress has been made to begin the mass upload of back log Staff Reports and other pertinent documents from years preceding the M drive. Software has been purchased to assist in this effort and is in the process of being set up. To ensure that the document center is populated consistently and that Ordinance No. 3 requirements are met, the PMO has hired consultant services for additional support.



M2 Administrative Cost Safeguards

Both M1 and M2 include 1 percent caps on administrative expenses for salaries and benefits of OCTA administrative staff, but the M2 language sets the cap on an annual basis, whereas the M1 cap was set as an annual average over the life of the measure. In a legal opinion on M2, it was determined that in years where administrative salaries and benefits are above 1 percent, only 1 percent can be allocated with the difference borrowed from other, non-Measure M fund sources. Conversely, in years where administrative salaries and benefits are below 1 percent, OCTA can still allocate the full 1 percent for administrative salaries and benefits but may use the unused portion to repay the amount borrowed from prior years in which administrative salaries and benefits were above 1 percent.

Based on the original M2 revenue projections, OCTA expected to receive \$24.3 billion in M2 funds, with 1 percent of total revenues available to fund administrative salaries and benefits over the life of the program. As M2 revenue projections declined as a result of economic conditions, the funds available to support administrative salaries and benefits have also declined from the original expectations. While revenue has declined, the administrative effort needed to deliver M2 remains the same. Additionally, the initiation of the EAP in 2007 required administrative functions four years prior to revenue collection. While the EAP resulted in project savings and significant acceleration of the program, administrative functions were required during this time with associated administrative costs. One final impact of the EAP is that with the acceleration of the M2 Program, as well as early work on developing a multitude of M2 programs and projects, this requires significant early effort including administrative responsibilities. As with Measure M, this level of effort is expected to decrease as projects are completed, reducing the level of administrative costs below the 1 percent cap, which should balance out over the life of the M2 Program.

As of June 30, 2012 (updated annually), \$8.3 million in administrative/overhead salaries and benefits had been charged to the M2 administrative cap. Based on M2 revenues received through that date, \$3.1 million were available to fund these administrative costs, leaving an amount borrowed of \$5.2 million. OCTA currently has Board approval to use funds from the Orange County Unified Transportation Trust fund, with the idea that those funds will be repaid with interest in other years that OCTA administrative costs fall below the 1 percent cap. Efforts are ongoing to monitor the administrative salaries and benefits impact to the 1 percent cap provision within M2.

Staff continues to meet quarterly to review all labor costs to ensure proper cost allocation to both M1 and M2. Staff met on April 17, 2013, to review the past quarter's labor reports to

Measure M2

Progress Report



ensure costs attributed to the 1 percent cap were accurately reported and are not misplaced project related costs as well as to ensure project costs were applied to the correct projects. Any misplaced charges are routinely corrected.

Additionally, as a result of suggestions received through the 2009-2012 M2 Performance Assessment report, staff will look at allocating grant funding and state planning funds more precisely to those areas that are subject to the 1 percent administration cap and review OCTA's cost allocation plan to ensure that administrative charges are appropriately captured. This review is underway and any changes identified will be included in the cost allocation plan which is anticipated to take place in the fall.

Key Upcoming Activities

During the next quarter, the PMO will present to the Board in August and September an M2020 Plan Review and will continue to work with the consultant team on the Organizational Assessment.



FINANCE MATTERS

M2 FINANCING

Revenue Forecast and Collection

Summary: OCTA contracts with three universities to provide a long-range forecast of taxable sales to project Measure M2 revenues for purposes of planning projects and program expenditures. Annually, OCTA takes an average of the three university projections and incorporates this to develop a long-range forecast of Measure M2 taxable sales. Original projections in 2005 estimated total nominal M2 sales tax collections at \$24.3 billion. Additionally, as required by law, OCTA pays the State Board of Equalization (SBOE) a fee to collect the sales tax. The M2 Ordinance estimated this fee to be 1.5 percent of the revenues collected over the life of the program.

Contact: Sean Murdock, Finance
(714) 560-5685

Current Forecast

After establishing the FY 2011-12 and FY 2012-13 growth rates, staff utilized the blended growth rates from the universities for the remaining years in the M2 period (FY 2013-14 through FY 2040-41) and determined that yields total nominal M2 sales tax collections of \$15.4 billion. Based on the original 2005 projection of \$24.3 billion, current projections are \$8.9 billion less over the life of the program. This projection is up from the lowest point in 2010 when the revenue projections were \$13.7 billion or \$10.6 billion less than the original projections. An update on this annual projection based on new university projections will be provided to the Board in August 2013.

Quarterly, this information is updated based on the actual revenues received for the past quarter. Sales tax receipts are 0.04 percent above the amount assumed for the budget. Sales tax receipts from the SBOE for the period increased 5.5 percent from the same period last year. It is estimated that given the final sales tax receipts for FY 2011-12, the year-to-date sales tax receipts for FY 2012-13, coupled with the long-term sales tax growth rate forecasts, that the revenue forecast for the life of the M2 Program will be approximately \$15.4 billion. The revenue forecast for the life of the M2 Program varies on a quarterly basis due to actual receipts being updated quarterly. Over the last four quarters, the forecast has ranged between \$15.3 billion and \$15.6 billion.

SBOE Fee Charged

OCTA monitors the fee on a quarterly basis. For the M2 Program, inception to date, the SBOE fee has not exceeded the 1.5 percent assumed in the ordinance. The fee collected for this quarter was 0.96 percent.

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Schedule 1

Measure M2

Schedule of Revenues, Expenditures and Changes in Fund Balance

as of June 30, 2013

(Unaudited)

(\$ in thousands)	Quarter Ended June 30, 2013	Year to Date June 30, 2013 (A)	Period from Inception to June 30, 2013 (B)
Revenues:			
Sales taxes	\$ 69,272	\$ 265,632	\$ 578,886
Other agencies' share of Measure M2 costs:			
Project related	19218	81,718	140,683
Non-project related	-	-	-
Interest:			
Operating:			
Project related	-	-	-
Non-project related	(106)	1,791	2,276
Bond proceeds	(129)	5,921	15,266
Debt service	4	12	32
Commercial paper	-	-	395
Capital Grants	-	-	-
Right-of-way leases	43	113	352
Miscellaneous:			
Project related	13	13	13
Non-project related	7	7	7
Total revenues	<u>88,321</u>	<u>355,210</u>	<u>737,910</u>
Expenditures:			
Supplies and services:			
State Board of Equalization (SBOE) fees	806	2,661	5,772
Professional services:			
Project related	8,096	28,364	157,266
Non-project related	716	2,249	7,990
Administration costs:			
Project related	1,345	5,155	17,877
Non-project related	2,393	7,697	26,146
Other:			
Project related	97	251	718
Non-project related	48	84	3,496
Payments to local agencies:			
Project related	37,981	86,762	223,873
Non-project related	-	-	-
Capital outlay:			
Project related	39,299	96,321	216,881
Non-project related	-	-	32
Debt service:			
Principal payments on long-term debt	-	6,410	6,410
Interest on long-term debt and commercial paper	36	22,509	49,707
Total expenditures	<u>90,817</u>	<u>258,463</u>	<u>716,168</u>
Excess (deficiency) of revenues over (under) expenditures	<u>(2,496)</u>	<u>96,747</u>	<u>21,742</u>
Other financing sources (uses):			
Transfers out:			
Project related	(922)	(2,821)	(5,881)
Non-project related	-	-	-
Transfers in:			
Project related	-	1	26,503
Non-project related	-	-	-
Bond proceeds	-	-	358,593
Total other financing sources (uses)	<u>(922)</u>	<u>(2,820)</u>	<u>379,215</u>
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	<u>\$ (3,418)</u>	<u>\$ 93,927</u>	<u>\$ 400,957</u>

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Schedule 2

Measure M2

Schedule of Calculations of Net Tax Revenues and Net Bond Revenues (Debt Service) as of June 30, 2013 (Unaudited)

(\$ in thousands)	Quarter Ended June 30, 2013 (actual)	Year Ended June 30, 2013 (actual) (C.1)	Period from Inception through June 30, 2013 (actual) (D.1)	Period from July 1, 2013 through March 31, 2041 (forecast) (E.1)	Total (F.1)
Tax revenues:					
Sales taxes	\$ 69,272	\$ 265,632	\$ 578,886	\$ 14,903,739	\$ 15,482,625
Operating interest	(106)	1,791	2,276	356,899	359,175
Subtotal	<u>69,166</u>	<u>267,423</u>	<u>581,162</u>	<u>15,260,638</u>	<u>15,841,800</u>
Other agencies' share of M2 costs	-	-	-	-	-
Miscellaneous	7	7	7	-	7
Total tax revenues	<u>69,173</u>	<u>267,430</u>	<u>581,169</u>	<u>15,260,638</u>	<u>15,841,807</u>
Administrative expenditures:					
SBOE fees	806	2,661	5,772	223,646	229,418
Professional services, non-project related	607	1,933	4,830	101,329	106,159
Administration costs, non-project related	2,393	7,697	26,146	142,331	168,477
Transfer outs, non-project related	-	-	-	20,862	20,862
Other, non-project related	48	84	3,496	26,822	30,318
Capital outlay, non-project related	-	-	32	-	32
Environmental cleanup	1,496	2,072	4,055	305,213	309,268
Total expenditures	<u>5,350</u>	<u>14,447</u>	<u>44,331</u>	<u>820,203</u>	<u>864,534</u>
Net tax revenues	<u>\$ 63,823</u>	<u>\$ 252,983</u>	<u>\$ 536,838</u>	<u>\$ 14,440,435</u>	<u>\$ 14,977,273</u>
Bond revenues:					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 358,593	\$ 1,500,000	\$ 1,858,593
Interest revenue from bond proceeds	(129)	5,921	15,266	32,000	47,266
Interest revenue from debt service funds	3	15	32	58,036	58,068
Interest revenue from commercial paper	-	-	395	-	395
Total bond revenues	<u>(126)</u>	<u>5,936</u>	<u>374,286</u>	<u>1,590,036</u>	<u>1,964,322</u>
Financing expenditures and uses:					
Professional services, non-project related	109	316	3,160	-	3,160
Bond debt principal	-	6,410	6,410	1,866,855	1,873,265
Bond debt and other interest expense	36	22,509	49,707	1,627,325	1,677,032
Total financing expenditures and uses	<u>145</u>	<u>29,235</u>	<u>59,277</u>	<u>3,494,180</u>	<u>3,553,457</u>
Net bond revenues (debt service)	<u>\$ (271)</u>	<u>\$ (23,299)</u>	<u>\$ 315,009</u>	<u>\$ (1,904,144)</u>	<u>\$ (1,589,135)</u>

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Progress Report



Schedule 3

Measure M2 Schedule of Revenues and Expenditures Summary as of June 30, 2013 (Unaudited)

Project	Description	Net Tax Revenues Program to Date Actual	Total Net Tax Revenues	Project Budget	Estimate at Completion
(G)		(H)	(I)	(J)	(K)
(\$ in thousands)					
Freeways (43% of Net Tax Revenues)					
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 21,160	\$ 590,331	\$ 589,184	\$ 589,184
B,C,D	I-5 Santa Ana/San Diego Freeway Improvements	53,358	1,488,639	1,171,382	1,171,382
E	SR-22 Garden Grove Freeway Access Improvements	5,402	150,723	150,721	150,721
F	SR-55 Costa Mesa Freeway Improvements	16,477	459,705	456,043	456,043
G	SR-57 Orange Freeway Improvements	11,647	324,933	289,851	289,851
H,I,J	SR-91 Riverside Freeway Improvements	40,910	1,141,349	1,125,129	1,125,129
K,L	I-405 San Diego Freeway Improvements	62,691	1,749,013	1,012,667	1,012,667
M	I-605 Freeway Access Improvements	900	25,120	25,120	25,120
N	All Freeway Service Patrol	6,753	188,404	188,404	188,404
	Freeway Mitigation	11,542	322,011	281,409	281,409
	Subtotal Projects	230,840	6,440,228	5,289,910	5,289,910
	Net (Bond Revenue)/Debt Service	-	-	1,150,317	1,150,317
	Total Freeways	\$ 230,840	\$ 6,440,228	\$ 6,440,227	\$ 6,440,227
	%				43.0%
Street and Roads Projects (32% of Net Tax Revenues)					
O	Regional Capacity Program	\$ 53,684	\$ 1,497,746	\$ 1,286,022	\$ 1,286,022
P	Regional Traffic Signal Synchronization Program	21,473	599,072	598,655	598,655
Q	Local Fair Share Program	96,631	2,695,909	2,695,909	2,695,909
	Subtotal Projects	171,788	4,792,727	4,580,586	4,580,586
	Net (Bond Revenue)/Debt Service	-	-	212,141	212,141
	Total Street and Roads Projects	\$ 171,788	\$ 4,792,727	\$ 4,792,727	\$ 4,792,727
	%				32.0%

Continues on following page

Measure M2

Progress Report



Measure M2 Schedule of Revenues and Expenditures Summary as of June 30, 2013 (Unaudited)

Variance Total Net Tax Revenues to Est at Completion	Variance Project Budget to Est at Completion	Expenditures through June 30, 2013	Reimbursements through June 30, 2013	Net Project Cost	Percent of Budget Expended
(L)	(M)	(N)	(O)	(P)	(Q)
\$ 1,147	\$ -	\$ 1,404	\$ -	\$ 1,404	0.2%
317,257	-	34,935	7,837	27,098	2.3%
2	-	4	-	4	0.0%
3,662	-	4,963	13	4,950	1.1%
35,082	-	34,107	7,051	27,056	9.3%
16,220	-	21,049	5,330	15,719	1.4%
736,346	-	17,285	1,255	16,030	1.6%
-	-	16	-	16	0.1%
-	-	28	-	28	0.0%
40,602	-	32,271	1,204	31,067	11.0%
1,150,318	-	146,062	22,690	123,372	
(1,150,317)	-	15,628	-	15,628	
\$ 1	\$ -	\$ 161,690	\$ 22,690	\$ 139,000	28.5%
\$ 211,724	\$ -	\$ 224,315	\$ 80,142	\$ 144,173	11.2%
417	-	2,693	272	2,421	0.4%
-	-	88,600	-	88,600	3.3%
212,141	-	315,608	80,414	235,194	
(212,141)	-	13,624	-	13,624	
\$ -	\$ -	\$ 329,232	\$ 80,414	\$ 248,818	51.0%

Measure M2

Progress Report



Schedule 3

Measure M2 Schedule of Revenues and Expenditures Summary as of June 30, 2013 (Unaudited)

Project	Description	Net Tax Revenues Program to Date Actual	Total Net Tax Revenues	Project Budget	Estimate at Completion
(G)		(H)	(I)	(J)	(K)
(\$ in thousands)					
Transit Projects (25% of Net Tax Revenues)					
R	High Frequency Metrolink Service	\$ 48,059	\$ 1,340,789	\$ 1,243,207	\$ 1,243,207
S	Transit Extensions to Metrolink	47,390	1,322,146	1,307,790	1,307,790
T	Metrolink Gateways	10,739	299,598	184,859	184,859
U	Expand Mobility Choices for Seniors and Persons with Disabilities	16,103	449,265	449,265	449,265
V	Community Based Transit/Circulators	10,734	299,466	299,466	299,466
W	Safe Transit Stops	1,185	33,054	33,054	33,054
		134,210	3,744,318	3,517,641	3,517,641
	Net (Bond Revenue)/Debt Service	-	-	226,677	226,677
	Total Transit Projects	\$ 134,210	\$ 3,744,318	\$ 3,744,318	\$ 3,744,318
	%				25.0%
	Measure M2 Program	\$ 536,838	\$ 14,977,273	\$ 14,977,272	\$ 14,977,272
Environmental Cleanup (2% of Revenues)					
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 11,623	\$ 316,836	\$ 316,836	\$ 316,836
	Total Environmental Cleanup	\$ 11,623	\$ 316,836	\$ 316,836	\$ 316,836
	%				2.0%
Taxpayer Safeguards and Audits					
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 8,683	\$ 232,239	\$ 232,239	\$ 232,239
	%				1.5%
	Oversight and Annual Audits (1% of Revenues)	\$ 5,812	\$ 158,418	\$ 158,418	\$ 158,418
	%				1.0%
	Total Measure M Program	\$ 548,461	\$ 15,294,109	\$ 15,294,108	\$ 15,294,108

Continues on following page

Measure M2

Progress Report



Measure M2 Schedule of Revenues and Expenditures Summary as of June, 2013 (Unaudited)

