



Measure M
Taxpayers Oversight Committee
at the Orange County Transportation Authority
600 S. Main Street, Orange CA, Room 154
September 27, 2012
6:00 p.m.



SPECIAL MEETING AGENDA

- 1. Welcome**
- 2. Pledge of Allegiance**
- 3. Chairman's Report**
- 4. Presentation Item**
 - A. Proposed Amendment to the Measure M Investment Plan
Presentation – Kia Mortazavi, Executive Director, Planning & M Program Management Office
- 5. OCTA Staff Update**
- 6. Public Comments***
- 7. 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.



September 27, 2012

To: Members of the Taxpayers Oversight Committee
From: Kia Mortazavi, Executive Director, Planning
Subject: Proposed Amendments to the Measure M2 Transportation Investment Plan

Overview

On September 10, 2012, the Board of Directors approved the Measure M2 M2020 Plan. The M2020 Plan sets a course for advancement of major Measure M2 projects and programs between now and the year 2020. The plan requires an amendment to the Measure M2 Transportation Investment Plan to balance the plan of projects in the freeway mode.

Recommendation

Consider the adoption of the proposed amendment to the Measure M2 Transportation Investment Plan to decrease the funding of Project J by \$572.8 million and increase the funding of Project K by \$572.8 million, in 2005 dollars.

Background

On September 10, 2012, the Board of Directors (Board) approved a M2020 Plan which set a course for advancement of major Measure M2 (M2) projects and programs between now and the year 2020 (Attachment A) to bring improvements sooner to Orange County residents. In order to implement the plan, staff defined the need to amend the M2 Transportation Investment Plan to address the funding shortfall on Project K, Interstate 405 (I-405) between Interstate 605 and State Route 55. The M2020 Plan includes funding for the voter-approved project in M2 to add one general purpose lane in each direction.

Discussion

In addition to funds provided by Measure M, The M2020 Plan has incorporated a sound funding foundation of matching state, federal, and local funds already committed as well as anticipated future funds. For example, more than \$670 million has been programmed for M2 freeway projects. This funding came

principally from Proposition 1B Corridor Mobility Improvement Account, State Transportation Improvement Program funds, and American Recovery and Reinvestment Act funds. In addition, 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 new capacity projects. Also, nearly all of the M2 transit, streets and roads, and environmental programs have matching requirements from local agencies, which leverage additional funds to deliver M2.

As part of the M2020 Plan, more than \$5 billion in transportation improvements promised to the voters in M2, are planned to be completed or under construction by 2020. This includes \$3 billion to complete 14 freeway projects. In addition, the groundwork will be laid for another \$1.4 billion in freeway improvements by environmentally clearing all nine remaining M2 projects to be shelf ready in the event additional federal, state, or local funding becomes available.

To deliver the M2020 Plan and bring mobility improvements to the County as soon as possible, the plan assumes bonding for the freeway mode. Funding assumptions are included in the M2020 Plan. The assumptions are based on the latest M2 revenue forecasts prepared by Orange County universities, future state and federal funding projections consistent with current trends, and project/program costs in year-of-expenditure (YOE) dollars.

Beyond these known and projected commitments and requirements, an amendment to the M2 Transportation Investment Plan must be made to complete the funding and financing picture for the M2020 Plan.

Amendment to the Measure M2 Transportation Investment Plan

Forecasted and already completed project costs within the freeway program have been updated. The new forecast includes latest project cost information prepared during the project development process. It also includes final costs on near and already completed projects, as well as accounts for external factors such as the current bidding environment and cost of materials and resources for future projects.

State Route 91 (SR-91) (Project J) has benefited significantly. With the exception of one project, all of the projects within the Project J line item are either complete or in construction (complete by the end of the year). The remaining project, SR-91 between State Route 241 and Interstate 15, needs to be implemented in concert with the Riverside County Transportation Commission

(RCTC). The timing for the ultimate project, according to the 91 Implementation Plan, is in late 2030.

The SR-91 received \$138 million in external funds, realized bid, project cost savings, and cost sharing savings working with RCTC. This has resulted in savings of \$847 million after allowing for the final project. Although freeway project completion costs in a 30-year program will continue to fluctuate, an amendment to the M2 Transportation Investment Plan is recommended to balance the plan of projects.

The original cost of Project K included in the M2 Transportation Investment Plan anticipated a total cost of \$600 million. As the project moved through the project development process and additional engineering was done the cost estimate increased. This was a result of a substantial increase in the cost of materials and changes in project scope such as the replacement of every bridge including overcrossing widenings and ramp improvements in the 14 mile long project area. With the project more clearly defined, the project cost estimate is now \$1.3 billion.

With the cost of Project K at \$1.3 billion, securing contracts sooner rather than later, is important to keep the overall cost of the project down. With Project K ready to move forward to the next step in delivery (assumed to be design-build delivery method), action is needed at this time to address the funding gap and to reduce the inflation risk.

Requested Amendment

To address the \$709 million need in escalated dollars on the I-405 (Project K), and as a result of capturing additional external funds and project cost savings on SR-91 (Project J), staff is recommending that \$709 million, a portion of the \$847 million in savings currently allocated to Project J, be reallocated to Project K. This action still maintains a balance of M2 funding of more than \$139 million for future SR-91 improvements beyond funding needed for projects identified.

