Orange County Transportation Authority

July 1, 2015 to June 30, 2018 M2 Performance Assessment

Final Report

OCTA

OCGO *Local Tax Dollars at Work*

February 2019

SJOBERG EVASHENK CONSULTING, INC

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With only seven years elapsed of the Measure M2 Program's 30-year timeframe, we found that the Orange County Transportation Authority (OCTA) and its M2 partners are on track towards meeting the primary goals of the M2 Ordinance and fulfilling the promises made to the voters thus far. The agency is at a mature phase in its implementation of M2 and has incorporated many leading practices resulting in strong program management and sound fiscal practices.

Like other similar entities tasked with delivering transportation and other public infrastructure, OCTA was recovering from the impacts of the Great Recession when projected sales tax collections did not materialize as expected. Yet, at the same time, OCTA was able to take advantage of external revenue opportunities, favorable construction prices, and debt financing instruments to advance projects for delivery, allowing Orange County voters to realize the benefits of their "yes-vote" early on in the M2 Program's lifecycle.

Program Goals Were Met Thus Far

While the M2 Ordinance established a goal of relieving traffic congestion in Orange County and used certain performance indicators as part of its Long Range Transportation Plan that is significantly comprised of M2 projects, OCTA's stated focus and directive was to complete the projects listed in the Renewed Measure M Transportation Investment Plan under the premise that those efforts would address the Ordinance purpose and goals. Our review found that OCTA had many accomplishments toward those goals with only 7 years elapsed of the M2 30-year timeframe—although OCTA did not specifically track performance against the overarching M2 goals.

SIX M2 ORDINANCE GOALS

- Relieve Congestion
- Reduce Air & Water Pollution
- Fix Potholes & Resurface Streets
- Synchronize Traffic Lights
- Expand Metrolink
- Provide Transit, at Reduced Rates, to Seniors & Disabled Persons

OCGO

M2 GOALS WERE MET THUS FAR

- Congestion increased, but so did vehicle miles traveled indicating more vehicles on the road.

- M2 freeway improvement showed decreases in travel delay during evening commute hours on the SR-91 between SR-57 and I-5, after the project was completed.

- Over $58 million was provided to projects expanding senior transportation services and stabilizing fares for seniors and persons with disabilities.

- Local street and road condition improved since 2014 and was the best in the state in 2016 when data was available.

- More traffic lights were synchronized than promised.

- Environmental efforts achieved results with more than 6.2 million cubic feet of trash removed from local beaches and roadways as well as 1,300 acres of land acquired and preserved as open space.

Strong M2 Program Management Existed

When Orange County voters approved the M2 Ordinance in 2006, OCTA was tasked with administering an initial $11.9 billion (in 2005 dollars) program over a 30-year period. The Ordinance required OCTA to deliver a diverse portfolio of transportation solutions, generally geared towards relieving congestion in the region. Embracing the challenge to fulfill promises made to voters while safeguarding tax dollars, OCTA evolved into an organization that employed strong program management practices, valued external reviews on its program and practices, and safeguarded sales tax dollars. Moreover, OCTA has begun implementing a higher-level cyber security framework to minimize vulnerabilities, risks, and risks of potential attacks to its technology and information systems.

- OCTA's Program Management Office employed strong oversight practices and in many instances is more robust than other similar entities.
- Clear roles and functions within OCTA helped coordinate the delivery of the M2 Program and formal M2 Program management committee consisting of OCTA executives and key managers ensured appropriate sharing of knowledge.

- Continuous improvements were valued as demonstrated by OCTA's implementation of prior performance assessment recommendations, with no open or recurring issues noted.
- Administrative costs were closely monitored and limited to comply with the Ordinance.
- Strong framework was in place over cybersecurity, but training protocols could be tightened.

M2 Program Areas Showed Significant Progress

When Orange County voters renewed Measure M in 2006, they agreed to spend a half-cent sales tax on improving transportation infrastructure and offsetting related environmental impacts in essentially four program areas: Freeways, Streets and Roads, Transit, and Environmental. Similar to other transportation agencies, OCTA was able to take advantage of favorable conditions in the construction industry and financial markets during the Great Recession to accelerate projects prior to the start of the M2 sales tax collection in 2011 through its Early Action Program. As a result, with only seven years passed since the start of the sales tax collection, OCTA already demonstrated significant progress across all M2 Program areas.

- Many accomplishments realized to-date early in M2 timeframe included, but were not limited to:
  - 43.6 new freeway lane miles, 5 reconstructed interchanges, 7 railroad grade crossings, 8 Metrolink grade crossings/station improvements completed.
  - 96 million boardings provided to seniors and persons with disabilities.
  - $342 million provided to improve local transportation infrastructure.
  - 6.2 million cubic feet of trash collected and 1,300 acres preserved as open space in addition to 350 acres of restoration projects.

- Capital projects showed substantial progress to-date, although some faced budget and schedule challenges.
- Appropriate systems were in place to monitor and report on capital project progress toward full completion of the Ordinance.
- Solid policies and procedures existed over contract and construction management.
- Procurement practices and activities complied with OCTA policies.
- Capital project selection principles seemed reasonable and were generally comparable to others, but linkages to projects implemented could be more formal.
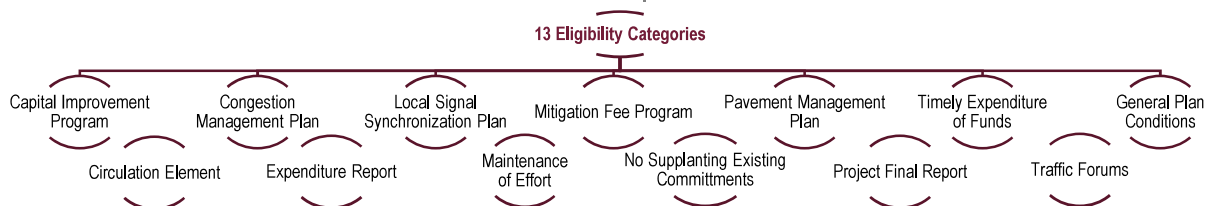- Environmental programs realized substantial successes.

Approaches Ensured Compliance with Ordinance

Gaining public trust and confidence is critical for any successful government entity, in particular those with sales tax measures placed on ballots before local residents to fund transportation or other types of public services. As such, adherence to promises made to voters and compliance with ballot provisions is important. At OCTA, we found that this philosophy and mandate permeated through all levels of the organization from executive management to newly hired employees. Staff developed strong approaches and practices to track compliance and ensure strict adherence to the promises made.

- Robust system was used to track compliance with Ordinance provisions that was more thorough than similar entities.

- Processes to award grants were vigorous and, once awarded, monitoring of local grants was sound.

- Local eligibility requirements were robust and thoroughly reviewed by OCTA.

13 Eligibility Categories

Capital Improvement Program

Congestion Management Plan

Local Signal Synchronization Plan

Mitigation Fee Program

Pavement Management Plan

Timely Expenditure of Funds

General Plan Conditions

Circulation Element

Expenditure Report

Maintenance of Effort

No Supplanting Existing Committments

Project Final Report

Traffic Forums

Good Fiscal Practices were in Place

To deliver the freeway and transit projects outlined in the M2 Ordinance by 2041, OCTA must reasonably manage Measure M2 funds, efficiently leverage those local funds with additional state and federal dollars, and carefully program financial resources over the life of the program. In general, we found that OCTA had sound fiscal practices in place during our assessment period and management employed a careful and conservative approach when planning and programming funds to deliver projects. As a result, OCTA appeared to be on track to complete the M2 freeway and transit projects despite a significant reduction in forecasted sales tax collections largely resulting from the Great Recession.

- Sales tax reductions were not unlike other similar entities and OCTA implemented appropriated safeguards.

- Forecast methodology was generally sound and OCTA made appropriate revisions to increase forecast accuracy.

- OCTA's ability to leverage sales tax dollars with additional state and federal funding helped mitigate the impact of the decline in sales tax revenue and future funding assumptions and leveraged funds were reasonable.

- OCTA took a conservative approach when issuing debt and debt service coverage appeared sufficient to meet future repayment obligations.

- While future construction cost increases could pose a significant potential risk to OCTA's ability to deliver promised capital projects, OCTA adopted a construction cost pressure index to mitigate that risk and built in an economic uncertainty factor to its cash flow projections.

OCTA was Transparent & Accountable

Transparency and accountability is paramount to OCTA's mission and culture in addition to being a critical measure of success of the M2 Program. We found OCTA was highly focused on accountability to the promises made in the Ordinance and being transparent in its actions, decisions, and data communicated to its Board, the Taxpayer Oversight Committee, stakeholders, and the general public.

- Outreach efforts provided access to information and key staff and efforts were similar to others; although certain website features and social media content could be enhanced.
- Stakeholder awareness and public perception results were positive and showed more awareness.

- Taxpayer Oversight Committee functioned as envisioned in the M2 Ordinance and was similar to other entities; however, adding member resumes on the website and considering specific transportation experience could increase transparency and oversight.
- Internal audit function provided additional layer of oversight and accountability.

Summary of Recommendations

To improve efficiency, effectiveness, and accountability to the taxpayers of Orange County, OCTA should consider and implement the recommendations summarized in the following table.

	Recommendation	Report Page
Chapter 1: Program Goals Have Been Met Thus Far		
1.	Consider identifying measures to capture progress towards each of the six key M2 Ordinance goals and, on a periodic basis, report on how results achieved correlate to those goals.	14-16
Chapter 2: OCTA Demonstrated Strong Program Management		
2.	Implement in-progress plans to update security training policy and require annual cybersecurity training as well as establish a timeline for implementation.	28-31
3.	Regularly monitor the training status of all employees to ensure employees complete cybersecurity training within the required timeframe including defining specific roles and responsibilities, timelines and frequency of monitoring, verification methods, and documentation of status.	28-31
Chapter 3: While Still Early in the M2 Life Cycle, Substantial Progress was Made Across All Program Areas		
4.	Create a methodology to gather quantitative accomplishment data and track project outputs and accomplishments against Transportation Investment Plan anticipated goals.	33-35
5.	Demonstrate a stronger link between capital project selection guiding principles and the actual implementation order for capital projects by formally memorializing discussions and decisions made.	41-42
Chapter 4: OCTA Approaches Ensured Compliance with M2 Ordinance		
6.	Include additional links, where appropriate, to underlying support documentation to validate compliance efforts and activities tracked and evaluated in the Program Management Office's Compliance Matrix.	44-45
Chapter 5: OCTA's Sound Fiscal Practices Helped Mitigate Risks Associated with Rising Construction Costs and Decreased Sales Tax Revenue		
No recommendation.		
Chapter 6: OCTA was Transparent and Accountable to The Public		
7.	Enhance awareness of the M2/OC Go Program, M2-funded projects, and related M2 accomplishments on social media through posts on currently existing OCTA social media pages or through using separate social media dedicated to M2.	73-74
8.	Add a short biography on the OCTA website highlighting Taxpayer Oversight Committee members' experience and expertise to enhance transparency of those providing oversight.	74-76

Introduction and Background

To provide congestion relief, improved accessibility, and reduced pollution through a variety of freeway, roadway, transit, and environmental projects, voters passed Measure M in November 2006 calling for a continuation of an existing Measure M half-cent sales tax for an additional 30-year period from 2011 through 2041. This measure paved the way for transportation-related improvements worth an initially projected amount of $11.9 billion in 2005 dollars as part of the 2006 Renewed Measure M Transportation Investment Plan (Transportation Investment Plan) as approved by the Orange County Transportation Authority (OCTA) Board of Directors (Board).[1] OCTA, in its capacity as the Regional Transportation Planning Agency and administrator of the sales tax, was responsible for administering the Measure M Program and projects in coordination with the California Department of Transportation (Caltrans) and several local partner jurisdictions.

Measure M Ballot Goals

Measure M was a half-cent sales tax for transportation improvements in Orange County first approved by voters in 1990 for a 20-year time period. When Orange County voters renewed Measure M (known as M2) in November 2006, they agreed to continue the half-cent sales tax in Orange County for an additional 30 years.[2] Specifically, the ballot promised congestion relief on the I-5, I-405, SR-22, SR-55, SR-57, and SR-91 freeways, along with funding to fix potholes and resurface local streets, expand Metrolink rail service, provide additional transit options and transit services at reduced rates to seniors and disabled persons, synchronize traffic lights, reduce air and water pollution, and protect local beaches from oil runoff from roadways, as shown in Exhibit 1. Additionally, the M2 Ordinance included taxpayer safeguards through annual independent audits and taxpayer reports, triennial performance assessments, ongoing monitoring and spending reviews by the Taxpayer Oversight Committee, regular quarterly project progress reports, and a comprehensive review of M2 every ten years.

EXHIBIT 1. M2 GOALS FROM 2006 VOTER BALLOT

Source: Official Ballot General Election Orange County, November 7, 2006.

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[1] Sales tax forecast estimates as of 2018 were $13.1 billion (year of collection dollars) over the life of the program.

[2] The initial Measure M Ordinance as extended on November 7, 2006 was subsequently amended in November 2012, November 2013, and December 2015 and was known as Measure M2. In 2017, Measure M2 was rebranded as OC Go.

Transportation Investment Plan and Projects

Upon approval by the voters, the OCTA Board's Ordinance No. 3 was enacted to implement the goals outlined to voters and included the Transportation Investment Plan outlining specific projects. Specifically, OCTA's Board collaborated with the Orange County Board of Supervisors, the 34 cities within Orange County, and thousands of Orange County citizens to create the Transportation Investment Plan designed for addressing current and future transportation needs.

In fact, the Measure M2 Ordinance sought to continue investment to expand and improve the freeway system, maintain and improve roadways, expand Metrolink rail service, provide more transit service for seniors and persons with disabilities, preserve open space, and clean up runoff from roads that lead to beach closures. Twenty-four specific projects and programs were outlined for completion over the 30-year timeframe of M2 as shown in Exhibit 2.

EXHIBIT 2. MEASURE M2 PROJECTS

(A) Santa Ana Freeway (I-5) Improvements between Costa Mesa Freeway (SR-55) and "Orange Crush" Area (SR-57)	**(B)** Santa Ana Freeway (I-5) Improvements from the Costa Mesa Freeway (SR-55) to El Toro "Y" Area	**(C)** San Diego Freeway (I-5) Improvements South of the El Toro "Y"	**(D)** Santa Ana Freeway/San Diego Freeway (I-5) Local Interchange Upgrades	**(E)** Garden Grove Freeway (SR-22) Access Improvements
(F) Costa Mesa Freeway (SR-55) Improvements	**(G)** Orange Freeway (SR-57) Improvements	**(H)** Riverside Freeway (SR-91) Improvements from the Santa Ana Freeway (I-5) to the Orange Freeway (SR-57)	**(I)** Riverside Freeway (SR-91) Improvements from Orange Freeway (SR-57) to the Costa Mesa Freeway (SR-55) Interchange Area	**(J)** Riverside Freeway (SR-91) Improvements from Costa Mesa Freeway (SR-55) to the Orange/Riverside County Line
(K) San Diego Freeway (I-405) Improvements between the I-605 Freeway in Los Alamitos Area and Costa Mesa Freeway (SR-55)	**(L)** San Diego Freeway (I-405) Improvements between Costa Mesa Freeway (SR-55) and Santa Ana Freeway (I-5)	**(M)** I-605 Freeway Access Improvements	**(A-M)** Freeway Environmental Mitigation	**(N)** Freeway Service Patrol
(O) Regional Capacity Program	**(P)** Regional Traffic Signal Synchronization Program	**(Q)** Local Fair Share Program	**(R)** High Frequency Metrolink Service	**(S)** Transit Extension to Metrolink
(T) Convert Metrolink Station(s) to Regional Gateway that Connect Orange County with High-Speed Rail System	**(U)** Expand Mobility Choices to Seniors and Persons with Disabilities	**(V)** Community Based Transit/Circulators	**(W)** Safe Transit Stops	**(X)** Environmental Cleanup

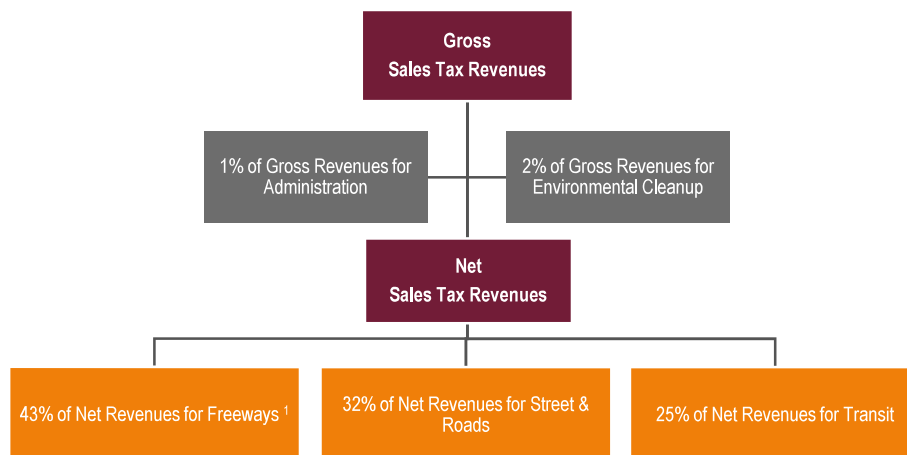Source: Renewed Measure M Transportation Investment Plan.

Legend: ▮ Freeways ▮ Streets & Roads ▮ Transit ▮ Environmental Cleanup

Except for the specific highway capital construction projects identified in the M2 Ordinance, many of the M2 projects or programs are scalable to available funds—meaning the plan can be delivered as promised, based on the available revenue, while still meeting commitments to voters. One other exception related to Project U-Fare Stabilization Program where one percent of net revenue must be dedicated to provide fare discounts for seniors and persons with disabilities "in an amount equal to the percentage of partial funding of fares" as of the effective date of the Ordinance.

Financing the M2 Program

With provisions for continuation of the existing half cent sales tax, the M2 Program was designed to be primarily funded through local sales tax collections starting on April 1, 2011 for a period of 30 years. After deduction for State Board of Equalization costs of administering the collection and distribution of the sales tax revenue to OCTA, the M2 Program revenues are to be allocated as shown in Exhibit 3.