Variance Total Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures through June 30, 2013 (N)	Reimbursements through June 30, 2013 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
\$ 97,582	\$ -	\$ 128,164	\$ 64,170	\$ 63,994	5.1%
14,356	-	347	19	328	0.0%
114,739	-	13,451	81	13,370	7.2%
-	-	14,793	-	14,793	3.3%
-	-	11	-	11	0.0%
-	-	5	-	5	0.0%
226,677	-	156,771	64,270	92,501	
(226,677)	-	7,922	-	7,922	
<u>\$ -</u>	<u>\$ -</u>	<u>\$ 164,693</u>	<u>\$ 64,270</u>	<u>\$ 100,423</u>	<u>20.6%</u>
<u>\$ 1</u>	<u>\$ -</u>	<u>\$ 655,615</u>	<u>\$ 167,374</u>	<u>\$ 488,241</u>	
<u>\$ -</u>	<u>\$ -</u>	<u>\$ 4,055</u>	<u>\$ 177</u>	<u>\$ 3,878</u>	<u>1.2%</u>
<u>\$ -</u>	<u>\$ -</u>	<u>\$ 4,055</u>	<u>\$ 177</u>	<u>\$ 3,878</u>	<u>0.7%</u>
<u>\$ -</u>	<u>\$ -</u>	<u>\$ 5,772</u>	<u>\$ -</u>	<u>\$ 5,772</u>	<u>2.5%</u>
				<u>1.0%</u>	
<u>\$ -</u>	<u>\$ -</u>	<u>\$ 8,321</u>	<u>\$ 5,184</u>	<u>\$ 3,137</u>	<u>2.0%</u>
				<u>0.5%</u>	
<u>\$ 1</u>	<u>\$ -</u>	<u>\$ 659,670</u>	<u>\$ 167,551</u>	<u>\$ 492,119</u>	

Measure M2

Progress Report



LOCAL FAIR SHARE

Entity	FY 2012-13 Fourth Quarter M2 Funds	M2 Funds To Date
Aliso Viejo	\$187,302.56	\$1,111,281.94
Anaheim	\$1,586,669.06	\$9,566,186.75
Brea	\$266,753.66	\$1,597,343.38
Buena Park	\$427,857.84	\$2,585,206.45
Costa Mesa	\$683,524.73	\$4,022,881.74
County of Orange	\$842,455.80	\$4,986,293.40
Cypress	\$251,413.70	\$1,545,600.28
Dana Point	\$152,742.07	\$910,552.76
Fountain Valley	\$295,078.11	\$1,782,626.79
Fullerton	\$608,450.06	\$3,667,467.31
Garden Grove	\$696,448.81	\$4,213,326.42
Huntington Beach	\$895,879.30	\$5,387,967.88
Irvine	\$1,193,261.97	\$7,159,780.39
La Habra	\$245,231.40	\$1,487,313.59
La Palma	\$91,244.29	\$508,406.53
Laguna Beach	\$121,571.38	\$714,182.40
Laguna Hills	\$157,797.46	\$966,723.50
Laguna Niguel	\$317,399.82	\$1,914,039.78
Laguna Woods	\$60,721.16	\$369,502.06
Lake Forest	\$364,219.60	\$2,205,799.94
Los Alamitos	\$60,491.83	\$365,483.61
Mission Viejo	\$443,868.20	\$2,662,962.36
Newport Beach	\$515,393.77	\$3,057,886.27
Orange	\$763,465.01	\$4,603,041.19
Placentia	\$221,925.98	\$1,331,358.74

Measure M2

Progress Report



Entity	FY 2012-13 Fourth Quarter M2 Funds	M2 Funds To Date
Rancho Santa Margarita	\$198,227.17	\$1,198,226.95
San Clemente	\$258,699.58	\$1,570,288.56
San Juan Capistrano	\$178,786.61	\$1,052,760.66
Santa Ana	\$1,283,020.37	\$7,824,954.75
Seal Beach	\$123,343.56	\$732,632.39
Stanton	\$139,178.70	\$840,562.21
Tustin	\$415,007.35	\$2,463,051.11
Villa Park	\$24,562.66	\$147,075.48
Westminster	\$397,394.14	\$2,406,616.96
Yorba Linda	\$283,065.34	\$1,677,805.15
Total M2 Funds	\$14,752,453.05	\$88,637,189.68

Measure M2

Progress Report



CAPITAL PROGRAM

Capital Projects	Cost Budget/ Forecast	Schedule Plan/Forecast			
	(millions)	Begin Environmental	Complete Environmental	Complete Design	Complete Construction
Freeway Projects:					
I-5, Pico to Vista Hermosa	\$113.0	Jun-09	Dec-11	Oct-13	Feb-18
Project C	\$113.0	Jun-09	Oct-11	Sep-13	Oct-17
I-5, Vista Hermosa to Pacific Coast Highway	\$75.6	Jun-09	Dec-11	Feb-13	Jan-16
Project C	\$75.6	Jun-09	Oct-11	May-13	May-16
I-5, Pacific Coast Highway to San Juan Creek Rd	\$70.7	Jun-09	Dec-11	Jan-13	Nov-15
Project C	\$69.5	Jun-09	Oct-11	Jan-13	Nov-15
I-5, I-5/Ortega Interchange	\$90.9	Sep-05	Jun-09	Nov-11	Sep-15
Project D	\$81.0	Sep-05	Jun-09	Dec-11	Sep-15
I-5, I-5/Ortega Interchange (Landscape)	N/A	N/A	N/A	N/A	N/A
Project D	N/A	N/A	N/A	Dec-14	Aug-16
I-5, SR-73 to El Toro Road	TBD	Sep-11	Jun-14	TBD	TBD
Project C & D	\$534.6	Oct-11	May-14	Jun-17	May-22
I-5, I-5/El Toro Road Interchange	TBD	TBD	TBD	TBD	TBD
Project D	TBD	Aug-14	Jul-17	TBD	TBD
I-5, I-405 to SR-55	TBD	Sep-13	Jun-16	TBD	TBD
Project B	TBD	Nov-13	Jul-16	TBD	TBD
I-5, SR-55 to SR-57	TBD	Jul-11	Jun-13	TBD	TBD
Project A	\$46.3	Jun-11	Mar-14	Jan-16	Oct-18
SR-55, I-405 to I-5	TBD	Feb-11	Nov-13	TBD	TBD
Project F	\$274.6	May-11	Oct-14	Oct-17	Aug-21
SR-55, I-5 to SR-91 (Draft)	TBD	TBD	TBD	TBD	TBD
Project F	TBD	Jan-15	Jun-17	TBD	TBD
SR-57 Northbound (NB), Orangewood to Katella (Draft)	TBD	TBD	TBD	TBD	TBD
Project G	TBD	Jul-15	Jun-17	TBD	TBD
SR-57 (NB), Katella to Lincoln	\$78.7	Apr-08	Jul-09	Nov-10	Sep-14
Project G	\$38.5	Apr-08	Nov-09	Dec-10	Sep-14

Grey = Milestone achieved

Green = Forecast milestone meets or exceeds plan

Yellow = Forecast milestone is one to three months later than plan

Red = Forecast milestone is over three months later than plan

Measure M2

Progress Report



CAPITAL PROGRAM

Capital Projects	Cost Budget/ Forecast	Schedule Plan/Forecast			
	(millions)	Begin Environmental	Complete Environmental	Complete Design	Complete Construction
Freeway Projects:					
SR-57 (NB), Katella to Lincoln (Landscape) Project G	N/A N/A	N/A N/A	N/A N/A	N/A Jul-10	N/A Mar-16
SR-57 (NB), Orangethorpe to Yorba Linda Project G	\$80.2 \$57.5	Aug-05 Aug-05	Dec-07 Dec-07	Dec-09 Jul-09	Mar-14 Mar-14
SR-57 (NB), Yorba Linda to Lambert Project G	\$79.3 \$56.5	Aug-05 Aug-05	Dec-07 Dec-07	Dec-09 Jul-09	Jul-14 Dec-13
SR-57 (NB), Orangethorpe to Lambert (Landscape) Project G	N/A N/A	N/A N/A	N/A N/A	N/A Apr-14	N/A Nov-15
SR-57 (NB), Lambert to Tonner Canyon (Draft) Project G	TBD TBD	TBD Jun-16	TBD May-19	TBD TBD	TBD TBD
SR-91 Westbound (WB), I-5 to SR-57 Project H	\$78.1 \$68.3	Jul-07 Jul-07	Apr-10 Jun-10	Feb-12 Apr-12	Apr-16 Apr-16
SR-91, SR-57 to SR-55 Project I	TBD TBD	Feb-14 Feb-14	Sep-16 Sep-16	TBD TBD	TBD TBD
SR-91 (WB), Tustin Interchange to SR-55 Project I	\$49.9 \$48.7	Jul-08 Jul-08	Jul-11 May-11	Mar-13 Feb-13	Jul-16 Jul-16
SR-91, SR-55 to SR-241 Project J	\$128.4 \$81.5	Jul-07 Jul-07	Jul-09 Apr-09	Jan-11 Aug-10	Dec-12 Mar-13
SR-91, SR-55 to SR-241 (Landscape) Project J	N/A N/A	N/A N/A	N/A N/A	N/A Feb-13	N/A Oct-14
SR-91 Eastbound, SR-241 to SR-71 Project J	\$104.5 \$57.8	Mar-05 Mar-05	Dec-07 Dec-07	Dec-08 Dec-08	Nov-10 Jan-11
I-405, I-5 to SR-55 (Draft) Project L	TBD TBD	TBD Sep-14	TBD May-17	TBD TBD	TBD TBD
I-405 Southbound, SR-133 to University Drive (Draft) Project L	TBD TBD	TBD Nov-14	TBD Sep-15	TBD Dec-16	TBD Sep-18

Measure M2

Progress Report



CAPITAL PROGRAM

Capital Projects	Cost Budget/ Forecast	Schedule Plan/Forecast			
	(millions)	Begin Environmental	Complete Environmental	Complete Design	Complete Construction
I-405, SR-55 to I-605 (Design-Build)	TBD	Mar-09	Mar-13	TBD	TBD
Project K	\$1,299.1	Mar-09	Aug-14	Oct-14	Oct-19
I-605, I-605/Katella Interchange (Draft)	TBD	TBD	TBD	TBD	TBD
Project M	TBD	Feb-16	Jan-18	TBD	TBD
Grade Separation Projects:					
Sand Canyon Grade Separation	\$55.6	N/A	Sep-03	Jul-10	May-14
Project R	\$55.6	N/A	Sep-03	Jul-10	Aug-14
Raymond Grade Separation	\$77.2	Feb-09	Nov-09	Aug-12	Mar-16
Project O	\$98.1	Feb-09	Nov-09	Dec-12	Oct-16
State College Grade Separation	\$73.6	Dec-08	Jan-11	Aug-12	Mar-16
Project O	\$80.3	Dec-08	Apr-11	Feb-13	Sep-16
Placentia Grade Separation	\$78.2	Jan-01	May-01	Mar-10	Nov-14
Project O	\$69.4	Jan-01	May-01	Jun-10	Aug-14
Kraemer Grade Separation	\$70.4	Jan-01	Sep-09	Jul-10	Oct-14
Project O	\$66.6	Jan-01	Sep-09	Jul-10	Jul-14
Orangethorpe Grade Separation	\$117.4	Jan-01	Sep-09	Dec-11	Sep-16
Project O	\$107.2	Jan-01	Sep-09	Oct-11	Sep-16
Tustin/Rose Grade Separation	\$103.0	Jan-01	Sep-09	Dec-11	May-16
Project O	\$91.3	Jan-01	Sep-09	Jul-11	May-16
Lakeview Grade Separation	\$70.2	Jan-01	Sep-09	Oct-11	Sep-15
Project O	\$104.6	Jan-01	Sep-09	Jan-13	Jun-16
Ball Grade Separation	TBD	TBD	TBD	TBD	TBD
Project R	TBD	TBD	TBD	TBD	TBD

Measure M2

Progress Report



CAPITAL PROGRAM

Capital Projects	Cost Budget/ Forecast	Schedule Plan/Forecast			
	(millions)	Begin Environmental	Complete Environmental	Complete Design	Complete Construction
Grade Separation Projects:					
17th Street Grade Separation	TBD	TBD	TBD	TBD	TBD
Project R	TBD	TBD	TBD	TBD	TBD
Rail and Station Projects:					
Rail-Highway Grade Crossing Safety Enhancement	\$94.4	Jan-08	Oct-08	Sep-08	Dec-11
Project R	\$94.4	Jan-08	Oct-08	Sep-08	Dec-11
San Clemente Beach Trail Safety Enhancements	\$6.0	Sep-10	Jul-11	Apr-12	Jan-14
Project R	\$6.0	Sep-10	Jul-11	Jun-12	Jan-14
Metrolink Service Expansion Program	\$134.0	May-07	Apr-08	Mar-09	Jun-12
	\$134.0	May-07	Apr-08	Mar-09	Sep-12
Anaheim Rapid Connection	TBD	Jan-09	Oct-14	TBD	TBD
Project S	TBD	Jan-09	Nov-14	TBD	TBD
Santa Ana/Garden Grove Fixed Guideway	TBD	Aug-09	Mar-12	TBD	TBD
Project S	\$252.0	Aug-09	Jan-14	Jul-16	Mar-19
Anaheim Regional Transportation Intermodal Center	\$227.4	Apr-09	Feb-11	Feb-12	Nov-14
Project R & T	\$227.4	Apr-09	Feb-12	May-12	Nov-14

Measure M2

Progress Report



Orange County





COMMITTEE TRANSMITTAL

September 23, 2013

To: Members of the Board of Directors
WK
From: Wendy Knowles, Clerk of the Board
Subject: Status of the Interstate 405 Improvement Project Between State Route 55 and Interstate 605

Regional Planning and Highways Committee Meeting of September 16, 2013

Present: Directors Bates, Donchak, Harper, Lalloway, Miller, Murray, and Spitzer
Absent: Director Nelson

Committee Vote

Recommendations A, C, D, and E were passed by the Members present.

The Committee chose to forward Recommendation B to the Board without a recommendation.

Committee Recommendations (Reflects change from staff recommendations)

- A. Direct staff to continue development of the Interstate 405 improvement, Measure M2 Project K, which adds a single general purpose lane in each direction between Euclid Street and Interstate 605, as approved by the Orange County Transportation Authority Board of Directors on October 22, 2012.
- C. Direct staff to examine options for addressing high-occupancy vehicle degradation, including those that could be implemented in coordination with the Interstate 405 improvement project.
- D. Direct staff under Recommendation C to analyze tolling policies and the use of potential excess toll revenue for use in improving public transportation in and near the project boundaries (i.e., additional roadway and transit improvements).



Committee Recommendations, Continued
(Reflects change from staff recommendations)

- E. Direct staff to explore and coordinate with the Transportation Corridor Agencies on solutions to resolve high-occupancy vehicle lane degradation and opportunities to increase high-occupancy vehicle capacity and connectivity between the Interstate 405 and State Route 73, including opportunities for financial participation in transportation projects in the region.

Staff Recommendation

- B. Preclude further study of the Interstate 405 improvement project Concept B, which includes the addition of a second general purpose lane northbound from Brookhurst Street to Valley View Street, and southbound from the Seal Beach Boulevard on-ramp to Brookhurst Street.

Committee Discussion

The Regional Planning and Highways Committee requested additional information and data be provided in the PowerPoint for the September 23, 2013, Board meeting.

Director Spitzer requested that the corridor cities' Technical Working Group meeting minutes be forward to the Board prior to the September 23, 2013, Board meeting.



ORANGE COUNTY TRANSPORTATION AUTHORITY


**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Staff Report



September 16, 2013

To: Regional Planning and Highways Committee
From: Darrell Johnson, Chief Executive Officer
Subject: Status of the Interstate 405 Improvement Project Between State Route 55 and Interstate 605

A handwritten signature in blue ink, appearing to read "Darrell Johnson", is written over the "From:" line of the memo.