The M2 Ordinance allows for such adjustments which are defined in Section 12 of the Orange County Local Transportation Authority Ordinance No.3. Also, OCTA has set a precedent for such freeway program amendments during the Measure M1 20-year period to balance project costs. Amendments involve approval by the Taxpayers Oversight Committee (TOC) and a public review period.

The process and timing for amending the expenditure plan is shown below:

Actions	Date
OCTA Board adopts M2020 Plan	September 10, 2012
OCTA Board initiates amendment and sets public hearing date	September 24, 2012
Proposed amendment sent to local agencies for public review prior to public hearing	September 26, 2012
Taxpayers Oversight Committee hears amendment proposal (may choose to act on amendment – requires two-thirds vote)	September 27, 2012
Taxpayers Oversight Committee considers/acts on amendment (requires two-thirds vote)	October 9, 2012
Public hearing on amendment and roll call vote by Board	November 9, 2012
Adopted amendment transmitted to local agencies	November 10, 2012
Amendment effective 45 days following adoption	December 24, 2012

The schedule anticipates two meetings of the TOC for consideration of the amendment. The first meeting is on September 27 to review information, and a second meeting on October 9 to take an action.

The proposed amendment of project costs are shown on page 12 (for Project J) and page 13 (for Project K) of the Transportation Investment Plan (Attachment B), and page 31 of the Transportation Investment Plan (Attachment C). The project costs reflected in the Transportation Investment Plan are in 2005 dollars (the year the plan was developed). In order to keep the numbers consistent, the actual amendment is also shown in 2005 dollars. This translates from \$709 million in YOE dollars to \$572.8 million in 2005 dollars.

It should be noted that the M2020 Plan includes funding to deliver the Measure M commitment of one general purpose lane in each direction (Alternative 1) for Project K (I-405). This project is still under environmental review, and the ultimate selection of a locally preferred alternative by the California Department of Transportation is expected in early 2013. If an alternative other than Alternative 1 is selected as the locally preferred alternative, then a separate funding source and a separate plan of finance, for improvements beyond Alternative 1, will be required.

Summary

On September 10, 2012, the OCTA Board of Directors adopted the M2020 Plan which set a course for advancement of major Measure M2 projects and programs between now and the year 2020. To ensure plan delivery, a proposed amendment to the Measure M2 Transportation Investment Plan is presented for consideration by the Taxpayers Oversight Committee.

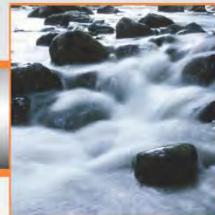
Attachments

- A. M2020 Plan
- B. Revised Project J and Project K Descriptions (Pages 12 – 13)
- C. Revised Transportation Investment Plan (Page 31)



M2020 Plan

Sept. 10, 2012



Printed September 17, 2012

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

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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 (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 elements of the plan 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 sets 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 Draft 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 & 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 investments 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 is 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

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 M1 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 and 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/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 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 (includes temporary construction easements) by the I-405 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 within 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 "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 final 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 assumes \$1.994 billion in total revenue, with costs for the same period totalling \$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.

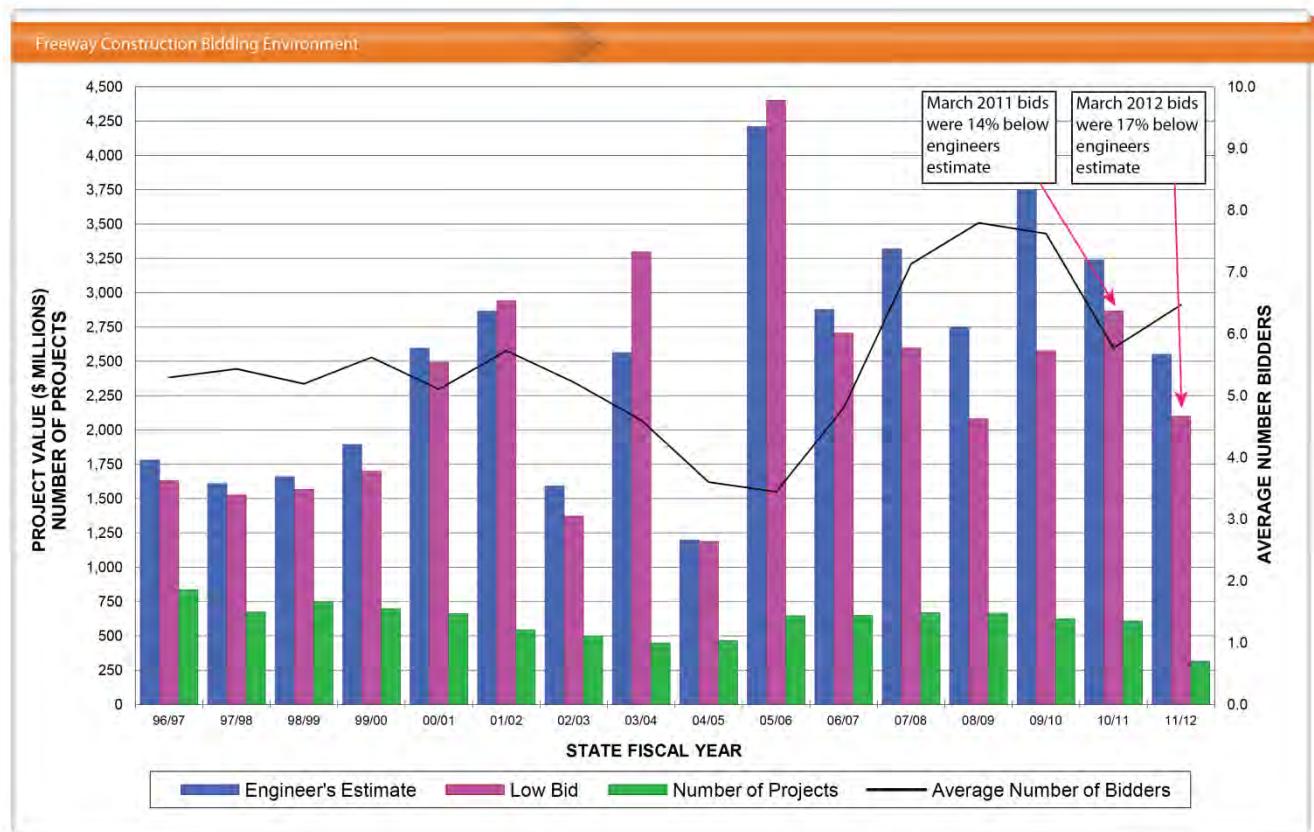
With careful management of the projects and use of financial resources, the full scope of the M2 Program can be delivered as promised.