EXHIBIT 3. REQUIRED MEASURE M2 SALES TAX REVENUE ALLOCATIONS

Gross Sales Tax Revenues

1% of Gross Revenues for Administration

2% of Gross Revenues for Environmental Cleanup

Net Sales Tax Revenues

43% of Net Revenues for Freeways [1]

32% of Net Revenues for Street & Roads

25% of Net Revenues for Transit

Source: Generated from M2 Ordinance and Renewed Measure M Transportation Investment Plan.
Note: [1] 5 percent of net freeway revenues for Environmental Freeway Mitigation Program.

While "pay as you go" was the preferred method of financing transportation improvements and operations, the M2 Ordinance included provisions to use bond financing as an alternative method of financing project scopes where "pay as you go" was unfeasible. As of June 30, 2018, OCTA issued two bond series totaling approximately $350 million—although future bond issues were expected. Additionally, to offset reduced sales tax revenues mostly impacted by the Great Recession, OCTA successfully leveraged state, federal, and other local funding. In fact, between Fiscal Year 2010-2011 when sales tax collections started and the end of our assessment period in Fiscal Year 2017-2018, the M2 Program received 38 percent of its funding from these other external sources.

Key M2 Partners

Pursuant to state law, OCTA was designated as the Orange County Local Transportation Authority in 1991. As such, OCTA's mission is "to develop and deliver transportation solutions to enhance the quality of life and keep Orange County moving." Governed by a 17-member Board of Directors with the Caltrans District Director serving as the 18th member in an ex-officio capacity, OCTA is responsible for planning, funding, and implementing transit and capital projects throughout Orange County—including the Measure M2 Ordinance Plan.

While OCTA is the primary entity responsible for the M2 Program, other entities cooperatively shared responsibilities for managing and implementing projects and programs funded through Measure M2. Other

key partners included Caltrans and the 34 local city and county jurisdictions along with a multitude of grantees, non-profits, conservancy groups, and other federal and state agencies.

Capital Project Delivery Plans

With the Measure M2 Plan providing specific projects and programs promised to the voters over a 30-year period, OCTA needed shorter term blueprints to guide project prioritization and implementation. OCTA coordinated and sought input from officials and stakeholders to develop a series of delivery plans including an Early Action Plan (EAP), M2020 Plan, and a Next 10 Delivery Plan (Next 10 Plan) described as follows:

- **EAP**: While sales tax collections for the Measure M2 Plan were not slated to begin until April 2011, the OCTA Board adopted a five-year Early Action Plan in 2007 to advance projects between 2007 and 2012 and place more than $1.6 billion in transportation improvements underway by 2012. The EAP allowed Measure M2 projects to start before any sales tax revenue was collected. Funding was provided through debt financing against future Measure M2 Plan revenues, unallocated Measure M1 funds, and leveraging of external state, federal, and local grants and/or matching funds.

- **M2020 Plan**: Developed after completion of the EAP in 2012, the M2020 Plan expedited projects and programs for all modes between 2013 and 2020 to help deliver projects earlier than originally anticipated by taking advantage of a favorable bidding climate and low construction costs as well as adhering to aggressive project schedules and collaboration with local jurisdictions and project partners.

- **Next 10 Plan**: When sales tax revenue forecasts decreased, the Board cut short the M2020 Plan and replaced it with the Next 10 Plan—initially approved in November 2016 and reviewed and updated in November 2017 and September 2018—to account for additional sales tax forecast reductions. The Next 10 Plan outlined priorities and funding commitments for a ten-year period between 2017 and 2026. In all, approximately $6 billion in transportation improvements is anticipated to be completed or underway by 2026.

Scope and Methodology

As part of the M2 Ordinance, OCTA must undergo a performance assessment at least once every three years to evaluate efficiency, effectiveness, economy, and program results of OCTA in satisfying the provisions and requirements of the Ordinance including its Transportation Investment Plan. Three performance assessments were completed to date covering program activities since Fiscal Year 2006-2007. This report provides results of the fourth performance assessment as of June 30, 2018.

Scope

Sjoberg Evashenk Consulting Inc. (Sjoberg Evashenk), was contracted by OCTA to conduct the fourth performance assessment for the three-year period covering July 1, 2015 through June 30, 2018. Specifically, OCTA asked Sjoberg Evashenk to examine OCTA's performance on a range of activities surrounding the planning, management, and delivery of M2 Program components to ensure necessary tools and practices were in place to successfully implement the plan over its remaining life. This included, but was not limited to, a review of OCTA's:

- Effectiveness and efficiency in developing and implementing the M2 projects and programs;

- Approach to program management with regard to addressing prior assessment findings, interdivisional coordination, progress reporting mechanisms, function and functionality of the M2 Program Management Office, and security over cyber-attacks;

- Practices to ensure compliance with monitoring and reporting on M2 Ordinance provisions;

- Fiscal responsibilities when funding local grants and reporting on expenditures in addition to established practices surrounding long-term financial and investment decisions given anticipated revenue shortfalls; and

- Transparency and accountability in informing the public and decision-makers on M2 matters, public involvement when planning for M2 projects, and functionality of safeguards such as the Taxpayer Oversight Committee.

Objectives

The primary objectives identified for this performance assessment were as follows:

1. Evaluate the status of findings from the third performance assessment and the effectiveness of the changes implemented;

2. Assess the performance of the agency on the efficient delivery of M2 projects and programs; and

3. Identify and evaluate any potential barriers to success and opportunities for process improvements.

Methodology

To fulfill these objectives, we conducted a series of detailed tasks involving data mining and analysis, documentary examinations, peer comparisons, source data verification, and interviews. Appendix A provides the detailed methodology employed on this assessment.

Chapter 1: Program Goals were Met Thus Far

While the M2 Ordinance established a primary goal of relieving traffic congestion in Orange County, OCTA's stated focus and directive was to complete the projects listed in the Renewed Measure M Transportation Investment Plan under the premise that those efforts would address the Ordinance purpose and goals. Our review found that OCTA realized many accomplishments toward that goal with only seven years elapsed of the 30-year M2 Ordinance timeframe—although OCTA did not specifically track performance against the overarching M2 goals.

We found that the M2 Ordinance programs implemented and projects completed all contributed towards fulfilling the promises of the Ordinance and helped in achieving M2 goals. For instance, in reviewing congestion levels in Orange County over the assessment period, we noted that while overall congestion slightly increased, an area with an M2 funded transportation improvement actually realized a decline in congestion levels. Specifically, on a completed segment for the SR-91 "centerpiece" freeway westbound between I-5 and SR-57 where a 4.5 mile-long general purpose lane was added, vehicle hours of delay during peak evening commutes decreased from 2012 (prior to construction start) to 2017 (after the new lane opened to traffic in July 2016).[3] Other goals of the Ordinance were also met including highway and roadway pavement condition improving over the years and consistently ranking high statewide. While progress may fluctuate as time passes or even change depending on the period of time being measured, the M2 Program performed well thus far.

Many M2 Goals were Met Early in the M2 Program Lifecycle

Specific ballot language set forth funding for six overarching programs or goals to relieve traffic congestion, as shown in Exhibit 1 in the Introduction and Background Section of this report, through highway improvements, street resurfacing and traffic light synchronization, transit options, and environmental activities. As summarized in Exhibit 4 and described in the sections that follow, M2 goals were met even though less than a quarter of the M2 timeframe has elapsed.

EXHIBIT 4. STATUS TOWARD MEETING M2 GOALS THROUGH JUNE 30, 2018

#	M2 Ordinance Goal	Measure	Results Thus Far
1	Relieve Congestion on I-5, I-405, SR-22, SR-55, SR-57, and SR-91	• Commute Time • Hours of Delay	• Congestion increased, but so did vehicle miles traveled (VMT) [4] • Delay was less on the SR-91 project reviewed
2	Fix Potholes & Resurface Streets	• Pavement Condition Index	• Pavement Condition Index (PCI) improved from 77 in 2014 to 79 in 2016. Orange County has the best pavement condition in the State
3	Expand Metrolink Rail & Connect with Local Communities	• Projects Completed	• 8 of 13 identified Metrolink rail expansion capital projects needed to accommodate future increased

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[3] Vehicle Hours of Delay or travel time delay is a measure of additional time driven on a roadway relative to the amount of time it would have taken at "free-flow" speeds (60 mph).

[4] VMT is a widely-known industry measure of the number of miles traveled by all vehicles in a region over a specific time period. It is determined by either actual odometer readings or by estimated modeling calculations.

#	M2 Ordinance Goal	Measure	Results Thus Far
			service frequency were completed which included approximately 50 at-grade rail crossings • OC Streetcar ready to start construction
4	Provide Reduced Cost Transit Services to Seniors and Persons with Disabilities	• Number of Issued Passes • Number of Boardings • Funding Provided	• More than 6.8 million of reduced senior passes and approximately 2.7 million of reduced passes for persons with disabilities issued between Fiscal Year 2015-2016 and Fiscal Year 2017-2018 alone • More than 96 million fare stabilization program-related boardings provided • $36.4 million provided to projects expanding senior transportation services • $22 million provided to stabilize fares and provide fare discounts to seniors and persons with disabilities.
5	Synchronize Traffic Lights	• Number of Lights Synced	• 2,258 traffic lights synchronized.
6	Reduce Air and Water Pollution and Protect Local Beaches through Cleanup of Roadway Oil Runoff	• Better Air Quality and Less Water Pollution	• 6.2 million cubic feet of trash removed • 1,300 acres preserved as open space

Source: Generated from OCTA M2 Website at http://www.octa.net/OC-Go/Milestones/.

When evaluating goals and progress towards them, one must keep in mind that results may fluctuate as time passes or depend on the period being measured. Thus, performance results over a 3-year assessment period can vary from performance results over a longer time span such as the start of M2. Further, there are several forces that constantly affect transportation demand and performance outcomes as described in the following section.

Both Internal and External Forces Impact Goals and Outcomes

Outcomes are one of the most important measures of what government entities provide. They compare the results or outputs of program activities—such as completed construction projects or new transit service stops—to a program's intended purpose and allow a determination of progress toward meeting goals. While the M2 Ordinance had an overarching goal or outcome to relieve traffic congestion, achievement of that goal was affected by both internal factors within OCTA's span of influence and external forces outside of OCTA's purview as shown in Exhibit 5.

For instance, results can be influenced internally by factors such as the design of capital projects, approach to pavement maintenance, transit scheduling, and local policies and priorities—all of which are areas where M2 funds were directed and influenced performance. However, there are also significant external forces affecting transportation plans and projects—not just in Orange County, but across the nation—including population, employment, economy, and driver preference. External legislative changes and technological advances can also affect traffic demand and mobility. Although OCTA did not have full control over certain factors that can affect performance, understanding performance results and outcomes is useful for decision makers to initiate actions and improvements to enhance performance.

EXHIBIT 5. INTERNAL AND EXTERNAL FORCES IMPACTING M2
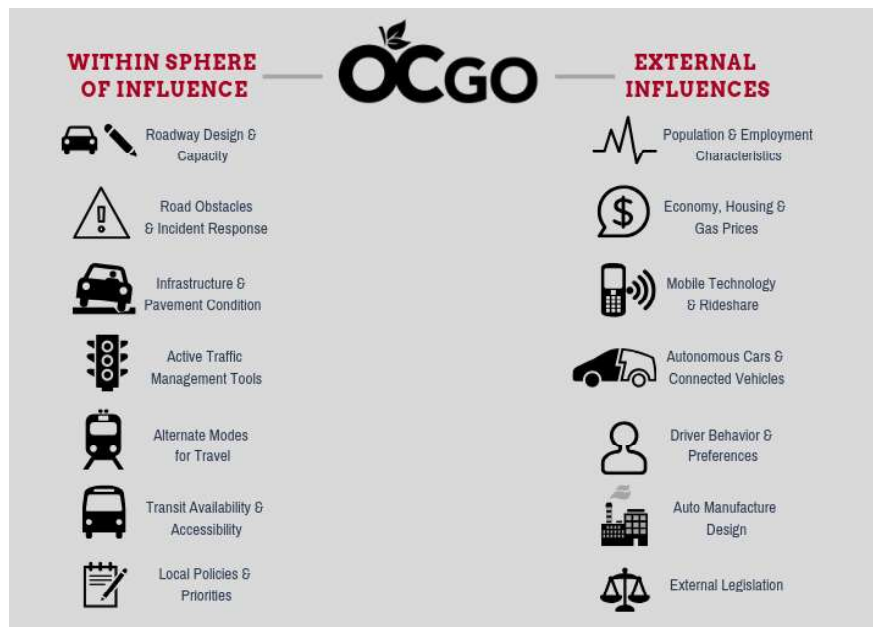
Source: Generated from legislative research, data from U.S. Energy Information Administration, National Conference of State Legislatures Research, and Federal Highway Administration website guidance at https://fhwa/dot.gov/publications.

Many Entities Tracked and Measured Performance

Over the past several years, transportation agencies and the federal government evolved toward stronger performance measurement in terms of performance priorities, goals and target setting, and data collection methods. Additionally, legislation passed in 2012 and subsequent guidance progressively elevated target setting and performance measurement, with transportation agencies across the nation reacting to these mandates.

Although not specifically required for OCTA, other entities invested in measuring performance through target-setting and data collection as part of more recent federal mandates placed on other regional transportation entities through the Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012 as continued under the Fixing America's Surface Transportation (FAST) Act of 2015. Specific requirements related to performance targets and data reporting in certain areas include safety; pavement and bridge condition; system, freight, and congestion mitigation and air quality; and asset management. While these federal requirements were specific to OCTA's regional Metropolitan Planning Organization (MPO), the Southern California Association of Governments (SCAG), the M2 efforts and transportation investments impact the region's progress in meeting SCAG's performance targets. While no particular performance requirements were placed on OCTA, SCAG may look to OCTA at some point in the future for assistance in data gathering or reporting through some type of performance measurement system.

In fact, many other MPO and non-MPO entities across the nation were capturing performance measurement data related to similar sales-tax measures or long-term regional plans even before mandates from the federal government. For instance:

- **Redding, California**

  The Shasta Regional Transportation Agency created performance measures tied to the goals and objectives of its Regional Transportation Plan in addition to those required by federal law and track progress against regionally-specific goals such as:
  - ✓ Reduce average travel time (in minutes); and
  - ✓ Reduce vehicle air pollutants and greenhouse gas emissions.

- **San Francisco, California**

  The Metropolitan Transportation Commission for the San Francisco Bay Area and its sister agency, the Association of Bay Area Governments, used performance targets in its Plan Bay Area 2040 regional plan to measure and report on its transportation network conditions including:
  - ✓ Increase share of jobs accessible within 30 minutes by auto by 20 percent; and
  - ✓ Increase non-auto mode share by 10 percent.

- **Chicago, Illinois**

  In its long-range transportation plan titled Go to 2040, the Chicago Metropolitan Agency for Planning established specific targets such as:
  - ✓ Increase arterials with acceptable ride quality to 90 percent and bridges "not deficient" to 80 percent; and
  - ✓ Increase transit ridership's share to 13.5 percent of trips each weekday.

According to the Federal Highway Administration, performance measurement improves the effectiveness of any program since significant effort goes into planning and implementing projects, but little effort goes into looking back on how they performed. The Federal Highway Administration offered four key benefits as follows:

- Provide transparency to public and accountability to public officials;
- Understand where problems are;
- Direct the best mix of investments; and
- Evaluate how well past investments worked.

Yet, capturing and analyzing performance information can be challenging and time consuming requiring staff to mine data from a variety of sources to assess progress toward M2 goals. Thus, this effort can involve a significant investment of staff time and resources and make it more challenging for entities to evaluate performance outcomes. Once performance data is gathered, it should be analyzed and used in some capacity to inform future transportation decisions.

Like many similar entities, no required or planned activities to track performance results were built into the M2 plan. Thus, if the OCTA Board wants to better capture, track, analyze, and report more fully on the taxpayer's return on investment and progress toward M2's goals, more staff time and/or monetary resources would need to be allocated for this function. Extra resources may be needed to gather and track data, analyze what the data means, correlate the results with other factors, and determine how the data

influences future planning and project activities. Additionally, because there are a multitude of performance metrics used in industry, OCTA would need to consider and determine which metrics it would want to track and use to measure performance and results.

At a minimum, OCTA could consider identifying measures to capture progress towards each of the six key M2 Ordinance goals and on a periodic basis report on how results achieved correlate to those goals—similar to the data previously presented in Exhibit 4.

While Population Remained Fairly Stable, Traffic Demand Increased Since 2015

As part of our assessment of M2 Ordinance performance, we gathered information from a variety of external sources to understand performance in the region.[5] Two significant external forces on a region's transportation performance were population and traffic demand on the roadways. According to the US census' one-year estimates, Orange County's population of approximately 3.2 million for calendar year 2017 was fairly stable since 2015—similar to population fluctuations at three nearby counties in Los Angeles, Riverside, and San Diego as shown in Exhibit 6.