Overview

Project development and environmental documentation are underway for improvements to the Interstate 405 between State Route 55 and Interstate 605. On October 22, 2012, the Board of Directors selected Alternative 1, Measure M2 Project K, which adds one general purpose lane in each direction. On April 22, 2013, the Board of Directors directed staff to screen two new concepts for improvements to Interstate 405. Concept A builds the Measure M2 Project K, converts the existing single high-occupancy vehicle lane to a single high-occupancy toll express lane in each direction, and also adds a second general purpose lane in each direction. Concept B builds the Measure M2 Project K and adds a second general purpose lane in each direction, as in Alternative 2, but truncates the second northbound general purpose lane at Valley View Street. On June 28, 2013, the Orange County Transportation Authority, in partnership with the California Department of Transportation, released a supplemental draft environmental impact report/environmental impact statement which contained additional traffic information, largely in the Long Beach area, not previously contained in the original draft environmental impact report/environmental impact statement. This report provides a summary of the screening results for the two new concepts, as well as a review of public input on the supplemental draft environmental impact report/environmental impact statement.

Recommendations

- A. Direct staff to continue development of the Interstate 405 improvement, Measure M2 Project K, which adds a single general purpose lane in each direction between Euclid Street and Interstate 605, as approved by the Orange County Transportation Authority Board of Directors on October 22, 2012.

- B. Preclude further study of the Interstate 405 improvement project Concept B, which includes the addition of a second general purpose lane northbound from Brookhurst Street to Valley View Street, and southbound from the Seal Beach Boulevard on-ramp to Brookhurst Street.
- C. Direct staff to examine options for addressing high-occupancy vehicle degradation including those that could be implemented in coordination with the Interstate 405 improvement project.

Background

In fall 2003, the Orange County Transportation Authority (OCTA) launched the Interstate 405 (I-405) Major Investment Study (MIS). On October 14, 2005, following an extensive public outreach effort and a comprehensive technical review, the OCTA Board of Directors (Board) adopted MIS Alternative 4 as the strategy to move forward in the project development process. MIS Alternative 4 adds one general purpose (GP) lane in each direction from an area near Brookhurst Street to Interstate 605 (I-605), generally staying within the existing state highway right-of-way (ROW). This was the basis for improvements included in Project K, of the Measure M2 (M2) Transportation Investment Plan, approved by voters on November 7, 2006.

Environmental Phase of Project Development

The environmental phase of project development for the I-405 improvement project (Project) began in early 2009 and included two build alternatives: Alternative 1, which adds one GP lane in each direction (M2 Project K) as approved by the voters, and Alternative 2, which added a second GP lane in each direction. On January 26, 2009, the Board approved the addition of Alternative 3 to both significantly alleviate congestion and provide additional travel choices to commuters, as well as help fund the overall Project during difficult economic times when M2 sales tax forecasts were dropping. Alternative 3 studies the potential for managed lanes, including high-occupancy and tolled (HOT) express lanes, similar to the 91 Express Lanes in northeast Orange County, while also delivering the M2 Project K commitment to the voters. A key milestone was the release of the Project draft environmental impact report/environmental impact statement (DEIR/EIS) on May 18, 2012.

The DEIR/EIS includes the following alternatives as shown in Attachment A:

- **No-Build Alternative**

The No-Build Alternative leaves the I-405 in its existing configuration with no additional lanes or interchange improvements.

- **Alternative 1: Add one GP lane in each direction**

Alternative 1 adds a single GP lane in each direction on the I-405 from Euclid Street to the I-605 interchange. This is the M2 Project K.

- **Alternative 2: Add two GP lanes in each direction**

Alternative 2 is the M2 Project K with the addition of a second GP lane in the northbound direction from Brookhurst Street to the State Route 22 (SR-22)/ 7th Street interchange, and the addition of a second GP lane in the southbound direction from the Seal Beach Boulevard on-ramp to Brookhurst Street.

- **Alternative 3: Add one GP lane and one HOT express lane in each direction**

Alternative 3 is the M2 Project K with the addition of a HOT express lane in each direction on I-405 from State Route 73 (SR-73) to SR-22 east. The HOT express lane would be combined with the existing high-occupancy vehicle (HOV) lane to provide dual HOT express lanes in both the northbound and southbound directions on I-405 between SR-73 and I-605.

On October 22, 2012, the Board selected Alternative 1, M2 Project K, as the recommendation to the California Department of Transportation (Caltrans) for the preferred alternative. Alternative 1 delivers the M2 Project K scope approved by voters, and does not require reconstruction of the Fairview Road overcrossing in the City of Costa Mesa. The approved recommendation also included a design variation to remove the southbound braided on- and off-ramp structures between Magnolia Street and Warner Avenue, which eliminates the need for up to four full commercial property acquisitions and business relocations in the City of Fountain Valley. Parking impacts in the City of Westminster have also been greatly reduced through design modifications. Alternative 1 does not necessitate the relocation of the soundwall that exists along Almond Avenue in the City of Seal Beach.

Project Costs

The cost estimate for Alternative 1, M2 Project K, is \$1.3 billion; Alternative 2, M2 Project K plus an additional GP lane in each direction, \$1.4 billion; and Alternative 3, M2 Project K plus the additional HOT express lane in each

direction, \$1.7 billion. These estimates have been updated based on the latest preliminary engineering in the draft project report, dated May 2012, represent year-of-expenditure dollars, and assume a design-build (DB) delivery method of construction beginning in 2015.

After including the design variation to eliminate the southbound braided ramps in the City of Fountain Valley, the cost estimate of all three alternatives is reduced by approximately \$50 million. In addition, the HOT express lanes in Alternative 3 can be truncated in the vicinity of Euclid Street, rather than connecting to SR-73, eliminating the need to replace the Fairview Street overcrossing and further reducing the cost estimate for Alternative 3 by \$180 million. As shown in Attachment A, these design variation modifications to the alternatives give revised cost estimates of \$1.25 billion for Alternative 1, \$1.35 billion for Alternative 2, and \$1.47 billion for Alternative 3. The cost estimates are based on the scope contained in the draft project report which represents approximately 20 percent of design completion. Updated cost estimates are developed as the design advances and the schedule is updated.

New Concepts

On April 22, 2013, the Board directed staff to screen two new concepts for improvements to the I-405. Both of these concepts include the existing M2 Project K which adds one GP lane in each direction as approved by the voters as shown in Attachment B. Due to traffic and other related impacts which have not been fully studied to the level of an environmental document, either concept could require that a supplemental DEIR/EIS be prepared and circulated for public comments, adding approximately twelve months to the overall Project delivery timeline. It is estimated that this additional environmental work could cost up to \$1.7 million and add one year of inflationary costs, estimated at \$40 to \$44 million, to the DB phase of the Project. The overall delay can be limited to one year by continuing with preliminary design and releasing the DB request for qualifications (RFQ), with options as to which alternative is to be constructed.

Concept A: This concept builds the M2 Project K, converts the existing single HOV lane to a single HOT express lane in each direction, and also adds a second GP lane in each direction, similar to Alternative 2. It assumes that the occupancy rate of the HOV lane would be changed to a minimum requirement of three or more persons (HOV 3+) per vehicle for toll-free use. A preliminary Traffic and Revenue Study analyzing one HOT express lane in each direction has been completed and the results show that for HOV 3+, toll revenues could generate approximately \$163.3 million in toll financing capacity, assuming a level debt structure. If an ascending debt structure is used, the toll revenue stream could generate up to \$186.6 million in toll financing capacity. The toll

revenue for an HOV 2+ free scenario could generate approximately \$3.3 to \$7.4 million which would not be sufficient for financing unless additional funding sources for the HOV/HOT conversion are identified.

The estimated cost of constructing Alternative 2 is \$100 million more than the M2 Project K, Alternative 1. For Concept A, the estimated cost of converting the existing HOV lane to a HOT express lane is \$110 million, and similar to Alternative 2, the cost of the second GP lane is \$100 million. In addition, there is a one year delay escalation cost of \$44 million. Therefore, the incremental cost of Concept A over M2 Project K is \$254 million. Concept A would incrementally increase the required ROW as compared to Alternative 2 for the inclusion of a buffer and possible ingress/egress transition lanes between the HOT express and GP lane. Concept A presents many operational challenges during peak hours. Two lane HOT lanes, such as the 91 Express Lanes, provide more certainty of operations, more throughput, and less financial risk. If Concept A is selected, additional funding of \$254 million would need to be identified. Toll revenue could finance up to \$186 million. The balance of \$68 million would have to come from other sources.

Concept B: This concept builds on the M2 Project K and adds a second GP lane in both directions, as in Alternative 2, but truncates the second northbound GP lane at Valley View Street. The intent of this concept is to avoid impacts to the existing soundwall bordering the I-405 along Almond Avenue in the City of Seal Beach. Preliminary analyses have determined Concept B creates traffic impacts at the confluence of SR-22 and I-405, an extremely high volume traffic area, resulting in significant bottlenecks on the mainline freeway as well as traffic impacts to arterial streets within the cities of Garden Grove, Seal Beach, and Westminster. A more in-depth traffic analysis of Concept B has been performed which shows peak hour traffic being impacted from Beach Boulevard north to I-605. For the 2040 model year, in the morning (AM), the impact to the overall throughput is approximately 400 vehicles per hour less than Alternative 2. In the afternoon (PM), the impact to the overall throughput is up to 2,550 vehicles per hour less than Alternative 2. Alternative 2 models predict northbound speeds on I-405 are 58 miles per hour (mph) at Beach Boulevard and 59 mph at Valley View Street. With Concept B, northbound speeds on I-405 drop from 57 mph at Beach Boulevard to 25 mph at Valley View Street. Annual delay increases from 1.7 million hours under Alternative 2 to 2.4 million hours (47 percent increase) under Concept B.

The estimated cost of constructing Concept B is \$90 million more than the M2 Project K, Alternative 1. The one year delay from implementing Concept B would also include one year of escalation at a cost of \$40 million. Therefore, the total cost of Concept B is \$130 million more than the M2 Project K. Costs

related to mitigation needed on local arterials impacted by the bottleneck have not been determined.

As traffic conditions on the I-405 mainline deteriorate under Concept B, additional northbound traffic could leave the freeway and travel through the cities of Garden Grove, Seal Beach, and Westminster in order to avoid the bottleneck caused by the lane drop at Valley View Street, and to access I-405 north of the bottleneck. Concept B is found to be impracticable and is not supported by Caltrans.

Funding and Revenue

The Board-approved M2020 Plan of Finance includes \$1.25 billion of M2 funding for the M2 Project K single GP lane addition as promised to the voters. The single GP lane can be constructed within all three alternatives, including Concepts A and B. Alternative 3 includes an additional lane for the HOV system for which excess lane capacity can be sold to GP traffic as a HOT lane system, similar to the 91 Express Lanes. Alternative 3 and Concept A, as HOT express lanes, have potential to generate revenue to self-finance additional project costs above and beyond the M2 Project K. The revenue can vary depending on HOV occupancy requirements, Board-approved tolling policy, and debt structure. Attachment B is a summary of Project revenue sources for all three Project alternatives and Concepts A and B.

Alternative 1 can be fully implemented with \$1.25 billion in M2 funding. Alternative 2 has a \$100 million funding shortfall. Alternative 3, with HOV 3+ occupancy using the express lanes for free, generates sufficient revenue to construct the additional HOT lane and generates an additional \$1.5 billion in excess revenue over 30 years for use to relieve congestion in the Project corridor. Alternative 3, with HOV 2+ occupancy using the express lanes for free, does not generate enough revenue for financing to fully fund the additional HOT lane. Alternative 3, with HOV 2+ occupancy using the express lanes for free for only the first five years of operation, creates a financing constraint which requires an additional need of up to \$250 million additional funding, but still generates revenue long term. The source of additional funding has not been identified. Concept A would also require additional funding and performs poorly in comparison to Alternative 3. Additional revenues would need to be identified for both of the Alternative 3 HOV 2+ occupancy options and for Concept A. This would require a change in existing Board policy which currently prioritizes use of state and federal funding for M2 projects. Other transportation authorities and commissions in California have used local sales

tax measure funds (if allowed), Transportation Infrastructure Finance and Innovation Act financing, federal Congestion Mitigation and Air Quality funds, and federal demonstration grants, for the development of toll lanes.

Supplemental DEIR/EIS

The public comments received that relate to the focus of the supplemental DEIR/EIS can generally be categorized as: concern as to the funding and nature of the proposed improvements in the City of Long Beach; proposed mitigation improvements in the City of Long Beach at the intersection of College Park Drive and the Studebaker Road off-ramp; and traffic at the Orange County/Los Angeles County line. Other comments about the Project outside of the scope of the supplemental DEIR/EIS were also received and will be addressed in the final EIR/EIS. These comments included: support of Alternatives 1 and 2; opposition to tolling; opposition to relocation of the existing soundwall at Almond Avenue in the City of Seal Beach; opposition to the proposed northbound braided ramps at Magnolia Street/Warner Avenue in the City of Fountain Valley; and support of mass transit/light rail systems. In addition, the Transportation Corridor Agency expressed its support of the I-405/SR-73 direct connector, and the Orange County Business Council reaffirmed support of Alternative 3.

All of the public comments received are being reviewed so the Project Development team, consisting of Caltrans and OCTA staff, can formalize the recommended Project preferred alternative for final approval by the Caltrans District 12 Director. Based upon the existing Board direction to proceed with project development of the Measure M2 Project K, the schedule includes the preferred alternative selection in October 2013, approval of the final EIR/EIS in May 2014, and the Federal Record of Decision in August 2014.

On June 26, 2013, prior to the release of the supplemental DEIR/EIS, the I-405 Policy Working Group met to discuss the status of the Project, including the schedule for the supplemental DEIR/EIS and the screening of Concepts A and B. The meeting was well attended and the group reaffirmed its support for Alternative 2.

Status of DB Legislation

As of September 6, 2013, the California Senate Transportation and Housing Committee and Senate Appropriations Committee passed AB 401 (Daley, D-Anaheim), which would provide DB authority for the Project. The final bill needs to pass the full Senate and return to the full Assembly for approval of amendments in September 2013. The DB legislation, if approved,

would be effective on January 1, 2014. If not approved, staff will return to the Board to advise on impacts to Project schedule and cost.

HOV Degradation

Moving Ahead for Progress in the 21st Century (MAP-21), enacted on July 6, 2012, requires that state Departments of Transportation (DOTs) prepare a plan to manage degradation for HOV lanes and that DOTs procure a remedy for degraded HOV lanes within 180 days of submitting the degradation study to the Federal Highway Administration (FHWA) or the states risk the loss of federal funding and project approvals.

At the April 8, 2013 OCTA Board meeting, Caltrans provided an HOV degradation presentation which outlined the degraded status of HOV lanes in Orange County. Caltrans presented potential solutions to address degradation which ranged from the least to the most effective for diminishing HOV lane degradation and enhancing corridor vehicle and people throughput. These solutions included prohibiting inherently low emission vehicles in HOV lanes, changing the HOV lane vehicle occupancy requirements from 2+ to 3+, and converting the HOV lanes to HOT lanes.

On July 31, 2013, Caltrans released the California HOV Lane Degradation Action Plan that was provided to FHWA. The listed remedies for freeway segments that show degradation in HOV lanes include: additional carpool lanes; conversion of carpool lanes to toll lanes for single occupant vehicles, and; increased carpool lane vehicle occupancy requirements.

The remedial strategies specified for I-405 in the vicinity of M2 Project K include the following: changing the HOV lane vehicle occupancy requirements from 2+ to 3+, adding a second HOV lane, HOV weaving lane, or adding a second lane and converting both to HOT lanes; adding HOV direct access ramps to/from Bear Street; adding HOV direct access ramps in the vicinity between Beach Boulevard and Bolsa Avenue; adding an HOV direct connector at SR-73; and proposed widening in both directions on I-405 between SR-73 and I-605 including an alternative that adds HOV capacity and converts existing and new HOV lanes to HOT lanes.

Recommendations and Next Steps

It is recommended to continue project development and delivery of Alternative 1, M2 Project K, as previously directed by the Board. This includes commencement of preliminary design and ROW activities, which offers the best opportunity to deliver the M2 Project K, generally on the current schedule, and mitigate the potential for inflationary risk and cost increases. The DB RFQ

is scheduled to be released in early 2014, with the request for proposals (RFP) scheduled to be released in late 2014. Assuming the use of the DB delivery method, construction is expected to begin in mid to late 2015 and would take approximately four years, from late 2015 to late 2019, minimizing inflationary risk. An RFP for construction management services is tentatively scheduled to be issued in November 2013 to provide construction management services during the RFP preparation and DB phases.

It is also recommended that the Board direct staff to preclude further study of Concept B since this concept creates a bottleneck on the northbound I-405.