Funding and Financing

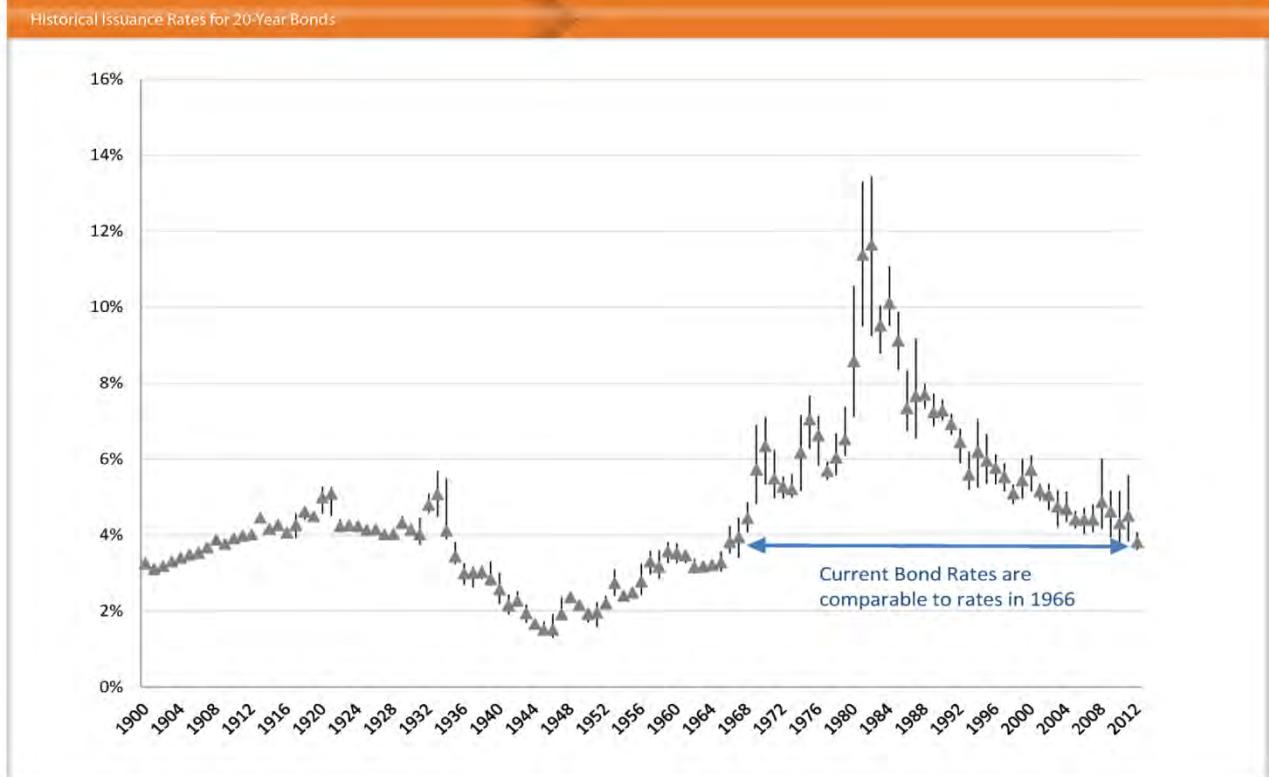
The Board's vision in developing the EAP created a great opportunity for the M2 Program. While the economy took a significant downturn, OCTA advanced projects years before revenue became available. Projects were accelerated, making them shelf ready. This allowed OCTA to capture significant one time external 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 on 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) I-5 Widening (PCH to Avenida Pico)
- (C) 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-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.

M2020 Projects

M2020 Freeway Projects Through Construction



Environmental [Orange Box] Design/Right of Way [Yellow Box] Construction [Teal Box]

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).

