

FINAL REPORT

July 1, 2012 to June 30, 2015 M2 Performance Assessment

Prepared for



Orange County Transportation Authority

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In cooperation with:



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Executive Summary

In November 2006, Orange County, California voters approved Ordinance 3, the Renewed Measure M Transportation Investment Plan (M2), which extended the collection of a one-half cent sales tax in Orange County for 30 years to fund transportation improvements. M2 is administered by the Orange County Transportation Authority (OCTA) and is designed to reduce traffic congestion and enhance overall mobility.

M2 requires a performance assessment be conducted every three years to evaluate the efficiency, effectiveness, economy, and program results of the Orange County Transportation Authority (OCTA) in satisfying the provisions and requirements of the Investment Summary of the Plan, the Plan and the Ordinance.

The assessment, which covers the timeframe from July 1, 2012 to June 30, 2015, evaluates OCTA's performance on a range of activities covering planning, management, outreach, and delivery of the M2 Program. Key objectives of this assessment include the following:

- Evaluate the status of findings from the previous M2 performance assessment and the effectiveness of implemented changes
- Assess the performance of OCTA on the efficiency, effectiveness, and economy in the delivery of M2 projects and programs
- Identify and evaluate any potential barriers to success and opportunities for process improvements

This report contains the findings and recommendations from the third performance assessment of OCTA's management and delivery of the M2 Program.

The five areas of the assessment are: project delivery; program management and responsiveness, compliance, fiscal responsibility, and transparency and accountability.

Project Delivery

OCTA's implementation of the M2 Program has progressed significantly on all plan elements over the last three years. During this assessment period, OCTA completed construction of four freeway capital projects: three projects along State Route (SR) 57 (SR-57) (associated with Project G) and one project along SR-91 (associated with Project J). A key success for OCTA and the California Department of Transportation (Caltrans) was the development and approval of the Interstate 405 (I-405) cooperative agreement, which identifies agency roles and responsibilities for project delivery, funding and financing, and operations. To date, OCTA has provided local agencies with approximately \$249.3 million in M2 funding for local streets and roads improvement projects and about \$185 million in M2 Local Fair Share funding.

OCTA and the cities of Santa Ana and Garden Grove received certification for the Revised Environmental Assessment/Final Environmental Impact Report for the OC Streetcar in 2015, and the Federal Transit Administration (FTA) issued a Finding of No Significant Impact. Subsequently, OCTA received approval from FTA to enter into the Federal New Starts Program. OCTA was named the lead agency for the OC Streetcar and is proceeding with project design and construction. The City of Anaheim completed construction of the Anaheim Regional Transportation Intermodal Center (ARTIC) and held a grand opening ceremony in December 2014. ARTIC serves as a landmark facility and a regional transportation gateway.

Challenges with project delivery also exist. One of the largest risks facing the M2 Program is the changing direction from the State of California. New policies regarding greenhouse gases, sustainability,

and managed lane facilities were identified as potential scope, schedule, and budget adherence risks for the M2 Program. In some cases, Caltrans' preferences for project features differ from the projects described in the original M2 Ordinance. OCTA and Caltrans occasionally have differing viewpoints on issues related to the environmental phase for freeway projects, particularly related to traffic modeling and underlying growth assumptions that make up the 2035 no-build network. Also, during the review it was noted that there are growing requests for additional design elements from partner agencies, up until construction contract closeout.

Program Management/Responsiveness

OCTA's program management/responsiveness function has continued to evolve and mature. The Program Management Office (PMO) continues to demonstrate an exceptional commitment to meeting the provisions of the M2 Ordinance, and to the efficient and effective delivery of the M2 Program. The organizational structure and supporting contracting policies and procedures are conducive to efficient delivery of the M2 Program. OCTA filled a vacancy for a Measure M Program Analyst to the PMO. An additional full-time equivalent, a Measure M Program Analyst coordinator, was subsequently added in August 2015, just beyond the assessment period. The M2 Program Management Committee meets every 2 weeks and reviews M2-related issues, project status, and internal management items. The PMO maintains a matrix of M2 Ordinance provisions to actively track requirements and to assign and monitor roles and responsibilities with respect to M2 compliance. The PMO also leads preparation of M2 Quarterly Reports, which keep the OCTA Board of Directors (Board) and the public apprised of M2 Program progress, project status, project financials, current issues, challenges, and risks. The M2 Quarterly Reports were redesigned during the assessment period to be more comprehensive.

With the two new program analysts taking on increasing responsibilities, the PMO Manager has an opportunity to expand participation with external stakeholder groups; think strategically about building awareness, build relationships with other self-help county partner agencies; and increase collaboration with Caltrans. OCTA must continue strong cross-divisional coordination and communications through the Program Management Committee meetings and other venues.

Compliance

Key compliance requirements from the M2 Ordinance include the following:

- Administration, which limits the amount expended for salaries and benefits for OCTA administrative staff to no more than 1 percent of M2 gross revenue in any year
- Uses of Revenue, which defines the allocation of M2 net revenue among freeway projects, street and road projects, transit projects, and environmental projects
- Safeguards, which establishes safeguards to ensure strict adherence to the limitations on use of revenues including the Taxpayers Oversight Committee and performance assessments

OCTA developed a detailed Ordinance Tracking Matrix in early 2012 that is updated on a regular basis, and serves as a highly effective method for OCTA to track compliance with the M2 Ordinance.

The PMO completed the first Measure M2 Ten-Year Review Report in fall 2015, after the end of the assessment period. This report fulfilled its requirement to analyze M2 projects and programs, assessed internal and external barriers, and recommended improvements to increase the delivery and efficiency of M2. The report found that external changes to land use, demographics, land use transportation legislation, and project costs would not require significant changes to the M2 Plan. The report also concluded that OCTA upheld its initial Measure M2 commitments to Orange County voters with significant progress to date and continues to have the public's support for the priorities in the M2 Plan.

Fiscal Responsibility

The 2008 recession majorly impacted the sales tax revenue available for M2. The initial 2006 total sales tax revenue estimate was projected to be \$24.3 billion over the lifetime of M2. In 2010, the sales tax revenue was forecasted to be \$13.7 billion, a 44 percent decrease from the initial forecast. While more recent sales tax revenue forecasts have risen to \$15.7 billion, this revenue is still considerably lower than the original projections.

OCTA personnel continue to manage administrative expenses related to the M2 Program. OCTA ensured that M2 project-specific administrative costs were charged to the appropriate project and tracked both project-specific and non-project administrative charges on an ongoing basis. This process meets the ordinance requirements and allows charges that exceed the 1 percent cap to be offset by using other funding sources. OCTA funded a portion of M2 administrative expenses by borrowing from the Orange County Unified Transportation Trust Fund and has already paid back part of the funds borrowed.

OCTA continues to actively seek other funding sources to supplement M2 sales tax revenue. OCTA leveraged approximately \$918 million in committed external funding to support the M2 Program. This allowed OCTA to bridge the funding gap resulting from the lower sales tax revenue receipts. Based on current sales tax revenue forecasts and committed external funding, OCTA will continue to meet the project commitments of the M2 Program. Any new external funding will be used to protect against any financial risks, such as higher project costs or interest rates.

Transparency and Accountability

OCTA implemented a wide range of outreach methods to satisfy its constituents' communication needs. Its Web site, newsletters, and public meetings were praised for being thorough, carefully prepared, and informative. OCTA adopted the latest marketing solutions, including new technologies such as digital marketing, e-mail blasts, mobile-friendly media, text messaging, and social media. Digital solutions reduce outreach costs and are effective in reaching constituents in the impacted areas.

External stakeholders noted receiving information from public outreach efforts in multiple ways: targeted e-mails, visits to the OCTA Web site, weekly newsletters, mailers, door hangers, videos, television and radio advertisements, phone calls, publications of upcoming bids, public informational meetings, informal meetings, community-based meetings, board meetings, and newspaper advertisements. In addition to the use of traditional and social media, OCTA's bilingual staff and outreach consultants regularly attended community meetings to provide additional information and support. OCTA staff were present to provide information and answer questions at committee meetings (such as the Taxpayers Oversight Committee, Environmental Oversight Committee, and Environmental Cleanup Allocation Committee). The meetings were well organized, and handouts/meeting agendas were provided.

Introduction

1.1 Background

In November 2006, Orange County, California voters approved Ordinance 3, the Renewed Measure M Transportation Investment Plan (M2), which extended the collection of a one-half cent sales tax in Orange County for 30 years through 2041 to fund transportation improvements. M2 is administered by the Orange County Transportation Authority (OCTA) and is designed to reduce traffic congestion and enhance overall mobility. Key features in the plan include improving key freeways, upgrading major interchanges, adding capacity, and maintaining streets and roads, building and improving rail and bus transportation, enhancing programs for seniors and establishing localized bus service. Collection of sales tax revenues under M2 began on April 1, 2011.

M2 requires a triennial performance assessment to help ensure effective and efficient delivery of M2 projects and programs. Specifically, M2 (Section 10.6) states that:

A performance assessment shall 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 Investment Summary of the Plan, the Plan, and the Ordinance.

The first triennial M2 performance assessment was completed in October 2010, and covered the period from November 2006 through June 2009. The second triennial assessment was completed in March 2013, and covered the period from July 2009 through June 2012.

In June 2015, OCTA selected CH2M HILL (CH2M) to conduct the third M2 performance assessment, which covers the period from July 1, 2012 through June 30, 2015. This report provides the findings and subsequent recommendations from this assessment.

The assessment involved evaluating OCTA's performance on a range of activities covering planning, management, and delivery of the M2 Program. Key objectives of this assessment included the following:

- Evaluate the status of findings from the previous M2 performance assessment and the effectiveness of implemented changes
- Assess the performance of OCTA on the efficient delivery of M2 projects and programs
- Identify and evaluate any potential barriers to success and opportunities for process improvements

The assessment consisted of the following five main areas:

- **Area 1: Project Delivery** — Evaluate OCTA's effectiveness in developing and implementing M2 projects and programs
- **Area 2: Program Management/Responsiveness** — Evaluate OCTA's approach to program management
- **Area 3: Compliance** — Evaluate OCTA's approach to ensuring compliance with M2
- **Area 4: Fiscal Responsibility** — Evaluate the extent to which OCTA is economical in structuring its approach to project and program delivery
- **Area 5: Transparency and Accountability** — Evaluate how fully, intelligibly, and otherwise appropriately, OCTA reports on M2 matters to the OCTA Board of Directors (Board), the Taxpayers Oversight Committee (TOC), the general public, and other stakeholders

1.2 Report Organization

The remainder of this report is organized according to the five main areas of the assessment and appendices containing supporting information:

- Section 2: Project Delivery
- Section 3: Program/Project Management and Responsiveness
- Section 4: Compliance
- Section 5: Fiscal Responsibility
- Section 6: Transparency and Accountability
- Section 7: Findings and Recommendations Summary
- Appendix A: Follow Up on Prior Assessment Findings
- Appendix B: Data Sources and Interviews
- Appendix C: Freeways Projects Activity Summaries (Projects A to N)
- Appendix D: Streets and Roads Projects Activity Summaries (Projects O to Q)
- Appendix E: Transit Projects Activity Summaries (Projects R to W)
- Appendix F: Environmental Cleanup Project Activity Summary (Project X)
- Appendix G: M2 Expenditures Summary Project Activity Summary
- Appendix H: Acronyms and Abbreviations

Sections 2 through 6 each contain an overview, observations, findings, and recommendations for their specific topics.

Section 7 summarizes the study team's key findings and recommendations pertaining to each area of the assessment.

Appendix A provides a follow up on the recommendations made during the prior M2 assessment, covering FY 2010 to 2012.

Appendices B through F provide a chronological progression of project delivery for each M2 project during the assessment period per the M2 Quarterly Progress Reports.

Appendix G presents the forecasted project cost and forecasted completion date for the M2 Capital projects, and changes in those metrics from June 2012 to June 2015.

Note that though the review time period is from July 1 through June 30, 2015, information from documents more recent than June 30, 2015, has been included. This information is for informational purposes only. The review and corresponding findings and recommendations are limited to the review period.

Project Delivery

2.1 Accomplishments

2.1.1 Freeway Projects (Projects A-N including the Freeway Mitigation Program)

Freeway projects receive forty three percent of Measure M2 net revenues. Relieving congestion on State Route (SR) 91 (SR-91) is one of the centerpieces of the M2 Freeway Program. The Freeway Program also includes several other major upgrades, which include improving Interstate 5 (I-5) in south Orange County, I-405 in west Orange County, SR-55 in central Orange County, and SR-57 in north Orange County.

OCTA is advancing a wide range of freeway projects. Table 2-1 provides a summary of progress achieved by each project between the first quarter of FY 2013 and the final quarter of FY 2015.

During this review period, OCTA completed construction on four freeway capital projects — three projects along SR-57 (associated with Project G) and one project along SR-91 (associated with Project J). On all other projects, OCTA advanced the projects along the project delivery cycle.

A key success to advancing Project K was the development and approval of the I-405 Cooperative Agreement, without which Project K could not advance.

Table 2-1: Freeway Projects Progress During Review Period

Project	Project Title	First Quarter of FY 2013	Final Quarter of FY 2015
Project A	I-5 (SR-55 to SR-57)	Environmental Study Underway	Final Environmental Document and Project Report Approved and Design Phase to begin soon
Project B	I-5 (SR-55 to El Toro Y)	Project Study Report Approved	Environmental Phase underway
Project C and Part of Project D	I-5 (SR-73 to Oso Parkway/ Avery Parkway Interchange)	Environmental Study Underway	Design Phase Underway
	I-5 (Oso Parkway to Alicia Parkway/ La Paz Road Interchange)	Environmental Study Underway	Design Phase Underway
	I-5 (Alicia Parkway to El Toro Road)	Environmental Study Underway	Begin Design Phase
	I-5 (Avenida Pico to Avenida Vista Hermosa)	Final Design Underway	Construction Underway
	I-5 (Avenida Vista Hermosa to PCH)	Final Design Underway	Construction Underway
	I-5 (PCH to San Juan Creek Road)	Final Design Underway	Construction Underway
Project D	I-5 El Toro Road Interchange	Project Study Report Underway	Project Study Report/ Project Development Support Document Complete

SECTION 2 – PROJECT DELIVERY

Project	Project Title	First Quarter of FY 2013	Final Quarter of FY 2015
	I-5/ Ortega Highway Interchange	Construction To Start Soon	Construction Underway
Project E	SR-22 Access Improvements	Project Complete	Project Complete
Project F	SR-55 (I-405 to I-5)	Environmental Study Underway	Environmental Phase
	SR-55 (I-5 to SR-91)	Project Study Report Underway	Project Study Report/Project Development Support Document Completed
Project G	SR-57 NB (Lambert Road to Tonner Canyon Road)	None	Conceptual Phase Complete
	SR-57 NB (Yorba Linda Boulevard and Lambert Road)	Construction 60% Complete	Project Complete
	SR-57 NB (Orangethorpe Avenue and Yorba Linda Boulevard)	Construction 55% Complete	Project Complete
	SR-57 NB (Katella Avenue and Lincoln Avenue)	Construction 20% Complete	Project Complete
	SR-57 NB (Orangewood Avenue to Katella Avenue)	Project Study Report Underway	Procurement for the Environmental Phase Underway
Project H	SR-91 WB (SR-57 to I-5)	Construction To Start Soon	Construction Underway
Project I	SR-91 (SR-55 to Tustin Avenue Interchange)	Final Design And Row Activities Underway	Construction Underway
	SR-91 (SR-57 to SR-55)	Project Study Report Underway	Environmental Phase Underway
Project J	SR-91 Eastbound (SR-241 to SR-71)	Project Complete	Project Complete
	SR-91 (SR-241 to SR-55)	Construction Underway	Project Complete
	SR-91 (SR-241 to I-15)	Environmental Study Underway	RCTC's Design-Build Construction Underway
Project K	I-405 (SR-55 to I-605)	Draft EIS/EIR Released	Design-Build Procurement Underway
Project L	I-405 (SR-55 to the I-5)	Project Study Report Underway	Environmental Phase Underway
Project M	I-605 Interchange Improvements	Preliminary Engineering Starting Soon	Final Project Study Report/Project Development Support Document Signed and Complete
Project N	Freeway Service Patrol	Service On-Going	Service On-Going

Finally, OCTA also advanced significantly on the Freeway Mitigation Program (part of Projects A to M) with OCTA's acquisition of approximately 1,300 acres of conservation properties (Preserves) and funding

of 11 restoration projects approved by the OCTA Board. In October 2014, the Board approved a commitment to establish an endowment to pay for the long-term land management cost of the Preserves.

Project descriptions and information on project status can be found in Appendix C.

2.1.2 Streets and Roads Projects (Projects O-Q)

Streets and roads projects receive thirty two percent of Measure M2 net revenues. OCTA works with local jurisdictions in Orange County for street widening, street maintenance, intersection improvements, and traffic signal synchronization on roughly 7300 lane miles of streets and roads.

During the review period, under the OC Bridges Railroad Program, OCTA completed two of the seven grade separations and the remaining five were under construction. OCTA Board has committed to provide more than \$634 million in state, federal, and M2 funds for the OC Bridges program's grade separation projects.

By the end of Fiscal Year 2015, OCTA had cumulatively issued a total of five call for projects awarding a total of 103 projects worth \$193 million since 2011 under the Regional Capacity Program (Project O). Similarly, during the same time period, OCTA had cumulatively issued a total of five rounds of funding awarding a total of \$56.3 million for over 69 projects under the Regional Traffic Signal Synchronization Program (Project P). Between Regional Capital Program (Project O) and Regional Traffic Signal Synchronization Program (Project P), OCTA has awarded local agencies nearly \$249.3 million.

Under the Local Fair Share Program (Project Q), OCTA provided a total of \$185 million in payments to local agencies as of the end of the review period.

Project descriptions and information on project status can be found in Appendix D.

2.1.3 Transit Projects (Projects R-W)

Transit projects receive about twenty five percent of Measure M2 net revenues. The M2 transit projects build and improve rail and bus transportation in Orange County. M2 funding is used to add transit extensions to the Metrolink corridor, reduce bus fares for senior citizens and persons with disabilities, and establish local bus circulators.

OCTA and the cities of Santa Ana and Garden Grove received certification for the Revised EA/Final EIR for the OC Streetcar (Project S) in 2015, and FTA issued a Finding of No Significant Impact. Subsequently, OCTA received approval to enter into the Federal New Starts Program. OCTA was named the lead agency for the OC Streetcar and is proceeding with project design and construction.

The city of Anaheim established a framework for evaluating alternatives and, although stalled by a change in the preferred alternative, the City continues to make progress on evaluating alternatives for the Anaheim Rapid Connection (Project S) to carry forward in the environmental documentation.

The city of Anaheim completed construction of ARTIC (Project T) and held a grand opening ceremony in December 2014. ARTIC serves as a landmark facility and a regional transportation gateway.

During the review period, OCTA closely monitored and evaluated the redeployment of some intra-county Metrolink Service Expansion Program (MSEP) trains to increase ridership without significantly impacting the operating costs (Project R). Consequently, OCTA made service changes and redeployed trains to increase ridership. Metrolink made improvements to rail line and stations (Project R), including parking lot expansions, platform access improvements, and passing siding construction. OCTA completed the San Clemente beach train enhancements and completed parking lot expansion at Laguna

Niguel/Mission Viejo. Other projects were advanced through the environmental, design, and construction phases.

On Project U, the Senior Mobility Program (SMP) hit a milestone for achieving one million boardings and the Senior Non-Emergency Medical Transportation Program (SNEMT) carried more than 301,000 boardings. Between bus services and specialized ACCESS services the fare discount programs continued to provide and meet critical mobility needs of the seniors and persons with disabilities. Throughout the final quarter in FY 2015, approximately 3.5 million passenger related boardings were observed. The local agencies continued to demonstrate interest in expanding community based transit circulators program (Project V) and improving passenger amenities under safe transit stops (Project W) program.

Project descriptions and information on project status can be found in Appendix E.

2.1.4 Environmental Projects

Five percent of net revenues from the Freeway program is set aside for environmental mitigation programs to address any environmental impact of freeway improvements under the freeway mitigation program.

To date, the Tier 1 and Tier 2 grants under the Environmental Cleanup Program (Project X) has funded over 140 water quality improvement projects throughout Orange County, totaling just over \$40 million. These projects facilitate runoff reduction and improve water quality by removing pollutants. In addition, OCTA solicited input from the applicants to obtain feedback on the types of projects that should be considered and to improve upon the competitive funding program guidelines.

Project descriptions and information on project status can be found in Appendix F.

2.2 Observations on Project Controls for Schedule/Cost/Quality

OCTA employs key operations management tools, including a P6 Primavera system managed through its Project Controls Department in cooperation with OCTA's project managers. Primavera tracks start dates, end dates, and percent complete for primary milestones on a project-by-project basis, and identifies inter-dependencies that help establish critical path items and potential bottlenecks.

In addition to Primavera, the Project Controls Department works with project managers to prepare monthly project status reports that summarize projects status, schedules, budgets. The Project Controls Department consists of one controls manager, four project controls professionals, and one office specialist to handle invoices. OCTA also uses SharePoint sites to enable document management and control across M2 projects. Project risks are monitored throughout the project lifecycle and they managed and mitigated appropriately.

OCTA strengthened its project controls in significant ways over the past three years. These include the following:

- The Project Controls Department addresses baseline schedules and budgets, baseline revisions, and final progress reports and budgets.
- OCTA's Program Management Procedures (PMP) facilitate the delivery of M2 capital projects. The PMP applies to all OCTA M2 projects and is updated periodically by the Highway Programs Department. The PMP provides a set of procedures to effectively manage and monitor projects, and strategies for delivering the entire capital improvement program. The PMP consists of 12 sections, including: program planning, program controls (for example, schedule and cost control, and change management), quality management, risk management, document control, and other key areas. The PMP was most recently updated in 2013.

2.3 Notable Challenges

Identifying challenges with project delivery and suggesting mitigation strategies was a main objective of the assessment. Some challenges are detailed below.

2.3.1.1 Freeways

Several OCTA staff noted that one of the largest risks facing the M2 Program is the changing direction from the State of California. New policies regarding greenhouse gases, sustainability, and managed lane facilities were identified as potential risks with respect to scope, schedule, and budget adherence.