Additionally, it is recommended to continue to examine options for resolution of HOV lane degradation, including options that could be implemented in coordination with the Project. The range of options that could be evaluated for potential HOT lanes on the I-405 include operational requirements such as vehicle occupancy, hours of operation, and access to the managed lanes, along with tolling policies. Staff could return to the Board in 60 days to present the traffic and revenue and funding options as well as a range of toll policy options for potential HOT lanes, which can include Alternative 3 and Concept A.


Summary

On October 22, 2012, the Board of Directors selected Alternative 1 as the alternative for the Interstate 405 improvement project. Staff is recommending the Board of Directors direct staff to continue with development of the Measure M2 Project K (Alternative 1). A supplemental draft environmental impact report/environmental impact statement has been circulated and review comments received. Screening studies have been completed for two additional Interstate 405 improvement project concepts as directed by the Board of Directors. The California Department of Transportation has provided supporting reports and the response plan to the Federal Highway Administration regarding high-occupancy vehicle lane degradation as required by Moving Ahead for Progress in the 21st Century. Staff is recommending studying options to address high-occupancy vehicle degradation as part of the Interstate 405 improvement project, and report back to the Board of Directors in approximately 60 days.

Attachments

- A. Interstate 405 Improvement Project Proposed Build Alternatives
- B. Interstate 405 Improvement Project Concepts A and B
- C. Interstate 405 Improvement Project Cost Estimates (In Millions \$)
- D. Interstate 405 Improvement Project Revenue Sources (In Millions \$)

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Executive Director, Capital Programs
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ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

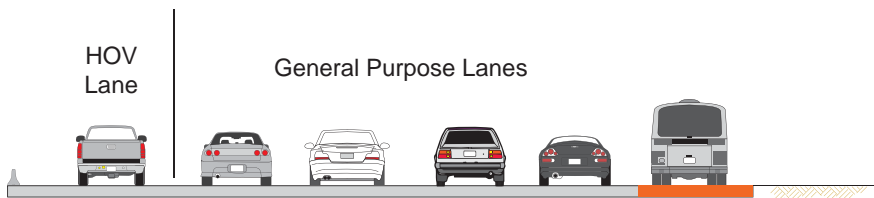
Attachment A

INTERSTATE 405 IMPROVEMENT PROJECT PROPOSED BUILD ALTERNATIVES

Typical Cross Sections between Brookhurst Street and Valley View Street

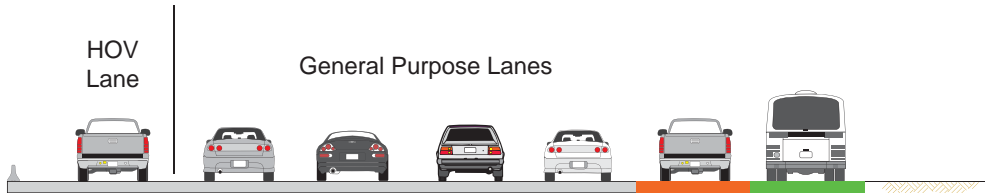


Existing



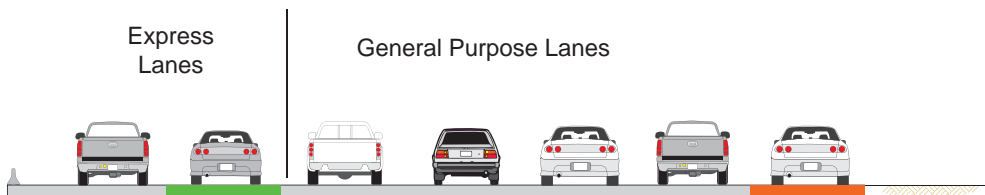
Alternative 1

M2 Project K – Adds one General Purpose (GP) lane






Alternative 2

M2 Project K – Adds one GP lane
Plus an additional GP lane



Alternative 3

M2 Project K – Adds one GP lane
Express Lane Facility: Adds one lane adjacent to the carpool lane. Both lanes will be managed together as the Express Facility

 = M2 Project K Funding 
 = Non M2 Funding Required
 Lane additions are in each direction



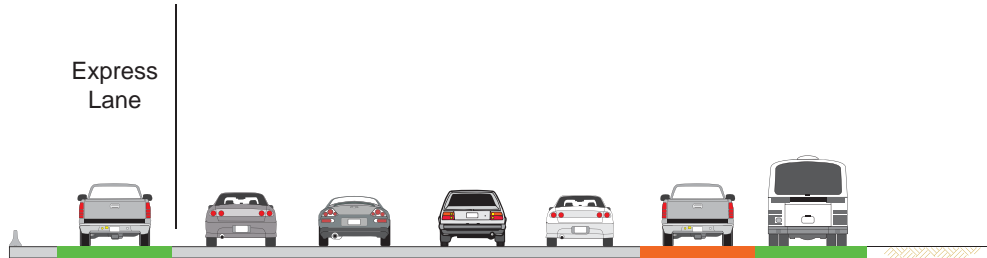
ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Attachment B

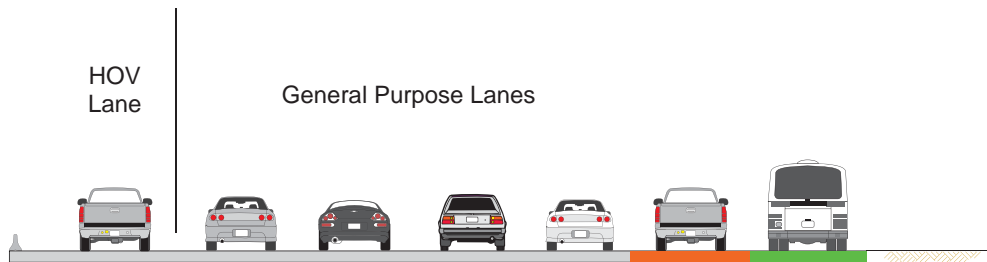
INTERSTATE 405 IMPROVEMENT PROJECT CONCEPTS A AND B

Typical Cross Sections between Brookhurst Street and Valley View Street






Concept A

M2 Project K – Adds one general purpose (GP) lane
Plus an additional GP lane
and changes HOV management to express lane



Concept B

M2 Project K – Adds one GP lane
Plus an additional GP lane
with the northbound additional GP lane
eliminated north of Valley View Street

	= M2 Project K Funding	
	= Non M2 Funding Required	
Lane additions are in each direction		



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Attachment C

**Interstate 405 Improvement Project
Cost Estimates (In Millions \$)**

Description	Alt 1	Alt 2	Alt 3	Concept A ⁽¹⁾	Concept B ⁽²⁾
Cost Estimate	\$1,300	\$1,400	\$1,700	\$1,510	\$1,390
Eliminate Braided Ramps	(\$50)	(\$50)	(\$50)	(\$50)	(\$50)
Eliminate SR-73 Connection			(\$180)		
Cost with Design Variations	\$1,250	\$1,350	\$1,470	\$1,460	\$1,340
Escalation plus additional environmental studies - estimated @ 3% first year				\$1,504	\$1,380

Alt = Alternative

(1) Alt 2 + \$110 for High Occupancy Toll Conversion

(2) Alt 2 less \$10 million for truncation at Valley View Street



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Attachment D

Interstate 405 Improvement Project Revenue Sources (In Millions \$)

Column	A	B	C	D	E	
Description	Cost Assumption	Measure M	Toll Financing Proceeds*	Total Available (B+C)	Funding Gap (D-A)	Notes
Alt 1	\$ 1,250.0	\$ 1,250.0	N/A	\$ 1,250.0	No Funding Gap	
Alt 2	\$ 1,350.0	\$ 1,250.0	N/A	\$ 1,250.0	\$100.0	
Concept B	\$ 1,380.0	\$ 1,250.0	N/A	\$ 1,250.0	\$130.0	Schedule impact creates additional escalation costs
Tolled Alternatives						
Alt 3 (No SR-73) - Assumes HOV3+ Free	\$ 1,470.0	\$ 1,250.0	\$255.4 - \$355.6	\$1,505.4 - \$1,605.6	No Funding Gap	Potential net toll revenues ~ \$1.5 billion over 30 yrs
Concept A - Assumes HOV3+ Free	\$ 1,503.8	\$ 1,250.0	\$163.3 - \$186.6	\$1,413.3 - \$1,436.6	\$67.2 to \$90.5	Requires other non-toll revenue and/or TIFIA financing
Alt 3 (No SR-73) - Assumes HOV2+ Free for 5 Years	\$ 1,470.0	\$ 1,250.0	\$181.4 - \$261.5	\$1,431.4 - \$1,511.5	\$0 to \$38.6	Requires other non-toll revenue and/or TIFIA financing
Concept A -- Assumes HOV2+ Free for 5 Years	\$ 1,503.8	\$ 1,250.0	\$3.3 - \$7.4	\$1,253.3 - \$1,257.4	\$246.4 to \$250.5	Requires other non-toll revenue and/or TIFIA financing
Alt 3 (No SR-73) - Assumes HOV2+ Free	\$ 1,470.0	\$ 1,250.0	\$3.3 - \$12.1	\$1,253.3 - \$1,262.1	\$207.9 to \$216.7	Requires other non-toll revenue and/or TIFIA financing
Concept A - Assumes HOV2+ Free	\$ 1,503.8	\$ 1,250.0	\$3.3 - \$7.4	\$1,253.3 - \$1,257.4	\$246.4 to \$250.5	Requires other non-toll revenue and/or TIFIA financing

* Lower range value includes level debt structure and higher range value includes ascending debt structure.

TIFIA = Transportation Infrastructure Finance and Innovation Act



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

PowerPoint



Status of the Interstate 405 Improvement Project Between State Route 55 and Interstate 605





DEIR/EIS Build Alternatives

Alt	General Description	Original Cost Estimate	Revised Cost Estimate With Variations*
1	Measure M2 Project K - one general purpose (GP) lane in each direction	\$1.3 billion	\$1.25 billion
2	Measure M2 Project K - one GP lane in each direction <ul style="list-style-type: none"> • Plus one additional GP lane in each direction 	\$1.4 billion	\$1.35 billion
3**	Measure M2 Project K - one GP lane in each direction <ul style="list-style-type: none"> • Plus one high-occupancy toll (HOT)/express lane to be combined with the existing HOV lane to create a two lane HOT/express facility 	\$1.7 billion	\$1.47 billion

DEIR/EIS = Draft Environmental Impact Report / Environmental Impact Statement

Alt = Alternative

*Alts 1, 2, 3 – eliminates southbound braided ramps in the City of Fountain Valley (reduces costs by \$50 million)

**Alt 3 – truncates express lanes at Euclid Street/Ellis Street, eliminates State Route 73 connector (reduces costs by \$180 million)

Note: Costs based on scope contained in draft project report, approximately 20 percent design



Project History

Major Investment Study Launched	2003
Major Investment Study Approved	2005
M2 Approved (Project K)	2006
Project Study Report Approved	2008
Draft EIR/EIS Initiated	2009
Phase I Traffic and Revenue Completed	2010
Phase II Traffic and Revenue Completed	2011
OCTA Board Recommends Alt 1	Oct 2012
Concept A and B Screening	Apr 2013
Supplemental Draft EIR/EIS	Jun 2013



Supplemental Draft EIR/EIS Public Comments

❖ Fair share calculation

❖ College Park Drive/Studebaker Road


Signal

❖ Traffic at the county line

**San Diego Freeway
(I-405) Improvement Project**



ORANGE AND LOS ANGELES COUNTIES, CALIFORNIA
12-ORA-405 PM 9.3/24.2 / 07-LA-405 PM 0.0/1.2
12-ORA-22 PM R0.7/R3.8 / 12-ORA-22 PM R0.5/R0.7
12-ORA-73 PM R27.2/R27.8 / 12-ORA-605 PM 3.5/R1.6
07-LA-605 PM R0.0/R1.2
EA 0H1000 / PN 1200000180

**Supplemental Draft Environmental Impact Report/
Environmental Impact Statement**



Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action in accordance with applicable federal laws for this project is being, or has been, carried out by the State of California Department of Transportation under its assumption of responsibility pursuant to 23 U.S.C. 327.




June 2013



Concept A Feasibility (Separate from Draft EIR/EIS)

Concept A

M2 Project K 
+
one more GP
+
Convert HOV to
HOT

HOT = High-Occupancy Toll



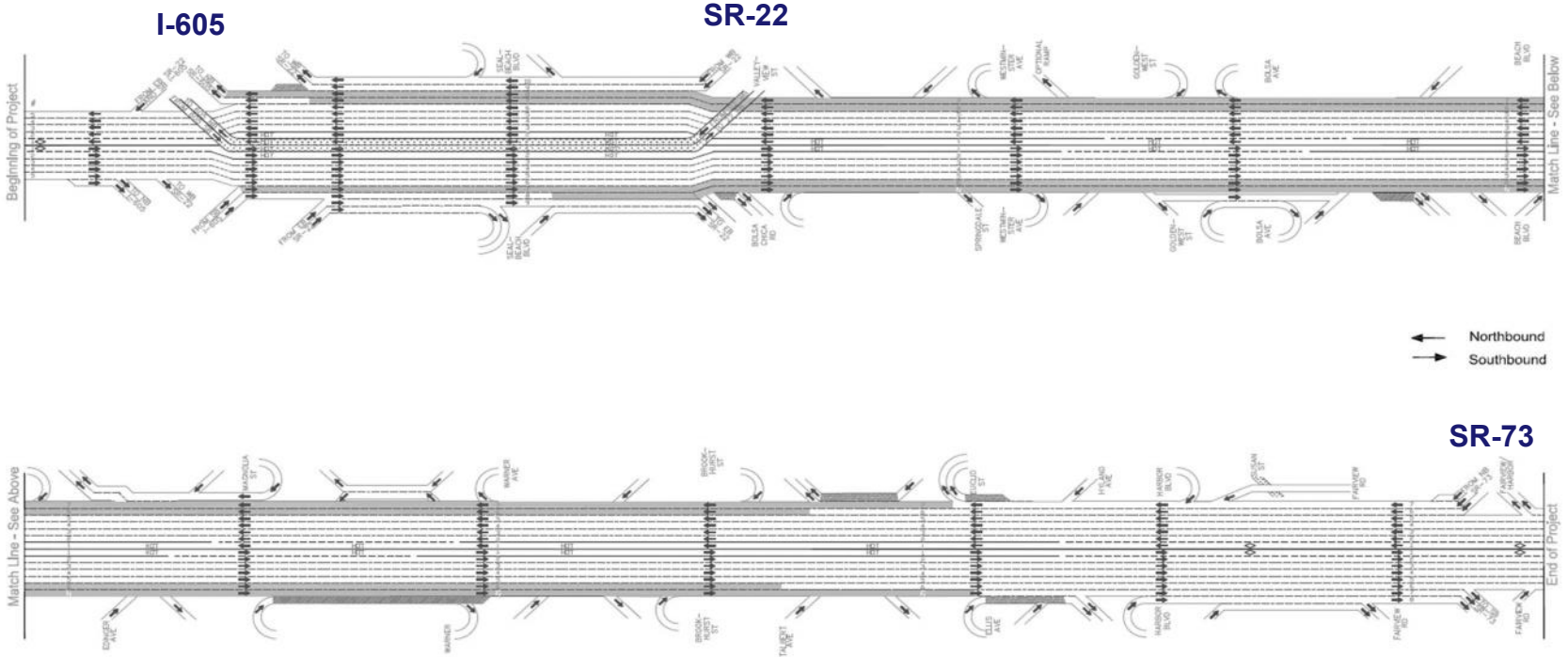
Concept A – Traffic & Revenue

Interstate 405 Update - Stantec





Concept A



Concept A (Add two general purpose lanes north of Euclid/Brookhurst to SR-22/I-605 and change management the HOV lanes to HOT lanes)

Baseline Improvement to Existing Condition
 Proposed General Purpose Lane
 Proposed Auxiliary Lane