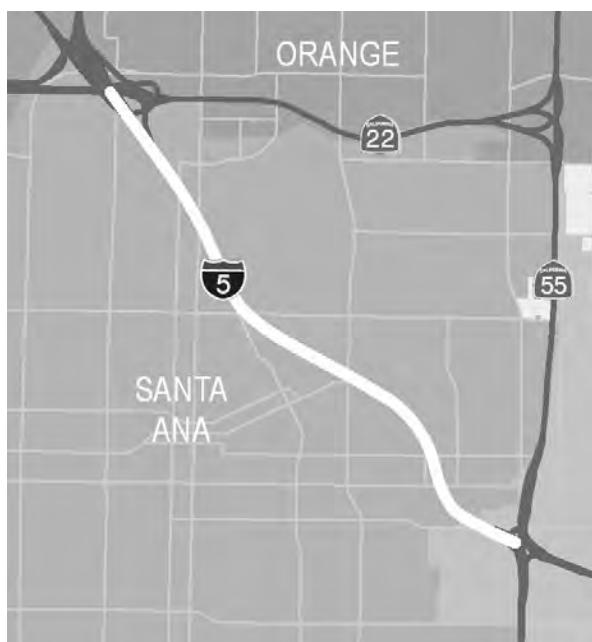
The project includes improvements at the I-5 / SR-55 interchange area between Fourth Street and SR-55. The project will generally be constructed within the existing ROW.

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.

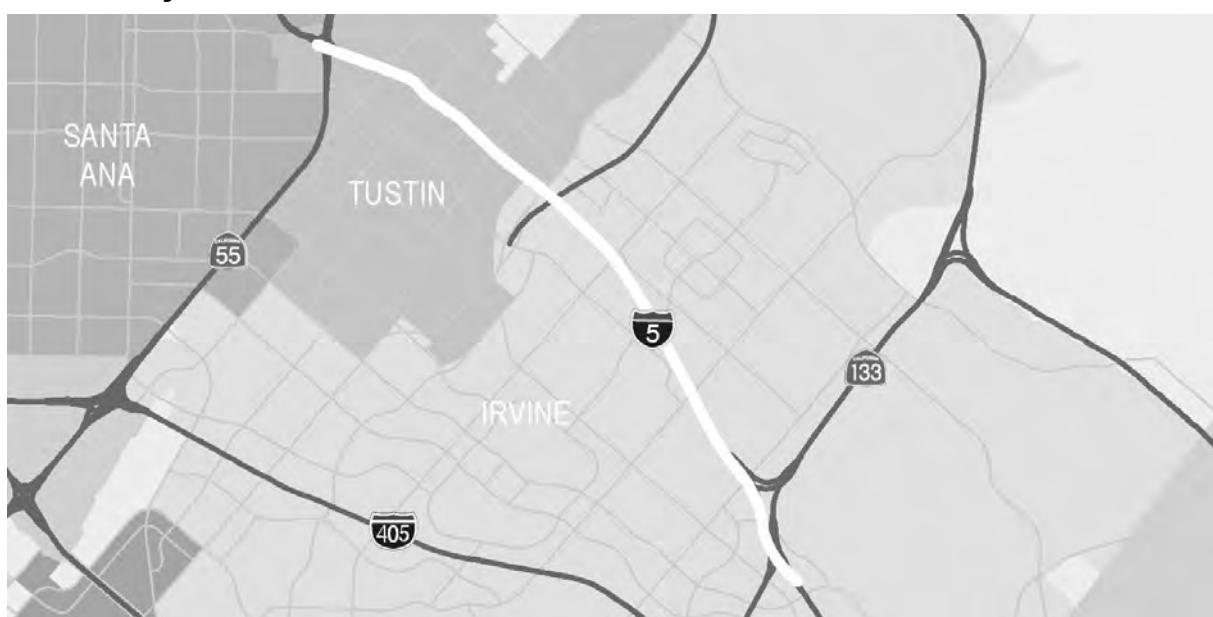
Cost :

\$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 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 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:

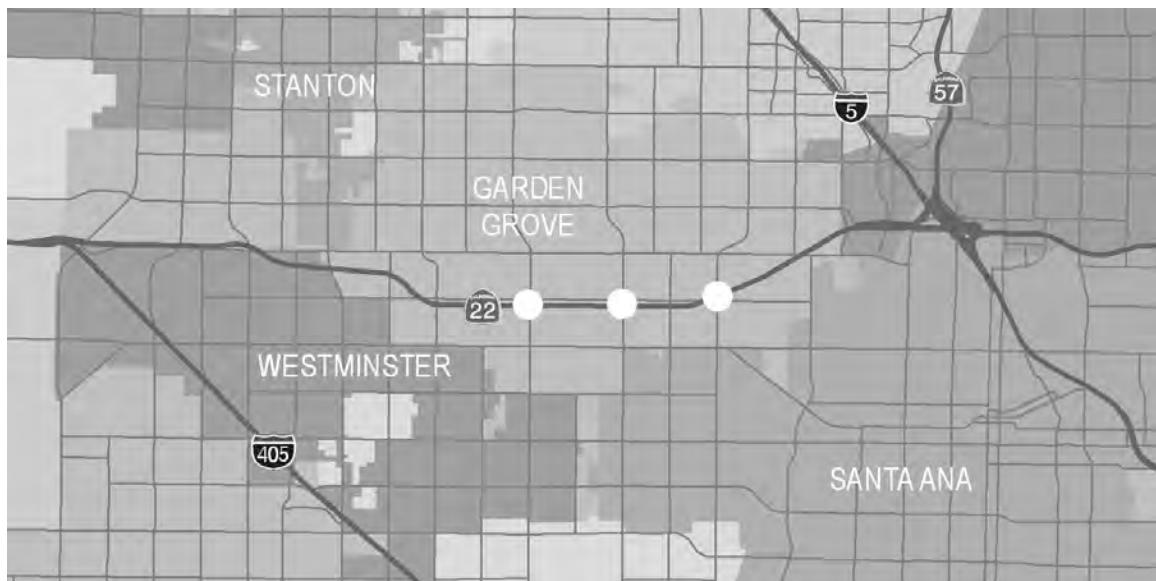
OCTA, City of Garden Grove, and Caltrans.