Differing philosophies regarding project approach/delivery for the Freeway Program have led to delays during the early phases of project development. OCTA’s overall position is to stay true to the original M2 Ordinance and project intent approved by Orange County voters (promises made / promises kept). Caltrans’ overall position is focused on delivering the best project to attain its mission to “Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability.”

In some cases, Caltrans’ view of the best project differs from the project described in several key OCTA documents including the original M2 Ordinance, OCTA’s Long-Range Transportation Plan (LRTP), and the Southern California Association of Governments’ Regional Transportation Plan (RTP). Both the LRTP and the RTP incorporate the OCTA Program Level EIR, which is the basis for M2 projects.

An example of the impact is Project K, I-405 Improvements, in which the OCTA Board approved general purpose lane additions as the preferred alternative (PA) while Caltrans supported a managed lanes alternative. This led to project delays while the agencies worked to resolve PA. Ultimately, a cooperative agreement between OCTA and Caltrans was reached to add one general purpose lane (M2 project) in each direction to I-405 from Euclid Street to the I-605 interchange, with tolled express lanes in each direction of I-405 from SR-73 to SR-22 east. The tolled I-405 express lanes and the existing HOV lanes will be managed jointly as a single tolled express facility, with two lanes in each direction from SR-73 to I-605. The general purpose lane portion will be funded by M2. The remainder of the project will be funded by a combination of funds in the form of Toll Revenue Bonds and possibly Transportation Infrastructure Finance and Innovation Act (TIFIA), as well as through future toll revenues.

Other challenges include the following:

- OCTA and Caltrans have differing viewpoints on issues related to the environmental phase for several freeway projects, particularly traffic modeling and underlying project assumptions that make up the 2035 no-build network. These differences have resulted in schedule delays.
- It was noted that there have been growing requests for additional design elements (“scope creep”) from partner agencies up until construction contract closeout. Scope creep poses both budgetary and schedule risks to the project from project development through construction.
- The OCTA Freeway Program’s reliance on Caltrans’ resources to secure right-of-way (ROW), and the related impacts on schedule and division of scope responsibilities, were noted. OCTA worked with Caltrans to assist real estate acquisitions for the I-5 project in the form of a cooperative agreement.

2.3.1.2 Transit

As part of the Metrolink Service Expansion Program (Project R), the concepts evaluated by OCTA to increase ridership required redeployment of service and introduction of new trips between Orange County and Los Angeles. This required close coordination not only with the Metrolink member agencies but also with the host railroad, Burlington Northern Santa Fe (BNSF). OCTA’s plan to add service to Los Angeles had to be delayed due to lack of availability of slots on BNSF. Additional trips to Los Angeles are not feasible until the completion of the third track between Los Angeles and Fullerton, which is

anticipated in mid to late 2016. Another challenge with service expansion was the rising cost of Metrolink operations due to unanticipated one-time cost events and increase in on-going costs, for example, PTC implementation. OCTA continues to be actively engaged in the Metrolink service and budget planning discussions with Metrolink and its member agencies to address these concern.

The draft EIR for the ARC streetcar project (Project S) in the City of Anaheim was originally anticipated to be completed and circulated for public review by the end of 2014. The project was then delayed as the City of Anaheim evaluated alignment options for ARC. The total schedule impact is still under review by the city.

Finally, as a result of a decline in the projected revenues after the recession, OCTA was concerned about the availability of sufficient funding to meet the M2 Ordinance requirements for the Fare Stabilization Program (Project U). OCTA staff continued to update the Board periodically about the challenges of the revenue shortfalls. In June 2014 update, OCTA Board directed staff to evaluate alternatives and explore viable options to address the annual shortfall under this Program. While this falls outside of the revenue period, OCTA addressed the revenue shortfall during the Ten Year Comprehensive Program Review in late 2015.

2.3.1.3 Environmental

The Tier 1 water quality projects appear to have not experienced any significant challenges. OCTA continues to monitor recent legislation adopted by the State Water Resources Control Board to ensure that changes do not conflict with the intent of the Environmental Cleanup Program.

Tier 2 projects are more complex and varied in scope than Tier 1 projects, which makes setting evaluation criteria more challenging. This includes establishing a deliberate vetting process to verify the water quality benefits of the candidate projects. A number of Tier 2 projects have been delayed in the planning process because of challenges in gaining cooperation from partnering agencies (that is, inter-agency agreements) and design issues. OCTA held off the third call for Tier 2 projects for 2 years to allow prospective applicants more time to further develop their projects.

To assist cities in applying for Tier 2 project funds, OCTA reached out to cities to offer pre-research and calculations for developing projects. After each call for projects, OCTA strives to improve upon the Comprehensive Transportation Funding Program (CTFP) guidelines and application process by soliciting feedback from applicants.

2.4 Findings and Recommendations

Findings and recommendations for OCTA to consider in project delivery are noted below.

Project Delivery Finding #1: It is difficult to align particular aspects of the voter-approved M2 Program with changes to the state’s priorities (for example, greenhouse gas reductions, sustainability, and managed lanes). These differences led to delays in project definition and environmental processes as OCTA and Caltrans worked to reconcile their differing goals, policies, and objectives.

Project Delivery Recommendation #1: Continue to partner with Caltrans at the technical levels for system planning and modeling, as well as throughout the environmental, design, and construction phases. This may resolve different priorities between agencies and identify projects where advanced coordination could help mitigate schedule delays while the agencies reconcile goals and objectives. An example of this partnership is for OCTA to work with Caltrans and explore the possibility of including OCTA projects on Caltrans list of approved projects in the fiscal year Contract for Delivery. This will enable Caltrans and OCTA to agree on milestones and timelines to level set expectation and commit the two stakeholders to meet the project delivery timeline.

Project Delivery Finding #2: It was noted that there appeared to be increasing occurrences of changes and/or growth in a project’s scope. Scope creep was an issue during design and development phase;

sometimes, requests for modification to constructed elements were requested during the final Caltrans safety and maintenance walk through.

Project Delivery Recommendation #2: Include language that defines the term “betterment” in project-specific third-party agreements with state, regional, and local agencies. Particular agreements may define how betterments will be negotiated, if appropriate. The Santa Clara Valley Transportation Authority’s (VTA’s) definition of “betterment” is provided below as example.

- "Betterment" shall mean the upgrading (e.g., increase in capacity) of a new or existing facility, that is not attributable to construction of the Project and is made solely for the benefit of and at the election of DEPARTMENT (not including a technological improvement which is able to achieve such upgrade at costs equal to or less than the costs of a "like-for-like" replacement or relocation). VTA shall not be obligated to pay for any portion of any Betterment.

Design changes to project elements are inevitable. However, managing, identifying the necessity, and mitigating the impacts of potential design changes as early as possible can reduce more costly changes late in both design and construction. The following apply in cases for both OCTA design consultants and/or Caltrans design efforts for consistency.

- Formalize and document the project configuration at the earliest possible stage to set and manage the project design elements. Potential changes to established project configurations would go through a set process that could range from informal to formal, depending on the specific project and the extent of the changes.
- Engage the Caltrans unit(s) responsible for safety and maintenance early in design, and establish requirements for traffic safety and maintenance aspects of the design. Also encourage formal design review workshops specifically targeted toward presenting design features to Caltrans Maintenance and Caltrans Traffic Operations Safety personnel, as well as third party agencies if appropriate. These workshops could be held separately or be combined, depending on the project.
- Encourage studies/workshops during the project design phases, focused on maintainability and safety, and achieve agency concurrence.

Approaches to mitigating impacts of proposed scope modifications during construction include the following:

- Apply life cycle cost analysis for field change requests/change orders to help identify long-term maintenance impacts resulting from each change request
- Encourage periodic project walk through with Traffic Safety and Caltrans Maintenance units to identify issues/concerns before close out

Program/Project Management and Responsiveness

3.1 Overview

The OCTA M2 program management / responsiveness function is defined as employing process-based activities to support the multiple components of the M2.

The M2 program management responsibility spans multiple OCTA organizational areas, and originates with the OCTA Board and Chief Executive Officer's leadership and policy directives. In 2006, OCTA designated a staff member in the Finance and Administration Division as the M2 Program Manager (in addition to other responsibilities) as an interim step. This transitioned to the creation of a PMO under the Planning Division to address expanded program management needs. In 2011, the current full-time PMO Manager was designated.

The fully functional PMO, which includes two newly recruited Measure M program analysts, was judged to be fulfilling its prescribed charter during the review period. Specific PMO policies, procedures, and protocols are in place and continue to be refined.

The PMO charter, adopted in June 2011, highlights the significance of a separate PMO for the M2 Program and states the purpose of the PMO as follows:

OCTA is committed to fulfilling the promises made in M2. This means not only completing the projects described in the Investment Plan, but adhering to numerous specific requirements and high standards of quality called for in the Measure. The PMO is intended to provide unified oversight and action to ensure successful delivery. While other organizational units within OCTA carry out the Investment Plan's individual projects and programs, the PMO monitors and as appropriate analyzes and assesses, facilitates, coordinates, and reports on M2 activities and progress.

In addition, the PMO charter prescribes specific program management responsibilities to the PMO to promote unified oversight and support successful delivery of the M2 Program and projects. The PMO is designed to do the following:

- Ensure compliance and consistency with M2 ordinance provisions
- Establish appropriate business processes and systems for effective and efficient delivery of M2 plans
- Establish proper reporting of M2 receipts, expenditures, and accounting standards
- Coordinate reporting of M2 Program status to internal and external stakeholders
- Ensure implementation of safeguard measures established in the M2 Ordinance

Figure 3-1 summarizes the M2 project life cycle process including project definition, design, and delivery. M2 program management spans the project life cycle. Within the M2 ordinance and charter provisions, and through its management principles and practices, the PMO is engaged in a broad range of program

management activities in support of M2 project delivery.

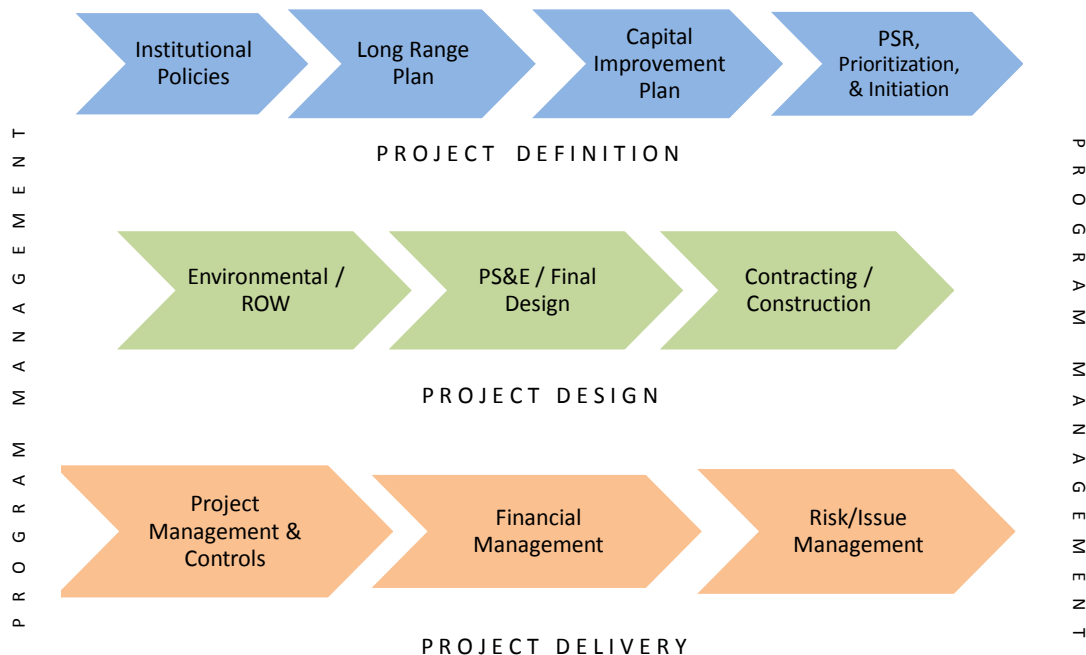


Figure 3-1. Summary of M2 Program Management Functions

OCTA's PMO function has continued to evolve and mature and continues to demonstrate an exceptional commitment to M2 Ordinance provisions and to efficient and effective delivery of the M2 Program.

The PMO analytically reviews the progress of and plans for M2 projects and programs. It identifies risks and pitfalls and ensures ongoing communication between key stakeholders, especially the executive team, to ensure OCTA is collectively managing the program, which includes proactively addressing and responding to issues with an agreed-upon and thoughtful plan. The following operations practices and management vehicles help establish and preserve effective program management:

- **PMO Office Staffing:** OCTA filled a vacancy for a Measure M Program Analyst. An additional full-time equivalent (FTE), also a Measure M Program Analyst coordinator, was subsequently added in August 2015, just beyond the performance assessment period. Filling these positions, in addition to using consultants on an as-needed basis, demonstrates the commitment of OCTA to program management and responsiveness.
- **M2 Program Management Committee:** The M2 Program Management Committee meets every 2 weeks and reviews M2 related issues, project status, and internal management items. This represents a critical aspect of the PMO's success. The PMO sets the agendas and runs the meetings (attendance is usually 12 to 15, mostly directors). OCTA uses a tracking matrix of action items that identifies lead staff and status. The Deputy Chief Executive Officer (CEO) attends on a regular basis, and the CEO attends when available.
- **M2 Ordinance Matrix:** The PMO maintains a matrix of M2 ordinance provisions to actively identify requirements and serve as a point of reference for internal roles and responsibilities with respect to M2 compliance.
- **M2 Quarterly Reports:** The PMO leads the preparation of M2 Quarterly Reports which keep the OCTA Board apprised of M2 program progress in a public setting, project financials and issues, and key project status. Quarterly reports were redesigned during the review period to be more comprehensive.

- **Public Information and Communications:** M2 Program information is managed through the Outreach and Government Relations Departments, as well as through the M2 Web page and related links on the OCTA Web site.

This section presents observations, specific findings, including challenges and opportunities, and recommendations to fine-tune the key M2 program management activity.

Organizationally, OCTA uses a shared administrative support model and has a dedicated Capital Programs Division. OCTA evolved from an agency with planning and operations to an organization that also provides significant capital delivery. The organizational structure, as currently set up within OCTA, provides for efficient delivery of programs and projects. Among best practices, there is an accepted practice that the span of control does not exceed seven or eight direct reports; a project controls unit that supports both highways and transit projects; and a separate, independent M2 Program Office under the Planning Division. Finally, OCTA Contract and Construction Management Policies and Procedures are important for program management and effectiveness, including for the M2 program.

3.2 Observations

OCTA completed all recommendations identified in the July 2009 – June 2012 M2 Performance Assessment. A range of general observations and findings were noted during the recent review. These are based on key document reviews and interviews with select OCTA staff, as well as the consultant team’s professional experience. The assessment underscores the baseline observation that the effectiveness and efficiency of the OCTA organization and of its program management function is centered in its strategic vision and mission statements and is supported by its operating principles, policies, protocols, and operations practices specific to this function. This subsection describes the following elements:

- M2 delivery principles
- PMO operations goals and protocols
- PMO operations management practices
- PMO operations management tools
- PMO challenges
- PMO opportunities
- Organizational structure
- Policies and procedures for contract management and construction management

3.2.1 M2 Delivery Principles

M2 operations management principles, adopted in the EAP and extended in the M2020 Plan, direct and focus the organization toward key values as the organization progresses through its day-to-day M2 Program activities. These key principles, first enumerated in the EAP and later carried forward to the M2020 Plan include the following:

- Project readiness
- Congestion relief and demand
- External funding availability
- Public opinion and support
- Project sequencing and connectivity
- Project duration and cycle

The OCTA Strategic Plan provides additional organization values, which are inherent to defining the OCTA organizational culture and are noteworthy as they permeate throughout OCTA. They include the following:

- **Integrity:** Deliver as promised and do so ethically, fairly, and with transparency
- **Customer Focus:** Treat our customers with care, consideration, and respect, and provide friendly and reliable professional service responsive to their needs
- **Can-Do Spirit:** Tackle challenges with innovation, vision, and strategic thinking
- **Communication:** Provide consistent, timely, and reliable information in an open, honest, and straightforward manner
- **Teamwork:** Work well together from a sense of shared purpose and mutual respect

The OCTA Comprehensive Business Plan (CBP) supplements these principles and values by providing financial analysis, strategic direction, and guidance toward establishing sound business principles for OCTA programs including M2.

3.2.2 Program Management Office Operations Goals and Protocols

A range of culture-based operating protocols are openly and visibly advanced through broader-based OCTA operations related to M2 program management operations. These include the following:

- **M2 Program Management Committee:** This committee meeting, chaired by the PMO Manager, meets every 2 weeks and reviews M2 related issues, project status, internal management items, and external influences.
- **M2 Ordinance Matrix and Compliance Tracking:** The PMO develops and maintains a matrix of M2 ordinance provisions to clearly identify requirements, serve as a touchstone for internal roles and responsibilities, and provide guidance on compliance requirements to OCTA personnel.
- **Triennial Performance Assessments:** Outside contractors, managed through the PMO, develop these assessments to provide an independent evaluation of OCTA's progress in implementing the M2 Program.
- **M2 Quarterly Reports to OCTA Board:** The PMO leads the preparation of quarterly reports designed to keep the Board and the public apprised of M2 program progress, financials, issues, risks, and key project status. The report format was considerably expanded and improved during the current review period. Reporting improvements include the following:
 - M2 Program schedule representation update
 - New delivery risk update section
 - M2020 plan objectives update section
 - Individual project status and summary of progress with more comprehensive descriptions and clearer linkage to project letters — especially helpful when there are multiple projects in a single category of projects
 - Graphics and professional layout of document
 - Celebratory flag icons for complete projects
 - Detailed program management office description of key activities
 - New finance section including current forecast and local fair share
- **Public Information and Outreach:** OCTA disseminates information to external stakeholders both in External Affairs and Government Relations divisions. The M2 Program Web page (housed on the

OCTA Web site) provides detailed, comprehensive, and timely information on M2 programs and projects. Fact sheets provide excellent detail on individual projects.

3.2.3 Program Management Office Operations Management Practices

Established operations practices and management vehicles are important for effective program management. The PMO function continues to evolve and mature. PMO practices include the following:

- **Project Delivery Priorities:** Project priorities are established early, first through the EAP and M2020 Plan, then most recently reported in the Ten-Year Review. Delivery schedules are tracked at various stages using P6 Primavera, with early warnings about project schedule slippage or cost escalations.
- **Inclusive Program Management Participation:** Both OCTA leadership and the PMO are in full engagement and participatory management of M2 delivery responsibilities. This principle is now mature but requires continuous monitoring and attention as it relates to key activities such as project controls, risk and issues management, change management, and stakeholder outreach, among other activities.
- **Open Communications:** The culture of OCTA as advanced through its Board and CEO and in combination with M2 ordinance provisions promotes an environment of openness and accessibility to internal and external interests. Internal awareness is recognized as very high, but there is a perception that external awareness/branding of the M2 Program could be strengthened.
- **Timely Progress Reporting:** M2 ordinance provisions set a baseline and pattern for timely reporting of progress in delivering M2 projects and programs, including scheduled reports to the OCTA Board and Taxpayers Oversight Committee (TOC), as well as providing M2 project information to a variety of external stakeholders.
- **Transparent and Informative Public Outreach:** Public information and outreach are a high-priority throughout the OCTA organization. OCTA's External Affairs and Government Relations Divisions use multiple mediums, including the OCTA Web site, M2 newsletters, speakers' bureaus, social media, digital communications, and other outreach mediums are employed to fulfill this function.

3.2.4 Project Management Operations Management Tools

OCTA employs key operations management tools, including a P6 Primavera system managed by its Project Controls Department in cooperation with OCTA's project managers. Primavera tracks start dates, end dates, and percent complete for primary milestones on a project-by-project basis, with dependencies identified that establish critical path items and potential bottlenecks.

In addition to the Primavera tool, the Project Controls Department also works with project managers to prepare monthly status reports for each project that summarize projects status, schedules, and budgets. The Project Controls Department consists of one project controls manager, four project controls professionals (three OCTA and one consultant), and one office specialist to handle invoices. In addition, OCTA uses SharePoint to enable document management and control across pilot projects for grade separation projects including the following:

- Financial management tracking
- Program management tracking
- Project management tracking
- Risk/issues management
- Document controls and archiving

Initially, the value and effectiveness of using the SharePoint site was successfully demonstrated through pilot projects, including grade separation projects, confirming broad benefits to OCTA program management functions. Projects tend to last about 9 years on average. SharePoint is used as a project

management tool for grade separation projects and as a repository tool for the M2 Document Center. To avoid overcrowding the SharePoint site, the Project Controls Department typically posts the budget, baseline schedule, any revisions to the baseline, and the final progress report and the final as-built schedule, but few or no “intermediate” files.

Implementing the SharePoint and Primavera web tools greatly improved OCTA’s program management effectiveness and efficiency. They are effectively being used for program and project management control. Key program management outputs from these applications improved interagency communications, provided a robust basis of documentation, and enhanced M2 public information and outreach activities.

The following subsections discuss current challenges and opportunities, particularly in light of the PMO operating environment and operations management systems, and provide suggestions for program refinements to help address these challenges and help capitalize on opportunities.

3.2.5 Program Management Office Challenges

3.2.5.1 M2 and M2020 Plan Implementation

The M2020 Plan calls for nearly \$5 billion in freeway, streets and roads, and transit projects, and environmental programs to be delivered through the year 2020. Delivery of M2020 requires a precise plan of finance, a capital improvement plan, a resource allocation plan, a freeway mitigation program, and a risk management plan, all directed at fulfilling an aggressive schedule of project activities. Despite recent improvements with the economy, there is a recognition that OCTA will likely never make up lost tax revenue because of the recent economic recession. OCTA has successfully leveraged external funding to be able to deliver the freeway program despite the shortfall in revenue. The other programs, for the most part, scale to projected revenues.

Other anticipated challenges include managing the changing project-delivery environment, including cost uncertainties, availability of qualified private contractors, and the associated challenge of meeting prescribed delivery schedules. Another general challenge is environmental cleanup requirements and general policy changes at the California state level, related to sustainability and greenhouse gas emissions reductions, which may affect OCTA’s ability to deliver highway projects as described in M2 in the future.

3.2.5.2 Staffing and Operating Resources and Training

The PMO filled a vacancy for the Measure M Management Analyst and acquired an additional FTE (for a total of two full-time Measure M Program Analysts). The second position was added just outside the window of the assessment period. The staff additions are helpful in keeping up as OCTA capital improvements and corresponding transportation operations activities grow. Staff resource balancing, training of new staff, and appropriate consultant management continue to be important.