DRAFT

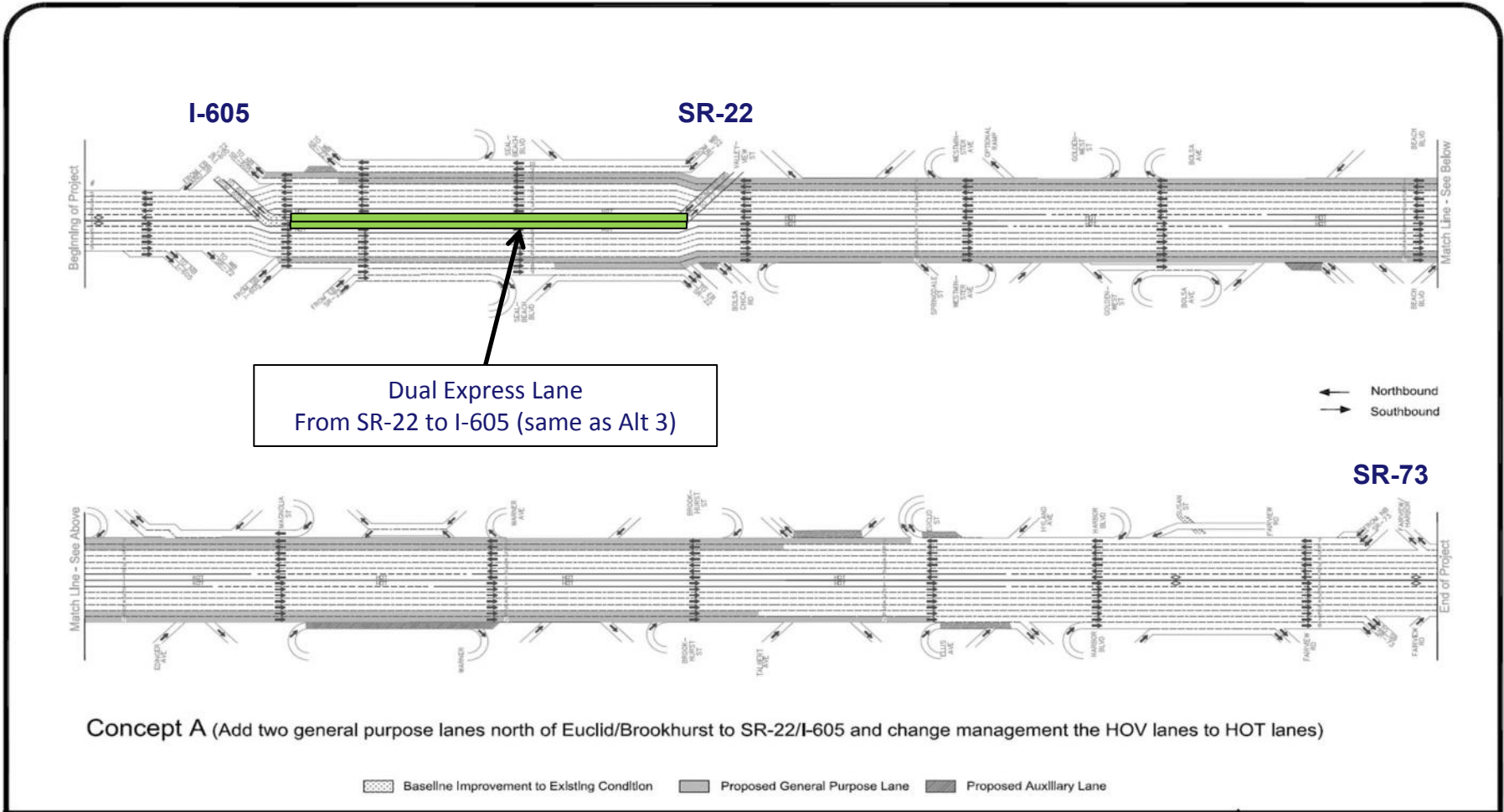
I-405 PA/ED CONCEPT A LANE SCHEMATIC

DRAFT

SHEET 1 OF 1

PARSONS

Concept A



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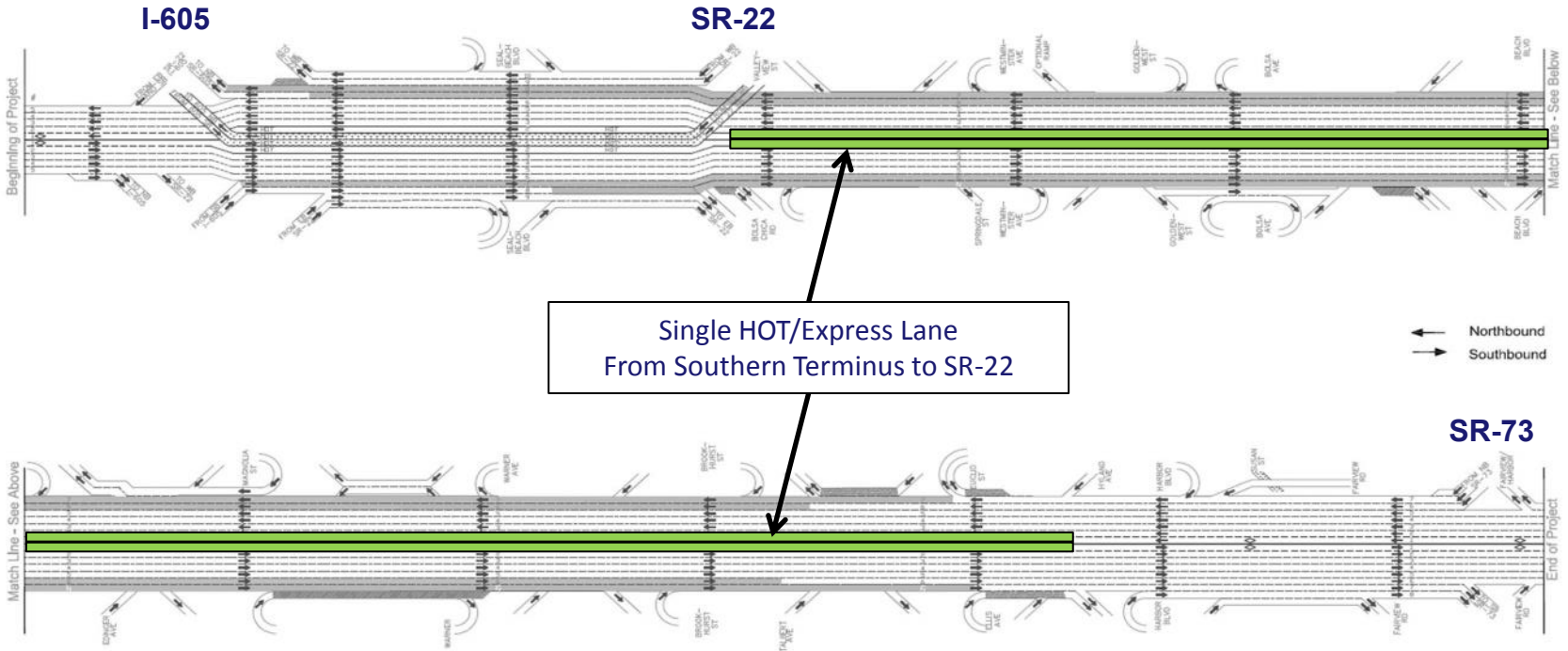
I-405 PA/ED CONCEPT A LANE SCHEMATIC

DRAFT

SHEET 1 OF 1

PARSONS

Concept A

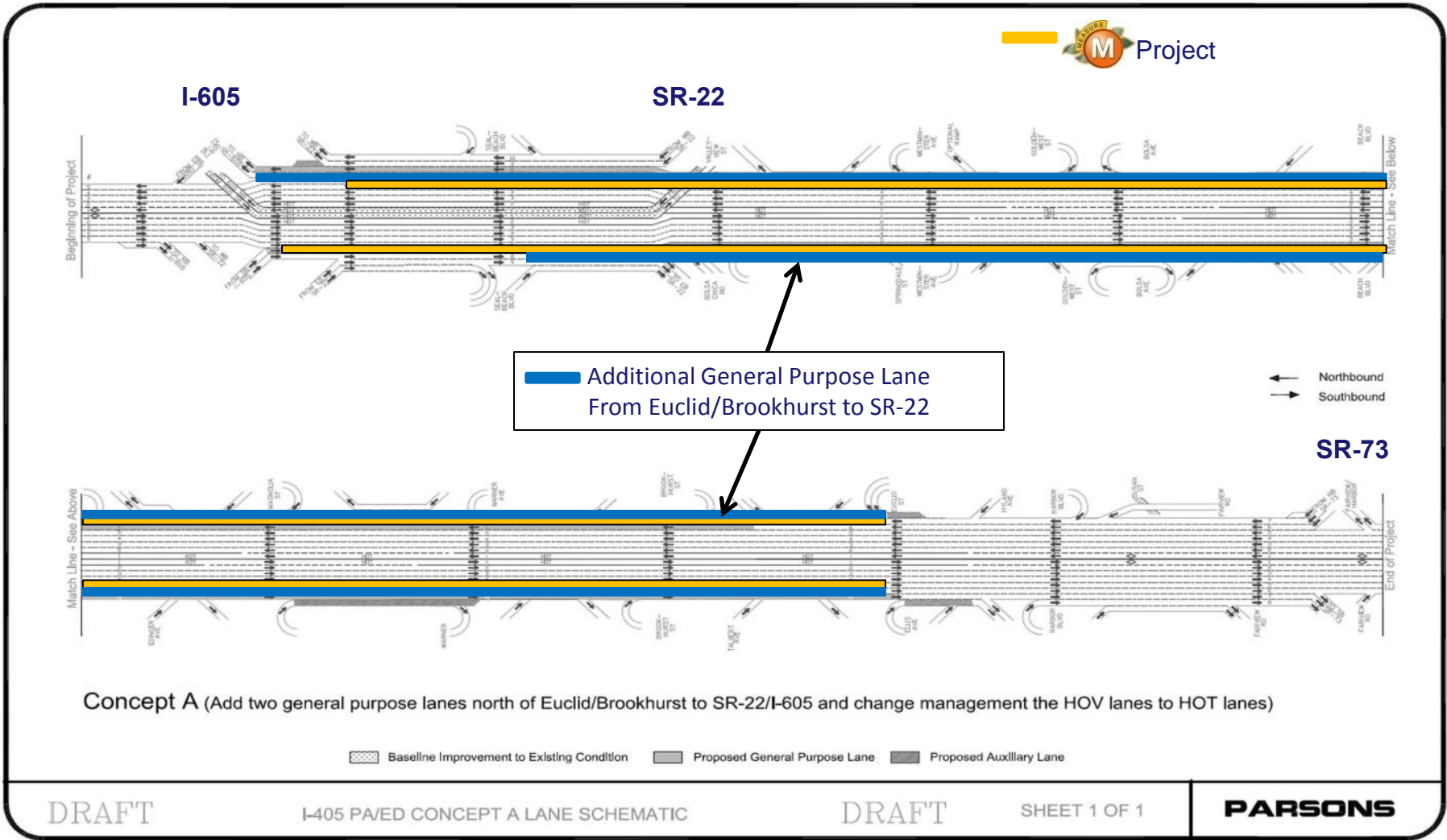


Concept A (Add two general purpose lanes north of Euclid/Brookhurst to SR-22/I-605 and change management the HOV lanes to HOT lanes)

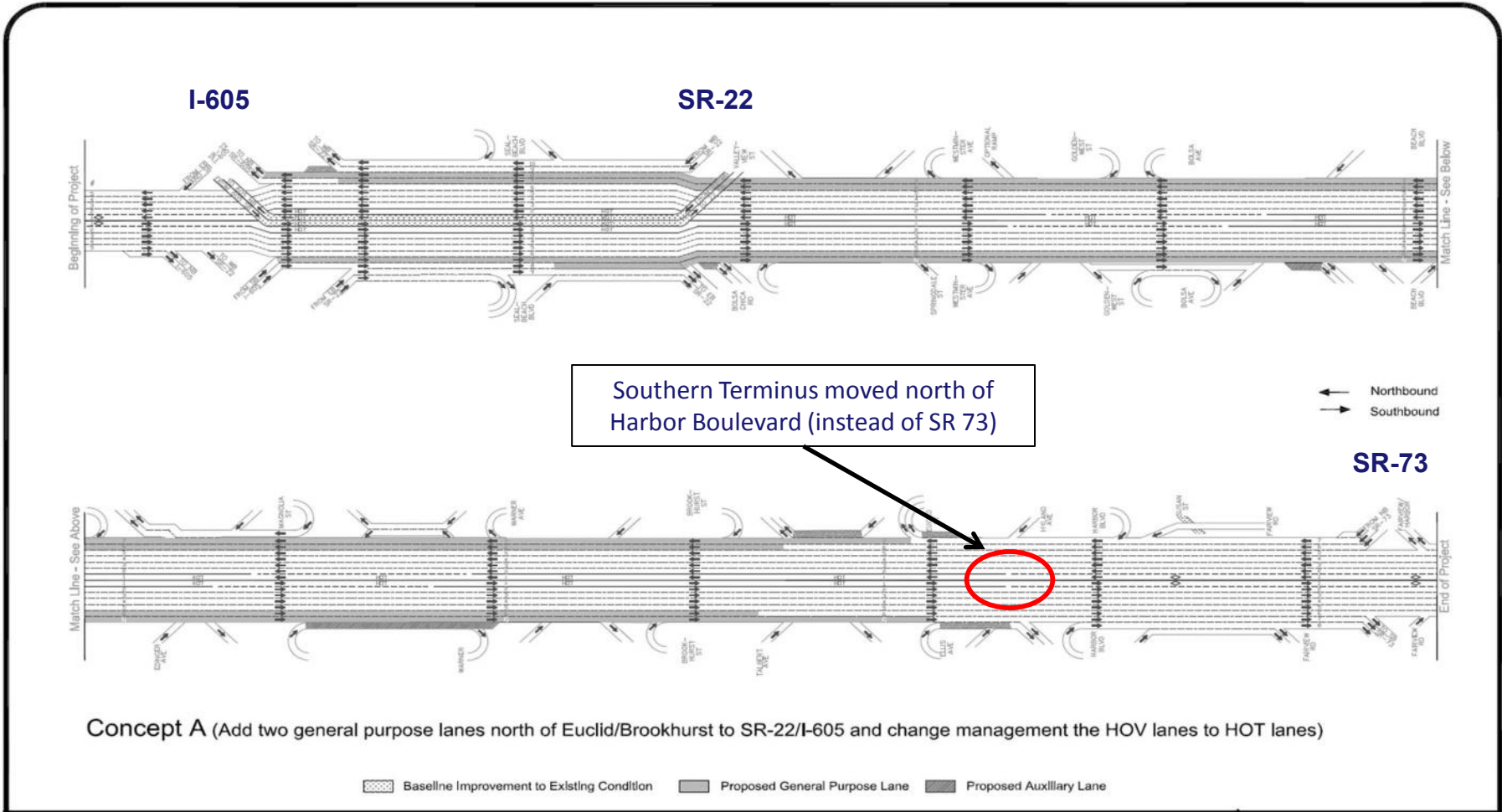
Baseline Improvement to Existing Condition
 Proposed General Purpose Lane
 Proposed Auxiliary Lane