EXHIBIT 6. ESTIMATED POPULATION CHANGE IN CALIFORNIA COMPARISON COUNTIES, CALENDAR YEARS 2015 TO 2017
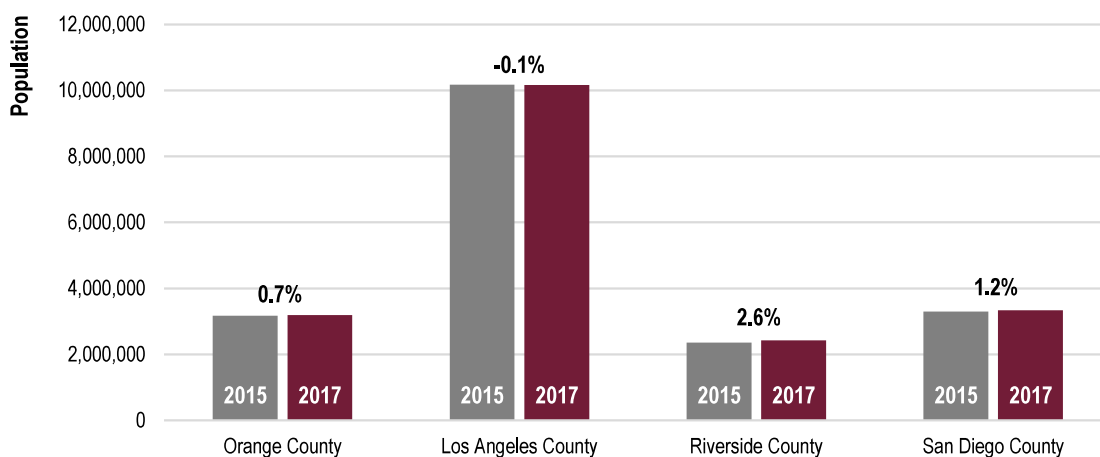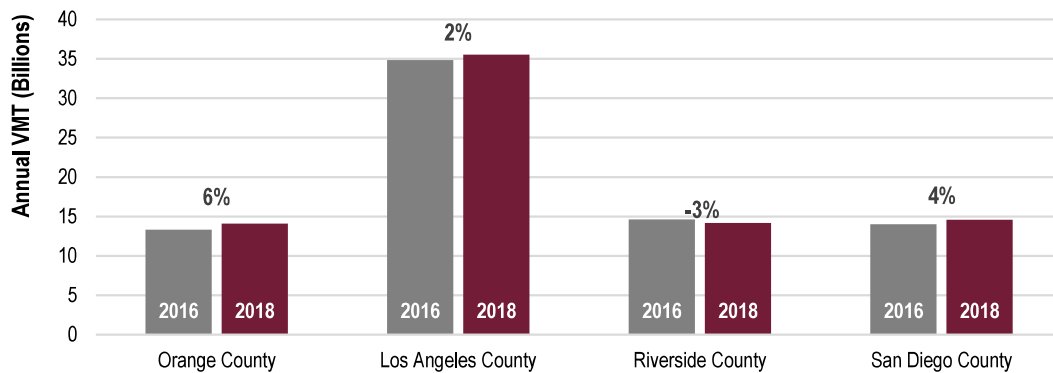

Source: US Census Bureau's Population Estimates for Calendar Years Shown.

When population grows, there could be more potential drivers in the region that would tend to increase demand as well as often lead to more congestion. In terms of traffic demand on roadways, a common industry measure is vehicles miles of travel (VMT). Specifically, VMT measures the total miles driven by all of the vehicles over a freeway segment during a specified time period.[6] In Orange County, VMT data shows that traffic demand increased in Orange County between 2016 and 2018 from 13.3 billion in 2016 to 14.1 billion in 2018—an increase of approximately 6 percent. The traffic demand in comparison counties generally increased at slower rates or showed slight declines as shown Exhibit 7.

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[5] External performance sources included the United States Census and Caltrans' Performance Measurement System (PeMS) database.
[6] Through its PeMS database, Caltrans calculated VMT for the state highway system through detectors by collecting data in individual travel lanes. Detectors report flow, occupancy, and speed.
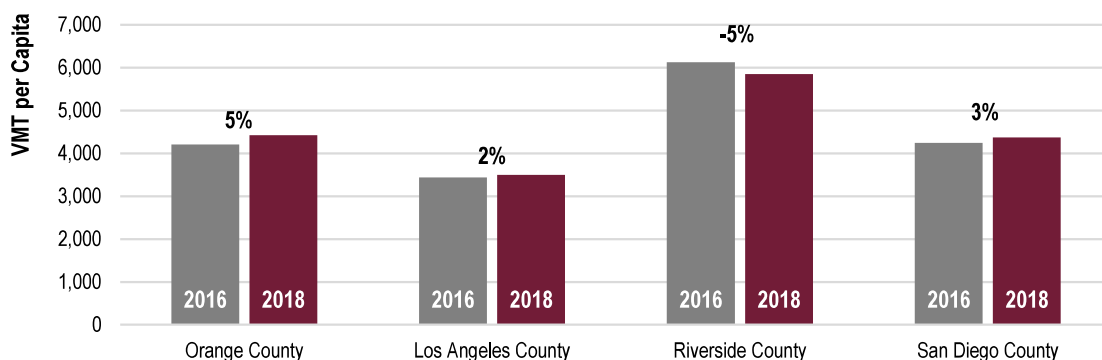
Source: US Census Bureau's Population Estimates and Caltrans PeMS.

When looking at both population and VMT in combination, data showed that VMT per capita in Orange County increased by 5 percent from 4,206 VMT per capita in 2016 to 4,423 in 2018 as shown in Exhibit 8—similar to most nearby comparison counties we reviewed. This metric showed that the traffic demand increased at a higher rate than population growth from 2016 to 2018.

EXHIBIT 8. CHANGE IN ANNUAL VMT PER CAPITA FOR CALIFORNIA COMPARISON COUNTIES, FISCAL YEARS 2016 TO 2018

Source: US Census Bureau's Population Estimates and Caltrans PeMS.

Congestion slightly Increased since 2015, but M2 Project Showed Less Congestion

A key goal stated in the M2 ballot language was to "relieve congestion on the I-5, I-405, SR-22, SR-55, SR-57, and the SR-91." To determine whether that goal was being met thus far, we used U.S. Census American Community Survey Urbanized Zone Areas (Urbanized Areas) data to gather commute time data and compare Orange County's performance to nearby areas.[7] Specifically, we compared Orange County's performance over the last three years with the other areas, although there were limitations in the

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[7] Urbanized Zone Areas are U.S. Census-designated land areas consisting of a central core and adjacent to densely settled territory that together contain at least 50,000 residents. Comparison counties in California reviewed include San Diego, Riverside-San Bernardino, and Los Angeles.

conclusions that could be drawn from the data as there were many factors influencing performance and no targets in place for expected performance.

Commute Time Slightly Increased over Assessment Period

Data produced by the American Community Survey estimated the commute time to work for all commuters in each of the comparison regions across all modes—driving alone, carpools, motorcycles, trucks, public transportation, bikes, and walking.[8] We reviewed the percent of commutes across these modes that took fewer than 30 minutes and the change from calendar year 2015 to 2017. Orange County commuters had slightly longer commutes in 2017 than in 2015 with 40.9 percent of commuters having commutes under 30 minutes in 2015 and only 42.8 percent of commutes under 30 minutes in 2017—for a 1.9 percent increase, on average, as shown in Exhibit 9.

EXHIBIT 9. CHANGE IN PERCENT OF COMMUTES THAT TOOK LONGER THAN 30 MINUTES, CALENDAR YEARS 2015 TO 2017
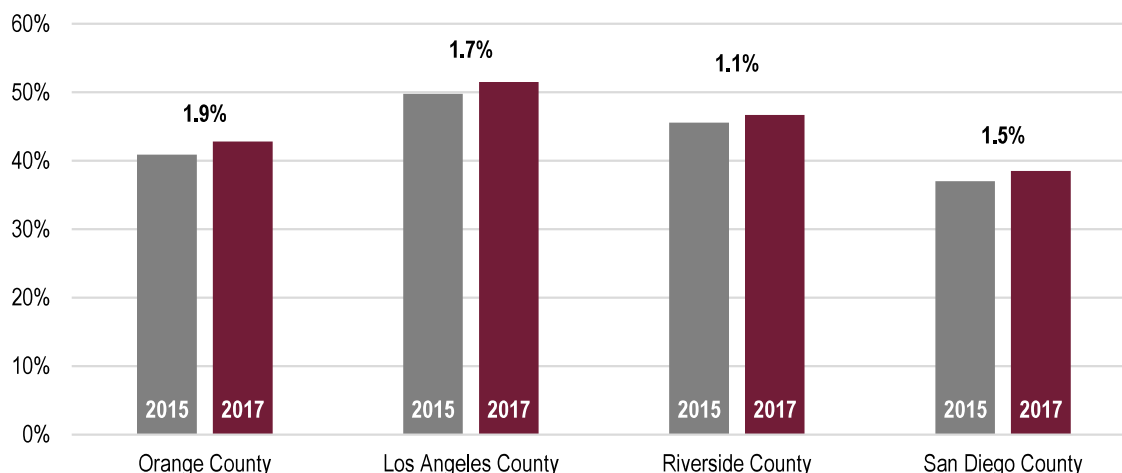
Source: American Community Survey Estimates.

Vehicle Hours of Delay Decreased on SR-91 Project

While countywide performance statistics can give context to factors impacting transportation performance in a region, measuring outcomes of transportation projects are generally more beneficial at a focused level. For example, according to the M2 Early Action Plan, the proposed benefits of Project "H"—Riverside Freeway (SR-91) Improvements from the Santa Ana Freeway (I-5) to the Orange Freeway (SR-57)—were to increase freeway capacity and reduce congestion.[9] Delay data from Caltrans PeMS was available for the year before construction started in 2012 and was compared to the congestion data from the year after the new lane was open to traffic in 2016. As shown in Exhibit 10, there was a decrease in vehicle hours of delay over the project area in 2017 compared to 2012 for the evening commute.

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[8] While not specific to the M2 Ordinance, the SCAG Regional Transportation Plan that is influenced by OCTA's portfolio of regionally significant projects indicated that it would use American Community Survey data to monitor the commute to work time performance measure related to congestion.

[9] The project added a 4.5-mile-long general-purpose lane to the westbound SR-91 Riverside Freeway with construction starting in February 2013 and opening to traffic in March 2016.
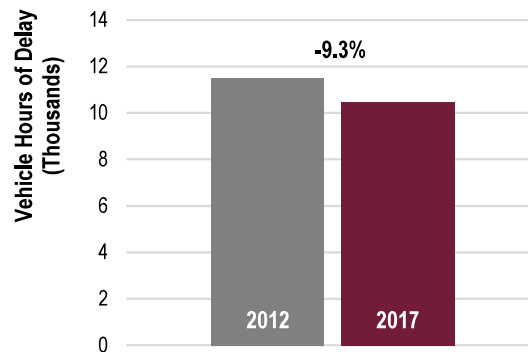
Source: Generated from *Caltrans* PeMS

Note: Data from PeMS was available on the corridor level, specifically, travel time delay. Travel time delay is a measure of additional time driven on a roadway relative to the amount of time it would have taken at "free-flow" speeds (non-congested conditions). Caltrans' system allowed a user to set the free-flow" for the system to perform the delay calculations. In the exhibit, 60mph was used as the free-speed condition. Peak evening hours were 3pm to 8pm.

Pavement Condition has Improved Over the Assessment Period

Another goal in the M2 ballot language was to "fix potholes and resurface streets." While we describe accomplishments related to projects commissioned for fixing potholes and resurfacing streets in Chapter 2, we also assessed overall pavement condition that allows for safe and free-flow travel to help address congestion. We found that both highway pavement and local road condition improved in Orange County over the period of our assessment.

Pavement condition can be assessed by a variety of methods. Two standardized methods include the International Roughness Index (IRI) and the Pavement Condition Index (PCI). The IRI is measured by a vehicle that is equipped with sensors and computers to automatically collect and analyze road conditions as a driver travels the roadway. The IRI basically measures the "roughness" of ride quality, or in simpler terms, the bumpiness of a road. Another method of assessing pavement condition is the PCI initially developed by the U.S. Army Corps of Engineers. The PCI is calculated from a visual survey—which may be aided by video captured from a modified vehicle—of pavement distress with score ranging from 0 (failed) to 100 (perfect). Points are deducted from 100 for distress such as cracking, rutting, and other distortions.

For highway pavement condition, Caltrans previously used IRI and a pavement condition survey to report results by Caltrans District in a biannual State of Pavement report. The last report was issued in 2015, because Caltrans was in process of changing its method to comply with MAP-21 and will use an automated pavement condition survey on a go-forward basis. For roadways, local entities used PCI to report results to the League of California Cities as part of an annual Local Streets & Roads Needs Assessment—as well as to report performance to OCTA through annual eligibility determination processes.

Highway Pavement Condition Improved since 2013

While the percent of distressed highway lane miles at the statewide level remained constant from 2013 to 2015, Caltrans District 12, which included only Orange County, showed improvement with 88 percent of non-distressed lane miles in 2015 up from 84 percent of non-distressed lane miles in 2013—better than the statewide average as shown in Exhibit 11. When compared to other nearby Caltrans Districts, two other districts showed worsening highway conditions—District 8 and District 11— during the same time period where data was available.

EXHIBIT 11. CHANGE IN SHARE OF NON-DISTRESSED HIGHWAY LANE MILES FROM 2013 TO 2015
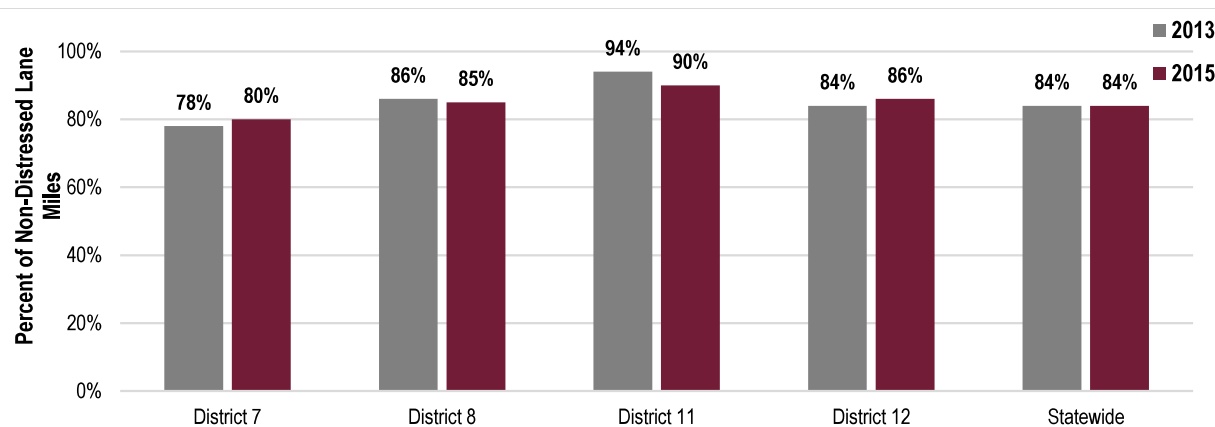
Source: Caltrans State of the Pavement reports, 2013 and 2015.

Note: District 7 includes Los Angeles and Ventura counties, District 8 includes Riverside and San Bernardino counties, District 11 includes San Diego and Imperial counties, and District 12 is only Orange County.

Local Streets and Roads Condition Improved since 2014

Pavement condition for local streets and roads was reported by the League of California Cities in its California Local Streets & Roads Needs Assessment through a survey of California's 58 counties, 482 cities, and 48 Regional Transportation Planning Agencies. While statewide averages decreased approximately 2 percent between 2014 and 2016, Orange County's condition showed an approximate 3 percent improvement increasing from a PCI of 77 in 2014 to a PCI of 79 in 2016 as shown in Exhibit 12.

EXHIBIT 12. CHANGE IN ROADWAY PAVEMENT CONDITION
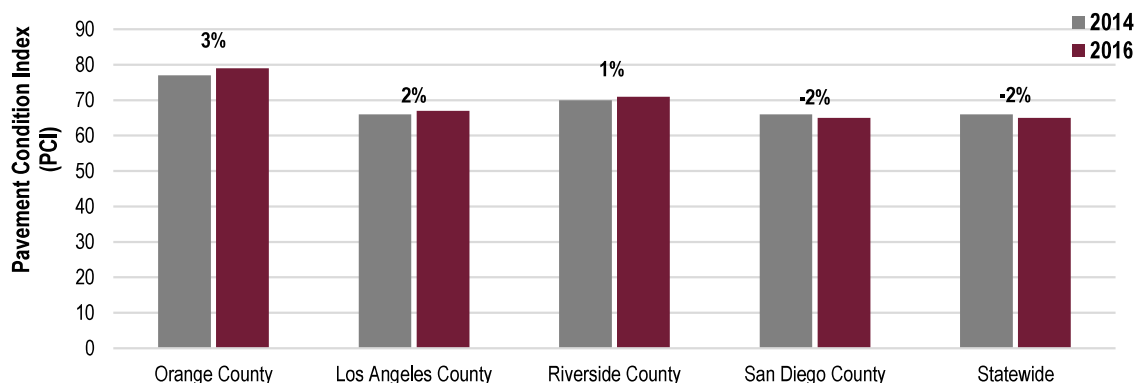
Source: California Statewide Local Streets and Roads Needs Assessment Local Pavement Data.

Transit Performance Showed Progress towards Goals

With guiding principles of value, safety, convenience, and reliability, Project R from the M2 Ordinance intended to expand Metrolink services and connect with local communities. As described in more detail in Chapter 2 of this report, OCTA completed eight Metrolink grade crossing, safety, and station projects as well as Project T, the Anaheim Regional Transportation Intermodal Center project.

Additionally, Project W related to safe transit stops where competitive grants were planned for the 100 busiest transit stops to ease transfers between bus lines and provide passenger amenities such as improved shelters, lighting, ticketing machines, and arrival timetables. According to OCTA, as of October 2018, 43 bus stop improvements were completed or nearing completion from the 51 project grants awarded. The City of Anaheim requested a cancellation of their grans and to postpone their eight improvements until a future competitive call for projects. Improvements included replacement or improvements to shelters, benches, concrete, curb ramps, and trash receptacles.

Further, an addition goal of the Ordinance was to provide reduced-cost transit services to seniors and persons with disabilities through Project U. Because reductions in collections were projected to not be sufficient to fund the M2 Ordinance's fare stabilization requirements for seniors and persons with disabilities, transfers from Project T (a completed program) converting Metrolink Stations to Regional Gateways, filled the shortfall.[10] Yet, over the three-year period of our assessment, OCTA provided more than $12.6 million of M2 revenues for reduced transit fares and issued more than 6.8 million reduced senior passes and 2.7 million reduced passes for persons with disabilities. Reduced senior fare passes issued decreased slightly between 2015 and 2018 as did ACCESS passes for persons with disabilities as bus ridership overall decreased across the country.