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 II and III 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.

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 II and III 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.

G. SR-57 Improvements

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 II and III 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
\$30,991,337 (M2 Revenue)
\$13,118,653 (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 5 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, \$5 million was allocated for a second round of restoration funds. The Board will consider funding recommendations in May 2012.

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

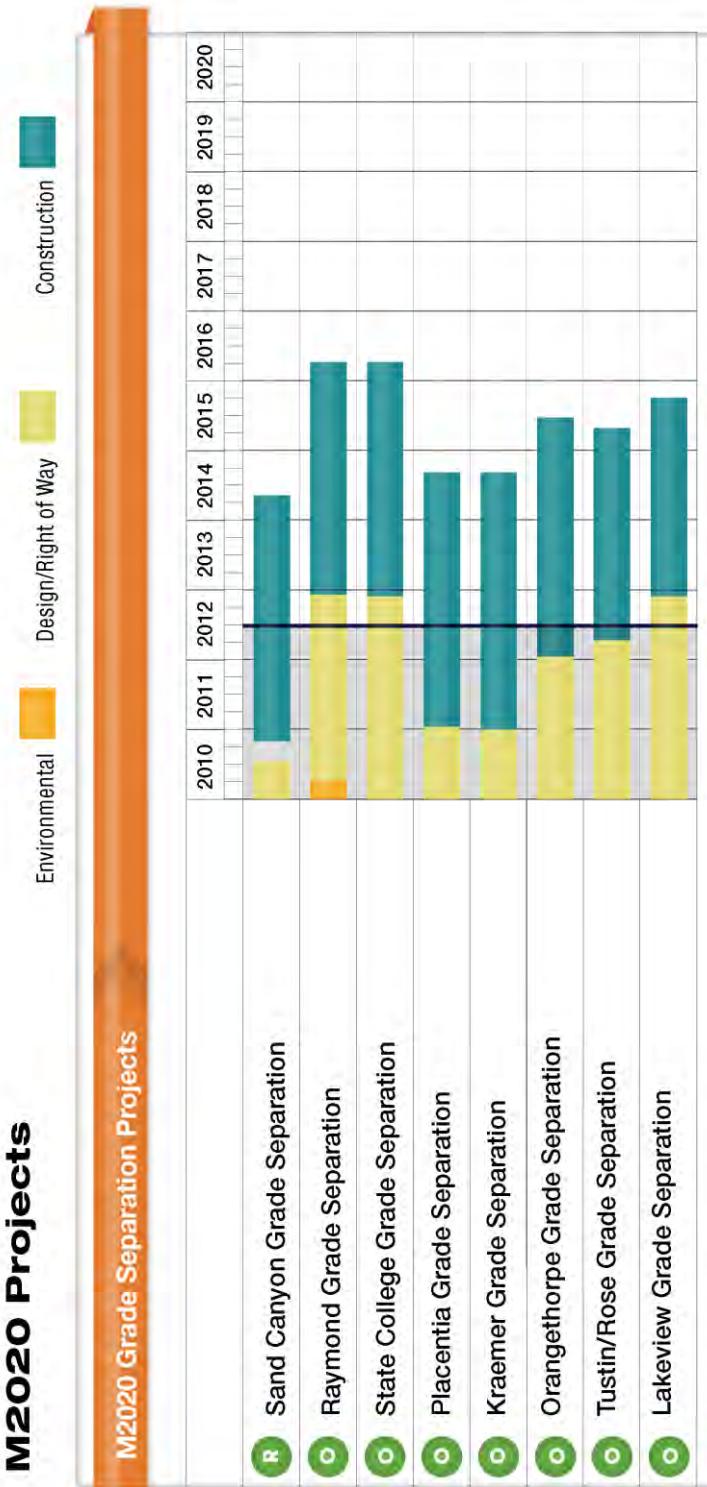


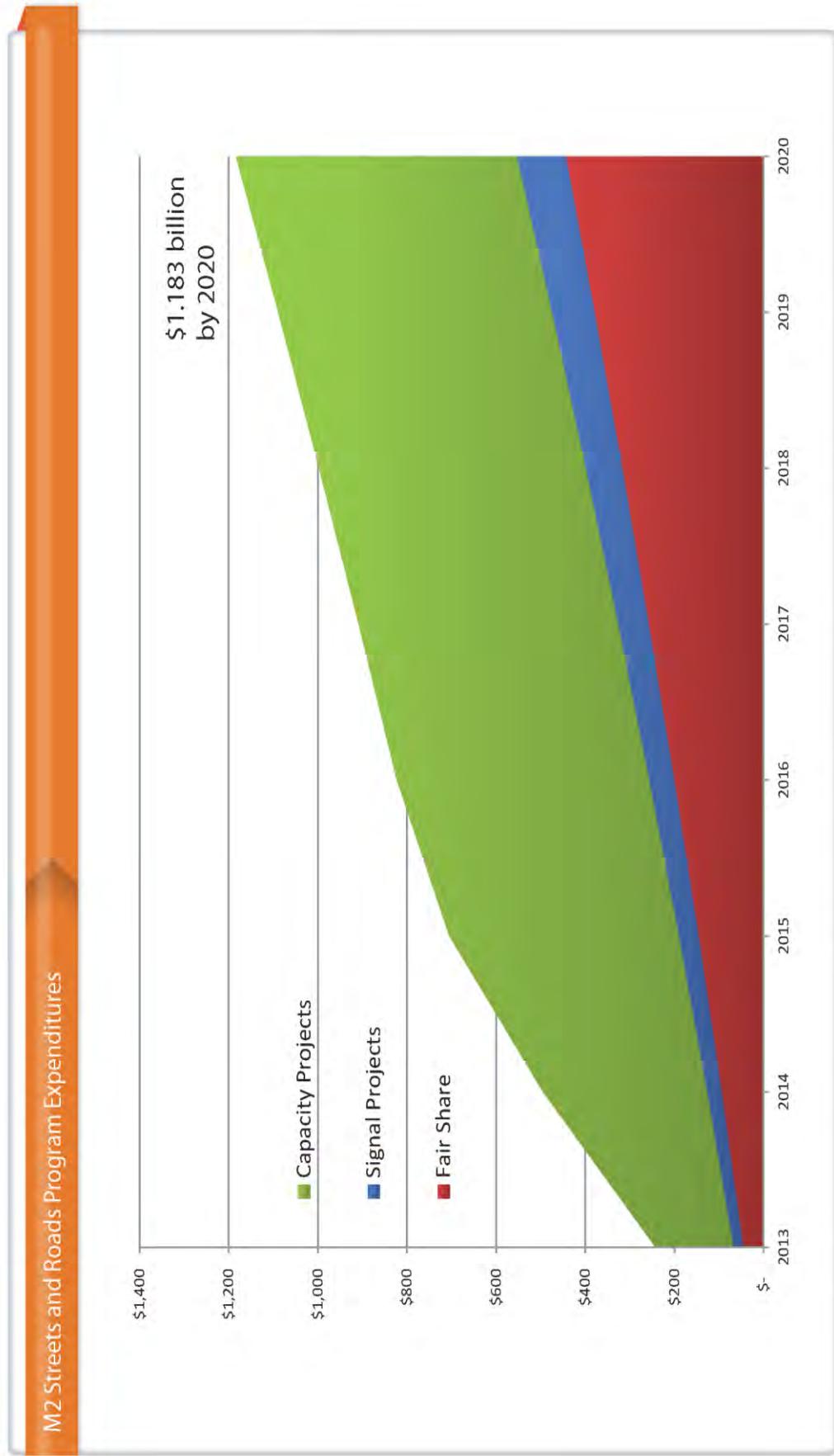
- **Regional Capacity Program**
(not mapped)
 - Up to 300 miles of roadway improvements
 - Competitive Program with annual call for projects

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

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

M2020 Projects





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 eight major initiatives through 2020, consistent with the above 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, a plan for future roadway improvements throughout Orange