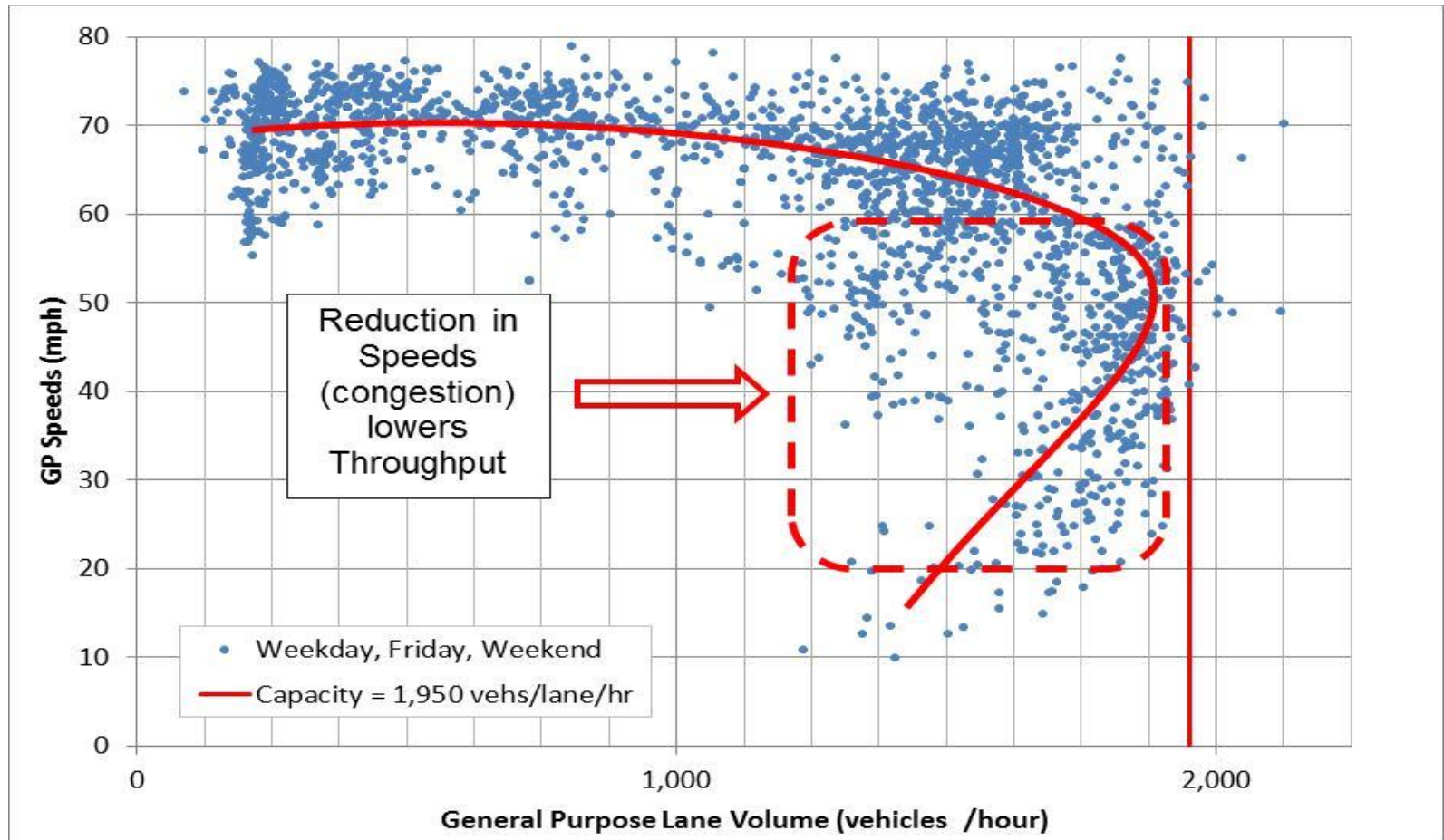
Concept A



Concept A



How Congestion Impacts Throughput



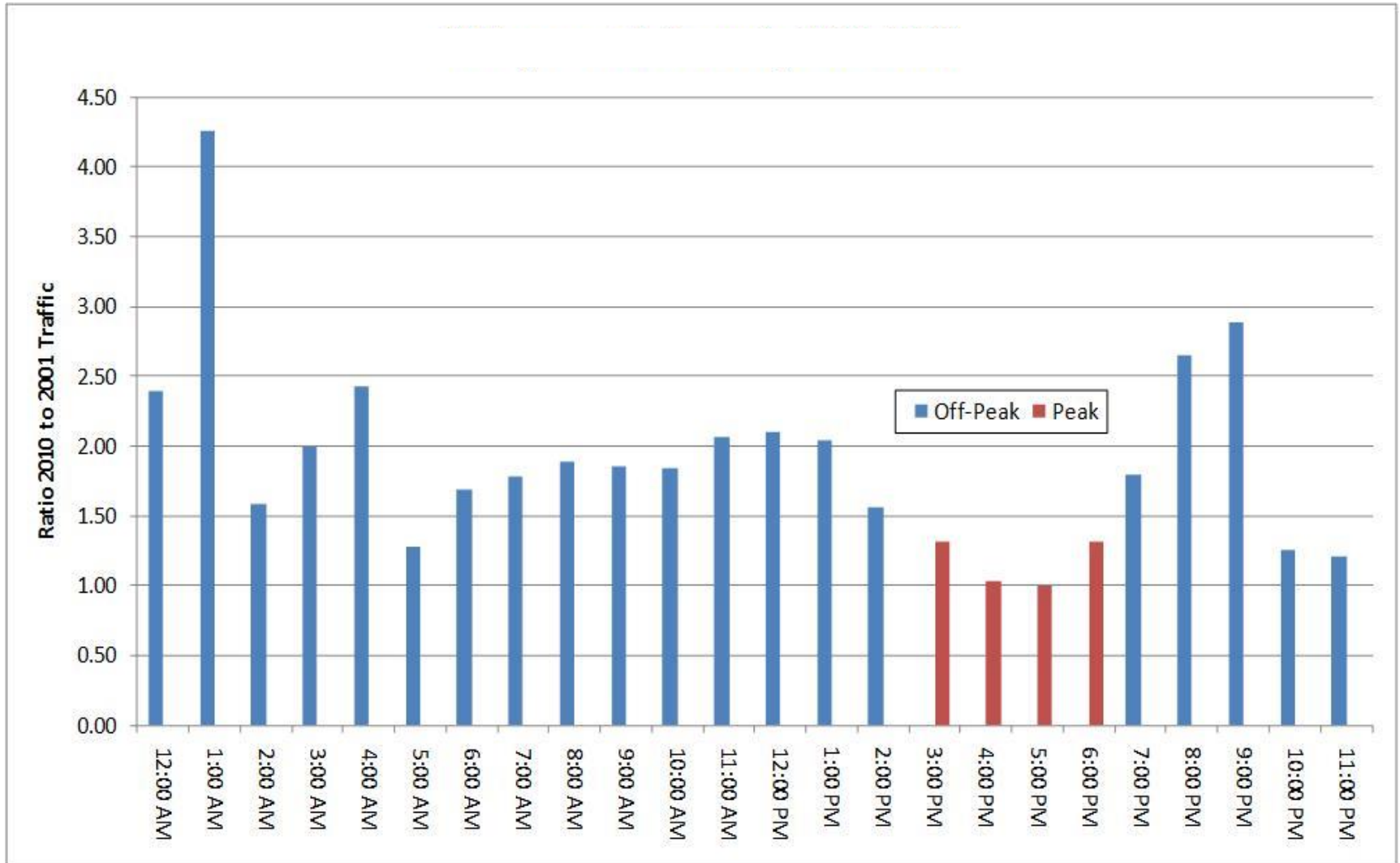


OCTA Toll Policy Assumptions

- Utilized existing 91 Express Lanes toll policy
- Establishes trigger points to avoid congestion in toll lanes
- Toll rates adjusted up or down, depending on traffic volumes
 - Peak tolls can be increased by either \$0.75 or \$1.00
 - Peak tolls can be decreased by \$0.50
- Includes annual cost of living adjustments (3%) for non-peak hours and HOV 3+ free



91 Express Eastbound Growth 2001-2010





Concept A – Traffic & Revenue

Forecasting for Single Express Lane

- Lower volume threshold on single lane (1,550 veh / hr) and direct connector (1,450 veh/hr)
- Toll rates on SR-22/I-605 segment must be increased to ensure total volume does not exceed 3,000 vehicles
- Results in higher rates on SR-22/I-605 segment for Concept A vs. Alternative 3



I-405 Concept A

HOV 3+ Toll Rates

2020 Average Weekday

Segment	Dir	Segment Distance (mi)	Average Toll Rate (2013 \$s)	Peak Toll Rate (2013 \$s)
Harbor to Magnolia	NB	3.8 mi.	\$1.57	\$2.06
	SB	3.6 mi.	\$1.43	\$1.99
Magnolia to Goldenwest	NB	2.6 mi.	\$0.91	\$1.23
	SB	2.4 mi.	\$0.93	\$1.12
Goldenwest to SR-22	NB	2.9 mi.	\$1.65	\$3.56
	SB	3.3 mi.	\$1.25	\$1.83
SR-22 to I-605	NB	2.8 mi.	\$2.18	\$4.73
	SB	2.8 mi.	\$1.37	\$2.02
Full Length Trip	NB	12.0 mi.	\$6.31	\$11.58
	SB	12.1 mi.	\$4.99	\$6.96



I-405 Concept A

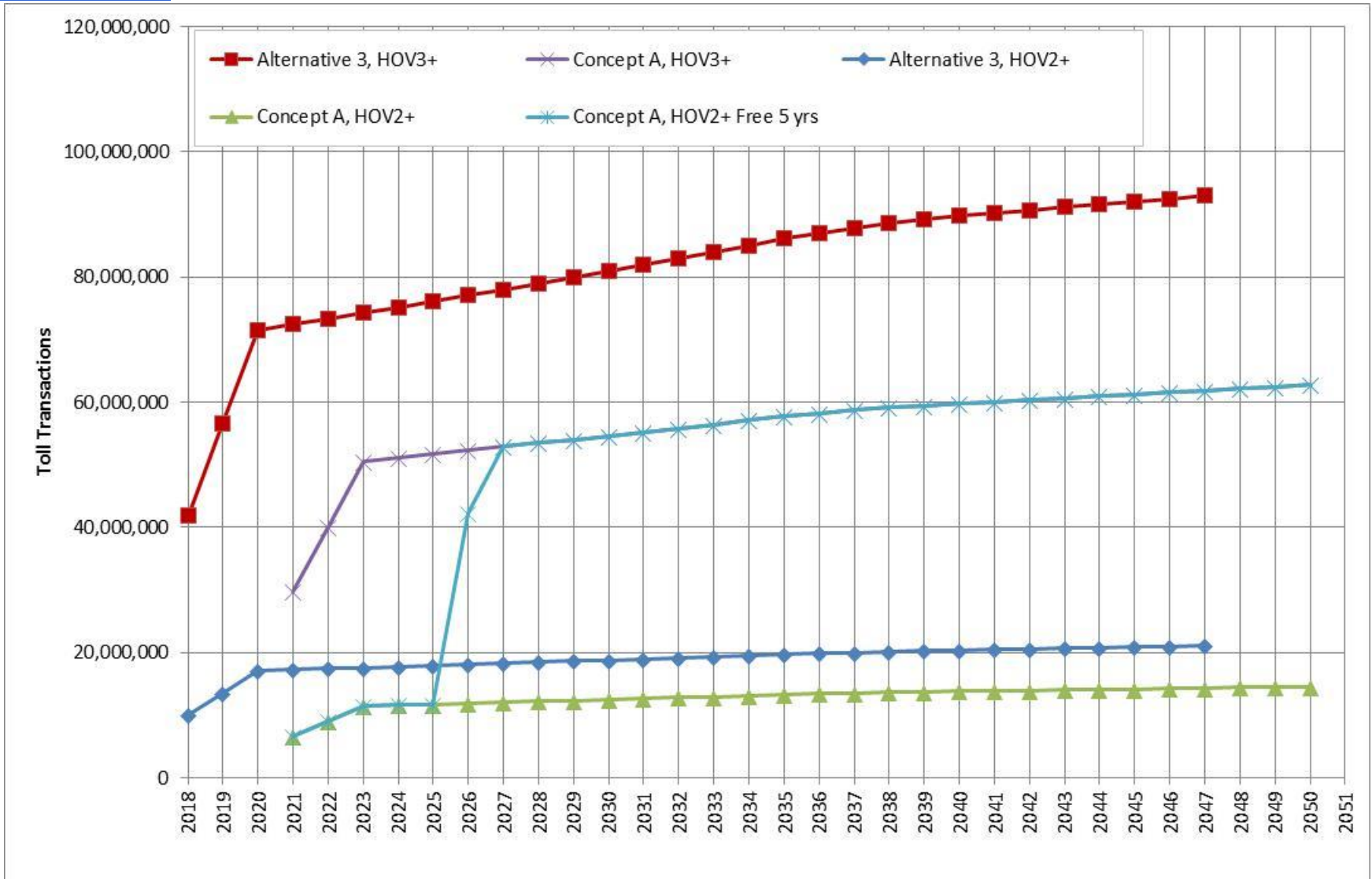
HOV 3+ Toll Rates

2035 Average Weekday

Segment	Dir	Segment Distance (mi)	Average Toll Rate (2013 \$s)	Peak Toll Rate (2013 \$s)
Harbor to Magnolia	NB	3.8 mi.	\$1.53	\$2.06
	SB	3.6 mi.	\$1.44	\$1.99
Magnolia to Goldenwest	NB	2.6 mi.	\$0.90	\$1.23
	SB	2.4 mi.	\$0.92	\$1.12
Goldenwest to SR-22	NB	2.9 mi.	\$3.17	\$5.06
	SB	3.3 mi.	\$1.65	\$2.98
SR-22 to I-605	NB	2.8 mi.	\$4.21	\$6.72
	SB	2.8 mi.	\$1.80	\$3.29
Full Length Trip	NB	12.0 mi.	\$9.82	\$15.07
	SB	12.1 mi.	\$5.80	\$9.38

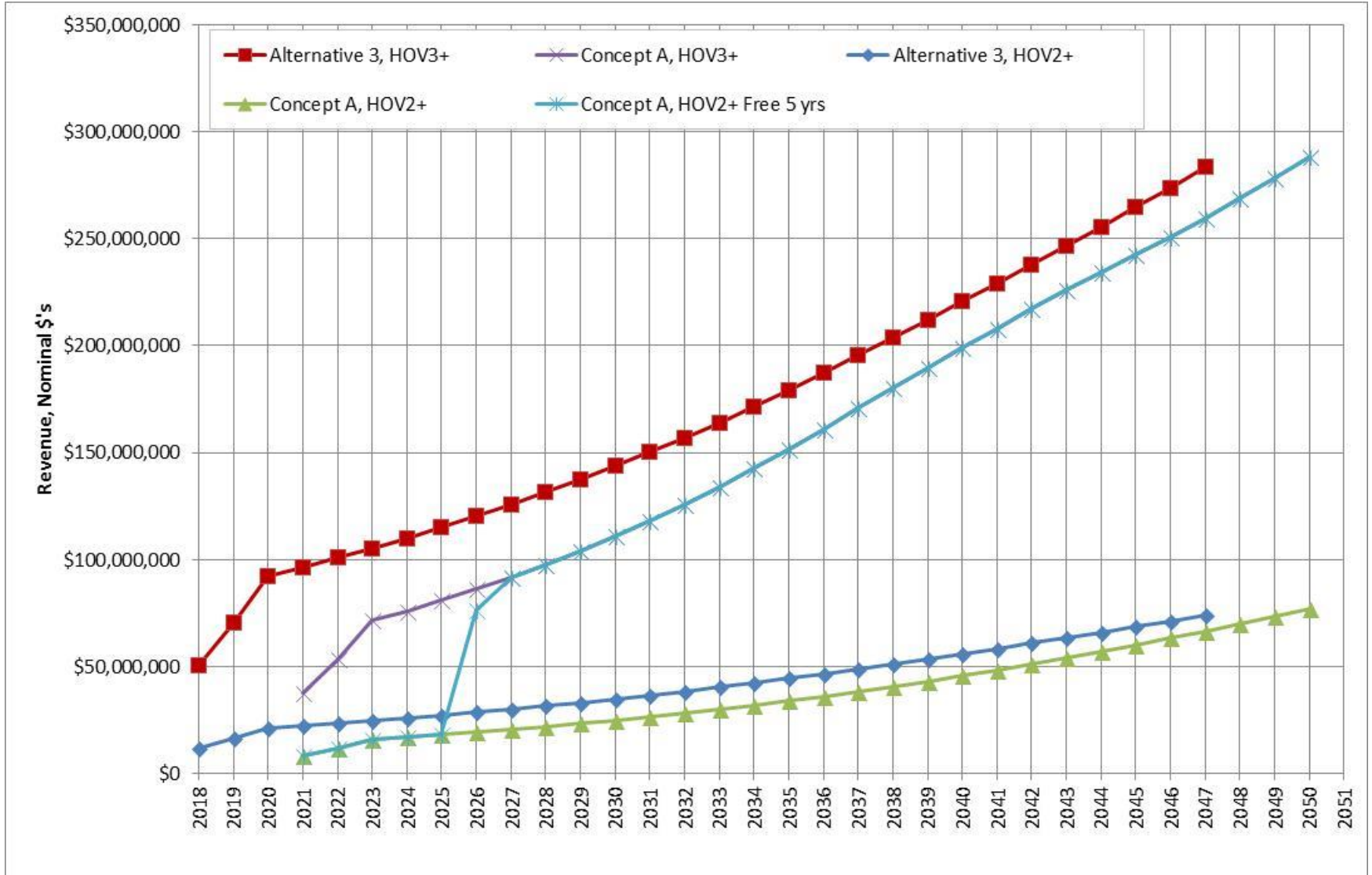


I-405 Concept A vs. Alternative 3 Toll Transactions





I-405 Concept A vs. Alternative 3 Toll Revenue





Concept A - Financing

❖ Assumptions:

- Toll revenues based on Stantec's July 2013 projections
- Non-toll revenues and operating expenses projected by OCTA and based upon 91 Express Lanes model
- Debt issuance in FY 2016-17
- Capitalize interest for 4 or more years
- 2.0 times debt service coverage ratio

❖ Results:

- HOV3+ scenario generates \$163.3 to \$186.6 million in toll road bond proceeds
 - Requires additional non-toll revenue funds (\$67.2 to \$90.5 million)
- HOV2+ scenario generates \$3.3 to \$7.4 million in toll road bond proceeds
 - Requires additional non-toll revenue funds (\$246.4 to \$250.5 million)



Concept B Feasibility (Separate from Draft EIR/EIS)

Concept B*

M2 Project K 

+

One (shorter) GP

* Alt 2 design option, second northbound GP lane eliminated north of Valley View Street



Concept B – Findings (cont.)