More Traffic Lights were Synchronized than Expected

To maximize efficiency of the street system, the Ordinance set aside funding for a coordinated regional traffic signal synchronization program. It was expected that, once completed, this program would increase street capacity and reduce delay by over six million hours annually in more than 2,000 signalized intersection. While initial amounts of funding for this program were much higher at pre-Great Recession levels, the program has already implemented 2,258 synchronized traffic signals with just one-quarter of the M2 Program timeline elapsed. According to an OCTA Regional Traffic Signal Synchronization Program Overview from March 2017, these completed projects reduced average travel time by 13 percent and improved average speed by 15 percent. Equally important, OCTA estimated that those improvements reduced greenhouse gas emissions by approximately 667.2 million pounds by decreasing the number of vehicle stops, smoothing the flow of traffic, and reducing the amount of vehicle acceleration and deceleration.

Environmental Efforts Achieved Desired Results

One of the six project goals for the M2 Ordinance was to mitigate the impacts of construction activities on the environment by "reducing air and water pollution, and protecting beaches by cleaning up oil runoff from

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[10] According to OCTA's Renewed Measure M Comprehensive Ten-Year Review issued in 2015.

roadways." OCTA employed two programs to address these goals—an Environmental Cleanup Program (Project X) and an Environmental Mitigation Program as part of the M2 freeway program.

Environmental Cleanup Program Met Ordinance Goals

To date, OCTA made significant efforts through its Environmental Cleanup Program whereby 2 percent of gross annual M2 revenues is set aside for competitive grant activities to protect Orange County beaches, improve ocean water quality, and comply with the Clean Water Act through activities such as removing trash and debris. Envisioned as a competitive countywide program, the Ordinance set-aside $237.2 million (revised to $259.4 million in 2018) over the life of the program to help supplement existing water quality programs. The OCTA Environmental Cleanup Allocation Committee is a technical working committee that makes recommendations on competitive funding to implement street- and highway-related water quality improvement projects to the Board. The Environmental Cleanup Allocation Committee meets as needed and is comprised of 14 members representing stakeholders and experts in the field. Tier 1 grants are designed to mitigate more visible forms of pollutants, such as liter and debris on roadways and catch basins, while Tier 2 grants are more regional, capital intensive projects such as construct wetlands or detention basins to mitigate pollutants. As of June 30, 2018, there have been seven rounds of funding for Tier 1 projects totaling $20.1 million for 154 projects and two rounds of funding for Tier 2 projects totaling $27.9 million for 22 projects.

With approximately $48 million invested to date, OCTA appeared on track to accomplish this Ordinance goal through its two-tiered competitive grant program. Reported results of the Tier 1 grants indicated 6.2 million cubic feet of trash was removed from local beaches and roadways. Additionally, OCTA estimated that once the Tier 2 projects currently underway are completed, they have the potential to recharge 157 million gallons of groundwater annually.

Environmental Mitigation Program Achieved Successes

As part of the Environmental Mitigation Program, 5 percent of M2 freeway revenues, or approximately $243.5 million of projected M2 revenues (revised to $266 million in 2018), were allocated to pay for direct mitigation of transportation projects and included acquisition, restoration, and land management activities. The OCTA's Environmental Oversight Committee makes technical recommendations to the OCTA Board, including fund allocations. The Environmental Oversight Committee meets quarterly and is comprised of 12 members which includes two OCTA Board representatives, Caltrans, state and federal resource agencies, non-governmental environmental organizations, the public, and the Taxpayer Oversight Committee. Over the period of our assessment, there were several accomplishments related to the M2 environmental programs.

Specifically, since a 2013 external audit was conducted focusing on the mitigation portion of the EMP, OCTA acquired two additional properties for a total of seven properties that need mitigation as well as funded 11 habitat restoration projects. Additionally, in 2016, OCTA funded a dam removal project (its 12th project) to enhance aquatic organism passage and stream habitat in the San Juan Creek area. Furthermore, the United States Fish and Wildlife Services and the California Department of Fish and Wildlife finalized the issuance of their respective biological permits, as well as executed the implementing

agreement in June 2017, streamlining M2 freeway project approvals and reducing mitigation costs. In January 2018, OCTA secured advanced streamlined state and federal clean water permitting requirements.

With the commitment to the voters largely achieved in terms of mitigation, OCTA staff began to focus on property management requirements and establishing an endowment for future management of the seven properties totaling 1,300 acres. To estimate the amount of endowment needed to fund land management efforts on the seven properties indefinitely, an external economist determined that an endowment of $34.5 million would be required assuming a 5.75 percent rate of return—of which 2.5 percent was forecasted to account for inflation. A small part of the $34.5 million endowment interest would cover operating costs estimated at 2.5 percent of the endowment earnings and fund management estimated at 0.75 percent of the endowment earnings.

In 2016, the Board approved an approximate 12-year plan to set-aside approximately $2.8 million annually to reach the $34.5 million endowment goal with expectations that it could take 10 to 15 years to establish—depending on sales tax revenue collections—and be fully funded by 2033. As of June 30, 2018, OCTA had made two deposits to the endowment with the future deposits anticipated to be made annually during the August timeframe. During the endowment building phase, OCTA's plans to focus on establishing agreements with local land managers for the seven properties and establishing the mechanism for allocating the endowment monies.

Once the endowment is fully funded, OCTA estimates that approximately 45 percent of the initial mitigation budget could remain and Board direction would be needed at that time to determine the appropriate use of the funds consistent with the M2 Ordinance. The existing M2 transportation projects are associated with the protected lands for which the endowment has been established. However, if additional lands are acquired to offset additional transportation projects, extra funds could be needed to pay for the long-term land management through a separate endowment. Further, OCTA is well aware that these long-term decisions will require agreement from the wildlife agencies, and staff will coordinate and collaborate in the future as necessary.

Recommendations

To enhance its reporting on program goals, OCTA could consider the following:

1. Identify measures to capture progress towards each of the six key M2 Ordinance goals and, on a periodic basis, report on how results achieved correlate to those goals.

Chapter 2: OCTA Demonstrated Strong Program Management

When Orange County voters approved the Measure M2 Program in 2006, OCTA was tasked with administering an initially estimated $11.9 billion (in 2005 dollars) program over a 30-year period. The Ordinance required OCTA to deliver a diverse portfolio of transportation solutions, generally geared towards relieving congestion in the region. Embracing the challenge to fulfill the promises made to voters while safeguarding tax dollars, OCTA employed strong program management practices, valued external reviews on its program and practices, and safeguarded sales tax dollars. Moreover, OCTA has begun implementing a cyber security framework to minimize vulnerabilities, mitigate risks of potential attacks, and resolve issues with evolving technology and information systems.

OCTA's PMO Employed Strong Practices and Aligned with Others

In 2007, OCTA created the M2 Program Management Office (PMO) to oversee the measure and "provide unified oversight and action to ensure successful delivery." While other organizational units within OCTA helped carry out the Transportation Investment Plan's individual projects and programs during our period of assessment, the PMO monitored and, as appropriate, analyzed, assessed, facilitated, coordinated, and reported on M2 activities and progress with a commitment to fulfilling promises made in the M2 ballot language. Operating under five goals related to compliance, effective management, fiscal responsibility, transparency, and taxpayer safeguards, the PMO formally defined ten functional responsibilities for managing the program and highlighting the importance of public trust as shown in Exhibit 13.

EXHIBIT 13. PMO FUNCTIONAL RESPONSIBILITIES

PMO Goal	Functional Responsibilities	
Compliance & Consistency	1.	Ensure projects and programs are delivered according to Ordinance
	2.	Coordinate and monitor close out plan for Measure M
Management	2.	Ensure business processes and systems are established for efficient and effective implementation
	3.	Coordinate program and project management policies and procedures
	4.	Serve as a clearinghouse for ensuring critical interdivisional information sharing and formation of Measure M Program Management Advisory Committee.
Fiscal Responsibility	5.	Ensure proper reporting and review of receipts, expenditures, and accounts to meet standards
	6.	Ensure uses of M2 and external funding follow Ordinance provisions
Transparency	7.	Coordinate and oversee reporting of M2 Program status to the Board, public, and stakeholders
	8.	Ensure consistent and appropriate reporting of M2 project development activities
	9.	Provide access to relevant M2-related policy and procedure development
Safeguards	10.	Ensure implementation of Ordinance safeguards including Taxpayers Oversight Committee, quarterly reports to the Board, annual expenditure reports, Triennial Performance Assessments, ten-year review, annual Local Transportation Authority audit, and reporting from local jurisdictions.

Source: PMO Charter.

Through interviews and documentary review, we found the PMO employed strong practices to fulfill its responsibilities. For instance, as described in more detail throughout this report, the PMO used a formal tracking matrix to demonstrate compliance with the M2 Ordinance, participated in project development

team meetings to stay current on progress and issues, and employed monthly tools to understand and validate reasonableness of project control data—in addition to other management methods.

We also found that the PMO's role, responsibilities, and approaches were generally consistent with protocols used by other similar agencies to fulfill their specific measure objectives related to organizational location, reporting, and involvement as shown in Exhibit 14. For instance, like the San Francisco County Transportation Authority and the Maricopa Association of Governments, OCTA's PMO issued annual reports focused on its sales tax measure and was involved in relevant project team meetings. While other entities used a similar PMO-like function or employed a centralized oversight on their particular sales tax measures, OCTA seemed to have a more formally established and comprehensive management function focused on its measure than the other entities.

EXHIBIT 14. COMPARISON OF OCTA'S PMO TO OTHER SIMILAR ENTITIES

Function	OCTA	SANDAG	SFCTA	MAG	RTA
Dedicated PMO or Similar	✓	✓	Note [1]	Note [1]	Note [1]
Location of PMO or Similar Organizationally	Planning	Planning	Planning	Planning	Planning
Dedicated Oversight Functions	✓	Note [2]			
Annual Reports	✓	Note [3]	✓	✓	Limited
Quarterly Reports	✓	✓		Note [4]	✓
Involved in Project Development Team and Other Pertinent Meetings	✓	✓	✓	✓	✓
Dedicated Focus to ensure Consistency with Reports, Fact Sheets, and Website	✓	Partial	Partial	Partial	✓
Formally tracks Compliance with each Ordinance Requirement	✓				

Source: Based on data gathered during performance audits and consulting engagements conducted by Sjoberg Evashenk Consulting, Inc.
SANDAG = San Diego Association of Governments, SFCTA = San Francisco County Transportation Authority, MAG = Maricopa Association of Governments (Phoenix, Arizona), and RTA = Regional Transportation Authority (Tucson, Arizona).
Notes: [1] No dedicated PMO exists, but these entities assume a leadership role on their respective local transportation sales tax measures. [2] While some oversight was provided, the PMO activities focused more on planning and programming. [3] Annual report issued by SANDAG Taxpayer Oversight Committee. [4] Quarterly Reports prepared by program staff in separate entities within MAG, Arizona Department of Transportation, and Valley Metro.

Clear Roles and Functions helped Coordinate M2 Program within OCTA

Although the PMO coordinated the delivery of the M2 Program, there was a multitude of functional experts in several divisions that helped deliver the program with roles that seem to be clearly defined for the M2 Program as depicted in Exhibit 15. Based on interviews, other divisions held a positive view of the PMO role and activities and those involved seemed to understand their individual M2 responsibilities. As such, there did not appear to be significant areas of misinterpretation, confusion, or inconsistency related to activities such as compliance, schedule and cost control, schedule and budget adherence, change orders, local eligibility, local grants and monitoring, contracting, outreach, forecasting, cash flows, and reporting. Further, to help ensure continued cooperation at regular and critical points, the PMO participated in capital project development team meetings to understand project scope, schedules, budgets, and challenges. The

primary purpose of these meetings was to communicate progress and discuss any existing or expected impediments to the project that could potentially impact the project's critical path.

EXHIBIT 15. ASSIGNMENT OF KEY M2 FUNCTIONS AND RESPONSIBILITIES

Key Function and Responsibility	PMO	Planning/ Programming	Capital Programs	Project Controls	Local Programs	Finance	Transit Ops	External Affairs
Program Delivery	✓		✓		✓		✓	✓
Compliance with Ordinance	✓	✓	✓		✓	✓		✓
Program Oversight	✓							
Project Oversight & Management			✓		✓			✓
Schedule & Cost Control	✓	✓	✓	✓	✓			
Schedule & Budget Adherence	✓	✓	✓	✓	✓			
Change Order Management			✓	✓	✓			
Determining Local Eligibility					✓			
Grants to Locals					✓	✓		
Monitoring Local Projects & Expenditures	✓ [1]				✓	✓ [1]		
Senior Passes							✓	
Forecasting & Cash Flows	✓	✓				✓		
Revenue Projections	✓	✓				✓		
Revenue Monitoring	✓	✓				✓		
Reporting to Decision Makers	✓	✓	✓		✓	✓		
Reporting to Public	✓	✓	✓		✓	✓		✓

Source: OCTA Organizational Chart and results of assessment interviews.

Notes: [1] During the period of our assessment, staff in the PMO reviewed annual expenditure statements submitted by the local jurisdictions. It was anticipated that this responsibility would be transferred back to the Finance Division at some point.

M2 Management Organizational Structure was more Formal than most Others, Although it Shared Similar Elements

Unlike most of the other entities we reviewed, OCTA established and operated under a formal and separately staffed PMO. Specifically, most of the other entities managed their sales tax measure alongside other transportation improvement projects through the Transportation or Planning Director function— although the San Diego Association of Governments had a separate "PMO" similar to OCTA. While we did not conduct formal workload studies to evaluate the time associated with each PMO responsibility and activity, OCTA's PMO staff size generally aligned with San Diego Association of Governments' staff given their capital project workload. Specifically, OCTA's three PMO staff oversaw and monitored an initial $11.9 billion measure with the assistance of other divisional functional staff, whereas San Diego Association of Governments' PMO-like functions employed approximately five staff to monitor its voter-approved $14 billion sales tax measure.

Yet, OCTA's M2 management shared some organizational elements with the other entities including relying on experts in functional areas to manage and delivery measure projects as well as operating under the scrutiny of a Taxpayer Oversight Committee as shown in Exhibit 16.

EXHIBIT 16. COMPARISON OF OCTA ORGANIZATIONAL STRUCTURE WITH SIMILAR ENTITIES

Characteristic	OCTA	SANDAG	RCTC	SFCTA	MAG	RTA
Voter Approved Measure Amount	$11.9 B	$ 14.0 B	$ 4.7 B	$ 2.4 B	$14.3 B	$ 2.1 B
Length of Measure	30 years	40 years	30 years	30 years	20 years	20 years
Entity Type	TA	MPO/RTC	TC	TA	MPO	TA
Total FTEs	372[1]	225	50	44	34	60[5]
Direct Measure Management and Oversight Provided by	PMO	Separate Project Office	Executive Director/ Transportation Director	Planning Director	Transportation Director	Executive Director/ Transportation Director
PMO Staff FTE [2]	3	5[3]	N/A	N/A	N/A	N/A
Taxpayer Oversight Committee	Yes	Yes	Yes	Yes	Note[4]	Yes
Responsible for Some Capital Project Implementation	Yes	Yes	Yes	Yes	No	No

Source: Current annual budgets for entities shown.

Notes: [1] FTEs shown less transit operations staff. [2] Official Program Management Office (PMO) or similar operating central function staff monitoring the measure. [3] SANDAG's budget included eight positions, but 3 positions were dedicated to financial programming. [4] The Citizens Transportation Oversight Committee for MAG's local sales tax measure was eliminated in 2015. [5] RTA is managed by the Pima Association of Governments.

Formalized M2 Program Management Committee Ensured Knowledge Sharing

In addition to PMO staff involvement in project specific meetings and regular informal communications, OCTA established an M2 Program Management Committee with regular bi-weekly meetings to ensure a strong communication structure was in place. The PMO creates the agendas and leads the meetings with members including the Chief Executive Officer, Deputy Chief Executive Officer, and key managers from all M2 related OCTA divisions. Cross-divisional data, ideas, issues, information, and solutions were exchanged in an open and shared setting. Because the executive staff support this effort, setting a tone at the top focused on collaboration, openness, and accountability, all issues and items seemed to be discussed in a trusted environment. With the leaders of OCTA present, decisions and authority roles were able to be initiated, determined, and resolved. Each member brings subject matter expertise related to their individual division and function to provide insight, input, and recommendation on the M2 matters before the M2 Program Management Committee.

Moreover, the bi-weekly format ensured a regular communication structure was in place to discuss topics such as revenue assumptions, expenditure reports, individual project cost details, project delivery, competitive project applications, and outreach. Written agendas and meeting notes were prepared to summarize items discussed, updates provided, action items, and action owners. While the other entities we reviewed also collaborated and strategized to share issues and solutions collectively, OCTA's PMO formalized its discussions in written form to reduce any potential for confusion after the meetings and also ensured regular meetings were held.

Continuous Improvement was Valued through Implementation of Prior Assessment Recommendations

With the Ordinance requiring a performance assessment every three years to evaluate the efficiency, effectiveness, and economy of OCTA organization in delivering M2, OCTA staff demonstrated a strong commitment to continuous improvement by quickly responding to prior assessment recommendations. Soon after the completion of each triennial performance assessment, we found that the OCTA executive team and Board actively addressed recommendations as necessary. Prior assessment findings addressed also enhanced areas such as program management, fiscal responsibility, transparency, and accountability to the public and its stakeholders. Some of the actions taken by the PMO team included continuous outreach to partner agencies and formation of new partnerships with other agencies to share experiences. In addition, PMO staff attended Project Management Professional training and continued efforts looking for additional funds.

As such, there were no open or recurring issue themes over the past three assessment periods—other than some continuing discussions over freeway philosophies with Caltrans' statewide policy and procedural requirements at times conflicting with local voter-approved M2 Program initiatives and objectives. For instance, differences in project definition and environmental processes between OCTA and Caltrans caused changes in the past that led to project delays. Both OCTA and Caltrans recognized the need for continued partnership with each other at a technical level of system planning and modeling, and were continuing to work toward better resolutions to any future conflicts.