3.2.5.3 External Communications and Coordination

Dedicated staff in the External Affairs and Government Relations Divisions handle cross divisional communication and outreach with the public and city stakeholders. However, there is some recognition that external awareness communications and coordination could be strengthened with additional resources. Examples include the desire to raise awareness through branding of additional outreach activities to M2 with external stakeholders.

3.2.5.4 Program Management Office / Project Manager Relationships

Project managers are ultimately responsible for keeping their projects on schedule, within scope, and on budget. In their roles, they closely interface with the M2 program management function. For example, early identification of project risks and issues or stakeholder concerns can allow for early resolution and

avert potentially greater impacts to the broader M2 Program. Challenges could be amplified by “distance” in the organizational structure between the PMO and project managers, which can be exacerbated with turnover and transition to new project managers.

3.2.5.5 Program Management Office Budget Limitations

The 1 percent administrative budget limitation established in the M2 Ordinance limits growth for staffing and associated administrative and operations costs, which creates an institutional challenge.

3.2.6 Program Management Office Opportunities

3.2.6.1 External Communications and Coordination

With the two new program analysts taking on increasing responsibilities, the PMO Manager has an opportunity to broaden the PMO by expanding participation with external stakeholder groups; thinking strategically about building awareness, building relationships with other self-help county partner agencies; and increasing collaboration with Caltrans. It will also be important to continue strong cross-divisional coordination and communications through Program Management Committee meetings and other venues.

3.2.6.2 Program Management Training

The OCTA staff has a strong base of skills to administer the M2 Program. The PMO is under the Planning Division, which provides the PMO team access to the planning resources and the group works readily across other OCTA divisions. The PMO Manager has been in her current position for 4 years, and before that, worked with the M1 Program. One of the new program analysts came from the Finance and Administration Division, and the other started in the early days of the PMO, and then went to External Affairs. This rich background of experience is directly applicable to PMO duties.

However, periodic training can still strengthen the PMO. Training benefits include enhancing the cohesiveness of the PMO and strengthening its commitment to its broad mission.

3.2.7 Organizational Structure

OCTA evolved from an organization with solely planning and operations to one that also provides significant capital delivery. OCTA uses a shared administrative support model with a dedicated Capital Programs Division, which is divided into Rail Programs and Facilities Engineering and Highway Programs Divisions. This organizational structure allows for efficient delivery of programs and projects. OCTA implements many industry best practices: each manager has no more than seven or eight direct reports; the project controls unit supports both highways and transit projects; and a separate, independent M2 PMO exists under the Planning Division.

During 2013, OCTA commissioned an M2 organizational readiness assessment. Four options were evaluated for the PMO, and while initially it was recommended to integrate the PMO with the Project Controls Department, ultimately the assessment determined that the current structure was working. OCTA concurred with that recommendation. Other approved recommendations included re-evaluating performance metrics and Planning staff participating in the environmental phase of project development. However, OCTA disagreed on merging real property activities because of the difference in scopes, and chose to revise the title of Rail ROW Administrator to Rail Maintenance ROW Administrator. This M2 assessment also concludes the current organization structure is satisfactory to deliver the program.

3.2.8 Policies and Procedures for Contract and Construction Management

Three documents define OCTA’s policies for contract and construction management: CAMM Policies and Procedures Manual, Program Management Procedures Manual and Construction Management

Procedures Manual. These policies detail the general procurement policy and standards for OCTA procurement activities and personnel engaged in these activities. They ensure that goods and services are obtained timely, efficiently, and economically, while adhering to principles of good public policy and practices, and sound business judgment. The policy manual provides a common understanding of the methods for initiating, developing, executing, and administering third-party contracts within the parameters of federal, state, local, and OCTA requirements. CAMM oversees the purchase and sale of all goods, and equipment services within OCTA. It also coordinates all activities of a contractual nature with vendors, suppliers and contractors. The Construction Management Procedures Manual was developed to assist the Construction Management Team in the administration of construction contracts. It provides a reference, defines the general duties and functions of the CM members.

Cooperative Agreements are vital to the delivery of certain projects that involve the Authority and other public entity or entities. They are contractual documents that record cost-sharing arrangements, receipts of revenue, and/or establish roles of and responsibilities of the Authority and other public entities. The Program Management Procedures Manual provides a brief overview of OCTA's roles as a Lead Agency and Cooperative Agency. Currently, OCTA's Construction Management Manual is utilized when OCTA is the lead agency, with the exception of Highway projects, at which point Caltrans' Construction Management Manual is adhered to. OCTA is responsible for hiring the consultants for the Highway projects, however these consultant's report to Caltrans and utilize Caltrans' Construction Manual.

An observation and ongoing challenge for OCTA, within their cooperative agreements with Caltrans, is that Caltrans has standardized clauses that make negotiating or adapting for the specific project difficult. For example, OCTA has requested to implement Not-to-Exceed clauses in contracts awarded for projects, and pressed for timeliness of invoices but with little success. In an effort to move forward with vital projects such as the I-405 Project, also known as Project K, OCTA has accepted Caltrans' requirements to move forward.

3.3 Findings and Recommendations

Findings and recommendations for the program management/ responsiveness area are detailed below.

Program Management Finding #1: The M2 PMO performance has matured and continued to perform at a high degree of professionalism and responsiveness. With the arrival of two new program analysts, OCTA is poised to oversee the growing program more fully, such as with the more comprehensive quarterly reports recently redesigned and through deeper involvement in project management review and analysis.

Program Management Recommendation #1: OCTA should communicate PMO staff member roles and responsibilities. Clear roles should be communicated across divisions to help promote coordination and communication. PMO roles should clearly define backup and mutual support activities. OCTA should broaden the PMO by expanding participation with external stakeholder groups; think strategically about building awareness, build stronger relationships with other self-help county partner agencies; and increase collaboration with Caltrans.

Program Management Finding #2: PMO staff have a strong base of skills to administer the M2 Program, including work experience across other OCTA divisions and history dating back to the early days of the PMO. Periodic training, such as enhancing the cohesiveness of the PMO and key stakeholders and strengthening OCTA commitment to its broad mission, could strengthen the PMO. OCTA-branded training modules specific to the M2 Program could further enhance abilities.

In the past, OCTA conducted a program management academy, which could serve as a model for the new training. Such a training program is in place now; conducting it this coming year was discussed.

Program Management Recommendation #2: OCTA should implement the program management academy in the short term. Such a program will benefit new staff, serve as refresher for existing staff, and strengthen collaboration between the PMO, Finance and Administration Division, and the respective project/program managers. The M2 ordinance and policy administration strategies should be shared as part of training. In addition, OCTA should consider Project Management Professional training for all PMO staff.

Compliance

4.1 Overview

This sections evaluates OCTA’s approach to ensuring compliance with the M2 Ordinance. Key requirements from the ordinance are summarized in Figure 4-1.

Environmental Cleanup Program		2% of Gross Revenues
Audits, Safeguards, and Taxpayer Protection		1% of Gross Revenues
State Board of Equalization (SBOE) Fees		1.5% of Gross Revenues
Authority Administrative Staff		No More Than 1% of Total
Use of Net Revenues		43% Freeways, 32% Streets and Roads, 25% Transit
Local Jurisdiction Participation		Eligibility Criteria and Matching Fund Requirements
Taxpayer Oversight Committee		Review and Certify Overall Spending Decisions

* Five percent of the freeway program is dedicated to the Freeway Environmental Mitigation Program

Figure 4-1. Summary of M2 Ordinance Compliance Requirements

Key compliance requirements are described in the subsections below.

4.1.1 Net Revenue

Net revenue is defined as gross revenue from the M2 sales tax, minus the following deductions:

- Amounts payable to the State Board of Equalization for the performance of administration and operation functions of the ordinance at 1.5 percent of gross revenue
- Costs related to OCTA’s administration of the ordinance, including salaries, wages, benefits, overhead, and services. The amount expended for OCTA staff salaries and benefits related to administration of the M2 Program must not exceed 1 percent of gross revenue in any year
- Two percent of gross revenue allocated annually for environmental cleanup
- Satisfaction of debt service requirements of bonds issued pursuant to the ordinance not satisfied out of separate allocations

Net revenue will be allocated solely for the transportation purposes described in the ordinance, which specifies the following:

- Forty-three percent of net revenues will be used for freeway projects with five percent dedicated to the freeway environmental mitigation programs, focused on freeway improvements.
- Thirty-two percent will be used for streets and roads projects, including fixing potholes, improving intersections, and synchronizing traffic signals.

- Twenty-five percent will be used for transit projects, including more frequent Metrolink Service, Metrolink gateways, mobility choices for seniors and persons with disabilities, and community-based transit/circulators and improved bus stops.

4.1.2 Safeguards

The safeguards established to ensure strict adherence to the limitations on using revenues include the following:

- Each jurisdiction will distinguish the receipt, maintenance, and expenditure of M2 net revenues separately from other funding sources.
- No jurisdiction can use net revenues for purposes other than what is authorized in the ordinance. Interest earned on net revenues must be expended only for those purposes for which the net revenues were allocated.
- A TOC will provide an enhanced level of accountability for expenditure of revenues under the ordinance.
- The TOC through the Chair will certify annually whether revenues were spent in compliance with the Plan.
- A performance assessment will be conducted every three years to evaluate the efficiency, effectiveness, economy, and results of OCTA in satisfying the provisions and requirements of the ordinance.
- Quarterly status reports regarding major M2 projects will be brought before OCTA in public meetings.
- OCTA will annually publish a report on how all revenues were spent and about progress in implementing M2 projects.
- A comprehensive review of all M2 projects and programs will be conducted at least every 10 years, to evaluate the performance of the overall program.

4.1.3 Maintenance of Effort

M2 streets and roads funding is meant to supplement existing local discretionary funds used for transportation improvements. Local jurisdictions in Orange County are to annually maintain, as a minimum, a maintenance of effort amount of local discretionary funds as specified in Ordinance No. 3, adjusted for inflation every three fiscal years.

4.1.4 Amendments

The ordinance can be amended to provide for using additional funding to account for unexpected revenue, or to take into account unforeseen circumstances. Public hearings on proposed amendments must be held, and amendment adoption requires a two-thirds vote of all of the TOC committee members (if related to the changes to the Plan) and a two-thirds vote of the OCTA Board for all amendments. Additional requirements (which may require going back to the voters) apply to amendments that change programs or projects, or that change funding allocations among the four major categories of freeway projects, street and road projects, transit projects, and environmental cleanup projects.

4.2 Observations

4.2.1 Net Revenue

A key requirement of the M2 Ordinance is an annual one percent cap on OCTA M2 administrative expenses. The EAP was approved in August 2007, and OCTA began delivering M2 projects in 2008 - before the start of M2 sales tax revenue collection in 2011. To cover administrative expenses incurred before the start of M2 revenue collection, the OCTA Board authorized borrowing funds from Orange County Unified Transportation Trust (OCUTT), which will be repaid over time. During the review period, OCTA continued to borrow funds from OCUTT on an as-needed basis and has paid back part of the borrowed funds.

OCTA tracks other compliance aspects associated with net revenue closely, including the allocation of net revenue between freeway, streets and roads, and transit projects; the revenue allocation to environmental cleanup; and satisfaction of debt service requirements. OCTA reports actual M2 revenues and expenditures to the TOC on a quarterly basis.

4.2.2 Safeguards

OCTA complies with each of the safeguards specified in the M2 Ordinance. This includes the following:

- OCTA works with each jurisdiction in Orange County to ensure M2 revenues are being used appropriately. OCTA personnel meet with representatives from every city at least twice a year to review project delivery and reporting requirements associated with M2 streets and roads projects.
- The TOC serves the functions specified in the M2 Ordinance, which includes determining if OCTA is proceeding in accordance with the ordinance. The TOC meets bimonthly at OCTA.
- An independent reviewer assesses OCTA every three years for satisfaction of the provisions and requirements of the M2 Ordinance. This report is the third M2 performance assessment, covering the period from July 2012 to June 2015.
- OCTA regularly reports its progress on M2 projects in Board meetings, Executive Committee meetings, Regional Planning and Highways Committee meetings, and Transit Committee meetings. These meetings are held at OCTA on a regular basis and are open to the public. OCTA also prepares quarterly reports on M2 progress for the OCTA Board.

4.2.3 Maintenance of Effort

OCTA certifies that each local jurisdiction in Orange County annually maintains a minimum maintenance of effort amount of local discretionary funds as specified in the M2 Ordinance, adjusted for inflation. OCTA reviews and ensures the maintenance of effort requirements are met as part of the annual review process.

4.2.4 Ordinance Tracking Matrix

OCTA developed a detailed ordinance tracking matrix in early 2012 that is updated on a regular basis. The matrix includes the following sections:

- Administrative and General Requirements
- General Requirements – Allocation of Net Revenues
- Requirements Related to All Freeway Projects
- Requirements Related to Specific Freeway Projects
- Requirements for Eligible Jurisdictions
- Requirements Related to Specific Streets and Roads Projects

- General Requirements Related to Transit Projects
- Requirements Related to Specific Transit Projects
- Requirements Related to Project X
- Safeguards and Audits

For each requirement, OCTA provides a description of the compliance item, the citation within the ordinance that the item stems from, the OCTA division primarily responsible for compliance, the compliance timeframe, the status, the responsible OCTA staff person, and notes. This matrix is a highly effective method for OCTA to track compliance with the M2 Ordinance.

4.2.5 Internal Audit

The Internal Audit Department provides the Board with reports detailing the results of audits of financial, administrative, and operational activities. The department operates independently of other OCTA functions and reports directly to the Board. The Internal Audit Department has several responsibilities related to M2. These responsibilities include the following:

- Assisting the TOC Audit Subcommittee in the design of agreed-upon procedures to be applied to the annual M2 Status Report
- Assisting the TOC Audit Subcommittee in the design of agreed-upon procedures to measure compliance with the Local Fair Share program, the Project U Senior Mobility Program, and the Senior Non-Emergency Medical Transportation Program
- Assisting the TOC Audit Subcommittee in review of the results of the annual financial and agreed-upon procedures review
- Performing internal audits of M2 related projects and programs as appropriate

4.2.6 Measure M2 Ten-Year Review

Though the performance assessment review time period is from July 1, 2012 through June 30, 2015, information from documents more recent than June 30, 2015, have been included. This information is for informational purposes only. The review and corresponding findings and recommendations are limited to the performance assessment review period.

OCTA is required to perform a comprehensive review of M2 projects and program elements at least every 10 years. The current 10-year cycle began on November 8, 2006 (the Measure M2 initiation date), and will continue until November 7, 2016. In fall 2015, the PMO completed the first 10 year review report. The report was submitted to the Executive Committee on October 5, 2015 and the full Board on October 12, 2015. The specific requirements of the review are described in Section 11 of Ordinance 3 and are described below.

4.2.6.1 Ten-Year Comprehensive Program Review

At least every 10 years, OCTA must conduct a comprehensive review of all projects and programs implemented under M2 to evaluate the performance of the overall program and may revise the plan to improve its performance. The review must consider changes to local, state, and federal transportation plans and policies; changes in land use, travel and growth projections; changes in project cost estimates and revenue projections; ROW and other project constraints; level of public support for the plan; and the progress of OCTA and jurisdictions in implementing the plan. OCTA may amend the plan based on its comprehensive review, subject to the requirements of Section 12.

OCTA established the following five major objectives for the 2015 report:

1. Research and identify external policy and/or regulatory changes at the local, state, and federal level, as well as changes in land use, travel, and growth projections that require consideration

2. Evaluate current project and program cost estimates and the financial capacity of the sales tax revenue through 2041 to confirm plan delivery
3. Review the M2 Program and project elements to determine performance issues or constraints to the promised delivery
4. Identify OCTA's and local jurisdictions' progress in implementing the plan
5. Assess public and stakeholder support for the plan

These objectives were broken down into four specific areas of analysis:

- Situation analysis
- Financial analysis
- Project delivery analysis
- Public priority analysis

Analysis for each area covered current conditions and potential future considerations. The PMO used internal research efforts across several departments, information and outreach conducted during the 2014 LRTP, and the 2015 update of OCTA's CBP to complete the report.

4.2.6.2 Situation Analysis

The situation analysis considered the possible impact of external factors on the delivery of M2. External factors considered included federal and state transportation legislation, state policy regarding transportation planning, and demographic/land use changes.

The report found that federal transportation legislation indirectly impacted M2 delivery. In particular, Moving Ahead for Progress in the 21st Century Act (MAP-21) impacted transportation funding and project delivery. This act provided \$18.8 billion in transportation funding. MAP-21 also included provisions for streamlining projects, which the report found to be beneficial to M2 delivery. However, MAP-21 also placed a greater emphasis on managed highway lanes, which led to a change in the managed lane policy of Caltrans. This new Caltrans policy conflicts with the M2 plan which was drafted before the new Caltrans policy. The overall state transportation legislation placed a greater emphasis on environmental sustainability. Given that M2 included numerous sustainability measures, the new state legislative measures were determined to not have a major impact on M2 delivery.

Demographic and land use analysis found that demographic growth in Orange County was slower than projected. Despite the slower than projected growth, the location of housing and employment development was generally consistent across the 2006 projections and the 2014 LRTP. Overall, the demographic and development patterns did not substantially change the delivery of M2.

4.2.6.3 Financial Analysis

The 2008 recession majorly impacted the sales tax revenue available for M2. The initial 2006 total sales tax revenue estimate was projected to be \$24.3 billion over the lifetime of M2. In 2010, the sales tax revenue was forecasted to be \$13.7 billion, a 44 percent decrease from the initial forecast. While more recent sales tax revenue forecasts have risen to \$15.7 billion, this revenue is still considerably lower than the original projections and is not expected to go back to original projections.

The decline in sales tax revenue posed the biggest challenge to the numerous freeway projects. This category of projects accounts for 43 percent of net M2 sales tax revenue. On the whole, freeway projects faced a shortfall of \$3.4 billion compared to the initial estimates. OCTA took several steps to address this shortfall, including advancing several freeway projects to take advantage of the lower construction bids and lower interest rates that accompanied the recession. Despite being planned as a self-funded measure, OCTA secured external funding to help deliver many freeway projects.

The streets and roads categories also faced a similar funding shortfall. OCTA secured funding for the majority of the OC Bridge Program by leveraging external funding. Because of the flexible scope per the ordinance, of the various other streets and roads projects, funding for these projects is scaled based on available revenue. Similarly, the funding for the projects in environmental cleanup program and Project R was scaled based on available revenue. Project R provides operating and capital funding for Metrolink service. This project has been scaled back based on available revenue, which has limited additional service expansions. Providing additional funds would allow the service to grow and meet the future demand and also support sustainability goals by providing an attractive travel option for the commuters. The Senior and Disabled Fare Stabilization Program within Project U is the only transit project which cannot employ a scaled funding approach. The M2 Ordinance states that Project U will receive 1 percent of net revenues to provide fare discounts for seniors and persons with disabilities. The M2 Ordinance also provides specific guidance that fares will be stabilized in an amount equal to the percentage of partial funding of fares for seniors and persons with disabilities as of the effective date of the ordinance. However, 1 percent of the adjusted net revenues based on the latest forecasts was not sufficient to fund the requirements outlined in the M2 ordinance. Thus, Project U requires additional funding beyond the dedicated 1 percent of net revenues.

Project T (Gateways to High Speed Rail) was completed under budget with the completion of the Anaheim Regional Transportation Intermodal Center. The remaining balance of Project T (\$219 million) is sufficient to cover the budgetary shortfalls of Project U (Senior and Disabled Fare Stabilization) and of Project R (Metrolink Operations).

The report recommended that \$69 million of the remaining balance be transferred to Project U (Senior and Disabled Fare Stabilization) and the remaining \$150 million transferred to Project R (Metrolink Operations).

4.2.6.4 Project Delivery Analysis

Overall, project delivery has occurred at a very fast pace. All M2 programs have been initiated, with some already completed. Approximately \$3 billion dollars has been invested/allocated to the various projects. However, a gulf developed between the freeway project delivery priorities of OCTA and Caltrans, which is a major concern for project delivery. Caltrans now requires a broader range of alternatives be considered for analysis. These new requirements differ from those which were in place during the drafting of the M2 highway plan. This could expand project footprint, change intent, add costs, and/or cause scheduling impacts.

4.2.6.5 Public Priority Analysis

OCTA conducted thorough public outreach for the M2 plan to gauge feedback from a wide range of stakeholders. These included government officials, community and business leaders, transportation professionals, multicultural leaders, and the general public. OCTA provided the general public with many platforms to provide comments, including an online questionnaire, roundtables, outreach meetings, letters, a public opinion survey, and promotion through traditional media.

Public opinion of M2 is still favorable. The public generally supported the plan as passed. Many participants suggested that OCTA should also continue efforts to include multi-modal options including transit, street, freeway, and active transportation projects.

The requirements in the Ten-Year Review Report to analyze M2 projects and programs, assess internal and external barriers, and recommend efficiency improvements for M2 delivery were fulfilled. External changes to land use, demographics, land use transportation legislation, and project cost/revenue projects will not require significant changes to the M2 Plan. All projects listed in the plan were initiated, thus OCTA has upheld its initial commitments to voters.

Overall, OCTA was able to implement scalable funding systems and external revenue to make up for shortfalls in projected sales tax revenue. The report found that the balance of remaining funding in Project T is sufficient to address the projected budgetary shortfalls of Project R and Project U over the life of the M2 Program. The report recommended formally adding an amendment to allow for the transfer of funds between transit programs.

On December 14, 2015 the Board approved an amendment to the Renewed Measure M Local Transportation Authority Ordinance No. 3 and Transportation Investment Plan. The amendment was correctly stated in all communications and transmittals including the action taken by the Board on the dollar amounts. However, an error was found in the accompanying attachments reflecting the action. In order to ensure the record is clear on the action taken, a staff report with revised attachments were reviewed and approved by the Board on March 14, 2016.

4.3 Findings and Recommendations

No findings and recommendations are provided for Area 3, Compliance.