❖ PM Peak Hours – (Compared to Alt 2/Year 2040)

- Throughput 900-1400 vehicles/hr less
 - South of Valley View Blvd

- Throughput 2550 vehicles/hr less
 - North of Valley View lane drop

Speed Changes I-405 Northbound

	Beach to Bolsa	Goldenwest to Westminster	Westminster to Valley View	SR-22 to Seal Beach Blvd	7th St to I-605
Alt 2	58 mph	57 mph	59 mph	22 mph	24 mph
Concept B	57 mph	36 mph	25 mph	17 mph	27 mph
Change in Speed	-1 mph	-21 mph	-34 mph	-5 mph	3 mph



Concept B - Considerations

- Results in bottleneck at Valley View St.
- Traffic anticipated to disburse to local arterials in the cities of Garden Grove, Westminster, Seal Beach
- Traffic delays approximately 47% higher than Alt 2 in the Year 2040

Year 2040	Annual Delay Hours	Annual Cost of Delay \$\$
Alt 2	1.7 million	\$18 million
Concept B	2.4 million	\$27 million

- Caltrans is not supportive of concept



I-405 Revenue Sources (In Millions)

Column	A	B	C	D	E
Description	Cost Assumption	Measure M	Toll Financing Proceeds*	Total Available (B+C)	Funding Gap (D-A)
Alt 1	\$ 1,250.0	\$ 1,250.0	N/A	\$ 1,250.0	No Funding Gap
Alt 2	\$ 1,350.0	\$ 1,250.0	N/A	\$ 1,250.0	\$100.00
Concept B	\$ 1,380.0	\$ 1,250.0	N/A	\$ 1,250.0	\$130.00
Tolled Alternatives (No SR-73 HOT Direct Connector)					
Alt 3 - Assumes HOV3+ Free**	\$ 1,470.0	\$ 1,250.0	\$255.4 - \$355.6	\$1,505.4 - \$1,605.6	No Funding Gap
Concept A - Assumes HOV3+ Free***	\$ 1,503.8	\$ 1,250.0	\$163.3 - \$186.6	\$1,413.3 - \$1,436.6	\$67.2 to \$90.5
Alt 3 - Assumes HOV2+ Free for 5 Years***	\$ 1,470.0	\$ 1,250.0	\$181.4 - \$261.5	\$1,431.4 - \$1,511.5	\$0 to \$38.6
Concept A -- Assumes HOV2+ Free for 5 Years***	\$ 1,503.8	\$ 1,250.0	\$3.3 - \$7.4	\$1,253.3 - \$1,257.4	\$246.4 to \$250.5
Alt 3 - Assumes HOV2+ Free***	\$ 1,470.0	\$ 1,250.0	\$3.3 - \$12.1	\$1,253.3 - \$1,262.1	\$207.9 to \$216.7
Concept A - Assumes HOV2+ Free***	\$ 1,503.8	\$ 1,250.0	\$3.3 - \$7.4	\$1,253.3 - \$1,257.4	\$246.4 to \$250.5

* Lower range value includes level debt structure and higher range value includes ascending debt structure

** Potential net toll revenues ~ \$1.5 billion over 30 yrs

*** Requires other non-toll revenue and/or Transportation Infrastructure Finance and Innovation Act (TIFIA) financing



Key Findings

- ❖ **Concept A feasible but performance lags Alt. 3**
 - Requires additional funding

- ❖ **Concept B not recommended for further study**
 - Creates significant bottleneck at Valley View Street
 - Caltrans is not supportive of concept

- ❖ **New performance requirements on HOV lanes may affect overall strategy on I-405 corridor**



Staff Recommendations

A	Direct staff to continue development of the Interstate 405 improvement, Measure M2 Project K, which adds a single general purpose lane in each direction between Euclid Street and Interstate 605, as approved by the Orange County Transportation Authority Board of Directors on October 22, 2012.
B	Preclude further study of the Interstate 405 improvement project Concept B, which includes the addition of a second general purpose lane from northbound from Brookhurst Street to Valley View Street, and southbound from the Seal Beach Boulevard on-ramp to Brookhurst Street.
C	Direct staff to examine options for addressing high-occupancy vehicle degradation, including those that could be implemented in coordination with the Interstate 405 improvement project.



Committee Recommendations

D	Direct staff under Recommendation C to analyze tolling policies and the use of potential excess toll revenue for use in improving public transportation in and near the project boundaries (i.e., additional roadway and transit improvements).
E	Direct staff to explore and coordinate with the Transportation Corridor Agencies on solutions to resolve high-occupancy vehicle lane degradation and opportunities to increase high-occupancy vehicle capacity and connectivity between the Interstate 405 and State Route 73, including opportunities for financial participation in transportation projects in the region.



Project Schedule & Next Steps

OCTA Board Update	September 23, 2013
Caltrans Selects Preferred Alternative	Late 2013
Soundwall Survey and Meetings	Late 2013
AB 401 effective, if approved	January 2014
Final EIR/EIS	May 2014
Design-Build Milestones:	
Issue Request for Qualifications (RFQ)	March 2014
Issue Draft Request for Proposal (DRFP)	August 2014
Issue Request for Proposal (RFP)	January 2015
Design-Build Notice to Proceed	August 2015
Project Construction	2015 to 2019



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Handouts

Wendy Knowles

From: Marita Caruso <carmmarita@aol.com>
Sent: Monday, September 16, 2013 3:51 PM
To: Wendy Knowles
Subject: Please forward to all board members. Alt. 1/405 project

It is being proven by the trial toll lanes on the 110 and the huge losses on the 73, that they price out the average driver and wind up causing heavier traffic in free lanes. The new transponder are confusing and a burden.

The option 1 will impact far less people negatively. Please, be advised that the added lanes in alternative 1 will serve the public realistically.

Marita Caruso
Resident College Park East

Wendy Knowles

From: joya ryerson <jrcavalier@verizon.net>
Sent: Monday, September 16, 2013 5:21 PM
To: Wendy Knowles
Subject: Freeway widening- please share with all members of the board

PLEASE DO NOT PUT IN A TOLL ROAD NEAR SEAL BEACH BLVD AND DO NOT TAKE DOWN THE WALL11 THANK YOU, Joya Ryerson

Wendy Knowles

From: Harriett Walker <wackyws@aol.com>
Sent: Sunday, September 15, 2013 10:20 AM
To: Wendy Knowles
Subject: 405 project

We do not want the alternative of having toll lanes on the 405. It would cause financial distress and great inconvenience to the residents of Seal Beach. The present construction has already inconvenienced us greatly. We do not want or need toll lanes. Please leave our happy community alone! We do not wish to have our sound wall moved, and the freeway to further encroach upon our neighborhood.

Please send this email to all board members.

Harriett and James Walker
4397 Elder Ave.
Seal Beach, CA

Sent from my iPad

Wendy Knowles

From: John L. <narwhal72002@yahoo.com>
Sent: Sunday, September 15, 2013 9:57 PM
To: Wendy Knowles
Subject: 405 Toll Road proposal

Count me in! I feel a toll road on the 405 stretch from Seal Beach to Costa Mesa is an idea long overdue.

Thank you,

Jack Hannah

Wendy Knowles

From: David Kahn <baksdad@yahoo.com>
Sent: Sunday, September 15, 2013 3:17 PM
To: Wendy Knowles
Subject: Proposed I-405 Widening in Seal Beach

Dear Ms. Knowles,

We live in the College Park East section of Seal Beach and we are strongly opposed to any widening plan that would intrude into our tract. Nor are we in favor of any type of toll road plan.

We live about three streets down from where one of the proposals would demolish part of the current noise wall and push 10-15 feet into the tract. Such a change would be highly detrimental to the area.

Aside from losing valuable space between the freeway and the homes in the tract, the increase in noise from the shortened distance would make the area inhospitable and could quite possibly have a pronounced negative effect on our home values.

There is also the issue of the noise, dirt and quite possible physical hazards to the population of this area from any destruction/construction process.

Perhaps most importantly, any plan to push into the tract by moving the wall further onto Almond would cut off the only avenue of ingress to and egress from the tract for many residents.

Please bring our concerns to the Executive Committee and any other OCTA personnel involved in this process.

Thank you for your consideration in this matter,

David Kahn and Nancy Weintraub
3570 Violet Street
Seal Beach, CA 90740

Wendy Knowles

From: Amy Dockendorf <adveronese@yahoo.com>
Sent: Saturday, September 14, 2013 10:17 AM
To: Wendy Knowles
Subject: OC 405 Project

Dear OCTA Board,

Please be fiscally responsible. We were told by OCTA a year ago that the option for a toll lane is not fully funded and they are betting on future revenue to finish paying for it. Please choose the option that does not move the Seal Beach wall and is using funds already approved. The voters did not approve a toll lane in North Orange County.

Thank You,

Amy Dockendorf
College Park East

Sent from my iPad

Wendy Knowles

From: david and kam kalish <kdkalish2@yahoo.com>
Sent: Saturday, September 14, 2013 9:00 PM
To: Wendy Knowles
Subject: Orange County 405 project: please stick with option 1

To whom it may concern,

I would like to express my opinions on the Orange County 405 freeway project. I understand that toll lanes are under consideration. I think this is a very bad idea. First of all, will the toll lanes continue onto the LA county side? If not, there will be a mess when cars will all be trying to enter the carpool lane at the same spot at the county line. Also, in all my driving around SoCal in areas where they have toll lanes, those lanes end up being under-utilized, which means that more cars are in the regular traffic lanes, making those lanes more congested than they need to be. When all this time and money is being spent to improve traffic in the area, making toll lanes will probably be counter productive. The extra traffic congestion will also lead to reduced air quality, and since I live in the vicinity of this project, that would be detrimental to my livelihood and that of my small children who like to play outside.

The only people who tend to benefit from toll lanes are either the wealthy, who can afford to pay the tolls and be in a highway lane with little traffic, and the companies that administer the toll lanes and collect the profits from them. As a tax paying citizen, I feel it is unfair to make these toll lanes for the vast majority of the citizens in the area.

If you were to take a poll, I bet that a vast majority of people will agree with me.

Thank you for your time

Sincerely,

David Kalish

Wendy Knowles

From: Brad & Trisha Morris <somethingobvious@gmail.com>
Sent: Saturday, September 14, 2013 5:40 PM
To: Wendy Knowles
Subject: 405 Expansion Concerns

PLEASE FORWARD TO EVERY BOARD MEMBER.

Thank you!

OCTA Board Members:

We have significant concerns about reopening the conversation around the expansion of the 405.

Concerns/Comments re: the proposed expansion of the 405.

Any scenario that involves tearing down and moving the soundwall in Seal Beach along Almond avenue is unacceptable

- • Any period of time without any part of the wall is unacceptable in our neighborhood. The noise would be completely intolerable not only from the construction, but from the freeway. Could you sleep with nothing between your home and the 405? How do you expect our children to?
- • I am confident that the noise level while there is no wall violates any number of environmental issues in the study that were glossed only looking at the final result. The final result will certainly be bad enough for us, but the rebuild is completely intolerable.
- • There is absolutely no way they can build a new wall before tearing down the old (not enough room for the workers and equipment between the two structures).
- • No one knows how long the wall be down because “they haven’t looked at that closely yet”. That answer is completely unacceptable given how long it could potentially be down.
- • There will still be a backup as you approach the 605 because LA County is not do any expansion there. THAT BACK UP WILL FURTHER BOTTLENECK OUR EXITS AND CREATES FURTHER POLLUTION IN THE HOMES & COMMUNITIES BORDERING THE 405
- • Our property values will likely decrease – almost certainly during the period where the wall is being rebuilt and it is non-existent, and even afterwards because we will lose the landscaping we currently enjoy, not all of the wall will be uniform as not all of it is moving, and because the noise and pollution will be that much closer to our homes. In addition, our exits will be bottlenecked by the narrowing of lanes at the county line so getting to and from our homes will be perceived as more challenging instead of an improvement.
- • Pollution will only increase in an area that already has more than its fair share of black soot on everything.
- • We will lose 1 side of parking on Almond. This may not seem like a big deal at first blush, but our street sweeping does one side of a cul de sac at a time, and several of our cul de sacs have limited to

almost no curb parking. What happens when the street sweeper is coming down the side of Almond that has parking – where are those cars supposed to go? Blocks away?

- • We have enjoyed that wider street now for several decades and a more narrow street will affect the safety of our children, bicyclists, roller bladers, runners, walkers, dog walkers, and the elderly who prefer to use their walkers on the road instead of the bumpy sidewalk. And that list is not all inclusive as many of our residents use Almond to access our parks.
- • Measure M did not approve Alternative 2 and 3, only Alternative 1.
- • The new wall will not be as good as our current one – not up to the same earthquake standards as when originally built.
- • I lack faith that the builders will truly make rebuilding the wall a priority – what if something happens and we don't get our wall back for a long time or at all!
- • Power outages for the entire neighborhood as power lines are relocated is unacceptable
- • We are equally concerned for our neighbors in Fountain Valley who will lose jobs and revenue for the city when 4 of their businesses are uprooted. I know there is talk about relocating them, but so much of a business's success is dependent on it's location – it is unlikely to be a move up for them.
- • We will lose trees in Almond Park if the wall is moved at all in that area. The plan right now is to not move that part, so why do you have to move the adjacent parts????
- • It seems that either Alternative 2 or 3 will create more lanes of traffic outside our neighborhood by just moving the bottleneck to the LA Count/Orange County interface on the 405. The result is we'll have MORE pollution and noise in our neighborhood as the freeway clogs right at the border, and all those extra cars have nowhere to go with no other freeways expanded. The 605 northbound has never been an issue; the majority of the traffic backup is caused by the 405 north of OC, and expanding the freeway to the border not only fails to address the issue it makes the pollution worse in this area as more cars are backed up more hours of the day on the freeway. The added pollution could be significant for all of us, especially children with asthma, and elderly people with emphysema/COPD, bronchitis, or asthma.

Proposals:

- • Go with Alternative 1 as approved by the voters in Measure M
- • Narrow the shoulder by a few feet where necessary to avoid moving the wall at all – bridges don't have to have a 10' foot shoulder, so having small sections with smaller shoulders should be achievable without having to make changes to the soundwall.
- • Start eliminating one of the General Purpose lanes early to avoid moving the wall
- • Consider light rail or some other public transportation.
- • Lobby the heck out of the Navy to give a few feet where needed on their side – we don't need 10 feet all the way, just occasionally
- • **DO WHATEVER IT TAKES NOT TO MOVE THE WALL!!!!!!!!!!!!!!**



CITY OF FOUNTAIN VALLEY

CITY HALL 10200 SLATER AVENUE FOUNTAIN VALLEY, CALIFORNIA 92708

THE OFFICE OF THE MAYOR
Website: www.fountainvalley.org

(714) 593-4403 FAX: (714) 593-4494
Email: fvproud@fountainvalley.org

August 29, 2013

Mayor:
Mark McCurdy

Mayor Pro Tem:
Michael Vo

Council
Members:
Steve Nagel
Teryl Brothers
John J. Collins

City Manager:
Bob Hall

City Attorney:
Dan R. Burns

Chairman Greg Winterbottom
Orange County Transportation Authority
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584

Honorable Chairman and Members of the Board:

On behalf of the City of Fountain Valley, I submit this letter reaffirming the City's continued support of Alternative 2 (or Concept B, which is essentially Alternative 2 truncated in the northbound direction at Valley View) and opposition to Alternative 3 and toll lane options. Attached is a copy of the comment letter submitted by the City in response to the Supplemental DEIR that was recently circulated. In that letter, please note the reference to the City Council resolution adopted July 17, 2012, indicating support of Alternative 2 and opposition to Alternative 3 and toll lanes.