County that includes 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 also provides 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 the 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, 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 annually set aside for operating cost of rubber tire systems.

The rubber tired 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 need.

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 100 busiest transit stops across Orange County. The intent is to assist bus riders in the ease of transfer between bus lines and provide 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 2013, 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 get 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:

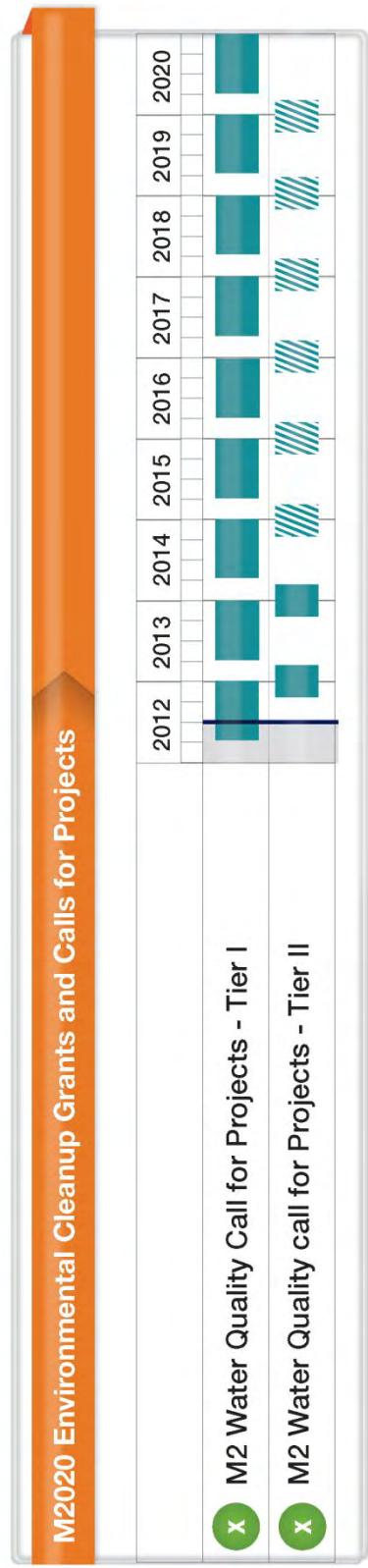
- M2 Eligibility Guidelines
- Project W Guidelines (under development)
- OCTA's Comprehensive Business Plan



Environmental Cleanup



M2020 Projects



Environmental Cleanup Allocation Program



Overview:

The OCTA Environmental Cleanup Program (Program) provides for the allocation of approximately \$300 million to improve overall water quality in Orange County from transportation-related pollution. The Program 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 water quality program.