Fiscal Responsibility

5.1 Overview

This section evaluates OCTA’s efficiency and effectiveness in structuring the fiscal approach to M2 project and program delivery. As described in the M2 PMO Charter, the PMO’s functional responsibilities with respect to fiscal responsibility include ensuring the following:

- Proper reporting and ongoing review of M2 receipts, expenditures, and accounting of M2 proceeds to meet business and agency standards
- Uses of M2 and related external funding follow the provisions of the ordinance

More holistically, OCTA’s fiscal responsibilities for the M2 Program include a broader spectrum of activities such as project selection, management and oversight of M2 funds, and ensuring compliance with financial aspects of M2 mandates (such as using M2 funds to leverage opportunities to expand project funding). These areas, summarized in Figure 5-1, were considered during the assessment.



Figure 5-1. Orange County Transportation Authority’s Fiscal Responsibility Objectives and Strategies for the M2 Program

5.2 Observations

5.2.1 Administrative Expenses

OCTA personnel continue to manage administrative expenses related to the M2 Program. The M2 Ordinance sets an annual one percent cap on salaries and benefits for OCTA administrative staff. OCTA ensured that M2 project-specific administrative costs were charged to the appropriate project and tracked both project-specific and non-project administrative charges on an ongoing basis. This process meets the ordinance requirements and allows charges that exceed the one percent cap to be offset by using other funding sources. OCTA funded M2 administrative expenses in excess of the cap by borrowing from OCUTT, and has already paid back a portion of the funds.

5.2.2 Program Financing and Funding

The Transportation Investment Plan, in its discussion of taxpayer safeguards and audits, mandates that every effort be made “to maximize matching state and federal transportation dollars.” While the M2

Ordinance states “Pay as you go financing is the preferred method of financing transportation improvements and operations under this Ordinance,” it permits bond financing where pay-as-you-go financing is not feasible.

5.2.2.1 Program Financing

OCTA did not issue any additional debt to finance M2 projects during the review period. However, the OCTA Board decided to retire the Tax Exempt Commercial Paper (TECP) facility, which was established in 2008 to finance the M2 EAP because M2 sales tax collections did not begin until 2011. Even though they were authorized to issue debt for approximately \$400 million using the TECP, OCTA issued debt for only \$100 million under the TECP facility. In 2010, OCTA issued long-term sales tax revenue bonds and paid back approximately \$75 million of the debt issued under the TECP facility. This reduced the outstanding debt issued under the TECP facility to about \$25 million. The OCTA Board retired the TECP program in 2014.

Though OCTA issued no debt during the review period, its current cash flow forecasts anticipate issuing debt to finance M2 projects.

5.2.2.2 Program Funding

Building on the success of securing Proposition 1B and American Recovery and Reinvestment Act funding from the 2009-2012 period, OCTA continues to actively seek other funding sources to supplement M2 sales tax revenue. OCTA leveraged approximately \$918 million in committed external funding for the M2 Program. This level of funding allowed the agency to bridge the funding gap caused by the recession.

Project K and Project S provide two examples of securing additional funding. For Project K, OCTA is working with Caltrans to widen the San Diego Freeway (I-405) between SR-73 and I-605. OCTA is actively seeking federal loans through the TIFIA program to finance the project. For Project S, OCTA is seeking funding for the OC Streetcar project through the federal New Starts process, working in close cooperation with FTA.

OCTA updated its cash-flow projections during the October 2015 Comprehensive Ten-Year Program Review of the M2 Program, which was completed outside the review period of this study. In these projections, OCTA’s financial assumptions included committed, external funding already programmed to specific freeway projects. Based on the current sales tax revenue forecasts and committed external funding, OCTA determined it will be able to meet the intent of the commitments made to Orange County voters. Any new external funding will be used to protect against any financial risks (higher project costs or interest rates).

5.2.3 Process to Forecast Cash Flow Needs

OCTA reports its cash flow projections for the M2 Program in the CBP, which is updated every year and published every other year. During the review period, OCTA published the CBPs in FY 2012-13 and FY 2014-15. As the Ten Year M2 Program Review was completed in 2015, OCTA also updated the M2 cash flow needs in October 2015.

To forecast the M2 revenues, OCTA continues to use sales tax forecasts from three universities. These projections are available annually. For informational purposes, the latest sales tax projections are shown in

Table 5-1. OCTA is currently reviewing the methodology used to estimate sales tax forecasts.

Table 5-1. M2 Sales Tax Revenue Forecasts, Growth Projections

Forecast Period	University of California, Los Angeles	Chapman	California State University, Fullerton
1-year rate (FY 2016)	6.51%	5.68%	7.98%
Average 3-year rate (FY 2016 - FY 2018)	4.94%	5.66%	7.15%
Average 5-year rate (FY 2016 – FY 2020)	4.81%	5.40%	6.37%
Average 10-year rate (FY 2016 – FY 2025)	4.49%	4.95%	5.37%
Average 30-year rate (FY 2016 – FY 2041)	4.35%	4.53%	4.68%
Sales Tax Forecast (\$ Billions)	\$15.1	\$15.8	\$16.4

Source: OCTA. 2015. Measure M2 Sales Tax Forecast. Finance and Administration Committee Meeting. November.

OCTA updates the cash flow needs once a year or as needed driven by the situation. The cash flow does not need to be updated more frequently unless there is a compelling reason to do so. Any changes in methodology used to forecast sales tax revenues will impact the M2 cash flow forecasts.

5.2.4 Technical Project Selection Process

OCTA established a specific process for awarding M2 grants to streets and roads, transit, and environmental projects. The review process included interviewing OCTA staff overseeing these programs and reviewing the corresponding processes documented in guidelines and other documents on OCTA’s Web site. This documentation included the following:

- CTFP Guidelines
- Measure M2 Eligibility Guidelines
- Select Program Guidelines (Project T, Project S, and Environmental Program)
- Preparation guidelines for various plans (Project Management Plan, Congestion Management Program, and Capital Improvement Program)

The CTFP guidelines provide information and procedures for local agencies to apply for funding for transportation projects. In general, this document lays out the program overview, eligibility, requirements, application process, and other requirements. The eligibility and project selection requirements are consistent with the requirements of state and federal grants (for example, Project S projects must be consistent with FTA process and policies). The process is logical, thorough, and complete.

The M2 Eligibility Guidelines require local agencies to satisfy 13 requirements as identified in the M2 Eligibility Guidelines to be eligible to receive funds. OCTA’s review process ensures local agencies are meeting the eligibility requirements. The eligibility review process is reviewed by OCTA staff, TOC, and Annual Eligibility Review subcommittee periodically. Recommendations from the eligibility reviews and the expenditure reports are then approved by the Board. OCTA has thorough guidance materials and conducts outreach with local agencies to ensure they have sufficient tools and the resources required to meet the annual eligibility requirements.

5.2.5 Investment Policy and Priorities Review

The investment policy and priorities review focused on whether OCTA invests the M2 funds balancing various priorities such as security of the principal, market average returns, and meeting the cash flow needs. Staff were interviewed and investment policies adopted by the Board in January 2012 (2011

Annual Investment Policy), June 2013 (2013 Annual Investment Policy), and July 2014 (2014 Annual Investment Policy) were reviewed.

The OCTA Board adopted an investment policy every year during the review period. The OCTA Finance and Administration Committee reviewed the investment policy every year during the review period and recommended changes to the investment policy. M2 does not require annual updates to the investment policy. An annual review is recommended under California Government Code Section 53646(a)(2), which requires the statement of investment policy be rendered to the Board and any changes be approved in a public meeting. During the review period, OCTA met the requirement for reviewing and approving the investment policy in 2013 and 2014. The 2011 Annual Investment Policy, which was not approved until early 2012, may also have been used to guide investments in 2012.

OCTA's Annual Investment Policy governs all investments made by OCTA, irrespective of the funding source. This appears a reasonable approach considering that the M2 Ordinance does not have specific policies or practices for investing M2 funds.

OCTA's investment policy is to ensure capital preservation, provide liquidity, and achieve market average rate of return. It also lays out priorities with regard to safety, cash flow needs, and returns. Investment objectives include the following (for exact definitions review OCTA's Annual Investment Policy):

- Safety of Principal – avoid capital losses
- Liquidity – ensure investments offer the flexibility to be easily sold at any time with minimal risk of loss of principal and interest
- Total Return – ensure investments attain market average rate of return through economic cycles
- Diversification – diversify investments to avoid unreasonable market risks

These objectives and the definitions remained unchanged during the review period.

To ensure that OCTA's investments comply with these objectives, OCTA provides a copy of the investment policy to the investment manager as part of its contract with the investment manager. OCTA regularly monitors the compliance of its portfolio manager and has provisions in place in case the investments are not in compliance.

Overall, OCTA's policies and processes protect the security of the principal, meet the cash-flow needs, and earn market average rate of return.

5.2.6 Expenditure Reporting Template

M2 guidelines require local agencies to adopt an annual expenditure report to account for net revenues, developer/traffic impact fees, and funds expended by local agencies that satisfy the maintenance of effort requirements. The M2 guidelines require that the expenditure reporting template include the following:

- All net revenue fund balances and interest earned
- Expenditures by type (capital, operating, and administration) and program or project

The expenditure reporting template is organized effectively and collects the following information required by the M2 Ordinance:

- Schedule 1 collects the beginning and ending fund balance by funding source for the fiscal year.
- Schedule 2 collects incoming sources of revenue and outgoing expenditures by fund, tracking the interest separately. This schedule also compiles the sources and uses of funds by project/program, and distinguishes interest from other amounts.

- Schedule 3 collects expenditures by fund source for the streets and roads program by administration/overhead, construction, and operations and maintenance.
- Schedule 4 collects the amount expended by fair share project list.

The expenditure report is collected annually and is submitted 6 months after the end of the fiscal year to allow for reporting audited financials. The reporting format and template are also adequate and complete.

5.2.7 Payment Process for Grant Funding Disbursement under Streets and Roads Program

This review consisted of interviewing OCTA staff and reviewing CTFP guidelines.

The disbursements for Project Q, Local Fair Share Program, are made bi-monthly using a formula once the minimum eligibility requirements are met, which are reviewed annually.

In general, the disbursements for Project O, Regional Capacity Program, and Project P, Regional Traffic Signal Synchronization Program, are generally released through two payments. The initial payment constitutes 75 percent of the contract award or allocation amount, whichever is less. The initial payment can be disbursed after the local agency submits the request including contract award and relevant information. The final 25 percent can be disbursed after OCTA receives the final report and the supporting documentation. The agencies must submit payment requests using OCTA's online platform. For Project P, the initial payment can be 75 percent of the primary implementation allocation. The remaining 25 percent can be disbursed after completion of the primary implementation phase and submission of required documentation. Payment for ongoing operations and maintenance can only be made upon submittal of the final invoice with proof of work performed.

Detailed instructions for submitting payment requests and supporting documentation are available for local agencies' reference. In addition, OCTA staff can assist the agencies with this process.

The 75-25 payment approach balances the up-front cash-flow needs of local agencies to initiate and make substantial progress and also provides OCTA some protection. In addition, a feedback loop is built in to review the process annually and make necessary adjustments based on lessons learned and stakeholder feedback. The payment process is working well for OCTA and, hence, no changes are proposed.

5.2.8 Process to Monitor Timely Use of Grants to Local Agencies

OCTA is required to review all active CTFP projects through the semi-annual review process. OCTA administers this process using the OCFundTracker. The review includes project cost, project scope, local match verification, project schedule, project viability, and in-kind match confirmation for the Environmental Cleanup Program. The reviews are conducted every six months generally, initiated in March and September, when local agencies are notified of the upcoming reviews and requested to submit project updates. Local agencies are given an opportunity to request changes per the CTFP guidelines, which are then reviewed on a case-by-case basis based on the information provided. The proposed changes may include changes to the project schedules, scope modifications, delays, advances and timely-use of funds extension request. OCTA staff review the proposed changes to ensure they are consistent with the CTFP guidelines and present the recommendations to the Technical Advisory Committee to initiate the approval process, and to the OCTA Board for final approval.

Several local agencies did not request an extension for expending the funds within the three year deadline imposed by the ordinance. Over time, OCTA may investigate whether there is a developing pattern of behavior and whether this pattern is indicative of a broader issue that should be addressed.

5.3 Findings and Recommendations

Findings and recommendations for OCTA to consider for fiscal responsibility are detailed below.

Fiscal Responsibility Finding #1: During the review period, OCTA implemented controls to improve tracking and administration of the one percent cap on administrative expenses. Though OCTA has borrowed from another funding source to satisfy the M2 requirement, OCTA staff are confident they will be able to satisfy the one percent cap requirement over the long term. OCTA has already paid back part of the amount borrowed.

Fiscal Responsibility Recommendation #1: Continue monitoring ongoing expenditures for administrative expenses, including labor charges by project, and determine whether any changes are required in the future.

Fiscal Responsibility Finding #2: OCTA regularly evaluates the optimum level of debt financing and the timing of debt issuance required to deliver the M2 Program in a cost-effective manner. While OCTA has indicated an ability to deliver the M2 Program without additional external funding, it continues to seek alternate sources of funding to supplement M2 funds when available. OCTA has processes in place to periodically update its cash-flow needs for the M2 Program.

Fiscal Responsibility Recommendation #2: Continue to evaluate the optimum level of debt to issue and timing of debt issuance to deliver the M2 Program. Continue efforts to seek alternate sources of funding to supplement M2 funds, including using M2 funding to meet local match requirements.

Fiscal Responsibility Finding #3: OCTA noted that three local agencies failed to request timely use of funds extension during the semi-annual review process, and, thus did not receive their full allocation.

Fiscal Responsibility Recommendation #3: Over time, evaluate whether there is a pattern developing by local agencies neglecting to request timely use of funds extensions, when such extensions are necessary. Should a pattern emerge, identify and address the underlying root causes.

Transparency and Accountability

6.1 Overview

This section evaluates how fully, intelligibly, and otherwise appropriately OCTA reports on M2 matters to the Board, TOC, general public, and other stakeholders. The M2 Program is a transparent and publicly visible program at OCTA. The review of OCTA's transparency and accountability included interviews, in-person or by phone, with OCTA staff working in the offices of External Affairs and Government Relations, as well as with a broad cross-section of external stakeholders as identified in Table 1-3. The interviews were to evaluate ongoing outreach efforts and obtain feedback from internal and external stakeholders. The project team also reviewed OCTA's Web site as a tool for outreach and providing project updates to the public and compared it to those of two similar transit agencies: the Los Angeles County Metropolitan Transportation Authority (LA Metro) and the San Diego Association of Governments (SANDAG).

6.2 Observations

External stakeholders lauded OCTA as a good partner, stating that OCTA has done a good job with M2 program outreach. Collectively, the OCTA staff is passionate and committed to disseminating M2 information to stakeholders and the public. However, balancing the appropriate levels of effort for transparency and accountability relative to the costs of implementing various strategies can be challenging given funding constraints. The following subsections outline the feedback and highlight successes and challenges.

6.2.1 OCTA Outreach Staff Feedback

OCTA outreach and government relations staff were interviewed about transparency and accountability efforts related to the M2 Program. Successes and areas for improvement noted during the interviews are highlighted below. The list of staff interviewed is provided in Table 1-3.

6.2.1.1 Successes

Collectively, staff members were passionate and committed to disseminating M2 information to external stakeholders and the public. Staff mentioned the updated OCTA Web site, which was launched in July 2015, provides consistent updates on new M2 projects and program information. Personnel photos and contact information of key OCTA staff are now provided on M2 project Web pages, so that stakeholders and the public can put a face to a project and easily provide input and feedback. The Web site is user-friendly, easy to navigate, and compatible with mobile and social media platforms. OCTA's internal design and Information Technology team provides quick assistance with Web site updates and basic maintenance. OCTA tailored its outreach strategies for each project to address different social, economic, and demographic needs with the help of subject matter experts and diverse community outreach consultants. These community outreach strategies included public informational meetings; automatic outgoing calls for senior citizens; and translated materials for the Hispanic, Vietnamese, and Cambodian communities, among others. In addition to conducting outreach activities during typical weekday work hours, OCTA outreach staff also facilitated and participated in after-hours and weekend activities.

6.2.1.2 Areas for Improvement

Staff stated that limited staff resources make it hard to stay on top of keeping information current and implementing a robust awareness program. For each project and program, OCTA staff members set a high standard to serve the general public by being responsive 24/7.

OCTA outreach team's efforts to communicate project related information through digital marketing solutions and traditional media such as television, radio, and print media was highly regarded by external stakeholders. However, the 2015 Attitudinal and Awareness Survey revealed that awareness of Measure M declined since last survey. About 74 percent of the respondents said that they had not heard of Measure M. In general, this presents a potential opportunity to improve the branding and awareness of Measure M and educate the public that the projects are in fact funded using Measure M.

Overall, staff working on government relations and outreach noted that the extended period of heavy workload presented a challenge to maintaining strategic planning, staff retention, and work-life balance. Stakeholders suggested that adding additional staff could reduce the pressure on current staff and improve the quality of the government relations and outreach efforts.

6.2.2 External Stakeholder Feedback

External stakeholders were interviewed about transparency and accountability efforts related to the M2 Program. Successes and areas for improvement noted during the interviews are highlighted below. The list of external stakeholders interviewed is provided in Table 1-3 (see page 1-5).

6.2.2.1 Successes

External stakeholders lauded OCTA as a good partner and indicated that overall OCTA has done a good job with M2 outreach. The majority of external stakeholders reported that OCTA has been timely in its communications and that they were encouraged to provide feedback that would be incorporated into decision making. Many external stakeholders have established long-term partnerships with OCTA. The stakeholders also praised OCTA staff for being professional, cooperative, and available.

Multiple external stakeholders noted that during committee meetings (TOC, Environmental Oversight Committee, and Environmental Cleanup Allocation Committee), several OCTA staff members were present to provide information and answer questions. The meetings were well organized, and handouts/meeting agendas were provided. When an issue was addressed during a committee meeting, OCTA staff responded immediately. If a particular question or information request brought up during a committee meeting was more complicated than could be satisfactorily addressed with the information on hand, OCTA staff would research the information and provide a follow-up response. Generally, external stakeholders thought follow-up communications were effective and largely attributed that success to a functional tracking system.

The majority of stakeholders who were interviewed were satisfied with the frequency of communication with OCTA. Many reported meeting and speaking frequently with multiple OCTA representatives on several different occasions. Most external stakeholders received their information (meeting agendas and project updates) via e-mail and were aware of the OCTA Web site and social media platforms. However, in-person meetings and phone calls were their preferred methods of communication. In-person meetings were regarded as the most effective method for soliciting input and feedback.

6.2.2.2 M2 Project Highlights

External stakeholders noted two high-profile M2 projects involving a large number of external stakeholders in particular had notable OCTA outreach efforts. A majority of external stakeholders mentioned the I-405 Improvement Project, which has been highly publicized and has continued to receive much attention from the public and stakeholders. Outreach efforts for this project improved

since the project's inception. Ultimately, most external stakeholders viewed communication for this project positively.

The Environmental Mitigation Program was the other noted project. The program involves a wide variety of external stakeholders, some of whom have been reluctant to accept the change in property ownership as well as OCTA's intent to protect the Preserves in perpetuity. OCTA diligently worked with environmental and community groups to address these concerns. Resource Management Plans (RMPs) for a number of properties were prepared well ahead of the required timeframe to address land management, protection of biological resources, and public access. Although not required, OCTA invited public input on the RMPs as well as organized public meetings to generate program awareness. OCTA also hosted wilderness hikes and rides (since 2011) on various Preserves to educate the public on the program's objectives, which were viewed positively by the public.

6.2.2.3 Areas for Improvement

The majority of external stakeholders reported that OCTA could improve its community outreach efforts through better use of stakeholder channels. External stakeholders represent organizations with member bases, and OCTA could use the stakeholders' communication channels such as e-mail, newsletters, Web site banners, meetings, printed ads, and mailers to improve their outreach efforts. While most stakeholders felt they were adequately informed about M2 projects and programs by receiving information at meetings, a few stakeholders stated they did not receive many subsequent project- or program-related e-mails, updates, or briefings and were interested in receiving more information about particular projects. Many external stakeholders expressed interest in receiving regular OCTA project and program information outside of their representative committee, district, or city. External stakeholders were primarily interested in M2 projects directly impacting their members' and constituents' interests. The stakeholders appreciated receiving quarterly reports, but were interested in receiving information with more specific project and program summary updates as it related to the needs and interests of their members and constituents. One-page information sheets to provide M2 project updates tailored to specific city or project interests were suggested.

A majority of the stakeholders acknowledged they rarely conducted an active search for information on the OCTA Web site or social media sites. However, they noted the Web site was well laid out and easy to use. Multiple stakeholders indicated that the outreach efforts could help facilitate sharing information with other areas of focus and other committees. More education across committees about M2 projects, via handouts and in-person briefings with stakeholder communities was suggested.

6.2.3 Assessment of Availability of Information on M2 Projects

This assessment of outreach methods is based on the feedback from internal and external stakeholders, as well review of the 2013 OCTA Measure M2 Organization Readiness Assessment Study: Staff Report, M2 Final Project Status Reports, OCTA's West County Connectors Public Outreach Plan, and OCTA's Web site.

6.2.3.1 Successes

To effectively engage the public and provide information on M2 projects, OCTA implements a wide range of outreach methods. External stakeholders praised the OCTA Web site, newsletters, and public meetings regarding M2 projects for being thorough, carefully prepared, and informative. OCTA adopted the latest marketing solutions, including new technologies such as digital marketing, e-mail blasts, mobile-friendly media, text messaging, and social media. The advantages to including digital media as part of OCTA's outreach strategy is reduced cost and increased effectiveness in reaching constituents in the impacted areas.

External stakeholders noted receiving information on M2 projects from public outreach efforts in multiple ways: targeted e-mails, visits to the OCTA Web site, weekly newsletters, mailers, door hangers,

videos, television and radio commercials, phone calls, publications of upcoming proposals, public informational meetings, informal meetings, community-based meetings, Board meetings, and newspaper advertisements. The informational materials ranged from a single page summary to quarterly reports numbering 45 to 60 pages; presentation formats ranged from print to digital. External stakeholders noted they liked receiving regular updates that provided a lot of information.

OCTA's outreach staff were proud of the capabilities of the OCTA's bilingual staff. To improve outreach, bilingual staff and consultants regularly attended community meetings to provide additional information and support. Printed materials and Web site communications were translated into different languages to provide information to the diverse communities throughout Orange County. The M2 logo was listed on its program and project marketing materials for consistent branding. A section of the OCTA Web site was dedicated to M2, and it was updated frequently. The committee meeting schedule and agendas were also posted on the Web site.