Administrative Costs were Closely Monitored and Limited to Comply with Ordinance

Recognizing the inherent cost of monitoring and overseeing the M2 Program, the Ordinance set forth provisions allowing M2 funds to pay for administrative salaries, wages, benefits, and overhead up to a ceiling of 1 percent of annual M2 revenues. We found that OCTA diligently monitored costs in compliance with those provisions and had good controls in place to ensure proper charges in keeping within Ordinance limits.

In fact, OCTA's PMO tracked costs quarterly and annually. For instance, at each quarter end, management met as part of a labor review meeting to discuss timesheet charges and ensured staff were billing time to correct projects. Costs were tracked by person, project, and hours spent on M2 activities, and these quarterly expenditures and revenue reports were also provided to the Taxpayer Oversight Committee. Additionally, the accounting department tracked administrative costs annually by fiscal year, which were reviewed by the Finance Director and subsequently provided to the Taxpayer Oversight Committee for review.

Administrative Cost Challenges Existed

Although OCTA has adequate processes in place to monitor its performance, they faced two key challenges in meeting restrictive administrative costs requirements. First, funding sources for administrative activities were affected by M2 revenue projections falling short of expected revenues due to the Great Recession and continued changes in consumer spending habits. As such, the 1 percent of total M2 revenues made available to fund administrative costs for the life of the program are also significantly

less than expected—although administrative demands and activities remained constant. Secondly, the 2007 Early Action Plan required administrative efforts four years prior to the actual start of revenue collection. As a result, OCTA's administrative costs in the early years did not have M2 revenues sources to reimburse those costs.

To address these challenges, the OCTA Board approved the use of its separate Orange County Unified Transportation Trust (OCUTT) Fund to reimburse M2 administrative costs exceeding the 1 percent limit. Initially, OCTA borrowed $5.2 million dollars of which $3.5 million was paid back to the fund—leaving a balance of $1.6 million owed as of June 30, 2018. According to recent updates in the M2 Ordinance Tracking Matrix, administrative expenditures were well below the one percent for fiscal year 2016-2017. In fact, costs were less than $600,000 for the year, or 0.81 percent of M2 revenues. These efficiencies offset past overages from the early action planning phase and reduced the balance owed to the trust fund.

Strong Framework was in Place over Cybersecurity, But Training Protocols Could Be Tightened

Cybersecurity is important for all entities and industry sectors, but especially in government and the construction industry. Access to project specifications, physical and security designs, and documentation must be protected. Currently, there are a multitude of best practices to guide entities in developing a cybersecurity framework. For this assessment, we considered guidance from the US Department of Commerce National Institute of Standards and Technology, US Department of Transportation, and California Office of Information Security, as well as pertinent literature from professional associations such as the Information Systems Audit and Control Association and the American Institute of Certified Public Accountants.[11] Framework elements most commonly used across the industry, included but were not limited to, the following:

1. Security Awareness Training modules
2. Disaster Recovery and Continuity Planning
3. Strong Authentication Practices
4. Access to Information Systems Policies
5. Incident Response and Reporting
6. Remote and Wireless Network Access Restrictions
7. Standard Contract Provisions for Third-Party Oversight

At OCTA, we found that staff implemented an appropriate information security framework that incorporated many leading practices to protect M2 Program documents and systems from a cyber-attack. For instance, OCTA conducted and implemented recommendations from a forensic exam with Microsoft in 2016 to ensure OCTA was free of any (known) malware or viruses. Further, when comparing OCTA policies, practices, and protocols implemented to seven key areas of cybersecurity controls, we found that OCTA developed a strong framework in alignment with leading practices as shown in Exhibit 17.

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[11] Cybersecurity best practices are drawn from US Department of Commerce National Institute of Standards and Technology (NIST), US Department of Transportation Cybersecurity Policy, California Office of Information Security (OIS), Information Systems Audit and Control Association (ISACA), and American Institute of Certified Public Accountants (AICPA).

EXHIBIT 17. CYBERSECURITY CONTROLS IN PLACE AT OCTA

Key Control Areas Suggested for Cyber Security	OCTA Control in Place
1. Regular Security Awareness Training Should cover all applicable aspects of the cyber security framework based on role and responsibility including general topics such as recognizing phishing schemes, password requirements, proper incident reporting, and consequences of legal and policy violations as well as specialized training such as disaster recovery. (NIST SP 800-53; AT-2, AT-3, and AT-4).	✓ OCTA staff took mandatory cyber security training which included four modules that cover the topics of password management, phishing scheme awareness, malware prevention, and personally identifiable information. ✓ Between August 2016 and July 2018, 95 percent of OCTA's 544 active employees completed all four modules and 99 percent of employees completed at least one module. ✓ Additionally, OCTA Information System (IS) conducted three phishing tests during our assessment period with the most recent test revealing staff response was 8.2 percent—appropriately less than the industry click rate of 23 percent.
2. Disaster Recovery and Continuity Planning Plans for the recovery of technology and communications following any major event that disrupts the normal business environment, provides for periodic updating and testing of the plan, and its documentation. (NIST SP 800-53; CP-2 and CP-6).	OCTA disaster recovery and continuity plans included: ✓ Disaster Recovery Plan ✓ Business Impact Analysis Report ✓ Emergency Operations Plan ✓ System Security and Emergency Preparedness Plan ✓ The Continuation of Operations Plan has been updated as of September 2018 The comprehensive planning also included yearly disaster recovery testing and cybersecurity insurance to minimize financial impacts of any security breach.
3. Utilizing Strong Authentication Practices Unique username, strong passwords, and restriction of sharing access and/or passwords. (NIST SP 800-53; IA-5)	OCTA's Access Control Security Policy includes strong authentication practices and requires passwords with a minimum length of 10 characters and be comprised of a combination of both alpha and numeric characters. The policy also states that credentials should never be shared.
4. Configuring and Monitoring Access to Information Systems Implementing least privilege level necessary and performing periodic monitoring of access levels in regards to changes in position duties, terminations, and transfers. Additionally, other access controls include verifying an individual's authorization for physical access to facilities containing information systems and employing environmental controls for backup power, fire detection and suppression, temperature and humidity controls, and water damage detection and mitigation. (NIST SP 800-53; AC-6, AC-6(7), PE-2, PE-3, PE-11, PE-13, PE-14, and PE-15).	✓ General User access and Privileged User access provided through separate sets of credentials. ✓ OCTA was in process of working with Human Resources (HR) on IS notification timeliness for personnel changes and access. In addition, a quarterly user access review was performed by IFSAS/One Solution and by HR. The independent user review was overseen by OCTA staff who signed-off on the results. ✓ Copier machines were purchased instead of leased, and are located in a secure room. OCTA wipes copier data prior to decommissioning to reduce the risk that OCTA data would be in appropriately accessed or distributed. ✓ OCTA's policies included appropriate physical and environmental controls.

Key Control Areas Suggested for Cyber Security	OCTA Control in Place
5. **Implementing Incident Response and Reporting Policy** Incident response and reporting policies and procedures consistent with applicable laws and state policies are in place such as identification of roles and responsibilities, training employees and contractors to report incidents, investigation, containment procedures, documentation, communication protocols, and submission of follow-up written reports. (NIST SP 800-53; IR-1, IR-4, and IR-6).	OCTA's Incident Response Security policy guided employees and third parties with the reporting of incidents and sensitive information, responding to, resolution of incidents. According to OCTA, recovery time from a breach was estimated to be less than 1 day.
6. **Applying Remote and Wireless Network Access Restrictions and Detection** Access is only permitted through secure methods and continuous monitoring for intrusion and rouge access is performed. Additionally, tools and techniques are utilized to monitor attacks or unauthorized system use as well as to protect against malicious code (NIST SP 800-53; AC-17, AC-18, CA-2, CA-8, SI-3, and SI-4).	✓ OCTA's Access Control policy only allowed access through approved methods such as VPN for select staff or direct access through employees' own personal computers with "single-sign-on." ✓ Tools used for detection included Cisco Amp Anti-Virus, Dell Secure Vault, Microsoft Defender, and Safelinks in addition to regular patching implemented every week to protect against malicious code and vulnerabilities.
7. **External Partner Management and Oversight** Personnel and cyber security requirements for external entities, such as requiring cyber security awareness training, should be standard provisions in any acquisition-related documents, such as service-level. (NIST SP 800-53; PS-6, PS-7, and SA-9).	According to OCTA, Citrix virtualized desktops were used to limit third-party access to OCTA systems. In addition, contracts include standard provisions defining third-party requirements in regards to: ✓ Payment Card Industry (PCI) Data Security Standards ✓ Information system security ✓ Production and Test environment backups ✓ Backup requirements

Source: US Department of Commerce National Institute of Standards and Technology (NIST) and US Department of Transportation Cybersecurity Policy.

However, one minor area that could be strengthened related to training protocols to include updating the training policy to require an annual training renewal and monitoring training status to ensure employees complete training within the required timeframe. Specifically, leading practices in security awareness training suggest that one of the best ways to prevent an unauthorized attack is to ensure cyber security awareness training is completed annually. While OCTA did not have an annual cyber security awareness training policy in place during our assessment period, information security staff planned to implement a new annual training policy by December 2018. Thus, OCTA should continue with plans to update security training policy to require annual training and establish a timeline for implementation.

Additionally, while we found OCTA had an appropriate information security framework in place to protect M2 Program documents and systems from a cyber-attack, OCTA should regularly monitor the training status of all employees to ensure employees complete the training within the required timeframe. Within the past two years (August 2016 through July 2018), 95 percent of OCTA's 544 active employees completed all

four OCTA internal training modules and 99 percent of employees completed at least one module.[12] Yet, only 9 percent of OCTA's 544 active employees completed all four modules within the past 12 months between August 2017 and July 2018—as recommended by best practice—and only 13 percent completed at least one module over the same time frame.

Recommendations

To enhance its already strong program management practices, OCTA could consider the following:

2. Implement in-progress plans to update security training policy and require annual cybersecurity training as well as establish a timeline for implementation.

3. Regularly monitor the training status of all employees to ensure employees complete cybersecurity training within the required timeframe including defining specific roles and responsibilities, timelines and frequency of monitoring, verification methods, and documentation of status.

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[12] Two year period from August 2016 through July 2018.

Chapter 3: While Still Early in the M2 Life Cycle, Substantial Progress was Made Across All Program Areas

Similar to other transportation agencies, OCTA was able to take advantage of favorable conditions in the construction industry and financial markets during the Great Recession to accelerate projects prior to the M2 sales tax collection start in 2011 through its Early Action Program (EAP). As a result, with only seven years passed since the start of the sales tax collection, OCTA demonstrated significant progress across all program areas as shown in Exhibit 18 and discussed in the sections that follow.

EXHIBIT 18. M2 ACCOMPLISHMENTS THROUGH JUNE 30, 2018

Source: Generated from OCTA M2 Website at http://www.octa.net/OC-Go/Milestones/.
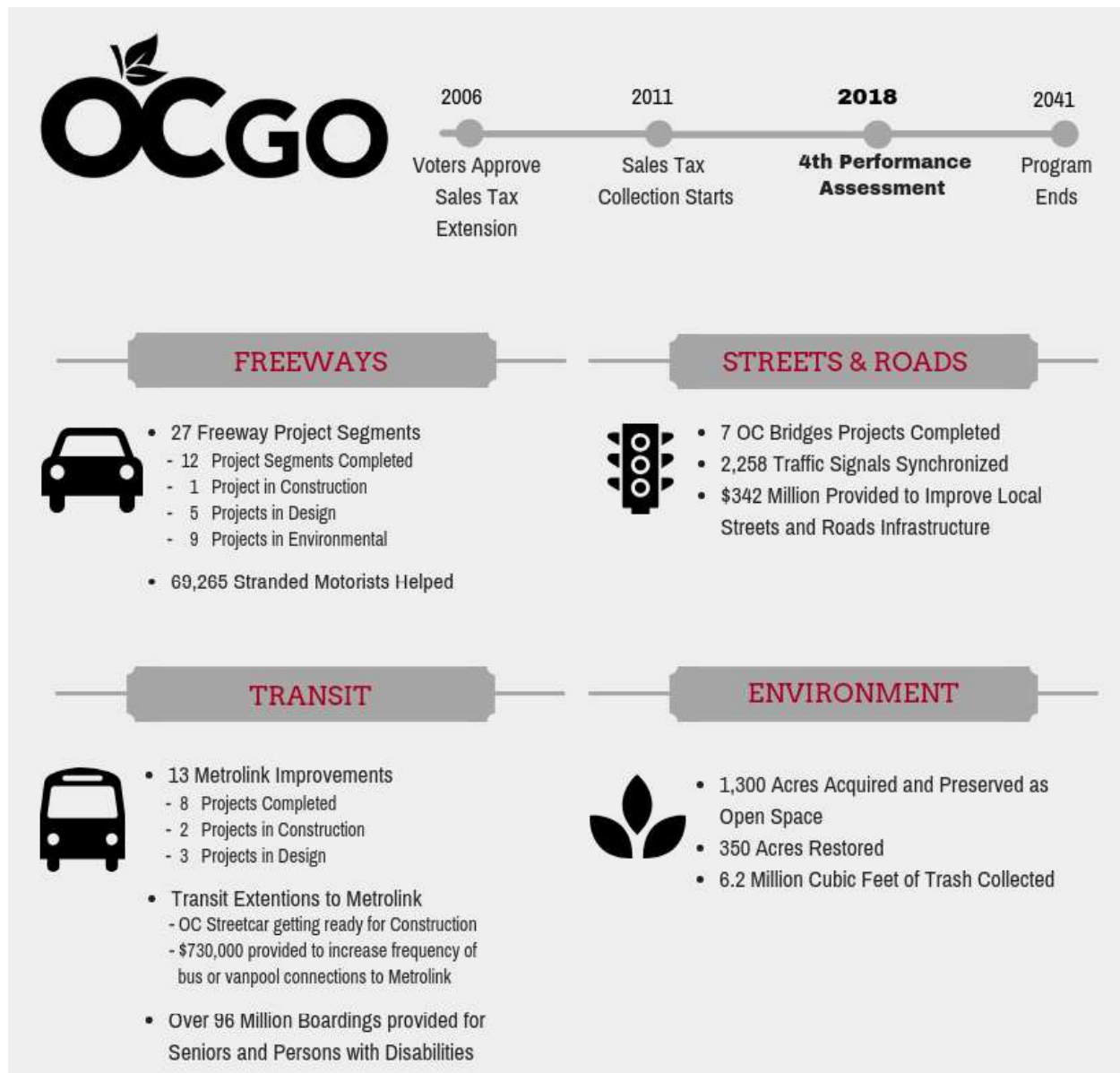
Many Accomplishments Realized Early in M2 Timeframe

After the passage of the Ordinance in 2006, OCTA immediately embarked on a mission to deliver the programs and projects promised to the voters. To-date, improvements completed included a total of 43.6 new freeway lane miles and 4 new interchanges along the seven freeway corridors identified in the M2 Ordinance. Additionally, seven key Burlington Northern Santa Fe (BNSF) railroad crossings and 8 of 13 projects related to improving Metrolink grade crossings and stations were completed as well as mobility options increased for seniors and persons with disabilities with approximately 98.7 million boardings supported by M2 funds to-date. Local jurisdictions received over $342 million to improve local transportation infrastructure, directly contributing to pavement condition on local roads being among the highest in California during the period of our assessment. For the environmental programs, 1,300 acres purchased and preserved as open space, 350 acres of restoration projects funded and $48 million awarded for water quality improvement projects as shown in Exhibit 19.

EXHIBIT 19. ACCOMPLISHMENTS ACROSS ALL PROGRAM AREAS AS OF JUNE 30, 2018

Project Letter	Project Name	Planned Improvement per the Ordinance's Transportation Investment Plan	Results to Date	
			Improvement Anticipated	Progress/Status as of June 30, 2018
Freeway Projects				
A	Santa Ana Freeway (I-5) Improvements between Costa Mesa Freeway (SR-55) and "Orange Crush" Area (SR-57)	Improve interchanges. Add capacity.	New HOVL; 3 miles, both directions.	In construction advertisement.
B	Santa Ana Freeway (I-5) Improvements from the Costa Mesa Freeway (SR-55) to El Toro "Y" Area	Add new lanes. Improve interchanges.	New GPL; 9 miles, both directions.	In environmental.
C	San Diego Freeway (I-5) Improvements South of the El Toro "Y"	Add new lanes. Improve interchanges.	6 Segments: ✓ 3 HOVL segments; 5.7 miles, both directions. ✓ 3 GPL segments; 6.5 miles, both directions. ✓ 3 Interchanges.	6 Segments: ✓ 3 HOVL segments open to traffic. ✓ 2 GPL segments in design. ✓ 1 GPL segment in construction advertisement. ✓ 1 Interchange open to traffic. ✓ 1 Interchange in design. ✓ 1 Interchange in construction advertisement.
D	Santa Ana Freeway/San Diego Freeway (I-5) Local Interchange Upgrades [13]	Improve interchanges.	2 Interchanges.	✓ 1 Interchange open to traffic. ✓ 1 Interchange in environmental.
E	Garden Grove Freeway (SR-22) Access Improvements	Improve interchanges.	3 Interchanges.	Open to Traffic.
F	Costa Mesa Freeway (SR-55) Improvements	Add new lanes.	2 Segments: ✓ 1 segment with new GPL/HOVL; 8 miles, both directions.	2 Segments: ✓ 1 GPL/HOVL segment in design. ✓ 1 GPL segment and operational improvements in early planning.

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[13] There are five interchanges under Project D—three are completed as part of Project C improvements and the remaining two are completed under Project D.