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 Water Quality Plan recommends three major initiatives through 2020 consistent with the above framework.

- Allocate competitive Tier 1 Grant Program (up to \$19.5 million) for trash/debris removal
- Allocate competitive Tier 2 Grant Program (up to \$38 million) for regional scale water quality improvement projects
- 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 and nutrients.

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 \$30 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. Funding recommendations to the Board is anticipated in summer 2012. The first Tier 2 call for projects is expected to be issued early June 2012.

Benefits:

Improvements funded through this program (including local matching funds) will improve overall water quality in Orange County. Funds 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 Eblasts 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 (what are Los Angeles' (LA) 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 2020 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 three+ 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 —P3an 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 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 —tmps" 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

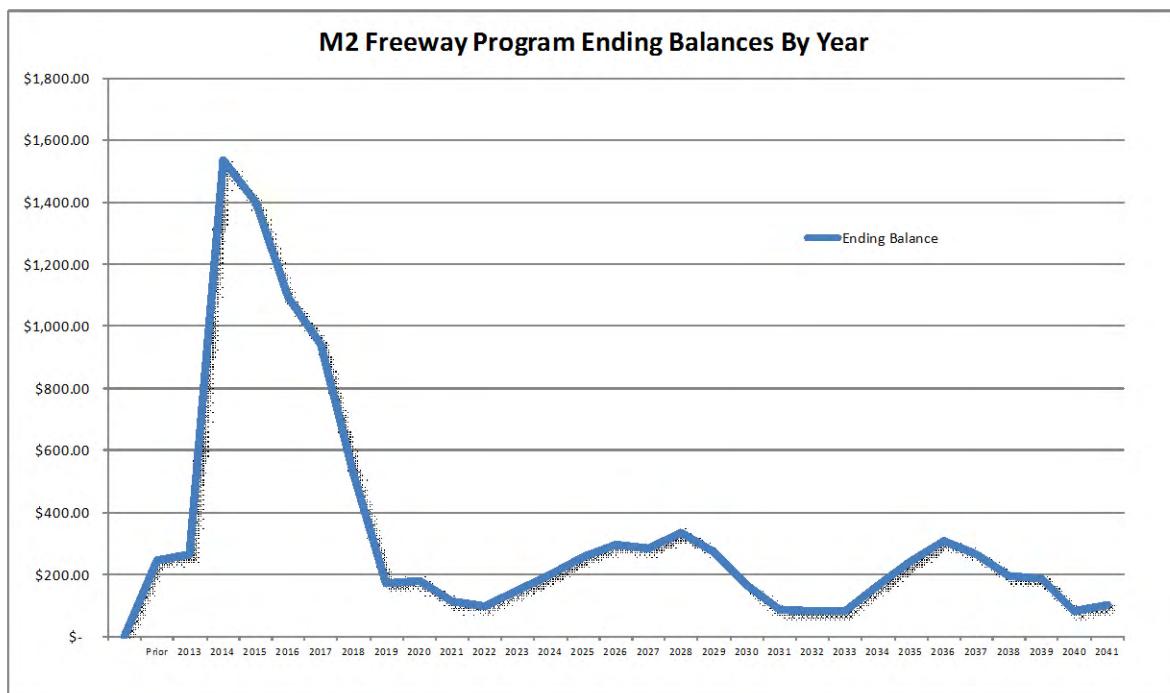
Revenues for the M2 Freeway Program assumed a proportional share (approximately 41 percent) of annual M2 revenue. From inception to 2020, the freeway program would receive approximately \$1.25 billion in M2 revenue (including \$55 million in prior bond proceeds) and \$744 million in state/federal grants (\$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	Programmed Other Revenue	Estimated Costs (YOE)	Project Revenues - Costs
	A	B	C	D = A + B - C
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 —201” 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.

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. 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.



Freeway Projects

Riverside Freeway (SR-91)

Project **J**

Riverside Freeway (SR-91) Improvements from Costa Mesa Freeway (SR-55) to the Orange/ Riverside County Line

Description:

This project adds capacity on SR-91 beginning at SR-55 and extending to I-15 in Riverside County.

The first priority will be to improve the segment of SR-91 east of SR-241. The goal is to provide up to four new lanes of capacity between SR-241 and Riverside County Line by making best use of available freeway property, adding reversible lanes, building elevated sections and improving connections to SR-241. These projects would be constructed in conjunction with similar coordinated improvements in Riverside County extending to I-15 and provide a continuous set of improvements between SR-241 and I-15. The portion of improvements in Riverside County will be paid for from other sources. Specific improvements will be subject to approved plans developed in cooperation with local jurisdictions and affected communities.