Another important aspect is how the outreach team receives and responds to public questions and comments. Providing timely responses to public comments was noted as a highlight of OCTA's outreach strategy by both staff and external stakeholders. OCTA outreach staff delivered acknowledgements and responses to all public comments within 24 to 48 hours. If a question was more in-depth, the staff member researched the topic and followed up as quickly as possible with a reply. During construction phases, multiple staff members received updates from one central e-mail inbox for receiving feedback from the general public to ensure an outreach staff was always available to respond to comments in a timely manner. For every M2 project, OCTA staff recorded the comments and categorized them as positive, negative, or neutral for trend analysis. The response time to committee members and elected officials varied because of the relative complexity of the subject matter.

OCTA outreach staff also noted the importance of coordinating outreach with other agencies for effective communication. OCTA provided resources and collaborated with its representative cities and Caltrans. To ensure that public outreach is effectively carried out for each M2 project, OCTA issues standalone outreach contracts. By issuing outreach and communication contracts separately, instead of including these functions in the construction project scope of work, OCTA designs projects such that the outreach efforts receive sufficient attention and support for successful implementation.

6.2.3.2 Areas for Improvement

Both OCTA staff and external stakeholders noted the challenges associated with OCTA receiving proper recognition from the public on how Measure M funding is used to create M2 projects and programs, despite OCTA's outreach efforts. TOC members noted there are more opportunities to educate members of the community – neighbors and friends – who do not yet fully appreciate the benefits of M2. OCTA marketing materials were branded with the M2 logo; however, the placement and size of the M2 logos should be larger and more prominent on city signage. Developing marketing and branding guidelines for cities that receive M2 funds on how best to promote and explain projects could improve the recognition of M2 projects.

Furthermore, the complexity of the subject matter has consistently made outreach efforts more challenging. Small cities lack the staff to review all materials and documents. Many cities also had a "silo" mentality, and were focused only on their own issues, which reduced efficiency. OCTA endeavored to bridge the gap by educating the city managers on M2 projects and programs.

Term limits and a high turnover rate of OCTA Board members, elected officials, and retiring city staff was an ongoing challenge to OCTA's outreach efforts. With changes in leadership comes the natural process of bringing the new member up to speed on OCTA activities. This can sometimes effect how quickly projects are able to move forward. To address this issue, as it relates to Board members, OCTA prepared a Board briefing book, which outlines all aspects of the organization and processes.

6.2.4 Quantitative Rating

As a benchmark for future reviews, interviewees were asked to rate OCTA’s performance in transparency and accountability on a scale of 1 to 10, with 10 being best. Among those willing to give a numerical rating, no rating was below 6, the mean was 8, and the highest rating was a 9.

6.2.5 Orange County Transportation Authority Web site and Social Media

One of the main improvements mentioned in the interviews was the OCTA Web site and social media platform. For all stakeholders, and especially the general public, the OCTA Web site, M2 web pages, and M2 project one-pager information sheets were a user-friendly doorway to finding specific M2 Program information and details about each project. The fact sheets, which were kept up to date, and committee agenda packages were especially helpful.

Figure 6-1 provides a sample graphic from the M2 Schedules Web page, with select freeway project schedules identified. Figure 6-2 provides a sample project fact sheet with detailed information pertaining to the I-405 Improvement Project. Figure 6-3 provides a screenshot of the M2 Web page; more program and project information is listed on a drill-down menu in the left pane. M2 funding projects are differentiated with a Measure M logo on the Web page for easy identification. Figure 6-4 shows a wide range of social media channels for outreach, including text messages (SMS), e-mail, Facebook, Twitter, YouTube, and Instagram, which generate interest and facilitates dialogue with the general public.

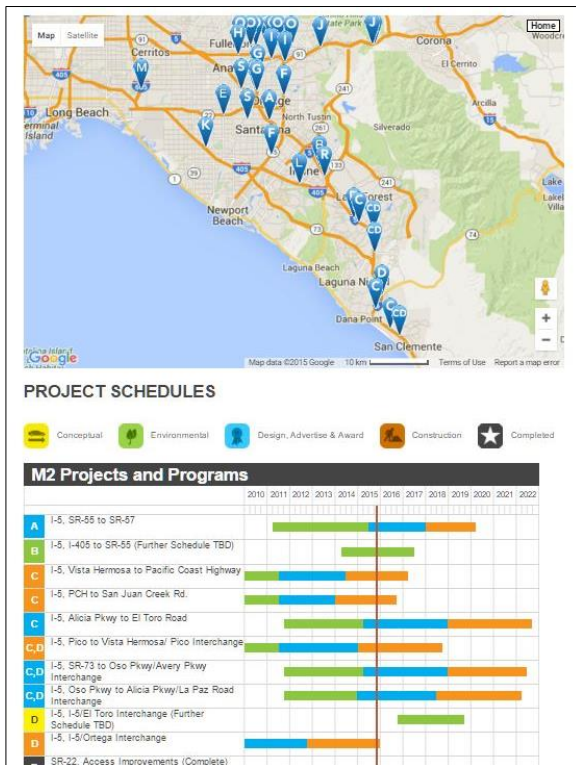


Figure 6-1. Sample of M2 Schedules on the Orange County Transportation Authority Web site

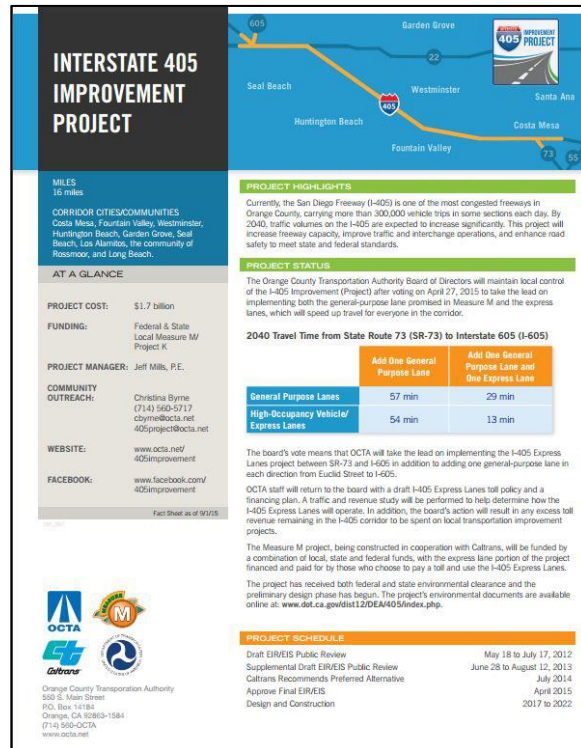


Figure 6-2. Sample of Project Fact Sheet, M2 Funding Project, I-405 Improvement Project (SR-73 to I-605)

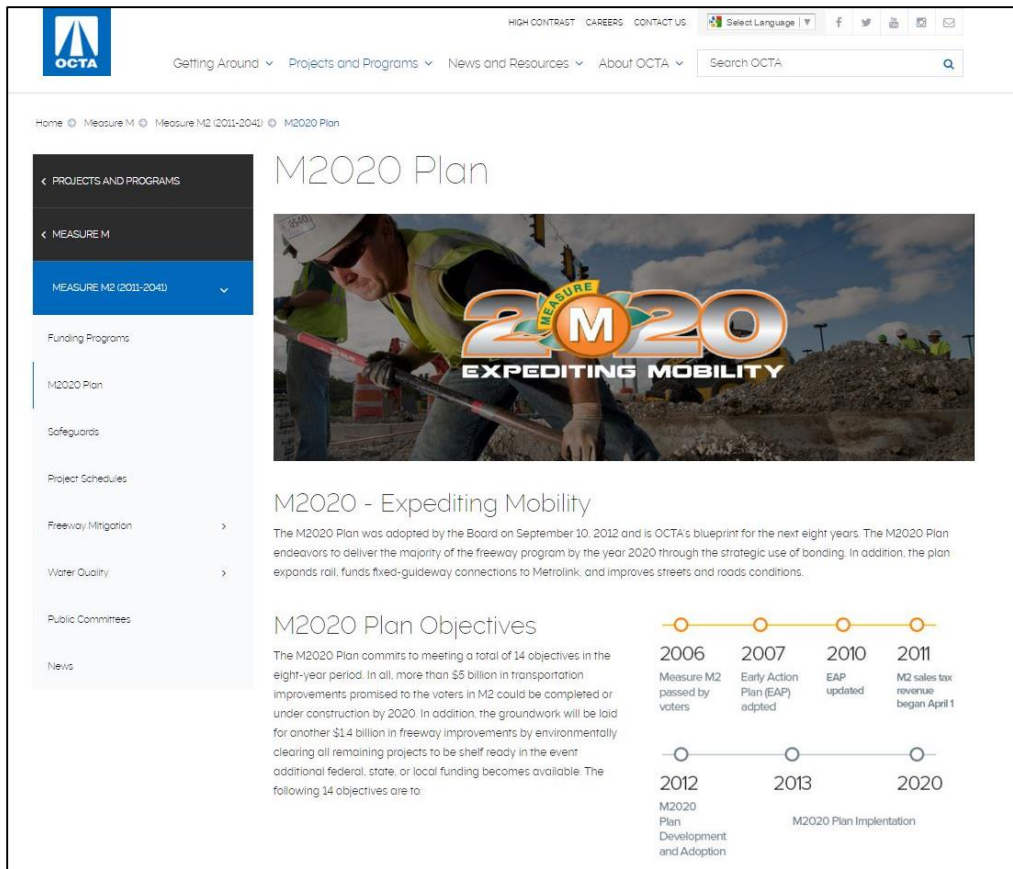


Figure 6-3. Orange County Transportation Authority M2 Web page

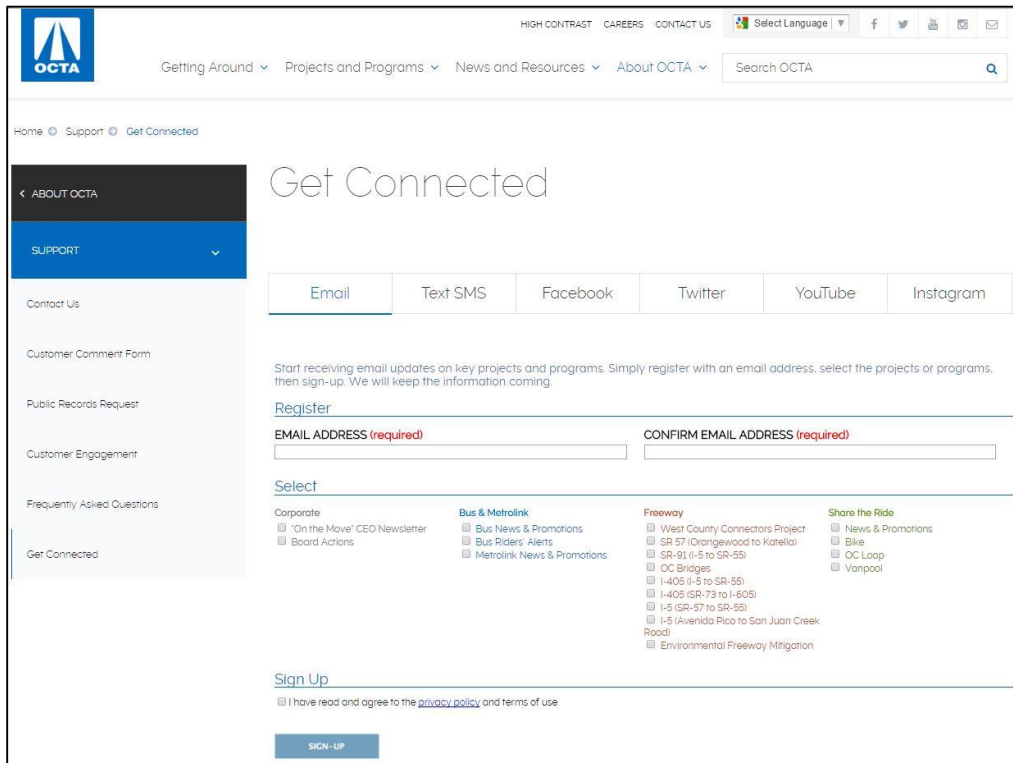


Figure 6-4. M2 Programs and Projects Social Media Outreach Efforts, Orange County Transportation Authority Web site

6.2.5.1 Comparison against Other Transit Agency Websites

This subsection compares various aspects of the OCTA Web site, including presentation, user function, and availability of project information, to the Web sites of two other similar transit agencies, LA Metro and SANDAG. The OCTA Web site provided a great deal of information in a clear and accessible manner. However, OCTA could improve access to information by providing downloadable PDF documents of project information and offering more users the ability to find information about project updates via project search or an interactive map display. Table 6-1 shows the review of the OCTA, LA Metro, and SANDAG Web sites for user function and comparison of programs similar to OCTA’s M2 Projects.

Table 6-1. Review of Orange County Transportation Authority and Other Transit Agency Websites



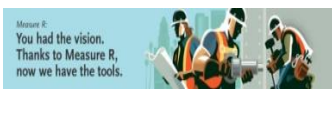

Agency / Web site Attribute	Orange County Transportation Authority	LA Metro	SANDAG
Program Description and Homepage Display	 <p>When clicking on the M2 tab, the following is exhibited: “The M2020 Plan was adopted ... the year 2020 through the strategic use of bonding.”</p> <p>This could be improved by displaying the following message: “Half-cent 20-year sales tax (Measure M) was approved in 1990. Extension (Measure M2) was approved in 2006 for an additional 30 years, to 2041.”</p>	 <p>Measure R is a half-cent sales tax for Los Angeles County to finance new transportation projects and programs, and accelerate those already in the pipeline. The tax took effect July 2009 for FY 2010-2039.</p> <p>A November 2012 vote to extend the sales tax (Measure J) did not pass. Metro continues to explore 2016 ballot Measure R.</p>	 <p>TransNet is the half-cent sales tax for local transportation projects that was first approved by voters in 1988, and extended in 2004 for another 40 years.</p>
Program Home Page Accessibility	Good. Under the top navigation bar on the OCTA homepage, second pull down.	Good. Under the top navigation bar, LA Metro homepage second pull down.	Very good. On the SANDAG home page, left pane.
Project Dashboard	Good. The Project Schedules landing page shows an interactive map. There is also a snapshot of all projects and programs that include status updates.	Very Good. The Interactive Dashboard landing page shows high-level summaries in a graph and chart; detailed information is available when scrolling down. The Project Tracker landing page shows each project name and type. Each project status, cost, and city/region is available in spreadsheet format. Information can be viewed or saved in a downloadable PDF or exported into Excel.	Good. The Transnet Dashboard is accessible from the SANDAG home page. There are three dashboard landing pages representing the Program, the Corridor, and the Segment. Performance and Trends information is also available. The information is presented in graphs, maps, and charts.
General Navigability	Generally good. Navigability could be enhanced through greater use of Google Maps to highlight program content and project status. Information is easy to understand.	Excellent navigability. Information is interactive, balanced with images, and easy to understand.	Information is static and the look and feel appears outdated. Program and project information are hosted on different sites. The layouts, names of the landing pages, and brand images are difficult to read.
Program / Project Content	Complete, interactive, and in-depth. In addition to the top navigation bar, there are sub-navigation bars on the left.	Complete, interactive, and in-depth. Project budget and status	In-depth projects and programs information is available, but is presented inconsistently.

Table 6-1. Review of Orange County Transportation Authority and Other Transit Agency Websites

Agency / Web site Attribute	Orange County Transportation Authority 	LA Metro 	SANDAG 
	Project maps and fact sheets are listed and can be downloaded.	information is available and can be downloaded.	
Frequency of Project Updates	Monthly and quarterly updates are available through committee meetings; an annual report is available.	Daily construction notices are posted for projects/programs.	Monthly updates are given through committee meetings; an annual report is available.
User Feedback Feature	User feedback is offered through a helpline, text messages, a customer comment form, social media, photos, and lists of personnel, phone numbers, and e-mail addresses.	User feedback is offered through social media, an e-mail subscription, project-direct phone numbers and e-mail addresses, and outreach team information.	User feedback is offered through lists of personnel, phone numbers, and e-mail addresses.
Connectivity to Social Media	Offers links to Facebook, Instagram, YouTube, Twitter, and the OCTA blog.	Offers links to Facebook, Twitter, and Ustream TV.	Offers links to Facebook, Twitter, and YouTube.
Language Translation	The Google Language Selector is at the top right of the Web page.	The Google Language Selector is at the top right of the Web page.	The Google Language Selector is at the lower left of the Web page.
Mobile Compatibility	Information is easy to use, and readability is excellent on mobile devices. OCTA offers four mobile apps to help users plan their trips: Google Maps, HotStop, The Transit App, and City Maps.	Offered, but navigability and accessibility are cumbersome. LA Metro offers its own mobile app Go Metro. The Web site also lists several third-party mobile apps such as Google Maps, HotStop, The Transit App, City Maps, allSchedules, and iTransitBuddy.	Offered, but navigability and accessibility are cumbersome. SANDAG provides real-time traveler information via its mobile app 511 San Diego.
Other Notes	Web site could be enhanced by giving more clarity on project status, budget, cost-to-date, cost forecast, and city/region.	Measure R Introductory video is an excellent overview and could be expanded with follow-up updates.	No additional comments.

6.3 Findings and Recommendations

Findings and recommendations for transparency and accountability are detailed below.

Transparency and Accountability Finding #1: Some external stakeholders noted that there seems to be a lack of recognition of M2 funding and a lack of association of M2 with its projects and programs within their organizations and among the general public.

Transparency and Accountability Recommendation #1: Improve branding and awareness of M2 projects and programs. Implement M2-specific marketing efforts to educate the general public and stakeholders and to collaborate with cities. To keep the branding efforts consistent, develop guidelines or a media toolkit for city staff, including logo, branding, and signage specifications, to better highlight M2 projects at construction sites.

Transparency and Accountability Finding #2: Small cities reported not having enough staff to review all M2 materials and documents.

Transparency and Accountability Recommendation #2: Develop an information card for each M2 program and project with easy-to-understand information and status updates for city staff and constituents.

Findings and Recommendations Summary

Table 7-1 provides a summary of the key findings and recommendations pertaining to each area of the assessment.

Table 7-1. Findings and Recommendations Summary

No.	Finding	Recommendation
Area 1: Project Delivery		
1	It is difficult to align particular aspects of the voter-approved OCTA M2 Program with changes to the state's priorities (for example, greenhouse gas reductions, sustainability, and managed lanes). These differences led to delays in project definition and environmental processes as OCTA and Caltrans worked to reconcile their differing goals, policies, and objectives.	Continue to partner with Caltrans at the technical levels for system planning and modeling, as well as throughout the environmental, design, and construction phases. This may resolve different priorities between agencies and identify projects where advanced coordination could help mitigate schedule delays while the agencies reconcile goals and objectives. An example of this partnership is for OCTA to work with Caltrans and explore the possibility of including OCTA projects on Caltrans list of approved projects in the fiscal year Contract for Delivery. This will enable Caltrans and OCTA to agree on milestones and timelines to level set expectation and commit the two stakeholders to meet the project delivery timeline.
2	It was noted that there appeared to be increasing occurrences of changes and/or growth in a project's scope. Scope creep was an issue during design and development phase; sometimes, requests for modification to constructed elements were requested during the final Caltrans safety and maintenance walk through.	Include language that defines the term "betterment" in project-specific third-party agreements with state, regional, and local agencies. Particular agreements may define how betterments will be negotiated, if appropriate. Following is the definition used by the SCVTA. "Betterment" shall mean the upgrading (e.g., increase in capacity) of a new or existing facility, that is not attributable to construction of the Project and is made solely for the benefit of and at the election of DEPARTMENT (not including a technological improvement which is able to achieve such upgrade at costs equal to or less than the costs of a "like-for-like" replacement or relocation). VTA shall not be obligated to pay for any portion of any Betterment.
Area 2: Program Management/Responsiveness		
3	The M2 PMO performance has matured and continued to perform at a high degree of professionalism and responsiveness. With the arrival of two new program analysts, OCTA is poised to oversee the growing program more fully, such as with the more comprehensive quarterly reports recently redesigned and through deeper involvement in project management review and analysis.	OCTA should communicate PMO staff member roles and responsibilities. Clear roles should be communicated across divisions to help promote coordination and communication. PMO roles should clearly define backup and mutual support activities. OCTA should broaden the PMO by expanding participation with external stakeholder groups; think strategically about building awareness, build stronger relationships with other self-help county partner agencies; and increase collaboration with Caltrans.