Project Letter	Project Name	Planned Improvement per the Ordinance's Transportation Investment Plan	Results to Date	
			Improvement Anticipated	Progress/Status as of June 30, 2018
			✓ 1 segment with new GPL; 2.5 miles, both directions; ✓ Operational Improvements.	
G	Orange Freeway (SR-57) Improvements	Add new lane.	✓ 5 Segments with new GPL; 11.2 miles.	✓ 3 segments, 7.7 miles open to traffic. ✓ 1 segment in environmental. ✓ 1 segment not yet started.
H	Riverside Freeway (SR-91) Improvements from the Santa Ana Freeway (I-5) to the Orange Freeway (SR-57)	Add capacity.	New GPL, WB; 4.5 miles.	Open to Traffic.
I	Riverside Freeway (SR-91) Improvements from Orange Freeway (SR-57) to the Costa Mesa Freeway (SR-55) Interchange Area	Improve interchanges. Add capacity.	2 Segments: ✓ 1 New AUXL segment; 2 miles. ✓ 1 New GPL segment, both directions.	✓ AUXL open to traffic. ✓ 1 GPL segment in environmental.
J	Riverside Freeway (SR-91) Improvements from Costa Mesa Freeway (SR-55) to the Orange/Riverside County Line	Add capacity by adding new lanes.	3 Segments: ✓ 1 New GPL, EB; 6 miles. ✓ 1 New GPL, both directions; 6 miles. ✓ 1 New GPL segment. Not yet started.	✓ 1 GPL EB open to traffic. ✓ 1 GPL segment, open to traffic. ✓ 1 GPL segment not yet started.
K	San Diego Freeway (I-405) Improvements between the I-605 Freeway in Los Alamitos Area and Costa Mesa Freeway (SR-55)	Add new lanes. Update interchanges. Widen local overcrossings.	New GPL/Express Lane, both directions; 16 miles. [14]	In construction (design-build).
L	San Diego Freeway (I-405) Improvements between Costa Mesa Freeway (SR-55) and Santa Ana Freeway (I-5)	Add new lanes.	New GPL, both directions; 8.5 miles.	In environmental.
M	I-605 Freeway Access Improvements	Improve freeway access and arterial connections.	Modify interchange ramps and lane configurations on Katella Avenue.	In environmental.
A-M	Freeway Mitigation	Restore and preserve habitat impacted by freeway construction.	Acquire land and preserve as open space.	✓ 1,300 Acres Acquired and Preserved as Open Space. ✓ 350 Acres Restored.
N	Freeway Service Patrol	Continuing service through 2041.	Assisting stranded motorists.	69,265 assists provided.
Streets & Roads Projects				
O	Regional Capacity Program	✓ Complete the Orange County Master Plan for Arterial Highways (MPAH), add roughly 1,000 miles of new street lanes. ✓ Construct 7 identified key BNSF railroad over or underpasses in Northern Orange County.	✓ $295 million provided to approximately 146 projects on the MPAH. ✓ 7 BNSF railroad crossings open to traffic.	

[14] The GPL portion of this project is a M2 project funded in part with sales tax dollars ($1.425 Billion). The Express Lanes are primarily funded through a low interest federal loan (TIFIA) to be paid back with toll revenues ($475 Million not tied or guaranteed by M2).

Project Letter	Project Name	Planned Improvement per the Ordinance's Transportation Investment Plan	Results to Date	
			Improvement Anticipated	Progress/Status as of June 30, 2018
P	Regional Traffic Signal Synchronization Program	Synchronize over 2,000 Signals.	✓ $98 Million provided to approximately 106 projects covering 597 miles of streets. ✓ 2,258 Signals Synchronized.	
Q	Local Fair Share Program	Provide flexible funding to cities to address local transportation needs (e.g. residential streets, safety near schools, etc.)	✓ $342.4 million provided to cities. ✓ Pavement is in good condition and the best in the State.	
Transit Projects				
R	High Frequency Metrolink Service	✓ Increase rail service, upgrade stations, add parking capacity, improve safety, and provide for quiet zones. ✓ Improve grade crossings and construct over or underpasses at high volume arterial streets that cross Metrolink tracks.	✓ 8 of 13 Metrolink grade crossing, safety, and station projects completed with nearly 50 grade crossings completed.	
S	Transit Extensions to Metrolink	Competitive programs for local jurisdictions to connect to Metrolink service (e.g. conventional bus, bus rapid transit, high capacity rail transit, etc.)	✓ OC Streetcar project pending construction award initiated through competitive fixed funding call. ✓ One funding round totaling $730,000 awarded to local jurisdictions under the rubber tire competitive program.	
T	Metrolink Gateways	Provide local improvements necessary to connect Metrolink stations to the future high-speed rail system.	✓ Anaheim Regional Transportation Intermodal Center (ARCTIC) completed.	
U	Expand Mobility Choices for Seniors and Persons with Disabilities	Stabilize fares and provide fare discounts, expand van service, and supplement senior non-emergency medical transportation services.	✓ 1.9 million boardings under Senior Mobility Program. ✓ 727,000 boardings under Senior Non-Emergency Medical Transportation Program. ✓ 96 million boardings supported under Fare Stabilization Program to date.	
V	Community Based Transit/Circulators	Competitive program for local jurisdictions to develop local bus transit services (e.g. community based circulators, shuttles, trolley buses, etc.).	✓ Awarded 29 projects and 7 planning studies to local jurisdictions totaling $43.6 million.	
W	Safe Transit Stops	Provide passenger amenities (e.g. shelters, lighting, timetable information, ticket vending machines, etc.) at 100 busiest transit stops across the County.	✓ 43 Bus stops improved or nearing completion. ✓ $1.6 million provided to support 51 transit stop projects.	
Environmental Cleanup				
X	Clean Up Highway and Street Runoff that Pollutes Beaches	Implement street and highway related water quality improvement programs and projects to help meet federal Clean Water Act standards for urban runoff.	✓ 6.2 Million Cubic Feet of Trash Collected.	

Source: Generated from M2 Ordinance, M2 Quarterly Progress Reports, OCTA Internal Monthly Status Reports, and M2 Program Website.
Notes: Refer to Appendix B for specific project budgets and schedule estimates and actuals. SR=state route. I=interstate. HOVL=high-occupancy vehicle lane, GPL=general purpose lane. AUXL=auxiliary lane. WB=west bound. EB=east bound.

There were likely additional accomplishments realized for locally implemented projects, but it was difficult to mine more comprehensive data from current systems that are primarily used for local eligibility and grant activities. As such, OCTA staff may want to consider options for obtaining more detailed local data that could provide a more complete listing of other quantitative accomplishments for each project.

Capital Projects Showed Substantial Progress To-Date Although Some Budget and Schedule Challenges Exist

With only seven years elapsed of the 30-year M2 Ordinance, OCTA already made substantial progress on capital projects towards fulfilling the promises made to the voters in 2006. Specifically, for the freeway program, improvements outlined along the seven freeway corridors evolved into the current 27 projects of which 12 were already open to traffic. In fact, 44 percent of the freeway projects envisioned were complete with only a quarter of the M2 Ordinance timeframe elapsed. Given OCTA's past success and current momentum, it is anticipated that all projects will be completed by 2041.

Capital improvements for the local streets and roads program also showed significant success with seven railroad crossings planned in the M2 Early Action Plan completed as of June 2018—although some of the individual projects faced extensive schedule delays and cost increases largely due to right-of-way/utilities issues, coordination with local partner agencies, and sequencing of projects as described in depth in the sections that follow.

Transit capital projects also realized steady progress with 8 of the 13 planned projects related to connecting transit services to Metrolink already opened to traffic. Additionally, the largest transit capital project, the OC Streetcar, was anticipated to be open for use by August 2021, although that project faced some schedule and budget challenges during 2018 but is now on track with construction with a revised completion date of November 2021.

Freeway Capital Projects Completed Under Budget (Ordinance Projects A – M)

For the freeway program, the improvements on the seven freeway corridors were broken into 27 individual project segments as of June 30, 2018. In total, 12 project segments were open to traffic. Of the remaining 15 projects, all have started with one large design-build project in construction, 5 projects in design or construction, and 9 projects in the environmental or conceptual planning phase with majority of those estimated to be in design within the next 10 years. [15] Of those 9 projects, only the "SR 91: SR-241 to Riverside County Line" project is scheduled to move forward past 2034 due to coordination needed with the Riverside County Transportation Commission to ensure a seamless transition of the general purpose lane improvements once the freeway crosses the Riverside County line.

Especially noteworthy for the freeway program, OCTA delivered the projects as promised to voters without any modifications to the scope provided for in the Ordinance. Although the Ordinance and the Transportation Investment Plan contained only general direction on improvements to be made such as adding new lanes or adding capacity, an underlying guiding document used to identify improvement options
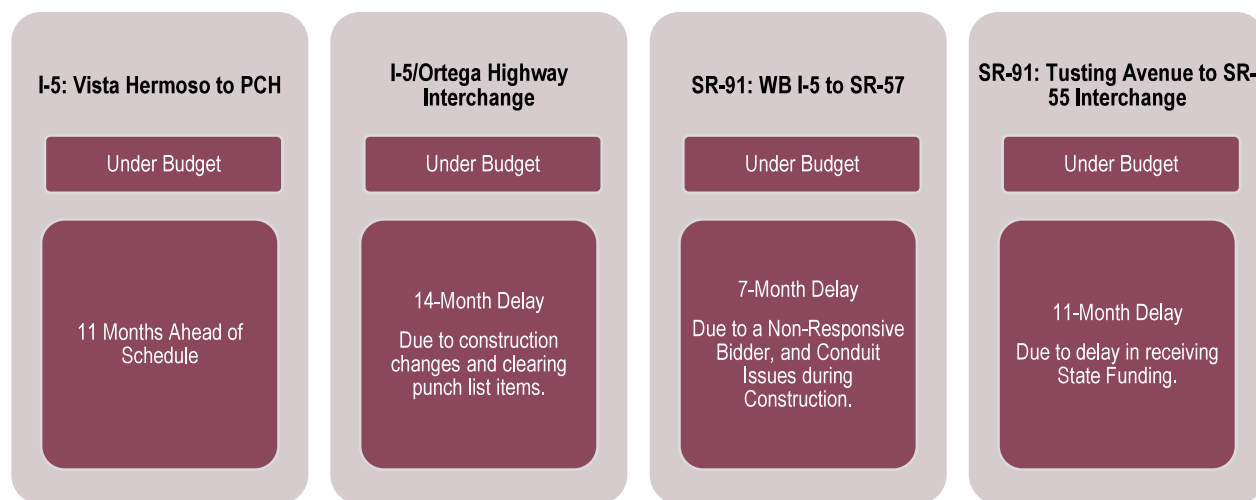
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[15] Refer to Appendix B for a Universe of M2 Projects.

provided specific recommendations on the types of capacity increasing projects to be built.[16] For instance, on the SR-91 "centerpiece" project, the underlying environmental report proposed "adding one westbound general purpose lane from I-5 to SR-57" (Project H). This project was completed in June 2016 with exactly one new general purpose lane added for westbound traffic.

Moreover, during our assessment period, four freeway segments opened to traffic. For those four projects only, all were completed between 6 percent and 24 percent under budget. While there were some schedule delays on three of the four projects ranging from 7 months to 14 months, the reasons for the delays appeared reasonable as shown in Exhibit 20. For example, the I-5/Ortega Highway Interchange project came in 17 percent under budget, although various delays cumulatively added 14 months to the baseline completion schedule. A one-month delay in completing design, delay in starting construction, as well as Caltrans directed changes and clearing punch-list items were the primary reasons for the behind schedule completion.

EXHIBIT 20. BUDGET & SCHEDULE ADHERENCE FOR FREEWAY PROJECTS COMPLETED JULY 1, 2015 – JUNE 30, 2018

I-5: Vista Hermoso to PCH	I-5/Ortega Highway Interchange	SR-91: WB I-5 to SR-57	SR-91: Tusting Avenue to SR-55 Interchange
Under Budget	Under Budget	Under Budget	Under Budget
11 Months Ahead of Schedule	14-Month Delay Due to construction changes and clearing punch list items.	7-Month Delay Due to a Non-Responsive Bidder, and Conduit Issues during Construction.	11-Month Delay Due to delay in receiving State Funding.

Source: Generated from M2 Monthly Status Reports and PMO Internal M2 Tracking Documents.

Local Streets & Roads Capital Projects Completed Slightly Over Budget (Ordinance Project O)

Outside of local jurisdiction capital improvements funded through Project O competitive calls for projects, OCTA also oversaw the delivery of 7 key Burlington Northern Santa Fe (BNSF) railroad overpasses and underpasses in Northern Orange County.[17] As part of Ordinance Project O, 7 key railroad crossing were completed at a total cost of $671.24 million, 14 percent over the combined baseline of $590 million. Although some of the individual projects in this category faced extensive schedule delays and cost increases, the causes appeared reasonable and largely related to right-of-way/utilities issues, coordination with local partner agencies, and sequencing of projects.[18]

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[16] Guiding document was the Final Program Environmental Impact Report (PEIR) developed for OCTA's Long-Range Transportation Plan in July 2006.

[17] OCTA was the lead on five BNSF projects, and the City of Fullerton was the lead for the remaining two projects.

[18] Refer to Appendix B for specific project budgets and schedule estimates and actuals.

For instance, as shown in Exhibit 21, the "Lakeview Avenue Overcrossing" project was completed 3.5 years behind schedule and cost 58 percent more than initially anticipated. Yet, the reasons for the delay and the cost increase appeared reasonable and were triggered by right-of-way and utilities issues that caused higher than planned related legal services and construction costs. In addition, construction was coordinated with another nearby overcrossing project (Tustin/Rose) that was already delayed—thus further delaying the Lakeview overcrossing completion schedule. Not only was OCTA able to obtain external funding sources to pay for the overage, but staff informed us that commuters in the area are now able to navigate the area without the previous long wait time due to freight train traffic.

EXHIBIT 21. PROJECT O SCHEDULE DELAY & COST INCREASE EXAMPLE: LAKEVIEW AVENUE OVERCROSSING
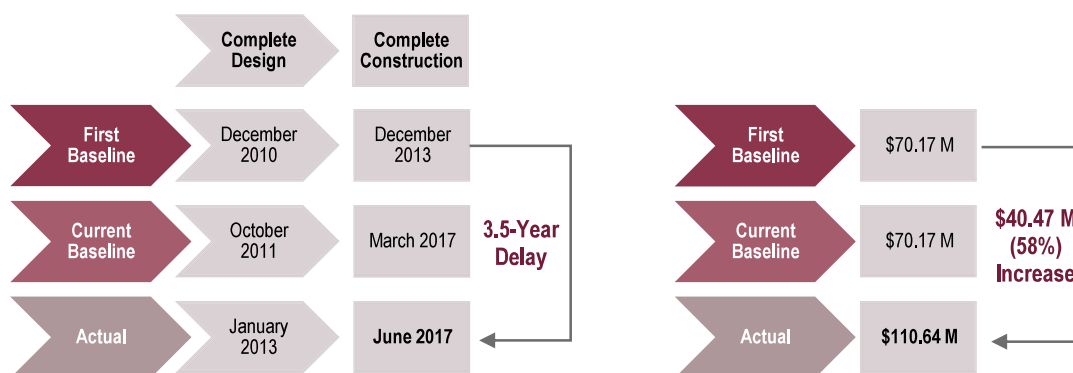
Source: First Baseline: PMO Grade Separation Progress Tracking; Current Baseline & Actual: M2 Monthly Project Status Report through June 2018. Note: First Baseline was set upon award of engineering consultant contract and estimated the project's schedule and cost through the end of construction. Current Baseline was set when construction contract is awarded. Actual Cost is being finalized pending remaining claims.

Majority of Completed Transit Capital Projects were On Budget (Ordinance Projects R – W)

Transit capital projects also made significant progress with the majority of projects listed in the Ordinance already open to traffic.[19] Specifically, of the 13 projects related to expansion of Metrolink rail service (Project R), 8 were complete.[20] Among those 8 completed projects, one project included improving safety at approximately 50 rail crossings throughout the county—all of which were completed early in 2012. The remaining 5 projects were currently either in design or construction, with the latest project (Anaheim Canyon Station) in this category expected to be completed by March 2021.

Similarly, the largest transit capital project, the OC Streetcar (Project S), was anticipated to be open for use by August 2021; however, facing some schedule and budget challenges due to the delay in moving forward while waiting for approval of a federal Full Funding Grant Agreement and a cost-rising construction market, OCTA revised the project schedule and completion cost. Specifically, the OC Streetcar project is now anticipated to be complete in November 2021 and the project budget was increased to $418.9 million. This increase of over $108.4 million is 35 percent higher than when costs were estimated at the time design was completed. The increase was mainly due to higher than expected construction bids coming in $100 million higher than initially anticipated—a situation also faced by other construction projects on the West Coast. In

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[19] Refer to Appendix B for project names.

[20] 7 of the 8 completed projects are open to traffic. For the remaining project (17th Street Grade Separation/LOSSAN, M2 paid for the environmental phase only, which has been completed.

November 2018, OCTA received $149 million from the Federal Transit Administration through a Full-Funding Grant Agreement, which allowed OCTA to move forward into construction.

Appropriate Systems were in Place to Monitor and Report on Capital Project Progress Toward Completion of the Ordinance

Overall, we found that OCTA established a strong framework to monitor and report on capital projects and was following current leading project management practices.[21] Specific to delivering capital programs under M2, OCTA developed a Program Management Procedures (PMP) manual serving as the guide "to effectively manage and monitor projects and develop strategies for delivering the entire capital improvement program." The PMP manual contained typical elements used in industry leading practices such as defining roles and responsibilities for OCTA and partner agencies in addition to consultant staff, controlling schedules and costs, reporting progress, evaluating risks, ensuring standards of quality, and managing consultants. In discussion with OCTA capital programs staff, the PMP manual was consistently observed and PMP mandated templates and tools were used.

Capital Projects were Thoroughly Vetted and Information Made Public was Reliable

At OCTA, majority of M2 capital projects were delivered "cradle-to-grave" with one project manager involved from the design stage through construction as well as through regular project team meetings with pertinent parties such as Caltrans, local jurisdictions, engineers, and contractors. Monthly project update meetings are attended by staff from OCTA's Project Controls section, External Affairs Division, and the M2 Program Management Office to ensure project progress is shared, challenges are communicated, and critical decisions-made are vetted internally at the staff level before information is conveyed to OCTA executive management, oversight bodies, or the public.