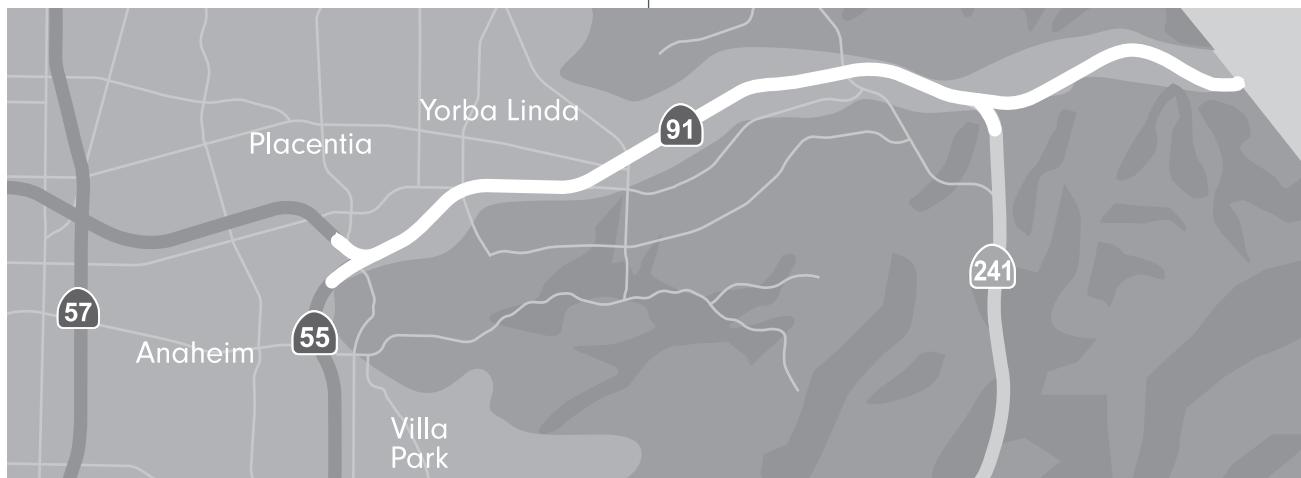
This project also includes improvements to the segment of SR-91 between SR-241 and SR-55. The concept is to generally add one new lane in each direction and improve the interchanges.

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.

Cost:

The estimated cost for these improvements to the SR-91 is \$925.0 million.

\$352.2





Freeway Projects

San Diego Freeway (I-405)

Project K

San Diego Freeway (I-405) Improvements between the I-605 Freeway in Los Alamitos area and Costa Mesa Freeway (SR-55)

Description:

Add new lanes to the San Diego Freeway between I-605 and SR-55, generally within the existing right-of-way. The project will make best use of available freeway property, update interchanges and widen all local overcrossings according to city and regional master plans. The improvements will be coordinated with other planned I-405 improvements in the I-405/SR-22/I-605 interchange area to the north and I-405/SR-73 improvements to the south. The improvements will adhere to recommendations of the Interstate 405 Major Investment Study

(as adopted by the Orange County Transportation Authority Board of Directors on October 14, 2005) and will be developed in cooperation with local jurisdictions and affected communities.

Today, I-405 carries about 430,000 vehicles daily. The volume is expected to increase by nearly 23 percent, bringing it up to 528,000 vehicles daily by 2030. The project will increase freeway capacity and reduce congestion. Near-term regional plans also include the improvements to the I-405/SR-73 interchange as well as a new carpool interchange at Bear Street using federal and state funds.

Cost:

The estimated cost for these improvements to the I-405 is \$500.0 million.

\$1,072.8





Measure M Investment Summary

LOCATION	PROJECTS	COSTS 2005 estimates in millions
Freeway Projects (in millions)		\$4,871.1
I-5 Santa Ana Freeway Interchange Improvements	A	\$470.0
I-5 Santa Ana/San Diego Freeway Improvements	B C D	1,185.2
SR-22 Garden Grove Freeway Access Improvements	E	120.0
SR-55 Costa Mesa Freeway Improvements	F	366.0
SR-57 Orange Freeway Improvements	G	258.7
SR-91 Riverside Freeway Improvements	H I J	1,481.5
I-405 San Diego Freeway Improvements	K L	819.7
I-605 Freeway Access Improvements	M	1,392.5
All Freeway Service Patrol	N	20.0
		150.0
Streets & Roads Projects (in millions)		\$3,625.0
Regional Capacity Program	O	\$1,132.8
Regional Traffic Signal Synchronization Program	P	453.1
Local Fair Share Program	Q	2,039.1
Transit Projects (in millions)		\$2,832.0
High Frequency Metrolink Service	R	\$1,014.1
Transit Extensions to Metrolink	S	1,000.0
Metrolink Gateways	T	226.6
Expand Mobility Choices for Seniors and Persons with Disabilities	U	339.8
Community Based Transit/Circulators	V	226.5
Safe Transit Stops	W	25.0
Environmental Cleanup (in millions)		\$237.2
Clean Up Highway and Street Runoff that Pollutes Beaches	X	\$237.2
Taxpayer Safeguards and Audits (in millions)		\$296.6
Collect Sales Taxes (State charges required by law)		\$178.0
Oversight and Annual Audits		118.6
Total (2005 dollars in millions)		\$11,861.9