The City strongly encourages the Board of Directors of OCTA to support Alternative 2 or Concept B to add two General Purpose lanes to I-405 as the Locally Preferred Alternative (LPA). Having been unanimously supported by the corridor agencies, it truly is the locally preferred alternative.

Sincerely,

Mayor Mark McCurdy

Attachment

cc: City Council
Director of Public Works/City Engineer
Planning/Building Director



CITY OF FOUNTAIN VALLEY

www.fountainvalley.org

10200 SLATER AVENUE • FOUNTAIN VALLEY, CA 92708-4736 • (714) 593-4400, FAX (714) 593-4498

August 12, 2013

Smita Deshpande, Branch Chief
Caltrans District 12
Attn: I-405 SDEIR-EIS Comment Period
2201 Dupont Drive, Suite 200
Irvine, CA 92612

RE: I-405 SDEIR-EIS Comment Period

Dear Ms. Deshpande:

Since the City's last comment submittal on July 17, 2012, regarding the I-405 DEIR-DEIS, the City Council of Fountain Valley adopted Resolution No.: 9375 on July 17, 2012, supporting Alternative No. 2 of the I-405 Improvement Project (attached).

Since the adoption of that resolution, there have been two additional alternatives or concepts introduced by OCTA: 1) Concept A, which is Alternative 2 with conversion of the existing HOV lane to a single HOT lane and, 2) Concept B, which is essentially Alternative 2 in its entirety except the second NB lane is truncated at Valley View. The City finds Concept B to be consistent with the goals of Alternative 2 and the City supports it.


The following comments are in addition or are amendments to the City's previous comment letter dated July 17, 2012.

Right-of-Way Impacts

The City requests that the efforts underway to eliminate the braided ramp design at the Warner/Magnolia south side interchange continue in favor of a condition similar to existing to avoid the need for full takes of property.

As noted above, this letter is additional comments to our original DEIR-DEIS letter and as such make note of the on/off ramp at Warner/Magnolia north side of the freeway. It is proposed that a braided on/off ramp be built. We believe the DEIR did not adequately describe the project magnitude and its impacts on noise, privacy, and aesthetics to the adjacent properties on Daisy Avenue. The City is greatly concerned regarding impacts to these properties.

Sincerely,


Raymond H. Kromer
City Manager

Attachment

c: City Council
✓ Director of Public Works/City Engineer
Planning Director

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
FOUNTAIN VALLEY SUPPORTING ALTERNATIVE NO. 2 OF
THE I-405 IMPROVEMENT PROJECT**

WHEREAS, the Orange County Transportation Authority (OCTA) in association with the State of California Department of Transportation (Caltrans) and the cities adjacent to the I-405 Freeway Corridor between the SR-73 and I-605 freeways, has been working on the I-405 Freeway Improvement Project; and

WHEREAS, Alternative No. 2, which adds two general purpose lanes in each direction, provides the greatest transportation benefit to the residents, businesses, and community of the City of Fountain Valley by providing the greatest travel time savings and vehicle capacity in the general purpose lanes; and

WHEREAS, Alternative No. 2 provides the greatest level of benefit to the entire I-405 Corridor, all cities along the corridor, and all users of the I-405 corridor without converting existing lanes to toll lanes and requiring the paying of tolls; and

WHEREAS, Alternative No. 2 has less right-of-way impacts to properties within Fountain Valley and other cities along the I-405 corridor than Alternative No. 3; and

WHEREAS, the City does not support the imposition of tolls for any portion of the I-405 Improvement Project as are included in Alternative No. 3; and

WHEREAS, the City agrees with OCTA that this is possibly the only chance in decades to make improvements to the I-405 corridor between SR-73 and I-605 and because of that rare opportunity the socially, economically, and politically responsible action is to provide for the greatest transportation improvements able to be constructed that best utilize taxpayer funds without requiring motorists to pay tolls to use portions of the improvements constructed

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Fountain Valley hereby affirms its support for the I-405 Freeway Improvement Project Alternative No. 2 as the superior and responsible transportation improvement alternative for the I-405 corridor from SR-73 to I-605.

PASSED and ADOPTED this 17th day of July, 2012.

ATTEST:

Kathleen Beard
City Clerk (Deputy)

[Signature]
Mayor

APPROVED AS TO FORM:

[Signature]
City Attorney

VOTE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF FOUNTAIN VALLEY)

I, Kathleen Heard, Deputy City Clerk of the City of Fountain Valley, do hereby certify that the foregoing Resolution was adopted at the Council meeting held on July 17, 2012 by the following vote, to wit:

AYES: CRANDALL, NAGEL, VO, MCCURDY, COLLINS
ABSENT: NONE
NOES: NONE


Kathleen Heard, Deputy City Clerk



CITY OF COSTA MESA

CALIFORNIA 92628-1200

P.O. BOX 1200

FROM THE OFFICE OF MAYOR JAMES M. RIGHEIMER

September 16, 2013

Mr. Gregory T. Winterbottom, Chairman, Board of Directors
Members of Board of Directors
Orange County Transportation Authority
550 South Main Street/P.O. Box 14184
Orange, CA 92863-1584

SUBJECT : INTERSTATE 405 IMPROVEMENT PROJECT

Dear Chairman Winterbottom and Honorable Board Members:

The City of Costa Mesa appreciates the Orange County Transportation Authority (OCTA) for its leadership and efforts in the implementation of regional traffic solutions. Over the past decade, the City has partnered with OCTA on several regional as well as local projects, including the I-405 Improvement project. The City understands that the Regional Planning & Highways Committee and the OCTA Board are considering certain actions on the I-405 project on September 16, 2013, and September 23, 2013, respectively.

As you are aware, the Costa Mesa City Council had approved a resolution in June 2012, supporting Alternatives 1 and 2 of the I-405 Improvement Project. This was then followed by OCTA Board approval of Alternative 1 as the locally preferred alternative on October 22, 2012. Since then, the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) was re-circulated and the State of California Department of Transportation (Caltrans) conducted a Statewide High Occupancy Vehicle (HOV) Degradation study. This study was pursuant to the requirements of the federal transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21).

The City of Costa Mesa requests that the OCTA RP&H Committee, as well as the Board postpone taking action on this project, pending City's review and discussions with Caltrans and OCTA staff on the degradation study and various options that are being considered as a result of this study. The I-405 Improvement Project is an important element of the Measure M2 program and requires a high level of cooperation between OCTA, Caltrans and all impacted agencies to assure a successful project delivery. The City of Costa Mesa looks forward to working with OCTA, Caltrans, and the affected corridor cities on this major improvement project.

Sincerely,

James M. Righeimer
Mayor

c Costa Mesa City Council
Darrell Johnson, OCTA CEO
Ryan Chamberlain, Chief, Caltrans District 12
Thomas R. Hatch, Chief Executive Officer
Ernesto Munoz, Public Services Director
Raja Sethuraman, Transportation Services Manager



Transportation Corridor Agencies™

September 16, 2013

Orange County Transportation Authority
Regional Planning and Highways Committee
550 South Main Street
Orange, CA 92863

Subject: Interstate 405 Improvement Project between State Route 55 and
Interstate 605

Dear Chairwoman Bates and fellow committee members,

I am Rush Hill, Mayor Pro Tem of Newport Beach and chair of the San Joaquin Hills Transportation Corridor Agency. I present my comments today on Item 9 of your agenda for your consideration, not only as a fellow elected representative, but also as a second generation resident of Orange County. In reading the staff report and accompanying HOV degradation study prepared by Caltrans, I urge you to include a direct connector from State Route 73 to and from Interstate 405 as part of the I-405 Improvement Project. The direct connector should be included along with whichever option is selected as the preferred alternative. Including a direct connector at this time will have the following benefits:

- 1) It allows for additional capacity for the 405/73 interchange and eliminates a bottleneck at that location,
- 2) It provides regional connectivity between two major highways,
- 3) It provides commuters with a choice in using either the general purpose lanes or HOV or potential HOT systems,
- 4) It reduces the need for weaving across general purpose lanes to access or exit the median element,
- 5) It provides redundancy at the connection by allowing for an alternate route should one of the connectors become blocked or inoperative for any reason,
- 6) Construction impacts to the local community are reduced if the connector is built along with the major widening project.

I applaud staff for recommending the Committee explore options that could be implemented in coordination with this project to address the degradation currently occurring in the existing HOV lanes. Our agency would be glad to participate in this

Neil Peterson, Chief Executive Officer

125 Pacifica, Suite 100, Irvine, CA 92618-3304 • (949) 754-3400 Fax (949) 754-3467

TheTollRoads.com

Members: Aliso Viejo • Anaheim • Costa Mesa • County of Orange • Dana Point • Irvine • Laguna Hills • Laguna Niguel • Laguna Woods • Lake Forest
Mission Viejo • Newport Beach • Orange • Rancho Santa Margarita • Santa Ana • San Clemente • San Juan Capistrano • Tustin • Yorba Linda

Orange County Transportation Authority
Regional Planning and Highways Committee
September 16, 2013
Page 2

effort as we continue to work with OCTA and Caltrans on improving network connectivity between the various transportation systems.

As your staff reviews the comments received during the public comment period of the draft EIR/EIS and recent supplemental document, I urge you to consider including the direct connector as part of the preferred alternative for the I-405 Improvement Project.

Thank you,

A handwritten signature in black ink, appearing to read "Rush Hill". The signature is stylized with a large initial "R" and a long horizontal stroke at the end.

Rush Hill
Chairman, San Joaquin Hills Transportation Corridor Agency

cc:
Darrell Johnson, OCTA
Neil Peterson, TCA



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Handout



BOARD OF DIRECTORS

Gregory T. Winterbottom
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Todd Spitzer
Director

Frank Ury
Director

Ryan Chamberlain
Ex-Officio Member

CHIEF EXECUTIVE OFFICE

Darrell Johnson
Chief Executive Officer

September 20, 2013

The Honorable James M Righeimer
Mayor
City of Costa Mesa
P.O. Box 1200
Costa Mesa, CA 92628-1200

Dear Mayor Righeimer:

Thank you for your recent letter regarding the Interstate 405 Improvement Project (I-405 Project) and the City of Costa Mesa's (City) request to postpone taking action on the project pending the City's review and discussions with the California Department of Transportation (Caltrans) and Orange County Transportation Authority (OCTA) staff on the degradation study and various options that are being considered as a result of this study.

The OCTA and Caltrans are committed to reducing congestion, enhancing operations, and increasing mobility while minimizing environmental impacts and right-of-way acquisition. Analysis of potential solutions to alleviate congestion on the I-405 corridor in Orange County has been underway for nearly a decade.

It is important the I-405 Project continues to move forward in order to avoid further schedule delays and escalation costs.

On Monday, September 23, 2013, the OCTA Board of Directors (Board) will consider directing staff to continue development of the I 405 Project, Measure M2 Project K, which adds a single general purpose lane in each direction between Euclid Street and Interstate 605, as approved by the Board on October 22, 2012.

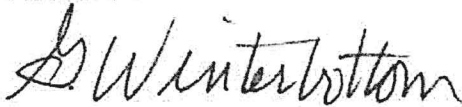
In addition, the Board will consider directing staff to explore and coordinate with the Transportation Corridor Agencies on solutions to resolve high-occupancy vehicle lane degradation and opportunities to increase high-occupancy vehicle capacity and connectivity between the I-405 and State Route 73 (SR-73), including opportunities for financial participation in transportation projects in the region. Staff intends to report back to the Board in approximately 60 days. During this time, staff is planning to meet with the City to discuss the project with a specific focus on the Fairview Street Bridge and a potential direct connection to SR-73.

Mayor Righeimer
September 20, 2013
Page 2

OCTA looks forward to working closely with the City of Costa Mesa as the project progresses.

Please feel free to contact me at (714) 560-5343 if you have any questions.

Sincerely,



Gregory T. Winterbottom
Chairman

GTW:cb

c: OCTA Board of Directors
Darrell Johnson, OCTA Chief Executive Officer
Ryan Chamberlain, Caltrans, District 12 Director
Costa Mesa City Council
Thomas R. Hatch, Chief Executive Officer
Ernesto Munoz, Public Services Director
Raja Sethuraman, Transportation Services Manager



CITY OF COSTA MESA

CALIFORNIA 92628-1200

P.O. BOX 1200

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The City of Costa Mesa requests that the OCTA RP&H Committee, as well as the Board postpone taking action on this project, pending City's review and discussions with Caltrans and OCTA staff on the degradation study and various options that are being considered as a result of this study. The I-405 Improvement Project is an important element of the Measure M2 program and requires a high level of cooperation between OCTA, Caltrans and all impacted agencies to assure a successful project delivery. The City of Costa Mesa looks forward to working with OCTA, Caltrans, and the affected corridor cities on this major improvement project.

Sincerely,

James M. Righimer
Mayor

- c Costa Mesa City Council
- Darrell Johnson, OCTA CEO
- Ryan Chamberlain, Chief, Caltrans District 12
- Thomas R. Hatch, Chief Executive Officer
- Ernesto Munoz, Public Services Director
- Raja Sethuraman, Transportation Services Manager

77 FAIR DRIVE

PHONE: (949) 274-9909 • www.costamesaca.gov • FAX: (714) 754-5330



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Status of the Interstate 405 Improvement Project Between
State Route 55 and Interstate 605**

Handout



BOARD OF DIRECTORS

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CHIEF EXECUTIVE OFFICE

Darrell Johnson
Chief Executive Officer

September 20, 2013

The Honorable James M Righeimer
Mayor
City of Costa Mesa
P.O. Box 1200
Costa Mesa, CA 92628-1200

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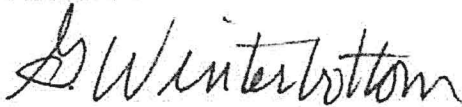
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Mayor Righeimer
September 20, 2013
Page 2

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Please feel free to contact me at (714) 560-5343 if you have any questions.

Sincerely,



Gregory T. Winterbottom
Chairman

GTW:cb

c: OCTA Board of Directors
Darrell Johnson, OCTA Chief Executive Officer
Ryan Chamberlain, Caltrans, District 12 Director
Costa Mesa City Council
Thomas R. Hatch, Chief Executive Officer
Ernesto Munoz, Public Services Director
Raja Sethuraman, Transportation Services Manager



CITY OF COSTA MESA

CALIFORNIA 92628-1200

P.O. BOX 1200

FROM THE OFFICE OF MAYOR JAMES M. RIGHEIMER

September 16, 2013

Mr. Gregory T. Winterbottom, Chairman, Board of Directors
Members of Board of Directors
Orange County Transportation Authority
550 South Main Street/P.O. Box 14184
Orange, CA 92863-1584

SUBJECT : INTERSTATE 405 IMPROVEMENT PROJECT

Dear Chairman Winterbottom and Honorable Board Members:

The City of Costa Mesa appreciates the Orange County Transportation Authority (OCTA) for its leadership and efforts in the implementation of regional traffic solutions. Over the past decade, the City has partnered with OCTA on several regional as well as local projects, including the I-405 Improvement project. The City understands that the Regional Planning & Highways Committee and the OCTA Board are considering certain actions on the I-405 project on September 16, 2013, and September 23, 2013, respectively.

As you are aware, the Costa Mesa City Council had approved a resolution in June 2012, supporting Alternatives 1 and 2 of the I-405 Improvement Project. This was then followed by OCTA Board approval of Alternative 1 as the locally preferred alternative on October 22, 2012. Since then, the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) was re-circulated and the State of California Department of Transportation (Caltrans) conducted a Statewide High Occupancy Vehicle (HOV) Degradation study. This study was pursuant to the requirements of the federal transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21).

The City of Costa Mesa requests that the OCTA RP&H Committee, as well as the Board postpone taking action on this project, pending City's review and discussions with Caltrans and OCTA staff on the degradation study and various options that are being considered as a result of this study. The I-405 Improvement Project is an important element of the Measure M2 program and requires a high level of cooperation between OCTA, Caltrans and all impacted agencies to assure a successful project delivery. The City of Costa Mesa looks forward to working with OCTA, Caltrans, and the affected corridor cities on this major improvement project.

Sincerely,

James M. Righimer
Mayor

- c Costa Mesa City Council
- Darrell Johnson, OCTA CEO
- Ryan Chamberlain, Chief, Caltrans District 12
- Thomas R. Hatch, Chief Executive Officer
- Ernesto Munoz, Public Services Director
- Raja Sethuraman, Transportation Services Manager

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