As a result of that coordination, we noted that project budget, schedule, scope, and progress information were consistent across internal documents such as Primavera project management systems, project change requests and cost estimate documents, monthly status reports, and PMO status tracking documents as well as were reconciled to information shared publicly via the M2 Quarterly Progress Report and M2 website. This robust dissemination of data at OCTA before it reached the public helped ensure accuracy, reliability, and consistency of information communicated—regardless of the outreach methods used.

Moreover, the main M2 public progress reporting tool—the M2 Quarterly Progress Report—was detailed, provided valuable content, and crafted in an easy-to-understand format to provide a critical look on program status. In particular, the report not only highlighted successes, but also pointed out challenges and clearly identified risks to the program and specific projects. For instance, the Capital Action Plan (CAP) section of the report provided a quick snapshot on cost baseline versus forecast at completion as well as construction completion baseline versus forecast in an easy-to-read format. More importantly, the CAP also flagged those projects where schedule milestones were missed and/or projected final costs were expected to

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[21] Leading practices considered include Project Management Institute's Construction Extension to the Project Management Body of Knowledge Guide, Construction Management Association's Construction Management Standards of Practice, Federal Highway Administration guidance, Caltrans Local Assistance Manual.

exceed the baseline. The reasons for the delays or cost increases for each project were then discussed in the report. In addition, OCTA staff presented schedule performance metrics to its Board quarterly describing whether forecasted delivery milestones—such as begin/complete environmental or design, construction ready, advertise construction, award construction contract, and complete construction—were met for each project that quarter. Milestones that were not met were clearly labeled "missed."

Solid Policies and Procedures Existed over Contract and Construction Management

With construction projects often being complex and subject to a wide range of factors influencing their outcome, managing capital projects is challenging and needs critical policies and procedures to guide project implementation.

Generally, we found OCTA had formal procedures in place over contract and construction management to ensure projects were delivered as planned. In fact, we found that its PMP manual included typical elements related to risk identification, constructability reviews, independent estimates, inspections and testing, change order control, project management, pay applications and schedule of value approvals, claims, utility coordination and relocation, closeout, and document retention. More specifically, OCTA's Construction Management Procedures, first developed in 2011, defined tools and practices for the construction management team to deliver OCTA projects in a consistent manner. Similar to the PMP manual, OCTA's Construction Management Procedures detailed steps required to take a project from pre-construction activities through close-out and included protocols for items such as how to review and route requests for information, records needed to substantiate a contract changer order, or how to verify contractor labor compliance. These procedures, if followed, align with leading practices for capital construction as shown in Exhibit 22.

EXHIBIT 22. CURRENT LEADING PROJECT MANAGEMENT PRACTICES COMPARISON

General Leading Practices Areas	Practices Followed by OCTA
Project Management Plans and Related Tools	✓ Project Management Plan ✓ Risk Assessments
Construction Management	✓ Construction Management Procedures ✓ Progress Payments Reviews ✓ Change Order Negotiations
Schedule and Task Management	✓ Primavera for Scheduling ✓ Critical Path Method

Source: OCTA Project Management Plan, OCTA Construction Management Procedures, OCTA Schedule and Cost Reports.

Note: Leading practices are drawn from a variety of industry sources including the Construction Management Association's Construction Management Standards of Practice, Federal Highway Administration guidance, Project Management Body of Knowledge, and practices observed at capital construction projects.

Procurement Practices and Activities Complied with OCTA Policies

With approximately 185 contracts totaling more than $284 million awarded for M2 purposes during our three-year period of assessment, strong contract administration over the M2 funds is critical. Toward that end, we found that OCTA established a robust procurement framework with key control points built in at several stages within the procurement process. To determine whether OCTA complied with its policies, we reviewed detailed contract and procurement files for seven M2 contracts issued during our three-year assessment period and found that each procurement complied with the following critical policy and procurement requirements reviewed:

- Scope of work defined
- Independent Cost Estimate performed
- Cost price analysis conducted
- Sole source justified
- Conflict of Interest forms signed by selection panel
- Evaluated and scored against defined criteria
- Evidence of negotiated price
- Properly approved

Capital Project Selection Principles were Reasonable and Compared to Others, but Linkages to Projects Implemented could be More Formal

While the Transportation Investment Plan outlined specific capital projects to be completed over the 30-year timespan of M2, various delivery plans outlined the following guiding principles for choosing projects to implement and meeting early delivery objectives:

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

When compared to other similar entities, OCTA's specific guiding principles aligned with other entities we reviewed. For instance, some entities had similar project selection principles related to congestion relief, availability of external funding, cost effectiveness, and public opinion or support. Other entities' selection criteria used also principles related to safety, accessibility, habitat impacts, and greenhouse gas emissions.

To implement the project selection principles and recommend project sequencing to the Board, managers and staff from a variety of OCTA disciplines were involved with the analysis. Empirical data related to congestion delay, environmental clearance, and cost was used to calculate a quantifiable score and arrive at a final ranking score, although there was no specific definition or data available to assess other guiding

principles such as external funding availability, public opinion, project connectivity, and project duration. We found the resulting ranked projects informed discussions with the Board and provided a nexus with projects identified in the Next 10 Plan for completion between 2017 and 2026, although there was limited documentation to demonstrate how the results of the project selection analysis related to the order of projects chosen for implementation.

Other entities had mixed success with linking project selection guidelines with prioritized projects. For instance, as reported in the 2011 performance audit report of the Maricopa Association of Governments' Regional Transportation Plan, auditors found little documentation correlating prioritization factors with selected project priority as well as no weighted factors for measuring relative value of one project over another using the criteria. Yet, at the San Diego Association of Governments, staff used a quantifiable weighted average to score, rank, and prioritize projects into time phases not just for its sales tax measure projects, but all long-term transportation improvement projects. While the quantifiable prioritization established the project order of implementation, other factors were also considered to ultimately influence the decision to move forward with a project such as when funding was received from a partner agency. To demonstrate a clearer connection between capital project selection principles and capital projects implemented, OCTA could consider formalizing discussions and decisions made leading to the actual selection or order of projects to be implemented.

Recommendations

To improve its already strong project delivery practices, OCTA could consider the following:

4. Create a methodology to gather quantitative accomplishment data and track project outputs and accomplishments against Transportation Investment Plan anticipated goals.

5. Demonstrate a stronger link between capital project selection guiding principles and the actual implementation order for capital projects by formally memorializing discussions and decisions made.

Chapter 4: OCTA's Approaches Ensured Compliance with M2 Ordinance

Gaining public trust and confidence is critical for any successful government entity, in particular for those with sales tax measures placed on ballots before local residents funding transportation or other types of public services. OCTA employed a philosophy of strict adherence to promises made to voters and compliance with ballot provisions that permeated through all levels of the organization from executive management to newly hired employees. Staff developed strong approaches and practices to track compliance and ensure rigorous observance to the promises made.

Robust System Used to Track Compliance

The M2 Ordinance and Transportation Investment Plan detailed provisions for funding, local maintenance of effort, and a Taxpayer Oversight Committee among several other requirements. To track compliance with the Ordinance provisions, the M2 Program Management Office (PMO) developed a comprehensive and detailed matrix involving many owners and experts throughout the organization as coordinated by the PMO. While other entities we reviewed diligently tracked compliance with their individual tax measures as well, OCTA's matrix and process was noticeably more thorough and formalized than those other entities.

Matrix Used was Comprehensive and Effectively Tracked Compliance as a Leading Practice

According to the PMO, its tracking matrix was designed to include all Ordinance areas especially where specific language "shall" and "must" were present. The requirements were presented in a question format with responses to answer compliance with the question. With 190 Ordinance requirements tracked, the PMO sorted the matrix into eight major categories including administration and general, specific projects by mode (freeway, local streets and roads, transit, and environmental), and safeguards and audits. We found the matrix was well organized into sub-categories with many matrix requirements needing action annually and other provisions only requiring actions at start-up or not required until the M2 Program is nearing completion. Based on our review of the OCTA tracking sheet as compared with key elements of the M2 Ordinance, we found the matrix was complete and reliable. We also found that OCTA annually updated the matrix on a calendar year basis, assigned task owners for each area, and typically included a link to a specific document or file providing access to the necessary underlying support from its Document Center.

Compared to other entities we reviewed, OCTA's practices to track, monitor, and document compliance with the M2 Ordinance were above and beyond the others' efforts. The detailed Ordinance tracking matrix was user-friendly and easy to navigate, and served as a tremendous tool to document compliance with Ordinance requirements. Yet, for a small handful of examples, the matrix could be enhanced to provide a more clear definition as to how particular compliance items were reviewed and validated. As shown in Exhibit 23, a 2017 response to compliance item 91.15 indicated that "those local agencies that did not meet the three-year expenditure deadline were not paid for expenditures incurred beyond the expenditure deadline." Yet, the response did not include underlying documentation that could validate that statement.

| ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY | Ordinance Tracking Matrix - Ordinance No. 3 For Period Ending December 31, 2017						
Item	Description	Citation	Division Responsible	Timeframe	Status	Responsible Person (POC)	2017 Response
91.15	Agreed that if the above time limits were not satisfied, to return to the Authority any retained Net Revenues and interest earned on them to be available for allocation to any project within the same source?	Att. B, Sec. III.A.10.c	Planning	Recurring	Done to date	Section Manager Name	Yes. Local agencies that did not meet the three-year expenditure deadline were not paid for expenditures incurred beyond the expenditure deadline.

Source: Ordinance Tracking Matrix as of 12/31/2017.

Another enhancement to the process could be the addition of a review column next to the responsible person or point of contact column to demonstrate accuracy and reliability of the compliance data tracked.

Currently, OCTA is continuing their efforts to improve and make more efficient processes by transitioning their existing Document Center from SharePoint 2013 to the new version of SharePoint 2016. The improved document center will continue to house all final M2 materials such as staff reports, accounting documents, and audits where PMO and other divisions have "read-only "access. According to the PMO, the upgraded Document Center will allow for more functionality and more user-friendly search features.

Compliance was Well-Managed Centrally, and Several OCTA Divisions were Involved

On an annual basis, the PMO coordinated updates to the tracking matrix. This effort included collaboration from other departments such as Finance & Accounting, Capital Programs, and External Affairs, with the PMO and Planning Division responsible for nearly half of the requirements. Each division assigned an owner or expert responsible for updating status and supplying underlying support documents which was verified centrally by the PMO team for accuracy and completeness in supporting compliance with each requirement.

From this documentation, we saw the compliance requirement, division responsible for maintaining compliance, timeframe and status of the item, response detailing specific steps taken, reference to supporting documents, and a point of contact. Moreover, the brief explanation described what was done, when it was done, and where specific supporting documentation can be viewed. This process allowed the PMO to easily validate and conclude on compliance.

Local Eligibility Requirements Were Rigorous and Thoroughly Reviewed

In order for local jurisdictions to receive M2 funds, they must undergo OCTA's diligent review process and be determined eligible on an annual basis. This applied to both local formula driven funds and competitive grants for street improvements, transit expansion, and environmental mitigation projects. While OCTA's process was similar to other entities reviewed, its protocols seemed to be more rigorous in terms of breadth of requirements and verification of compliance.

Requirements were Rigorous

According to the Ordinance, local jurisdictions must satisfy requirements within 13 eligibility categories before receiving M2 funds as shown in Exhibit 24.

EXHIBIT 24. 13 ELIGIBILITY CATEGORIES
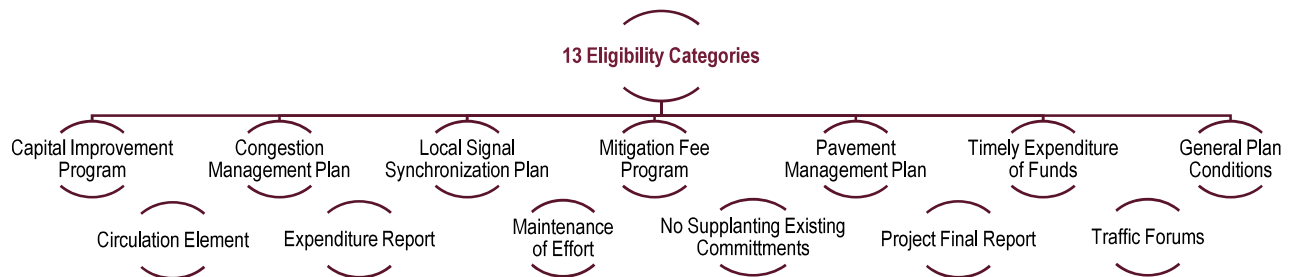
Source: M2 Eligibility Guidelines Fiscal Year 2018/2019, Effective April 9, 2018.

To meet these requirements, local jurisdictions were required to report and provide supporting documentation to demonstrate compliance with nearly 100 pages of Measure M2 Eligibility Guidelines updated each fiscal year. Some reporting methods leveraged tools routinely used by local jurisdictions in their public planning processes, while others required specialized OCTA-developed tools.

Using a proprietary internal system called OCFundtracker, local jurisdictions used a series of templates, forms, and report formats to submit required plans, certifications, and checklists to OCTA. Documents were submitted on annual, biennial, or other timeframe as dictated by OCTA policies and feasibility. Thus, not all 13 eligibility elements required verification each year.

Eligibility Review was Extensive and Diligent

Overall, we found OCTA conducted extensive formal eligibility determinations of local jurisdictions with technical due diligence protocols performed on an annual basis that questioned, discussed, collaborated, and documented reasonableness and adherence to the M2 Ordinance's goals.

Specifically, several internal OCTA staff and external technical experts conducted extensive reviews of submitted data to verify eligibility. As part of eligibility conducted, OCTA was responsible for verifying compliance with eight of the eligibility categories and the Taxpayer Oversight Committee's Annual Eligibility Review Subcommittee was responsible for verifying the remaining five eligibility elements. Steering the verification processes were the M2 Eligibility Guidelines and the Comprehensive Transportation Funding Program Guidelines that discussed specific verification methods to be utilized. Our review of underlying documentation found that these guidelines were followed and focused questions were asked and resolved by the local jurisdictions. Reviews were well-documented electronically and in physical files.

Generally, OCTA Local Programs staff coordinated the review of each eligibility element relying on both internal and externally-hired technical experts to question and validate technical elements to ensure documents and plans submitted support a variety of goals such as:

1. Having a Capital Improvement Plan that included projects needed to meet and maintain adopted Traffic Level of Service and Performance Standards.

2. Adopting and maintaining a Circulation Element that defined the minimum planned lane configurations for regionally significant roads and demonstrated consistency with the County Master Plan of Arterial Highways.

3. Complying with the County's Congestion Management Program to support regional mobility and air quality objectives.

4. Contributing required local matching funds to leverage available Measure M2 funds provided.

OCTA staff developed verification checklists to streamline the review processes and ensure consistency of review. For instance, technical reviewers asked questions of the local entity's use of survey systems when reviewing inputs to the Pavement Management Plan or evaluated traffic and intersection analysis through modeling of level of service on the local's Congestion Management Plan.

Detailed analysis occurred during these technical reviews with notes and resolutions documented in the annual eligibility review files. Annual expenditure reports were also studied to identify patterns, ensure expenditures reported agreed with audited financial statements, and determine whether expenditure categories aligned with OCTA disbursement reports.

Other entities we reviewed in California and Arizona used different practices for eligibility determinations— mostly due to the structure of their particular sales tax measure. For instance, the San Diego Association of Governments' sales tax measure distributed funds to local jurisdictions primarily by formula similar to OCTA's Local Fair Share Project Q. But for those funds available through grant funding, the San Diego Association of Governments verified and determined eligibility status in accordance with appropriate grant criteria. In another example in Phoenix, the Maricopa Association of Governments' sales tax measure provided funds to local jurisdictions for arterial street projects through regular transportation improvement plan processes although they created and vetted projects against specific project eligibility criteria.

Local Grant Practices were Solid and Aligned with Others

Once deemed eligible, local jurisdictions received M2 funds either through the formula-driven Local Fair Share Program (Project Q) or through application of individual competitive grants available for streets and roads, transit, and environmental activities through Projects O, P, S, T, V, W, and X as shown in Exhibit 25. We found that OCTA used comprehensive formal guidelines provided to the locals as well as followed solid practices including technical reviews and ongoing monitoring to help ensure that M2 funds were awarded for purposes that would help achieve the M2 goals.

M2 Project	Description	Amounts Allocated During Period	Disbursement Method
O	Roads Regional Capacity (RCP)	$102,243,642	Advance 75%/Reimburse 25%
P	Roads Reginal Traffic Signal Synchronization	23,837,626 (plus $6,693,813 in external funding)	Advance 75%/Reimburse 25%
S	Transit Connections to Metrolink	$0	Reimbursement
T	Transit Metrolink Stations/High-Speed Rail	N/A Project Complete	Reimbursement
V	Transit Circulators (Community-Based)	$33,838,803	Reimbursement
W	Safe Transit Stops	$0	Reimbursement
X	Environmental Cleanup Tier 1	$8,766,095	Advance 75%/Reimburse 25%
X	Environmental Cleanup Tier 2	$0	Advance 75%/Reimburse 25%
	Total Awarded	**$175,379,979**	

Source: M2 Ordinance and OCTA M2 Allocation spreadsheet.

Selection Practices were Robust

Overall, we found OCTA's grant selection practices to be thorough, complete, and robust with an internally developed common set of guidelines and project selection criteria known as the Comprehensive Transportation Funding Program Guidelines. Based on our review of seven grants for Projects O, V, and X selected during our assessment period, OCTA files contained supporting application documents, detailed scoring sheets, and evidence of detailed technical reviews conducted to verify reasonableness, feasibility, and adherence to grant purpose of the proposed project. These technical review efforts included questions posed and clarifications requested from the local jurisdictions in addition to in-depth analysis of supporting documentation. In fact, on some of the grants reviewed, technical staff calculated cost-benefits of proposed pollutant reductions, assessed timing of parcel takes on right-of-way project components, and considered traffic conditions. Moreover, OCTA assisted local jurisdictions with application elements and helped ensure complete local documentation was submitted to afford the local governments the best opportunity to receive needed funds.