Table 7-1. Findings and Recommendations Summary

No.	Finding	Recommendation
4	<p>PMO staff have a strong base of skills to administer the M2 Program, including work experience across other OCTA divisions and history dating back to the early days of the PMO. Periodic training, such as enhancing the cohesiveness of the PMO and key stakeholders and strengthening OCTA commitment to its broad mission, could strengthen the PMO. OCTA-branded training modules specific to the M2 Program could further enhance abilities.</p> <p>In the past, OCTA conducted a program management academy, which could serve as a model for the new training. Such a training program is in place now; conducting it this coming year was discussed.</p>	<p>OCTA should implement the program management academy in the short term. Such a program will benefit new staff, serve as refresher for existing staff, and strengthen collaboration between the PMO, Finance and Administration Division, and the respective project/program managers. The M2 ordinance and policy administration strategies should be shared as part of training. In addition, OCTA should consider Project Management Professional training for all PMO staff.</p>
Area 3: Compliance (No findings or recommendations)		
Area 4: Fiscal Responsibility		
5	<p>During the review period, OCTA implemented controls to improve tracking and administration of the one percent cap on administrative expenses. Though OCTA has borrowed from another funding source to satisfy the M2 requirement, OCTA staff are confident they will be able to satisfy the one percent cap requirement over the long term. OCTA has already paid back part of the amount borrowed.</p>	<p>Continue monitoring ongoing expenditures for administrative expenses, including labor charges by project, and determine whether any changes are required in the future.</p>
6	<p>OCTA regularly evaluates the optimum level of debt financing and the timing of debt issuance required to deliver the M2 Program in a cost-effective manner. While OCTA has indicated an ability to deliver the M2 Program without additional external funding, it continues to seek alternate sources of funding to supplement M2 funds when available. OCTA has processes in place to periodically update its cash-flow needs for the M2 Program.</p>	<p>Continue to evaluate the optimum level of debt to issue and timing of debt issuance to deliver the M2 Program. Continue efforts to seek alternate sources of funding to supplement M2 funds, including using M2 funding to meet local match requirements.</p>
7	<p>OCTA noted that three local agencies failed to request timely use of funds extension during the semi-annual review process, and, thus did not receive their full allocation.</p>	<p>Over time, evaluate whether there is a pattern developing by local agencies neglecting to request timely use of funds extensions, when such extensions are necessary. Should a pattern emerge, identify and address the underlying root causes.</p>
Area 5: Transparency and Accountability		
8	<p>Some external stakeholders noted that there seems to be a lack of recognition of M2 funding and a lack of association of M2 with its projects and programs within their organizations and among the general public.</p>	<p>Improve branding and awareness of M2 projects and programs. Implement M2-specific marketing efforts to educate the general public and stakeholders and to collaborate with cities. To keep the branding efforts consistent, develop guidelines or a media toolkit for city staff, including logo, branding, and signage specifications, to better highlight M2 projects at construction sites.</p>
9	<p>Small cities reported not having enough staff to review all M2 materials and documents.</p>	<p>Develop an information card for each M2 program and project with easy-to-understand information and status updates for city staff and constituents.</p>

Appendix A
Follow Up on Prior
Assessment Findings

Table A-1. Follow Up on Prior Assessment Findings

Prior Recommendation (March 2013)	OCTA Statement (October 2013)	Assessment Finding (December 2015)
<p>1. Having well qualified project managers in place is critical to proper oversight of the M2 program. It is important for OCTA to recruit highly qualified personnel to fill position vacancies in a timely manner and implement proven staff retention strategies.</p>	<p>The OCTA Board of Directors (Board) has reinstated a performance based rewards program with a merit pool and a special award program. Additionally, to assist OCTA's ability to be competitive, Human Resources is doing a compensation and class study to hire at a higher level within the grade pay range of a position. This will allow for greater flexibility to recruit qualified personnel.</p> <p>Status: Complete</p>	<p>OCTA has addressed this recommendation.</p>
<p>2. There are two suggestions related to Project Controls.</p> <p>First, the Project Controls Department and the PMO office need to work closely together as a team to fulfill the PMO functional roles of compliance, management, fiscal responsibility, transparency and safeguards. In effect the Project Controls Department, while located under Capital Programs should function as direct extension of PMO office capability.</p> <p>Second, OCTA should ensure every M2 project manager has the latest training with the P6 Schedule module. Project managers need to be responsible for overall content accuracy. This is true even where a different agency is the delivery lead.</p>	<p>To ensure the project controls group and the PMO work closely, the PMO has been meeting regularly with project controls staff and Capital Program Division program managers. Additionally, the PMO staff attends monthly California Department of Transportation/OCTA project meetings to keep informed.</p> <p>Status: Complete</p> <p>A determination was made that adding a staff person in the PMO to serve as a liaison between the Capital Programs Division would be beneficial. The position was approved in the FY 2013-2014 budget. Recruitment and selection is complete.</p> <p>Status: Complete</p> <p>Staff will ensure that regular P6 training (OCTA's in house program for monitoring capital programs cost and schedule) is provided for Measure M2 [M2] project managers and emphasize the importance of the information provided.</p> <p>The Project Manager Academy included a session on P6. Additionally, to provide open access, Project Controls has added schedules and progress reports to the Intranet for all OCTA to review if desired.</p> <p>Timeframe: Complete</p>	<p>OCTA has addressed this recommendation.</p>
<p>3. The PMO office should develop a listing of all the Calls, including project type, frequency, and time of year for the respective Calls. This would alleviate potential bunching and facilitate Call applications.</p>	<p>Staff has redesigned the streets and roads funding section of the Web site and added a page specifically for call for projects programs. The site lists past, current, and future calls to provide local jurisdictions with a place to find out what opportunities there are for capturing these funds. The site also includes the guidelines for each program in this specific area to provide easy access.</p> <p>Status: Complete</p>	<p>OCTA has addressed this recommendation.</p>
<p>4. Enhance project delivery metrics through the M2 Dashboard, by: clarifying cost reporting, adding a percent program expenditure field, and list a description and completion status at the designated</p>	<p>Staff enhanced the reporting for projects as a whole on OCTA's Website by adding all Measure M projects and provide schedule information and listed them as shown in the Transportation Investment Plan as Projects A-M.</p>	<p>OCTA has addressed this recommendation.</p>

Table A-1. Follow Up on Prior Assessment Findings

Prior Recommendation (March 2013)	OCTA Statement (October 2013)	Assessment Finding (December 2015)
M2 project level tied to individual projects.	Status: Complete	
5. Review organization-level M2 program management functions and definitions of associated functional responsibilities. Identify a precise definition of M2 administration and associated activities relating specifically to M2 program activity. This would include clear demarcations of project-based work, and appropriate limitations on administrative expenses that are not directly attributable to project-based activity.	OCTA completed an organizational review to ensure it is functionally capable of delivering on the promises of M2. The staff report highlighting the findings along with proposed actions was presented to the Board on November 8, 2013. The review included recommendations for adjustments which will be addressed as part of the FY 2013/14 budget process. Status: Complete	OCTA has addressed this recommendation.
6. Improve coordination and communication by enhancing uses of Primavera system outputs, enhancing internal program coordination and communications vehicles, promoting early project issues identification and resolution, and initiating individual and project team recognition programs that promote M2 project and program management enhancements.	Executive staff continues to meet every two weeks to discuss the M2 program and ensure that all key players are informed and any issues are addressed. Status: Complete A determination was made that adding a staff person in the PMO to serve as a liaison between the Capital Programs Division would be beneficial. The position was approved in the FY 2013-2014 budget. Additionally, to provide open access, Project Controls has added schedules and progress reports to the Intranet for all OCTA to review if desired. Status: Complete	OCTA has addressed this recommendation.
7. Conduct training for new staff, and refresher training for existing staff, on M2 Ordinance provisions and compliance approaches, M2 Program delivery policies and associated policy administration strategies, cost allocation, time management, and timesheet reporting requirements.	The PMO and Capital Programs Division have worked together to refresh past Program Manager Academy (Academy) materials. Because interest in the Academy spanned over multiple divisions, more presenters were invited and topics. A new session on the PMO was added along with a session on CEQA/NEPA and the importance and background on timesheet reporting requirements. There are a total of 10 sessions that were covered over 10 weeks lasting from September 18 until November 20. Status: Complete	These training sessions should be provided for OCTA personnel who have either joined the agency or changed their roles since 2013. OCTA should provide new and refresher training every 2 to 3 years. Next training is planned for late 2016 or early 2017.
8. Request project managers to fill out the project by project portion of the M2 Ordinance Tracking Matrix (that is, pages 6 to 15) for status and progress, to be maintained by the PMO office. Also, the matrix should be made available to the M2 Taxpayers Oversight Committee.	The Ordinance Tracking Matrix now includes status with documentation for each item. The Ordinance Matrix will be updated annually by the PMO office in January. The Ordinance Tracking Matrix has been circulated throughout OCTA for updates covering January 1, 2012- December 31, 2013. The next update will be in January 2014. The Ordinance Tracking Matrix will be provided to the TOC annually following each update. Status: Complete	OCTA has addressed this recommendation.
9. Continue efforts to manage administrative costs, ensure that project-	While there is a 1% cap on administration, the delivery pace and related transparency is still a	OCTA has effectively taken steps to address

Table A-1. Follow Up on Prior Assessment Findings

Prior Recommendation (March 2013)	OCTA Statement (October 2013)	Assessment Finding (December 2015)
<p>specific administrative costs are charged appropriately, and confirm a strategy for funding administrative costs that exceed the 1% cap over the course of the M2 program, including M2 administrative expenses incurred before April 2011 and after March 2041.</p>	<p>required priority. As was the case in Measure M, it is expected that administrative costs as a percentage of total costs will steadily decline over the life of the program. This is because many projects have been advanced to the beginning of the program, which places a heavier administrative burden than will be the case towards the end of the program when it is expected that most projects will be complete. Closeout activities at the end of the program will require administrative charges, but it is expected that overall costs will balance over time. As such, the need to fund administrative costs above the 1% cap should be unnecessary. However, in the event that administrative costs do exceed the 1% cap for a given year, OCTA currently has Board approval to use funds from the Orange County Unified Transportation Trust Fund with the idea that those funds will be repaid with interest in other years that OCTA administrative costs fall below the 1% cap.</p> <p>Labor meetings are still occurring quarterly to closely monitor 1% administrative charges.</p> <p>Status: Complete</p>	<p>this recommendation during the assessment period. This is an ongoing item that should continue to be monitored going forward.</p>
<p>10. In order to manage M2 administrative expenses, it is important for PMO staff to understand the indirect costs that are allocated to the M2 administrative expense code. Currently, the detail is not readily identifiable. OCTA should determine the extent of these charges and make that information available to the Project Management Office, to assist them in understanding the extent of the impacts of the current CAP allocations on M2 administrative expenses and in managing the administrative expense budget.</p> <p>OCTA should also consider alternatives to the CAP that more effectively allocate indirect charges to capital projects. One way to recognize and allocate these costs could be through a basis such as the dollar value of capitalized contracts. Other approaches to minimizing the impact of the CAP on administrative expenses could include automating time reporting and reassigning the non-project time of staff who work exclusively on M2 projects to M2 administration for the specific M2 project. In reviewing this alternative, OCTA should evaluate their costs and benefits, including the implications of</p>	<p>Finance and Administration Division staff has created a report that details the indirect charges by function as outlined in the cost allocation plan. This report will be available annually each fall, in conjunction with the completion of the FY cost allocation plan.</p> <p>Status: Complete</p> <p>At the recommendation of the assessment consultant team, staff applied state planning funds which brought down the charges to the 1% administrative cost. This allowed OCTA to begin pay back of the Orange County Unified Transportation Trust Fund. At the end of 2013, \$800,000 of the amount borrowed was paid back reducing the total amount borrowed to \$4.4 million. Additionally, quarterly labor meetings are held to closely monitor 1% administrative charges.</p> <p>Status: Complete</p>	<p>OCTA has addressed this recommendation.</p>

Table A-1. Follow Up on Prior Assessment Findings

Prior Recommendation (March 2013)	OCTA Statement (October 2013)	Assessment Finding (December 2015)
the cost of borrowing to fund overruns against the 1% cap.		
11. With respect to M2 revenue projections, consider providing the range of forecast scenarios (high and low) in addition to OCTA’s average forecast approach. This would underscore the variability of sales tax forecasts that OCTA uses to project M2 revenues and help OCTA manage towards revised revenue projections over the life of the M2 program.	On an annual basis, OCTA receives forecasts from three universities and each university presents their forecast to the Finance and Administration Committee. Staff provided a report to the Board that compared the forecasts from all three universities and how they are combined to create the “three-university average” that OCTA uses for planning purposes. Staff added a comparison of what different forecasts would yield independently to underscore the variability of sales tax forecasts. Status: Complete	OCTA has addressed this recommendation.
12. Consider enhancements to the OCTA Web site and M2 program information and outreach web pages, with broader utilization of the M2 brand.	Staff is continually improving the M2 section of the Web site. Since the start of the performance assessment, the OCTA Web site including the Measure M portion of the Web site has been overhauled. The M2 section of the Web site was a key focus of improvements and will continue to be reviewed quarterly to ensure transparency and ease of use for the public. Staff continues to look into enhancing the Measure M brand throughout the Web site. Status: Complete	OCTA has addressed the component of this recommendation pertaining to the M2 Web site. Additional actions are recommended for other marketing and branding activities.

Appendix B

Data Sources and Interviews

Data Sources

Table 1-1 lists the major data sources provided by OCTA that the study team used for the assessment. Other sources include meeting minutes, other working files, and project-related materials.

Table B-1. M2 Assessment Major Data Sources

Source	Relevance
M2 Triennial Performance Assessment, July 2009 – June 2012 (March 2013)	Fiscal Year (FY) 2010-2012 M2 assessment of OCTA, prepared by CH2M
M2 Triennial Performance Assessment, Year 2006 – 2009 (October 25, 2010)	2006-2009 M2 assessment of OCTA, prepared by the Orange County Business Council
Measure M2 Eligibility Guidelines, FY2015-16 (Effective April 13, 2015)	Describes the eligibility requirements for jurisdictions to receive M2 Local Fair Share and competitive program funds
Measure M2 Fact Sheet (August 24, 2015)	Provides background information on M2
Measure M2 Final M2020 Plan (September 10, 2012)	Provides the plan for delivery of M2 projects through 2020
Measure M2 Freeway Plan (February 2012)	Describes projects, schedules, key considerations, benefits, and costs for M2 freeway projects
Measure M Program Management Office (PMO) Charter (2011)	Identifies goals and functional responsibilities for OCTA's M2 PMO
Measure M2 Progress Reports, provided annually for each year during the assessment period	Highlights progress on M2 projects and programs for the OCTA Board, and made available to the general public
Measure M2 Progress Reports, provided on a quarterly basis for each quarter during the assessment period	Highlights progress on M2 projects and programs for the OCTA Board, and made available to the general public
Measure M2 Project Schedules of M2 Projects and Programs on OCTA's Web site	Provides a visual summary of current progress and planned schedule for M2 projects
Measure M2 Sales Tax Forecast, Staff Report (October 28, 2015)	Forecasts M2 sales tax revenues
Measure M2 Schedule of Revenues, Expenditures, and Changes in Fund Balance (end of each fiscal year during the assessment period)	Provides actual M2 revenues and expenditures by line item and by M2 project
OCTA Contracts Administration and Materials Management (CAMM) Policy Manual (June 2014)	Includes policies, procedures, and forms for OCTA's CAMM Department
OCTA Capital Programs Division – Capital Action Plan Performance Metrics (Fourth Quarter, FYs 2012-2015)	Provides budgeted and forecasted cost and schedule information for M2 capital projects
OCTA Comprehensive Business Plan (CBP), FY 2014-15 (January 12, 2015)	Presents OCTA's plan to ensure financial feasibility of OCTA programs
OCTA Comprehensive Transportation Funding Program Guidelines (August 2014)	Includes guidelines and procedures for Orange County agencies to apply for funding from OCTA
OCTA Construction Management Procedures Manual (March 4, 2011)	Describes procedures pertaining to construction management of OCTA construction contracts
OCTA Government Relations sample project fact sheets	Presents facts for M2 projects that OCTA distributes
OCTA M2 Capital Programming Policies by Fund Source (December 2014)	Describes policies for programming of M2 funds, by M2 program
OCTA M2 Capital Projects Outreach information (staffing plan and sample information: weekly progress update, scope of work, communication plans, closeout survey,	Provides information on how OCTA conducts outreach for its capital projects

Table B-1. M2 Assessment Major Data Sources

Source	Relevance
documentation reports, and metrics/social media analytics report)	
OCTA M2 Ordinance Tracking Matrix - Ordinance No 3 (for period ending December 31, 2014)	Tracks OCTA's compliance with specific requirements for M2
OCTA M2 select monthly Project Status Reports and Schedules (FY 2013 – FY2015)	Provides M2 summary project status and schedule information
OCTA Measure M2 Annual Eligibility Review, FY 2015 (November 10, 2014)	Provides FY 2015 eligibility verification for jurisdictions to receive competitive M2 funding
OCTA Measure M2 Eligibility Review Recommendations for FY 2014 Expenditure Reports (May 4, 2015)	Presents staff approval of FY 2014 M2 expenditure reports submitted by jurisdictions
OCTA Measure M2 Organizational Readiness Assessment Study (October 2013)	Examines the capacity of OCTA to deliver the M2020 Plan, with findings and recommendations
OCTA Measure M2 Program Management Committee, sample meeting notes (FY 2013 – FY 2015)	Provides information on discussion topics at OCTA's M2 program management committee meetings
OCTA Organization Charts (as of July 10, 2015)	Shows OCTA personnel organization
OCTA Program Management Procedures, Highway Project Delivery Department (April 2013, Revision 1)	Describes OCTA's program management procedures to facilitate the delivery of the M2 capital improvement program
OCTA Regional Planning Update Staff Report (November 2, 2015)	Provides background on OCTA's coordination with other agencies on regional planning
OCTA Response to Findings from July 2009 – June 2012 M2 Performance Assessment (October 31, 2013)	Presents OCTA's actions and status on addressing the 12 findings from the FY 2010-2012 Triennial M2 Assessment
OCTA Response to Recommendations from Organizational Readiness Assessment (May 30, 2014)	Provides OCTA's response to recommendations from the Measure M2 Organizational Readiness Assessment Study
OCTA Staff Report: 2012 State and Federal Programming Guidelines (December 3, 2012)	Presents OCTA updated programming guidelines for the use of state and federal funds
OCTA Staff Report: Repayment of the Orange County Unified Transportation Trust (OCUTT) Fund for Measure M2 Early Action Plan Costs (December 2, 2011)	Provides the plan for OCTA to repay the OCUTT fund for funds borrowed to pay for M2 Early Action Plan administrative costs
Ordinance No 3: Renewed Measure M Transportation Ordinance and Investment Plan (July 24, 2006)	Provides governing language for M2 program transportation improvements and requirements authorized by Orange County voters
Project K – I-405 Project Implementation of Alternative 3: Preliminary OCTA/ California Department of Transportation (Caltrans) Agreement on Terms (as of April 16, 2015)	Describes preliminary agreement on roles and responsibilities for OCTA and Caltrans for the I-405 project, with respect to project delivery, funding and financing, and operations
Project Q – M2 Local Fair Share FY 2015 Funding	Identifies funding provided to jurisdictions through the Project Q Local Fair Share program
Renewed Measure M Eligibility Guidelines (March 12, 2012)	Provides eligibility requirements for local jurisdictions to receive M2 funding
Renewed Measure M Comprehensive Ten-Year Review (October 12, 2015)	Presents OCTA's Ten-Year Review of Measure M2, which covers the timeframe from November 2006 to fall 2015

Table B-1. M2 Assessment Major Data Sources

Source	Relevance
Renewed Measure M – Transportation Investment Plan (approved by voters on November 7, 2006; as amended on November 9, 2012)	Provides a description of the projects included in the Renewed Measure M Transportation Investment Plan

Interviews

The study team conducted interviews with a number of OCTA personnel. Table 1-2 shows the list of interviewees. An interview guide with specific, targeted questions covering each major area of the M2 performance assessment was used to support the interviews.

Table B-2. M2 Assessment Orange County Transportation Authority Interviewee List

Orange County Transportation Authority Interviewees	
<ul style="list-style-type: none"> • Chief Executive Officer • Deputy Chief Executive Officer • Executive Director, Capital Programs • Executive Director, External Affairs • Executive Director, Finance and Administration • Executive Director, Government Relations • Executive Director, Internal Audit • Executive Director, Planning • Director, Contracts Administration and Materials Management • Director, Finance and Administration • Director, Highway Programs • Director, Rail Programs and Facilities Engineering • Director, Strategic Planning • Deputy Director, Los Angeles to San Diego Joint Powers Authority 	<ul style="list-style-type: none"> • Department Manager, Public Outreach • Department Manager, Rail Capital Programs • General Manager, Treasury/Toll Roads • Program Manager, Environmental Programs • Program Managers, Freeway Projects (four personnel) • Program Manager, M2 Program Office • Project Manager, Rail Programs • Senior Section Manager, Project Controls • Section Manager, Capital Projects Outreach • Section Manager, Measure M Local Programs • Manager, Capital Programming • Manager, Community Transportation Services • Community Relations Officer, Planning and Measure M • Program Analysts, Measure M (two personnel)

CH2M also conducted interviews with select external stakeholders, identified by OCTA as representing organizations that work with OCTA on particular aspects of the M2 Program. Table 1-3 identifies the external organizations interviewed for this assessment.

Table B-3. M2 Assessment External Organization Interview List

External Organizations	
<ul style="list-style-type: none">• Automobile Club of Southern California• Building Industry Association• Caltrans, District 12• California Transportation Commission / Commissioner California Transportation Commission Chair• Citizen Advisory Committee Member• Technical Advisory Committee Chair• Los Angeles / Orange Counties Building and Construction Trades Council	<ul style="list-style-type: none">• LSA Associates, Inc. and Orange County Business Council• M2 Environmental Oversight Committee Member• North Orange County Community College District Board of Trustees / Citizen Advisory Committee Chair• Orange County Taxpayers Association• Past TOC Member• Rancho Mission Viejo Company• Santa Ana College / Citizen Advisory Committee Bike and Pedestrian Subcommittee Chair• The Irvine Company

Appendix C
Freeways Projects Activity Summaries
(Projects A to N)

Appendix C: Freeway Projects Activity Summary (Projects A-N)

Project A: I-5 Improvements (SR-55 to SR-57)

Project A increases high-occupancy vehicle (HOV) lane capacity and improves operations by adding a second HOV lane in both directions along I-5 between SR-55 and SR-57 in Santa Ana.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> OCTA continued conducting an environmental study to add lanes to the I-5 between SR-55 and SR-57 in Santa Ana. The study will evaluate options to add capacity to the existing high-occupancy vehicle (HOV) lanes and improve traffic circulation within the I-5/ SR-55 interchange.
FY 2014	<ul style="list-style-type: none"> Traffic study and air quality study were approved. Work continued on noise study report, evaluation of options, and discussions on way-finding signage package. The mandatory design exception fact sheets and all technical studies were approved.
FY 2015	<ul style="list-style-type: none"> The final Environmental Document was approved by Caltrans on April 8, 2015. The final Project Report was approved by Caltrans on May 1, 2015. The project design phase began on June 30, 2015.

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

Project B adds one general purpose lane in each direction of the I-5 corridor and improves the interchanges in the area between SR-55 and SR-133 (near the El Toro “Y” and I-405) in Tustin and Irvine. An environmental study will consider the addition of one general purpose lane on I-5 between just north of I-405 to SR-55. Additional features of Project B include various operational improvements (for example, interchange ramps and auxiliary lanes).

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> A consultant was selected to prepare the Project Report and Environmental Document, and work is anticipated to begin in September of 2013.
FY 2014	<ul style="list-style-type: none"> Environmental assessment was approved by Caltrans and released for public review. The environmental study began on May 8, 2014.
FY 2015	<ul style="list-style-type: none"> The project has been delayed while OCTA and Caltrans have continued discussions on the traffic methodology. The draft Project Report and draft Environmental Document are expected to be complete by March 2017.

Project C & Part of Project D: I-5 Improvements (South of El Toro “Y”)

Project C adds new lanes on two different stretches along I-5. The project includes a northern segment, which stretches between El Toro Road and SR-73, and a southern segment, which stretches between San Juan Creek Road and Avenida Pico.

The northern segment includes three improvements involving construction of additional general purpose lane(s) in each direction from SR-73 to El Toro Road. The improvements in the northern segment include the following:

- Between SR-73 and Oso Parkway
- Between Oso Parkway and Alicia Parkway
- Between Alicia Parkway to El Toro Road

The southern segment includes three improvements involving adding a carpool lane in each direction on I-5. All improvements in the southern segment are currently under construction. The improvements in the southern segment include the following:

- Between Avenida Pico and Avenida Vista Hermosa/ (Project D: Avenida Pico Interchange)
- Between Avenida Vista Hermosa and Pacific Coast Highway

- Between Pacific Coast Highway and San Juan Creek Road

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • .100 percent Plan Specifications & Engineering (PS&E) for I-5 between Avenida Pico and San Juan Creek Road were completed and submitted to Caltrans. • The draft Environmental Assessment for I-5 between SR-73 and El Toro Road was completed and submitted to Caltrans for review in May 2013.
FY 2014	<ul style="list-style-type: none"> • For I-5 between Avenida Pico and San Juan Creek Road, Segment 1 final design was submitted to Caltrans, a cooperative agreement with Caltrans for Segment 2 construction phase was executed, and Segment 3 was advertised for construction. • The draft Environmental Assessment for I-5 between SR-73 and El Toro Road was approved by Caltrans, and the draft document was released for a 30-day public review period. OCTA and Caltrans held a public hearing in September 2013. • The Project Development Team, consisting of OCTA, Caltrans, and cities in the project area, selected a preferred alternative for I-5 between SR-73 and El Toro Road in November 2013. • Construction work for Segment 3 broke ground on March 3, 2014. • Caltrans approved the Initial Study/Environmental Assessment (IS/EA) document for I-5 between SR-73 and El Toro Road on May 6, 2014. The final Project Report was reviewed by Caltrans and approved on June 5, 2014.
FY 2015	<ul style="list-style-type: none"> • For Segment 2, construction began on September 2, 2014. • In September 2014, OCTA and Caltrans entered into a cooperative agreement to provide oversight during the design phase, and to advertise and award the construction project, for I-5 between SR-73 and El Toro Road. • For Segment 1, construction began on February 9, 2015. • Design phase work began on I-5 between SR-73 and Oso Parkway in March 2015. • For I-5 between SR-73 and El Toro Road, the design phase work is ongoing and is being conducted in three segments. Design work for one of the segments is scheduled to be complete in 2017; design work for the other two segments are scheduled to be complete in 2018.

Project D: I-5 Local Interchange Upgrades

Project D consists of several interchange improvements on I-5 in south Orange County. These interchanges are located either within or outside of the northern segment of Project C. The improvements include the following:

- El Toro Road Interchange
- SR-74 (Ortega Highway) Interchange
- Major interchange improvements at Avenida Pico, Avery Parkway, and La Paz Road

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • The California Department of Transportation (Caltrans) approved the construction contract on September 18, 2012 for the reconstruction of the interchange at SR-74 in San Juan Capistrano • Caltrans began construction in February on the two-year \$86 million project that will reconstruct the SR-74 Ortega Highway Bridge. • Completed draft I-5/El Toro Road interchange study and submitted to Caltrans for review in May 2013.
FY 2014	<ul style="list-style-type: none"> • Final draft Project Study Report/Project Development Support Report was submitted to Caltrans for final review in November 2013. • Caltrans began construction in February 2013 that will reconstruct the SR-74 Ortega Highway Bridge over the freeway and improve local traffic flow along the SR-74 and Del Obispo Street in the City of San Juan Capistrano.

FY 2015	<ul style="list-style-type: none"> • Caltrans approved the modified alternatives, with one additional request. Per Caltrans request, OCTA has submitted a revised PSR-PDS. • Project activities focused on awarding the construction contract, which occurred on December 18, 2014. • Caltrans approved the PSR-PDS on February 20, 2015. • For the I-5/EI Toro Road interchange, the environmental phase is expected to begin in late 2016. • For the I-5/Ortega Highway interchange, construction is 82% complete, and is scheduled for completion by December 2015.
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Project E: SR-22 Access Improvements

Project E consists of improvements at key SR-22 interchanges Brookhurst Street, Euclid Street, and Harbor Boulevard to reduce freeway and street congestion in the area. The project was completed in 2008, through OCTA's Early Action Plan (EAP) was a bonus project under the first Measure M (1991-2011).

Project F: SR-55 Improvements

Project F consists of SR-55 improvements between I-405 and SR-22, including lane additions and merging lanes between interchanges to smooth traffic flow, and potential operational improvements between SR-22 and SR-91. Project F consists of two phases. Phase I includes improvements on SR-55 between I-405 and I-5. Phase II will add capacity between I-5 and SR 22, and provide operational improvements between SR-22 and SR-91.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • OCTA initiated a Project Study Report / Project Development Study (PSR/PDS) for SR-55 between I-5 and SR-91. • The administrative draft report to increase capacity on SR-55 in the cities of Irvine, Santa Ana, and Tustin was submitted to Caltrans and the Draft Environmental document is scheduled to be completed by the end of August 2013. • Project Study Team refined the alternatives and associated technical reports, and is now prepared to finalize which alternatives to recommend for further study in the next phase.
FY 2014	<ul style="list-style-type: none"> • OCTA staff submitted the draft PSR-PDS for SR-55 between I-5 and SR-91 to Caltrans to begin their independent quality assurance review, which is the first step in initializing Caltrans' review and finalization of a PSR-PDS document. • For SR-55 (I-405 to I-5), Caltrans reviewed key project reports and refined their request for modified alternatives to be studied. To incorporate the proposed changes, the project is expected to result in a 17-month delay. • OCTA staff refined the draft PSR-PDS for SR-55 between I-5 and SR-91 using input from Caltrans and the final draft was resubmitted to Caltrans for approval.
FY 2015	<ul style="list-style-type: none"> • For SR-55 between I-405 and I-5, the draft Environmental Document was put on hold. • OCTA, in coordination with Caltrans, finalized the PSR-PDS for SR-55 between I-5 and SR-91 in January 2015. The environmental phase is scheduled to begin by mid-2016.

Project G: SR-57 Improvements

Project G consists of improvements on SR-57. Phase I includes three completed projects: (1) Katella Avenue to Lincoln Avenue; (2) Orangethorpe Avenue to Yorba Linda Boulevard; and (3) Yorba Linda Boulevard to Lambert Road. The project also includes adding a truck-climbing lane from Lambert Road to Tonner Canyon Road (this requires coordination with Los Angeles Metro because the project is located at the county line), and increasing capacity on northbound SR-57 from Orangewood Avenue to Katella Avenue, with a study to address how to add capacity in the northbound direction of SR-57 from Orangewood Avenue to Katella Avenue.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> Construction continued on three segments of the SR-57 freeway to add a new northbound general purpose lane through the cities of Anaheim, Brea, Fullerton, and Placentia. Caltrans is overseeing construction. For SR-57 Northbound from Orangewood Avenue to Katella Avenue, OCTA initiated a PSR/PDS
FY 2014	<ul style="list-style-type: none"> For the project's northern most segment between Yorba Linda Boulevard and Lambert Road, construction was completed on May 2, 2014. For the central segment between Orangethorpe Avenue and Yorba Linda Boulevard, final traffic striping was completed and the new general purpose lane was opened to traffic in April 2014. OCTA initiated a Project Study Report/Project Development Support (PSR-PDS) document to add capacity in the northbound direction of SR-57 from Orangewood Avenue to Katella Avenue.
FY 2015	<ul style="list-style-type: none"> For SR-57 NB (Katella Avenue and Lincoln Avenue), the new freeway lanes were opened to traffic on November 20, 2014. An open to traffic ceremony was held on December 22, 2014. For SR-57 NB (Orangewood Avenue to Katella Avenue), the PSR-PDS was approved by Caltrans. The environmental phase is scheduled to begin in November 2015 and to be completed by mid-2018. For SR-57 NB (Lambert Road to Tonner Canyon Road), the segment is scheduled to be cleared environmentally by 2020.

Project H: SR-91 Improvements (I-5 to SR-57)

Project H consists of SR-91 improvements between I-5 and SR-57 to add a westbound general purpose lane with operational improvements at on- and off-ramps Brookhurst Street and State College Boulevard.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> OCTA and Caltrans approved the final design. OCTA and Caltrans successfully negotiated and awarded the construction contract. On May 1, 2013, OCTA and Caltrans broke ground on State Route 91 (SR-91) between the Interstate 5 and State Route 57 (Project H), third series of "A Better 91" projects. Construction has started which will add a new, four-mile westbound general purpose lane to a key stretch of the SR-91 in the cities of Anaheim and Fullerton.
FY 2014	<ul style="list-style-type: none"> Construction was underway on the project by the end of the fiscal year, construction as 41 percent complete.
FY 2015	<ul style="list-style-type: none"> Construction is about 76% complete, and is scheduled for completion by early 2016.

Project I: SR-91 Improvements (SR-57 to SR-55)

Project I includes improvements to SR-91 between SR-57 and SR-55, including a new westbound auxiliary lane, an eastbound general purpose lane, and interchange improvements.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> Final design and right-of-way phases for the SR-91 between SR-55 and the Tustin Avenue interchange were completed in April 2013, and the project was advertised on June 17, 2013. Completed draft PSR for SR-91 between SR-57 and SR-55, and provided draft PSR to Caltrans for review in May 2013.
FY 2014	<ul style="list-style-type: none"> Construction began during the quarter on January 21, 2014. Work involved installing temporary safety barriers and electrical systems
FY 2015	<ul style="list-style-type: none"> The PSR-PDS for SR-91 between SR-57 and SR-55 was approved by Caltrans. The environmental phase for SR-91 between SR-57 and SR-55 began in January 2015. For SR-91 between SR-55 and the Tustin Avenue interchange, construction is about 63% complete and is scheduled for completion by mid-2016. For SR-91 between SR-57 and SR-55, the feasibility study portion of the environmental phase is scheduled for completion in September 2015 and the environmental phase is scheduled to be complete by late 2018.

Project J: SR-91 Improvements (SR-55 to Orange/Riverside County Line)

Project J consists of improvements to SR-91 between SR-55 and SR-71 (Riverside County), including lane additions and interchange improvements. In March 2013, 6 miles were added in the westbound and eastbound directions for a key stretch between SR-55 and SR-241, and second eastbound exit lanes were added at Lakeview Avenue, Imperial Highway, and Yorba Linda Boulevard/Weir Canyon Road off-ramps. Eastbound improvements between SR-241 and SR-71 opened in January 2011. The remaining segment, a design-build project, is managed by the Riverside County Transportation Commission as part of its SR-91 improvements. OCTA is responsible for adding a westbound lane between Green River and SR-241.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none">For SR-91 between SR-55 and SR-241, construction was completed. Opened a new, six-mile general purpose lane on SR-91 in Anaheim and Yorba Linda. Held opening ceremony on February 21, 2013.For SR-91 between SR-241 and I-15 (Riverside County portion of the project), the project's draft environmental document was completed in January 2013.
FY 2014	<ul style="list-style-type: none">RCTC's contractors broke ground on the Riverside County portion in December 2013.
FY 2015	<ul style="list-style-type: none">Work on the Riverside County portion of the project is ongoing.

Project K: I-405 Improvements (I-605 to SR-55)

Project K consists of improvements on I-405 between SR-73 and I-605.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none">The OCTA Board selected Alternative One as the Locally Preferred Alternative In October 2012.On April 22, 2013, the Board approved the exploration of Concept A (two general purpose lanes in each direction plus conversion of the existing high-occupancy vehicle lane to a high-occupancy toll/express lane in each direction) and Concept B (two general purpose lanes in each direction, but truncating the second general purpose lane in the northbound direction at Valley View Street).The recirculation of a supplemental draft environmental impact report (EIR)/environmental impact statement for Interstate 405 (Project K) began in June 2013.
FY 2014	<ul style="list-style-type: none">The Board approved exploration of Concept A and B and upon further analysis Board eliminated Concept B. In December 2013, the Board reaffirmed and recommended Caltrans to select Alternative 1 as the locally preferred alternative, which would add one general purpose lane in each direction.
FY 2015	<ul style="list-style-type: none">On July 25, 2014, Caltrans chose Alternative 3 as the preferred alternative, to be implemented in a phased approach. Under this phased approach, OCTA would construct one GP lane in each direction from Euclid Street to I-605, consistent with Measure M2, as the first phase of the project.The final EIS/EIR was approved by Caltrans on March 26, 2015.On April 27, 2015, the Board authorized the design-build cooperative agreement, approved the terms and conditions that OCTA staff negotiated with Caltrans, and directed staff to take steps to implement the preferred alternative.The federal Record of Decision was issued on May 15, 2015; the revised design-build Request for Qualifications was issued on May 28, 2015; and the state Notice of Determination was issued on June 17, 2015.

Project L: I-405 Improvements (SR-55 to I-5)

Project L will add one general purpose lane in each direction of the I-405 corridor and improve the interchanges in the area between I-5 and SR-55 in Irvine. Additional features include improvements to various interchanges, auxiliary lanes, and ramps. Currently, unresolved issues relating to environmental study traffic modeling methodology generated delays for the project.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none">Completed draft PSR and submitted to Caltrans for review in May 2013.

FY 2014	<ul style="list-style-type: none"> Final PSR/PDS was approved by Caltrans.
	<ul style="list-style-type: none"> The final I-405 Project Study Report/ Project Development Support (PSR-PDS) for Project L was approved by Caltrans.
FY 2015	<ul style="list-style-type: none"> Contract was signed on December 10, 2014 to initiate engineering and environmental work.
	<ul style="list-style-type: none"> The draft Project Report and draft Environmental Document are scheduled to be complete by March 2017.

Project M: I-605 Access Improvements

Project M will improve freeway access and arterial connections for I-605 at Katella Avenue in the City of Los Alamitos and Orange County. Improvements may include enhancements at the on- and off-ramps, in addition to operational improvements at the I-605/Katella Avenue interchange. Caltrans signed the PSR/PDS in May 2015. The project is scheduled to begin the environmental phase in fall 2016.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> The Request for Proposals (RFP) was released in October 2012
FY 2014	<ul style="list-style-type: none"> The project study team finalized the Purpose and Need Statement for the project. Conceptual project alternatives are being developed for the interchange and will be further studied as part of the Project Study Report-Project Development Support (PSR-PDS) report.
FY 2015	<ul style="list-style-type: none"> OCTA submitted the final PSR-PDS to Caltrans for review and approval. The final PSR-PDS was approved by Caltrans on May 11, 2015. The project is now eligible to advance to the Project Approval/Environmental Document (PA/ED) phase.

Project N: Freeway Service Patrol

Project N funds the Freeway Service Patrol (FSP) on Orange County freeways during weekday peak periods, and along select freeways during the midday and weekends. FSP began operations in June 2012 and provides tow truck service for motorists with disabled vehicles on the freeway system to quickly clear freeway lanes and minimize congestion. The FSP services are ongoing throughout the life of the M2 Program. This is an on-going service. Since inception, FSP provided a total of 34,887 assists to motorists on the Orange County freeway system.

Freeway Mitigation Program

The Freeway Mitigation Program provides higher-value environmental benefits such as habitat protection, wildlife corridors, and resource preservation in exchange for streamlined project approvals and greater certainty in the delivery of Projects A-M. The program is proceeding as planned, with seven properties acquired (1,300 acres), and 11 restoration projects approved for funding by the Board, totaling approximately 350 acres. Ten of these restoration project plans have been approved by the wildlife agencies and are currently being implemented, with the remaining project currently under development.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> To date, the Board has approved 11 restoration projects for funding, totaling approximately 400 acres. Staff continued to work with project sponsors on technical documents and draft restoration plans. At the end of FY 2013, acquired about 950 acres of open space property. Staff continued to work towards release of draft conservation plans and draft EIS/EIR.
FY 2014	<ul style="list-style-type: none"> The Board approved the Freeway Mitigation Program Draft Natural Community Conservation Plan/ Habitat Conservation Plan (NCCP/HCP) and Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) on January 27, 2014 for public release. The Board also directed OCTA staff to prepare a long-term expenditure plan for Environmental Mitigation Program funds on January 27, 2014. On June 9, 2014, the Board authorized OCTA staff to enter into a new interim management agreement for the Hayashi Preserve with the California Department of Parks and Recreation.

FY 2015	<ul style="list-style-type: none">• OCTA publicly released the NCCP/HCP and EIR/EIS on November 7, 2014. Two public meetings were held, on November 20, 2014 and on December 3, 2014.
	<ul style="list-style-type: none">• On March 4, 2015, OCTA staff received endorsement on a set of recommendations on Guiding Principles, Long-Term Funding Strategy, and an expenditures option list from the Environmental Oversight Committee.
	<ul style="list-style-type: none">• On May 22, 2015, the Board approved a framework for the use of remaining Mitigation Program revenues to off-set environmental impacts from future state highway improvement projects.

Appendix D
Streets and Roads Projects Activity
Summaries (Projects O to Q)

Appendix D: Streets and Roads Projects Activity Summary (Projects O-Q)

Project O: Regional Capacity Project and OC Bridges Railroad Program

Project O, known as the Regional Capacity Program, funds completion of the Orange County MPAH, intersection improvements, and other projects to improve traffic flow. Local jurisdictions apply for Project O funding through a competitive process and generally provide a 50 percent match in local funds, with a lower match requirement for specified projects that address key objectives.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • OCTA Board approved updates to the Comprehensive Transportation Funding Programs (CTFP) guidelines. 2013 Regional Capacity Program call for projects was issued. • For Tustin/Rose Grade Separation, OCTA released the advertisement for construction in October 2012, and five bids were received in November 2012. Construction began in April 2013 • For Orangethorpe Grade Separation, OCTA released the advertisement for construction on September 12, 2012 and six bids were received on November 6, 2012. Construction began in April 2013. • Programming recommendations for the 2013 Regional Capacity Program were approved by the OCTA Board on April 8, 2013. This included 10 projects with about \$35 million in funding.
FY 2014	<ul style="list-style-type: none"> • Board authorized staff to issue the 2014 Regional Capacity Program Call for Projects in August 2013. • For State College Grade Separation and for Lakeview Grade Separation, released advertisement for construction in September 2013. • On January 13, 2014, OCTA staff presented the OC Bridges Railroad Grade Separation Program Funding Plan Changes to the OCTA Board of Directors (Board). The Board approved OCTA staff's recommended funding plan to support the revised estimated cost to complete the OC Bridges Railroad Grade Separation Program. • For Placentia Avenue Grade Separation, the grade separation was opened to traffic in March 2014. • For Raymond Avenue Grade Separation, the construction contract was awarded on February 4, 2014. • For State College Boulevard Grade Separation, the City of Fullerton awarded the construction contract on February 4, 2014. • The Board approved the 2014 Regional Capacity Program programming recommendations on April 14, 2014, with \$35.4 million in funding for 17 projects. • For Kraemer Boulevard Grade Separation, the grade separation was opened to traffic in June 2014. Work continues on landscaping and fencing adjacent to the pump station.
FY 2015	<ul style="list-style-type: none"> • Board authorized staff to issue the 2015 Regional Capacity Program Call for Projects in August 2014. • For Lakeview Avenue Grade Separation, construction activities began in July 2014. • The Board approved the 2014 Regional Capacity Program programming recommendations on April 13, 2015, with 23 recommended projects. To date, the five Regional Capacity Program calls for projects have provided funding for a total of 103 projects in the amount of more than \$193 million. • Two of the seven grade separation projects (Kraemer Boulevard, Placentia Avenue) are complete. • For the other five projects, the status is as follows. Lakeview Avenue is about 28% complete, with scheduled completion by early 2017. Orangethorpe Avenue is about 63% complete, with scheduled completion by mid-2016. Raymond Avenue is about 45% complete, with scheduled completion by mid-2018. State College Boulevard is about 31% complete, with scheduled completion by early 2018. Tustin Avenue/Rose Drive is about 62% complete, with scheduled completion by mid-2016.

Project P: Regional Traffic Signal Synchronization Program

Project P, the Regional Traffic Signal Synchronization Program, implements and funds ongoing operations for regional signal coordination programs covering over 2,000 signalized intersections

throughout Orange County and across jurisdictional boundaries. Local jurisdictions provide a 20 percent match in local funds.

- In FY 2011-12, sixteen corridor-based signal synchronization projects were implemented.
- In FY 2012-13, twenty-three projects were selected.
- In FY 2013-14, thirteen projects were implemented.
- In FY 2014-15, ten projects were implemented.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • Released 2013 annual call for projects in August 2012. • All interagency agreements have been finalized for OCTA-led projects. These projects are First/Bolsa, Ball Road, Edinger Avenue, Oso/Pacific Park, Los Alisos Boulevard, Santa Margarita Parkway, and Lake Forest Drive. • Fourteen projects were approved by the OCTA Board in April 2013, covering 108.5 miles with 829 intersections at a cost totaling about \$19.4 million.
FY 2014	<ul style="list-style-type: none"> • Released 2014 annual call for projects in August 2013. • Ten projects were approved by the OCTA Board in April 2014, totaling about \$8.4 million.
FY 2015	<ul style="list-style-type: none"> • Released 2015 annual call for projects in August 2014. • Seven projects were approved by the OCTA Board in April 2015, totaling about \$16.3 million. • To date, there have been five rounds of funding, providing a total of 69 projects with more than \$56.3 million in funding. To date, OCTA and local agencies have synchronized 1,413 intersections along 363 miles of streets.

Project Q: Local Fair Share Program

Project Q, the Local Fair Share Program, provides flexible funding for local jurisdictions and Orange County to maintain streets and meet other local transportation needs such as safety enhancements. Funds are distributed by formula to local jurisdictions and Orange County. The formula is based on population, street mileage, and amount of sales tax collected. Funding is disbursed to the agencies every 2 months. The agencies that receive funding agree to abide by a specified set of project requirements.

FISCAL YEAR	SUMMARY
APR – JUN 2013	<ul style="list-style-type: none"> • To date, approximately \$88.6 million in Local Fair Share payments have been provided to local agencies.
APR – JUN 2014	<ul style="list-style-type: none"> • To date, approximately \$135 million in Local Fair Share payments have been provided to local agencies.
APR – JUN 2015	<ul style="list-style-type: none"> • To date, approximately \$185 million in Local Fair Share payments have been provided to local agencies.

Appendix E
Transit Projects Activity Summaries
(Projects R to W)

Appendix E: Transit Projects Activity Summary (Projects R-W)

Project R: High Frequency Metrolink Service

Project R, the High Frequency Metrolink Service project, consists of service frequency improvements, track improvements, additional vehicles, and other needs to enhance Metrolink commuter rail service provision within Orange County and to/from downtown Los Angeles. As part of the Metrolink Service Expansion Program, this project completed the enhancement of 52 Orange County at-grade rail-highway crossings with safety improvements. The cities of Anaheim, Dana Point, Irvine, Orange, Santa Ana, San Clemente, San Juan Capistrano, and Tustin have established quiet zones at respective crossings.

In 2011, OCTA deployed 10 new Metrolink intra-county trains operating between Fullerton and Laguna Niguel/Mission Viejo. Efforts are underway to increase ridership on these trains through an evaluation of service redeployment, which may provide new train trips between Orange County and Los Angeles County. OCTA staff are working with Metrolink, Los Angeles Metro, and Burlington Northern Santa Fe Railroad to address track sharing issues, operating constraints, and funding that impact options for redeployment.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> Enhancement of the designated 52 Orange County at-grade rail-highway crossings was completed as part of the Metrolink Service Expansion Program (MSEP).
FY 2014	<ul style="list-style-type: none"> OC Link day pass was discontinued on July 2, 2013.
FY 2015	<ul style="list-style-type: none"> For Sand Canyon Avenue Grade Separation, the westbound lanes were opened to traffic in June 2014 and the eastbound lanes opened to traffic in July 2014. A road opening ceremony was held in August 2014. On April 5, 2015, several schedule changes were made effective for the Metrolink Service Expansion Program to increase ridership through a redeployment of trains. OCTA continues to work with its partner agencies to move towards providing new Metrolink trips between Orange County and Los Angeles County.

Project S: Transit Extensions to Metrolink

Project S, the Transit Extensions to Metrolink project, involves planning, developing, and implementing a new fixed guideway and bus/shuttle services that strengthen connections between communities in Orange County with the Metrolink system. Local jurisdictions apply for Project S funding through a competitive process. There are two ongoing fixed guideway projects: the Anaheim Rapid Connection (ARC) project in Anaheim and the OC Streetcar project in Santa Ana and Garden Grove.

The City of Anaheim, working closely with OCTA, prepared an Alternatives Analysis in 2012 and the Anaheim City Council selected the streetcar as the Locally Preferred Alternative (LPA) for further environmental analysis. The OCTA Board approved the completion of the alternatives analysis and selection of the LPA and authorized the City of Anaheim to complete draft environmental documents for the LPA. A Notice of Preparation of the Environmental Impact Report (EIR) was released on December 1, 2013. The draft EIR was originally anticipated to be completed and circulated for public review by the end of 2014. The project was then delayed as the City of Anaheim evaluated alignment options for ARC. In 2015, OCTA and the City of Anaheim received the Notice to Proceed, and work on the draft EIR is currently underway.

The cities of Santa Ana and Garden Grove completed the Alternatives Analysis and Environmental Assessment (EA)/Draft EIR for the Santa Ana/Garden Grove Fixed Guideway Project in early 2015. OCTA and the cities selected Streetcar Alternative 1 as the LPA, and the Revised EA/Final EIR was certified in

January 2015. In April 2015, Federal Transit Administration (FTA) issued a Finding of No Significant Impact for the project and OCTA received approval to enter the Federal New Starts Program.

The OCTA Board approved OCTA as the lead agency for the project going into the design and construction phases. OCTA rebranded the project as the OC Streetcar. OCTA will serve as the owner and operator for the OC Streetcar, working closely with the cities of Santa Ana and Garden Grove. OCTA recently selected a firm to complete final design for the project; final design work will begin in early 2016. Construction is scheduled to begin in 2017, and the OC Streetcar is scheduled to begin revenue service in 2020

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • For Bus and Station Van Extensions Project, four applications were received in April 2012. The applications were approved by the TAC and the Board in June and July 2012, respectively. • The ARC Alternatives Analysis (AA) report is completed and was submitted to the Federal Transit Administration (FTA) in October 2012 for review. • Based upon the results of the AA report and community input, the Anaheim City Council adopted the streetcar as the locally preferred alternative (LPA) for ARC in October 2012. • The draft AA/EA/EIR for the SA-GG project was submitted to FTA for review in December 2012. • For the Bus and Station Van Extension Project, services for four approved applications began in November 2012.
FY 2014	<ul style="list-style-type: none"> • City of Anaheim presented summary of completed ARC milestones to the OCTA Board in July 2013. Board provided approval for the ARC project to advance into the environmental phase. • Two public environmental scoping meetings for the ARC project were held on January 14. During these meetings, the City of Anaheim provided the public with information about the proposed project and described the environmental review process. • Provided updates on the SA-GG project to the OCTA Transit Committee and the OCTA Board in March 2014. • In May 2014, the environmental assessment/draft environmental impact report (EA/DEIR) for the SA-GG project was completed. The City of Santa Ana released the EA/DEIR for public comment. Three public meetings were held in June to discuss the EA/DEIR and obtain comments.

FY 2015	<ul style="list-style-type: none"> • On August 5, 2014 the Santa Ana City Council approved Streetcar Alternative 1 as the Locally Preferred Alternative for the SA-GG project. • On August 11, 2014 the OCTA Board approved staff proposed financial and implementation plans for the project for the SA-GG project. OCTA was identified to serve as the lead agency for continued project development, and will own and operate the system. • The completion of project milestones, including the alternatives analysis, draft environmental document, and approval and adoption by the Santa Ana City Council of the LPA was approved by the Board on September 22, 2014. • OCTA submitted the revised environmental assessment/final environmental impact report (REA/FEIR) for the SA-GG project to FTA for review and approval in October 2014. • On January 20, 2015, the Santa Ana City Council certified the FEIR for the SA-GG project. On February 10, 2015, the Garden Grove City Council approved the LPA adopted by the Santa Ana City Council. On February 13, 2015, OCTA submitted its request to enter FTA's New Starts Project Development for the SA-GG project. On February 23, 2015, the Board approved a project management consultant contract for the SA-GG project. On March 10, 2015, the FTA issued a Finding of No Significant Impact for the SA-GG project, which completed the environmental phase. • The City of Anaheim continues to evaluate alternative alignments for the ARC project. • On May 5, 2015, the FTA formally approved the SA-GG project, or the OC Streetcar project, to move into the Project Development phase of the New Starts program. • OCTA will procure a design consultant for the OC Streetcar project, with Notice to Proceed scheduled by the end of 2015.
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Project T: Convert Metrolink Stations to Regional Gateways that Connect Orange County with High-Speed Rail Systems

Project T, the Convert Metrolink Stations to Regional Gateways project, provides for improvements to regional transit centers and transit services to connect Metrolink stations in Orange County with the future California High Speed Rail system. Project T consists of the Anaheim Regional Transportation Intermodal Center (ARTIC), located in Anaheim.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • In July 2012, the Board approved the sale of approximately 13.5 acres of real property to the City. • In August 2012, the City of Anaheim (City) received eight bids for the construction of ARTIC. • In September 2012, the City awarded the construction contract to Clark Construction Group (Clark) in the amount of \$126,997,000. The City issued a Notice to Proceed to Clark in September 2012. • The General Contractor mobilized to the site in October 2012 • In October 2012, the contractor began demolition of the existing structures on site. • Construction of ARTIC is underway, beginning with work on the foundation of the facility.
FY2014	<ul style="list-style-type: none"> • Douglas Road was re-opened to traffic on March 27, 2014. • Construction of ARTIC was proceeding with about 80 percent completed by the end of the FY.
FY2015	<ul style="list-style-type: none"> • The City of Anaheim opened the ARTIC facility to rail and bus service on December 6, 2014; held a ribbon cutting ceremony on December 8, 2014; and held a grand opening celebration on December 13, 2014.

Project U: Expand Mobility Choices for Seniors and Persons with Disabilities

Project U, the Expand Mobility Choices for Seniors and Persons with Disabilities project, funds transit fare discounts for seniors and persons with disabilities, expands local community van services through the Senior Mobility Program (SMP), and supplements the Orange County Senior Non-Emergency Medical Transportation Program (SNEMT). Thirty-one local jurisdictions are currently participating in the SMP, and the SNEMT is in operation. Since inception, more than 1,076,000 boardings and 340,000 boardings have been provided through the SMP and SNEMT programs, respectively.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> The City of Mission Viejo joined the program in February. In February 2013, Staff provided the Board with a staff report which indicated the Fare Stabilization Program funding levels may only be sufficient until FY 2019-20.
	<ul style="list-style-type: none"> In total, more than \$4.5 million in Project U funding was provided in FY2013 for the SMP and SNEMT. OCTA hosted a Senior Mobility Program Forum in May, with 24 cities participating. To date, about \$5.5 million has been allocated to stabilize fares for seniors and persons with disabilities through the Fare Stabilization Program.
FY 2014	<ul style="list-style-type: none"> In total since inception, about \$22 million in M2 Project U funding has been provided through the SMP, the SNEMT, and the Fare Stabilization Program.
FY 2015	<ul style="list-style-type: none"> In total since inception, about \$31 million in M2 Project U funding has been provided through the SMP, the SNEMT, and the Fare Stabilization Program

Project V: Community Based Transit/Circulators

Project V, the Community Based Transit/Circulators project, involves planning, developing, and implementing a new local bus shuttle and circulator services that complement existing transit services in Orange County. On June 24, 2013, the OCTA Board approved \$9.8 million to fund five proposals from the cities of Dana Point, Huntington Beach, La Habra, Laguna Beach, and Lake Forest. The cities serve as the lead agencies for these services, and have the option to operate the services directly or contract out operations. Service began in Laguna Beach on March 6, 2015. Staff is currently working on the next Call for Projects for Project V; several cities have expressed interest in participating.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> Draft Project V guidelines were presented to the Technical Advisory Committee (TAC) in October, approved by the Executive Committee and the Board in November 2012. The call for projects was issued in December 2012. Program Guidelines for Project V were approved by the Board last quarter and the first call for projects was issued for \$28 million. Five applications were received. Five applications from the cities of Dana Point, Huntington Beach, La Habra, Laguna Beach, and Lake Forest were approved by the Transit Committee for Project V (Community-Based Transit/Circulators) on June 13, 2013, for a total of up to \$9.8 million.
FY 2014	<ul style="list-style-type: none"> The City of Lake Forest began operating their service in January 2014. Projects proceeding to implement service in other cities. OCTA executed agreement documents with other participating cities.
FY 2015	<ul style="list-style-type: none"> OCTA procured the buses to operate La Habra Shuttle service and service started on August 4, 2014. Service began in Laguna Beach in March 2015. On June 24, 2015, OCTA held a Project V workshop with the TAC to obtain feedback on guidelines and provide information for the next call for projects. OCTA staff plan to present revised Project V guidelines to the TAC in August 2015 and to the Board in October 2015, and plan for the next call for projects.

Project W: Safe Transit Stops

Project W, the Safe Transit Stops project, provides for passenger amenities, including improved shelters, lighting, traveler information, and ticket vending machines at the 100 busiest transit stops across Orange County. On July 14, 2014, the OCTA Board approved \$1.2 million in funding for city-initiated improvements and \$370,000 for OCTA-initiated improvements in FY 2015. Fifteen cities are eligible for Safe Transit Stops funding. Seven cities applied for funds, and 51 projects will be funded per OCTA Board approval.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> OCTA staff refined draft Project W guidelines and submitted them to members of the Service Review Committee for review and input in December 2012. Completed development of a definition of "busiest

	<p>bus stops”, completed an inventory of 100 busiest stops, and commenced an industry review of best practices.</p>
FY 2014	<ul style="list-style-type: none"> • The OCTA Board of Directors approved the Project W framework at their March 10, 2014 meeting as presented by the OCTA staff. The proposed framework will provide up to \$950,000 for city-initiated improvements, and \$240,000 for OCTA-initiated improvements in FY 2015. • Seven out of 15 eligible cities applied for Project W funding.
FY 2015	<ul style="list-style-type: none"> • At the July 14, 2014 business meeting, the Board approved about \$1.2 million in M2 Project W funds for city-initiated improvements and \$370,000 for OCTA-initiated improvements in FY 2014-15. Fifteen cities are eligible for Safe Transit Stops’ funding, seven cities applied for funds, and 51 projects will be funded per the July Board approval. • Local agencies including Anaheim, Costa Mesa, Irvine, and Westminster reported that their projects have been awarded as of June 30, 2015. Other agencies including Brea, Orange, and Santa Ana have requested extensions to award their funds.

Appendix F
Environmental Cleanup Project
Activity Summary (Project X)

Appendix F: Environmental Cleanup Activity Summary (Project X)

Project X: Water Quality Program

Project X, the Measure M2 Environmental Cleanup Program, improves overall water quality in Orange County, which was impacted by transportation-generated pollution. Projects are chosen on competitive basis to assist jurisdictions in meeting the Clean Water Act requirements for controlling transportation-generated pollution. Eligible applicants include the County of Orange and cities in Orange County. Third parties, such as water and wastewater public entities, environmental resource organizations, nonprofit 501(c) environmental institutions, and homeowners associations can jointly apply with a city and/or the County of Orange, provided the eligible jurisdiction sponsors the project.

The Environmental Cleanup Program consists of a two-tiered funding program: Tier 1 projects mitigate the more visible forms of pollutants, such as litter and debris, which collects on roadways and in storm drains. Funding covers equipment purchases such as screens, filters, inserts, and other low-flow diversion projects to upgrade catch basins and collect debris. Tier 2 projects are multi-jurisdictional capital-intensive projects, such as constructing wetlands, and detention/infiltration basins.

FISCAL YEAR	SUMMARY
FY 2013	<ul style="list-style-type: none"> • In August 2012, the Board authorized funding of 33 projects totaling \$2.76 million to 25 cities plus the County of Orange for the second Tier 1 call for projects. • OCTA released the third Tier 1 call for projects, with Board approval. • OCTA released the second Tier 2 call for projects, with Board approval.
FY 2014	<ul style="list-style-type: none"> • The Board approved the funding recommendations for the third Tier 1 call for projects in September 2013, in the amount of \$2.83 million. • OCTA released the fourth Tier 1 call for projects, with Board approval. • Funding recommendations for the second Tier 2 call for projects were approved by the Board on April 14, 2014 in the amount of \$15.2 million.
FY 2015	<ul style="list-style-type: none"> • Funding recommendations for the fourth Tier 1 call for projects were approved by the Board on September 22, 2014 in the amount of \$2.8 million. • In September 2014, OCTA received a prestigious award for its innovative efforts to improve water quality across Orange County. The award, for Outstanding Stormwater Implementation Program in California, recognizes OCTA for best management practices under the Measure M2 Environmental Cleanup Program. • OCTA released the fifth Tier 1 call for projects, with Board approval.

Appendix G
M2 Expenditures Summary Project
Activity Summary

Appendix G: M2 Performance Metrics Summary

This appendix provides the forecasted project cost and forecasted completion date for M2 capital projects, and the changes in those metrics from June 2012 to June 2015. The source is the Capital Action Plan Performance Metrics Staff Reports, for Fourth Quarter FY2012 and Fourth Quarter FY2015.

Project Letter & Name	Forecasted Cost (June 2012)	Forecasted Cost (June 2015)	Change in Forecasted Cost	Forecasted Completion (June 2012)	Forecasted Completion (June 2015)	Change in Completion Date
FREEWAY PROJECTS						
A: I-5, SR-55 to SR-57	\$46.4 m	\$36.9 m	-\$9.5 m	Mar 2018	Dec 2019	21 months
B: I-5, I-405 to SR-55	n/a	TBD	-	n/a	TBD	-
C: I-5, Pico to Vista Hermosa	\$113.0 m	\$91.9 m	-\$21.1 m	Aug 2017	Aug 2018	12 months
C: I-5, Vista Hermosa to PCH	\$75.6 m	\$71.5 m	-\$4.1 m	Jan 2016	Mar 2017	14 months
C: I-5, PCH to San Juan Creek Rd	\$70.7 m	\$60.2 m	-\$10.5 m	Nov 2015	Sep 2016	10 months
C & D: I-5, SR-73 to El Toro Road	\$558.7 m	\$481.7 m	-\$77.0 m	Jul 2022	Sep 2022	2 months
D: I-5, I-5/Ortega Interchange	\$90.9 m	\$81.3 m	-\$9.6 m	Sep 2015	Dec 2015	3 months
D: I-5, I-5/El Toro Rd Interchange	n/a	TBD	-	n/a	TBD	-
F: SR-55, I-405 to I-5	\$274.9 m	\$274.6 m	-\$0.3 m	Nov 2020	Dec 2023	37 months
F: SR-55, I-5 to SR-91	n/a	TBD	-	n/a	TBD	-
G: SR-57 NB, Orange-wood to Katella	n/a	TBD	-	n/a	TBD	-
G: SR-57 NB, Katella to Lincoln	\$37.7 m	\$40.7 m	+\$3.0 m	Sep 2014	Apr 2015	7 months
G: SR-57 NB, Orange-thorpe to Yorba Linda	\$57.5 m	\$52.9 m	-\$4.6 m	Mar 2014	Nov 2014	8 months
G: SR-57 NB, Yorba Linda to Lambert	\$56.5 m	\$54.6 m	-\$1.9 m	Dec 2013	May 2014	5 months
G: SR-57 NB, Lambert to Tonner Canyon	n/a	TBD	-	n/a	TBD	-
H: SR-91 WB, I-5 to SR-57	\$72.8 m	\$63.5 m	-\$9.3 m	Nov 2015	Jul 2016	8 months
I: SR-91 WB, SR-57 to SR-55	n/a	TBD	-	n/a	TBD	-
I: SR-91 WB, Tustin Interchange to SR-55	\$49.9 m	\$47.8 m	-\$2.1 m	May 2015	Jul 2016	14 months
J: SR-91, SR-55 to SR-241	\$85.2 m	\$79.9 m	-\$5.3 m	Dec 2012	Mar 2013	3 months
J: SR-91, SR-241 to SR-71	\$58.2 m	\$57.8 m	-\$0.4 m	Jan 2011	Jan 2011	-
K: I-405, SR-55 to I-605	\$1,727.6 m	\$1,791.0 m	+\$63.4 m	Dec 2019	Oct 2022	34 months
L: I-405, I-5 to SR-55	n/a	TBD	-	n/a	TBD	-
L: I-405, SR-133 to University Drive	n/a	\$16.4 m	-	n/a	Nov 2019	-
M: I-605, I-605/Katella Interchange	n/a	TBD	-	n/a	TBD	-
GRADE SEPARATION PROJECTS						

Project Letter & Name	Forecasted Cost (June 2012)	Forecasted Cost (June 2015)	Change in Forecasted Cost	Forecasted Completion (June 2012)	Forecasted Completion (June 2015)	Change in Completion Date
O: Raymond	\$78.2 m	\$116.3 m	+\$38.1 m	May 2016	Aug 2018	27 months
O: State College	\$74.6 m	\$92.8 m	+\$18.2 m	May 2016	May 2018	24 months
O: Placentia	\$67.3 m	\$61.3 m	-\$6.0 m	Nov 2014	Dec 2014	1 month
O: Kraemer	\$67.8 m	\$64.2 m	-\$3.6 m	Oct 2014	Dec 2014	2 months
O: Orangethorpe	\$114.9 m	\$104.6 m	-\$10.3 m	Mar 2016	Sep 2016	6 months
O: Tustin/Rose	\$91.3 m	\$99.2 m	+\$7.9 m	Mar 2016	May 2016	2 months
O: Lakeview	\$95.5 m	\$99.2 m	+\$3.7 m	Dec 2015	Mar 2017	15 months
R: Sand Canyon	\$55.2 m	\$63.7 m	+\$8.5 m	May 2014	Jul 2015	14 months
R: 17th St	n/a	TBD	-	n/a	TBD	-
RAIL AND STATION PROJECTS						
R: Grade Crossing Safety Enhancements	\$94.4 m	\$94.4 m	No change	Dec 2011	Dec 2011	No change
R: San Clemente Beach Trail Enhancements	n/a	\$4.9 m	-	n/a	Mar 2014	-
R: San Juan Capistrano Passing Siding	n/a	\$25.3 m	-	n/a	Jan 2019	-
R: Placentia Metrolink Station and Parking	n/a	TBD	-	n/a	TBD	-
R: Metrolink Service Expansion Program	\$134.0 m	n/a	-	Sep 2012	n/a	-
S: Anaheim Rapid Connection	\$676.0 m	TBD	-	Aug 2018	TBD	-
S: Santa Ana/Garden Grove Fixed Guideway	\$252.0 m	TBD	-	May 2018	Dec 2019	19 months
R & T: ARTIC in Anaheim	\$227.4 m	\$230.4 m	+\$3.0 m	Oct 2014	Dec 2014	2 months

Appendix H

Acronyms and Abbreviations

Acronyms and Abbreviations

ARC	Anaheim Rapid Connection
ARTIC	Anaheim Regional Transportation Intermodal Center
Board	Board of Directors
Caltrans	California Department of Transportation
CAMM	Contracts Administration and Materials Management
CBP	Comprehensive Business Plan
CEO	Chief Executive Officer
CTFP	Comprehensive Transportation Funding Program
EAP	Early Action Plan
EIR	Environmental Impact Report
FSP	Freeway Service Patrol
FTA	Federal Transit Administration
FTE	full-time equivalent
FY	Fiscal Year
HOV	high-occupancy vehicle
I	Interstate
LA Metro	Los Angeles County Metropolitan Transportation Authority
LPA	Locally Preferred Alternative
L RTP	Long-Range Transportation Plan
M2	Renewed Measure M Transportation Investment Plan
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MPAH	Master Plan of Arterial Highways
OCTA	Orange County Transportation Authority
OCUTT	Orange County Unified Transportation Trust
PMO	Program Management Office
PMP	Program Management Procedures
PSR/PDS	Project Study Report/Project Development Support
RMP	Resource Management Plan
ROW	right-of-way
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SMP	Senior Mobility Program
SNEMT	Senior Non-Emergency Medical Transportation Program
SR	State Route
TECP	Tax Exempt Commercial Paper
TIFIA	Transportation Infrastructure Finance and Innovation Act

TOC

Taxpayers Oversight Committee

VTA

Santa Clara Valley Transportation Authority