Grant Disbursement Process was Appropriate

While disbursement methods varied across the different types of M2 grants, OCTA processes employed on grants reviewed were appropriate. For instance, once awarded a grant under Projects O and P related to street and road projects, OCTA advanced 75 percent of grant funds at the beginning of the project and reimbursed the final 25 percent at project completion. A similar process was followed for Project X environmental grants, while the remaining project grants functioned on a reimbursement basis. Regardless of method employed, our review of several grant files showed solid protocols were employed to ensure costs were appropriate prior to disbursement. In addition to looking for adequate support and mathematical

accuracy of disbursements, we saw evidence of engineer review of overhead costs and potential ineligible costs prior to disbursement. Final payments were not made until after close out reports and applicable documentation were received.

Moreover, we found OCTA's grant disbursement practices to be similar to those at other entities we reviewed. For instance, at the San Francisco County Transportation Authority a two-tiered review by accounting staff and project staff is required before payment is released. Specifically, accounting staff were responsible for verifying the financial aspect of the reimbursement requests such as amounts not exceeding grant agreement, mathematical accuracy, or timeliness of request while project level staff validated the eligibility of the expense and ensured progress payment amounts commensurate with project progress. However, this extensive review was lengthy and often took longer than 30 days to process. Additionally, at the San Diego Association of Governments, staff performed detailed reviews of supporting documents submitted, verified agreement with grant terms, and ensured adequate progress as part of disbursements.

Monitoring of Local Grants was Sound and Aligned with Others

OCTA monitored its local grants through a variety of methods such as semi-annual reviews, annual expenditures reviews, and other periodic audits. These protocols ensured Ordinance requirements were met and status was available for project phase or activity, and were similar to processes at other entities we reviewed.

For instance, one critical monitoring activity occurred as part of OCTA's semi-annual review process where staff identified issues with grant spending or use of funds, tracked details of concerns, and resolved issues through early outreach and collaboration with the local jurisdictions. Using its internal OCFundtracker system, OCTA staff reviewed active local M2 funded projects for schedule reasonableness, continued viability, project changes, supporting documents, and potential issues with matching funding. Changes to scope had to be supported and costs increases exceeding 10 percent required an approved revised cost estimate. This review also looked at timely use of funds (within a three-year window) and worked with local entities to encourage and promote compliance with the Comprehensive Transportation Funding Program guidelines and provisions of the M2 Ordinance. Staff obtained expenditure statements to review local match, actual spending, and cash flow versus expected planned spending. These semi-annual reviews were presented to the Taxpayer Oversight Committee and Board for discussion and final approval.

Other monitoring occurred on local annual expenditures where locals submitted certified expenditure statements to OCTA and staff reviewed for consistency with past spending patterns. If costs seemed questionable or outside of typically expected ranges, OCTA staff worked with the locals to ensure accuracy of expenditures and categories of expenditures. Additionally, local eligibility was audited both by external entities and OCTA's Internal Auditor. On an annual basis, the Taxpayers Oversight Audit Subcommittee selected a sample of local jurisdictions receiving M2 funds and approved external agreed upon procedure reviews in areas such as funding, expenditures, maintenance of effort, and project activities.

Additionally, we found that OCTA's processes aligned with other similar entities using competitive grants to provide local funding where the entities conducted in-depth expenditure reviews ensuring costs agree with grant agreement terms, were reasonable, and fiscally sound. For instance, while the Maricopa Association

of Governments did not distribute its sales tax measure money through grants, staff reviewed congestion management plans, required progress reports, and supporting invoices. The San Diego Association of Governments also had a strong and similar process for monitoring grants related to bicycle and pedestrian projects, environmental, and senior transit including activities to ensure grant funding disbursements were efficient and meeting goals of their local measures. While other entities included one or more similar practices, OCTA implemented each of the practices shown in Exhibit 26.

EXHIBIT 26. COMPARISON OF OCTA LOCAL GRANT PRACTICES WITH OTHER SIMILAR ENTITIES

Practice	OCTA	SANDAG	SFCTA	MAG	RTA
Components of Measure	• Local Formula • Grants for signals, transit, and environmental.	• Local Formula • Grants for transit, environmental, and bike.	• Local Formula but requires formal application.	• Local Formula • Formal Application for streets and roads.	• Pre-determined Local Projects.
Strong selection process controls	Yes	Yes	Yes	Yes	Yes
Formal eligibility process looking at CMP and other project docs	Yes	N/A	No	Yes	No
In-depth Review of Disbursements	Yes	No for local formula Yes for grants	Yes	Yes	Yes
Frequency of Disbursements	Varied	Monthly	Quarterly	3x (initial, middle, final)	Monthly
Monitoring—including timely use of funds	Yes	Yes on grants, but informally on local streets via TIP	Yes	Yes	Yes
Semi-Annual Reviews looking at scheduling, budget, spending, etc.	Yes	No	No	No	No
In-depth expenditure reporting process	Yes	Partial	Yes	Yes	No

Source: Grant project files tested as part of OCTA Triennial Performance Assessment; performance audits conducted at SANDAG, MAG, and RTA; and SFCTA consulting engagement.

Recommendations

To enhance compliance with the Ordinance, OCTA could consider the following:

6. Include additional links, where appropriate, to underlying support documentation to validate compliance efforts and activities tracked and evaluated in the Program Management Office's Compliance Matrix.

Chapter 5: OCTA's Sound Fiscal Practices Helped Mitigate Risks Associated with Rising Construction Costs and Decreased Sales Tax Revenue

To deliver the freeway and transit projects outlined in M2 Ordinance and Transportation Investment Plan by 2041, OCTA must effectively manage Measure M2 funds, leverage those local funds with additional state and federal dollars, and carefully program financial resources over the life of the M2 Program. In general, we found that OCTA had sound fiscal practices in place during our assessment period and employed a careful and conservative approach when planning and programming funds to deliver projects. As a result, OCTA appeared to be on track to complete the M2 freeway and transit projects despite a significant reduction in forecasted sales tax collections largely resulting from the Great Recession.

While M2 sales tax collections were initially forecasted to bring in approximately $24.3 billion, the most recent estimates forecasted total sales tax collections will be closer to $13.1 billion—a reduction of 46.1 percent—and was similar to those of other transportation agencies with similar half-cent sales tax measures, driven largely by the Great Recession. Despite the reduction, OCTA's methodology for forecasting sales tax collections was reasonably sound and the agency took additional and appropriate steps to improve the short term accuracy of forecasts.

OCTA developed a planning and programming process that began at the individual project level before being aggregated into the overall M2 Program. Similar to peer agencies, OCTA's cash flow planning focused on projects in the near term; but unlike peers, OCTA gave more consideration to planning for projects that will be delivered towards the end of the M2 timeframe. Sales tax revenues, other state and federal funding, and debt obligations resulting from the issuance of sales tax revenue bonds were allocated to individual projects regardless of when they were scheduled to begin. Combined with current delivery dates for capital projects planned for completion at least 5 years before the measure ends, the protocols provided some flexibility for OCTA should they encounter project-specific overruns in the future.

Moreover, OCTA's conservative and careful approach to cash flow planning and programming helped mitigate the impact of the decline in forecasted sales tax revenue. While the M2 Ordinance balanced estimated project costs with forecasted sales tax revenue, OCTA effectively leveraged local sales tax dollars with additional state and federal funds to make up for the decline in revenues. Since M2 collections began in 2011, OCTA secured additional $0.61 in state and federal funding for every $1.00 of M2 funds spent program-wide.[22] Going forward, current cash flow projections assumed OCTA will only need to leverage state and federal funds at a rate of $0.30 for every $1.00 in M2 funds to complete all projects promised—which was more than reasonable given historical performance. Further, recent cash flow planning included contingency reserves to help guard against potential construction cost increases over the next several years without impacting projects scheduled beyond 2026.

While the Ordinance indicated that pay-as-you-go was the preferred method for financing M2 projects, it did allow for debt secured by future sales tax revenue collections. Consistent with that a pay as-you-go

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[22] Measure M2 funds included sales tax collections and funds raised through the issuance of bonds secured by sales tax revenues.

approach, however, OCTA issued relatively little debt to date when compared with peer agencies— some of which chose to take on high levels of debt to complete projects early, while relying on sales tax revenues to rise over time to provide cash flow in future years. As a result, OCTA's debt service coverage ratios were well above the 1.3x minimum set by the OCTA Board and remained relatively stable year-to-year. Going forward, OCTA has seven bond issuances planned between Fiscal Year 2018-2019 and Fiscal Year 2033-2034. While this will significantly increase OCTA's debt service obligations, the agency's plan showed ample room to meet these obligations even if sales tax revenues slightly stagnate.

Projections Indicated Sales Tax Collections will be Significantly less than $24.3 Billion Initially Forecasted

In 2005, the initial forecast for Measure M2 projected that the measure would generate $24.3 billion between Fiscal Years 2010-2011 and 2040-2041.[23] Subsequent forecast updates lowered the estimated total collections—in 2012, the forecasted total was $15.5 billion and, by 2016, the forecast total had fallen to $14.2 billion. As shown in Exhibit 27, the most recent forecasts in 2018 suggested that M2 will bring in $13.1 billion over its 30-year life.[24] The 2018 forecast is 46.1 percent lower than the initial 2005 forecast.

EXHIBIT 27. SALES TAX COLLECTIONS AND FORECASTS
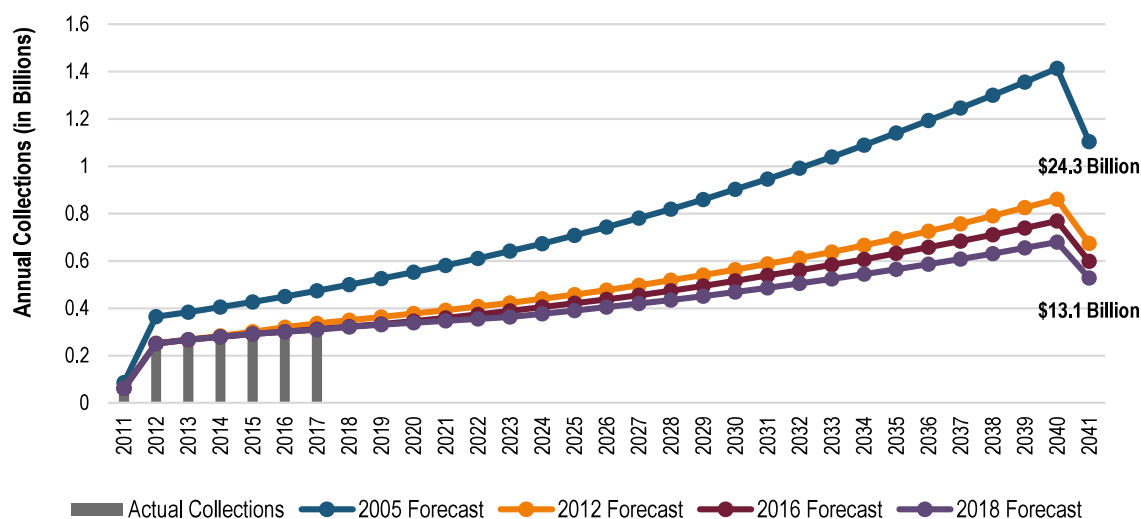
Source: OCTA forecast data.

While this represented a significant reduction in forecasted revenues, the decrease was not spread evenly over the life of M2. As shown in Exhibit 28, the largest changes in forecasted revenue happen over the final ten years of the M2 Program.

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[23] The fiscal year runs from July 1 through June 30.

[24] The 2018 updated forecast Includes actual collections through the end of Fiscal Year 2017-2018.

EXHIBIT 28. FORECASTED M2 SALES TAX REVENUES BY PERIOD

Forecast Period	2005 Forecast	2018 Forecast	$ Difference	Percent Difference
FY 2010-2011 to FY 2019-2020	$4,167,436,341	$2,748,904,179	$1,418,532,162	34.0%
FY 2020-2021 to FY 2029-2030	$7,316,694,338	$4,009,097,083	$3,307,597,255	45.2%
FY 2030-2031 to FY 2040-2041	$12,815,740,672	$6,310,177,585	$6,505,563,087	50.8%
Total	$24,299,871,351	$13,068,178,847	$11,231,692,504	46.2%

Source: OCTA forecast data.

The amount of sales tax collected each year was independent of the actions of transportation agencies, including OCTA. These entities had no direct or indirect control over the amount collected, which was largely determined by economic conditions and individual consumer behavior. As a result, transportation sales tax revenues can be especially volatile during economic downturns. Starting in 2008, the economy entered a period of economic downturn, now known as the Great Recession, which had a significant impact on all sales tax measures, including those enacted to fund transportation programs. For example, statewide sales tax receipts fell by 17.6 percent between 2008 and 2010. The Great Recession also had a significant impact on forecasted long-term revenues because, when forecasting revenue collections 30 years into the future, small changes to growth projections in the first few years have a disproportionate impact on the revenues projected at the end of the collection period.

Sales Tax Reductions were Not Unlike Other Similar Entities, although OCTA Implemented Appropriate Safeguards

Like OCTA, transportation agencies that enacted or renewed sales tax measures in the early 2000s experienced similar declines in forecasted revenue. To analyze these results, we compared OCTA to certain other regional entities that (1) enacted or renewed transportation sales tax measure between 2003 and 2005, (2) estimated total revenue from sales tax collections at the time of renewal, and (3) revised or updated their revenue forecasts since the end of the Great Recession. The agencies that we reviewed meeting this criteria included:

- San Diego Association of Governments in San Diego, CA
- Maricopa Association of Governments in Phoenix, AZ
- Regional Transportation Authority in Tucson, AZ

As shown in Exhibit 29, all four agencies experienced significant declines in forecasted sales tax revenues due to the impact of the Great Recession. Further, the change in projected revenue roughly correlated with the length of the sales tax measures—OCTA's decline in forecasted revenues was greater than the 20-year measures passed by the Maricopa Association of Governments and Regional Transportation Authority, but not as severe as what the San Diego Association of Governments projected for its 40-year measure.

Peer Agencies	Sales Tax Measure	Measure Passed	Duration	Initial Forecast Year	Forecast Updated	Initial Forecast (YOE $)	Current Forecast (YOE $)[1]	Variance
Maricopa Association of Governments, Phoenix, AZ	Proposition 400	2006	20 Years	2004	2017	$14.3 B	$8.6 B	-39.9%
Regional Transportation Authority, Tuscon, AZ	RTA Plan	2007	20 Years	2005	2013	$2.5 B	$1.7 B	-32.0%
San Diego Association of Governments, San Diego, CA[2]	TransNet	2006	40 Years	2003	2017	$39.0 B	$19.2 B	-50.8%
OCTA	**M2**	**2006**	**30 Years**	**2005**	**2018**	**$24.3 B**	**$13.1 B**	**-46.1%**

Source: Generated from data provided by OCTA; peer data obtained from publicly-available information posted on each agency's website.

Notes: [1]Based on the most recent publicly-released forecast. [2] SANDAG had a forecasting error that was introduced after the initial revenue forecast and resulted in forecasts that were higher than the original estimates. Neither forecast included in the Exhibit were impacted by the forecasting error.

Forecast Methodology was Generally Sound and OCTA made Appropriate Revisions to Increase Forecast Accuracy

While the decline in forecasted revenues was reasonably attributable to the Great Recession, we scrutinized the forecasting models used by OCTA to determine whether the process employed by OCTA produced reasonably accurate short- and long-term forecasts. Ultimately, the forecasting process employed by OCTA was sound and followed many forecasting best practices—specifically, OCTA used growth forecasts produced by nationally-known third parties, attempted to account for uncertainty by blending those forecasts together, used the forecast to evaluate various cash flow scenarios, and continually evaluated forecast methodology by comparing forecasts to actual results.

Since the inception of the initial Measure M in 1991, OCTA relied on revenue forecasts produced by external third parties. For more than a decade, OCTA used forecasts produced by three local universities—Chapman University, California State University Fullerton, and University of California, Los Angeles Anderson School of Management. All three universities were regionally and nationally-known for their economic forecasts, which were used by a variety of private and public entities. OCTA took the three forecasts and combined them into a single blended growth rate, providing an average of future economic growth.

As shown in Exhibit 30, the blended average rate produced variances from actual collections ranging from 0.2 percent less than actuals to 14 percent more than actuals. The blended growth rate was presented to the OCTA Board of Directors for approval and also served as a baseline when evaluating alternative economic scenarios.

Fiscal Year	Chapman	UCLA	CSUF	Blended Forecast Rate	Actual Rate	Variance Over/(Under)
2005	5.3%	1.8%	5.9%	4.4%	5.6%	(1.2%)
2006	4.2%	4.5%	5.9%	4.9%	8.0%	(3.1%)
2007	4.2%	5.2%	5.2%	4.9%	1.0%	3.9%
2008	5.9%	6.1%	5.1%	5.7%	-3.2%	8.9%
2009	1.8%	-1.3%	1.7%	0.7%	-13.3%	14.0%
2010	-1.1%	-0.3%	-1.3%	-0.9%	-3.6%	2.7%
2011	5.1%	8.2%	4.9%	6.1%	6.5%	(0.4%)
2012	6.8%	4.8%	6.5%	6.0%	6.2%	(0.2%)
2013	6.2%	7.2%	3.3%	5.6%	6.2%	(0.6%)
2014	6.1%	6.2%	7.4%	6.6%	4.8%	1.8%
2015	6.3%	9.1%	7.9%	7.8%	4.3%	3.5%
2016	5.7%	6.5%	8.0%	6.7%	3.3%	3.4%

Source: Generated from OCTA's March 28, 2016 Report to the Finance and Administration Committee.

To address concerns over the accuracy of forecasts, OCTA staff re-evaluated their forecast methodology in 2016. As part of the process, OCTA compared the forecasts produced by a variety of universities and nationally-known firms to actual growth rates and sales tax collections. In March 2016, staff recommended the Board adopt a forecast produced by MuniServices, LLC which regularly produced shorter-term 5-year forecasts for clients as opposed to forecasting revenues over a longer term such as the remaining life of M2.

When looking at a comparison of past MuniServices' forecasts against actual collections, the MuniServices forecast was closer to actual collections than the blended forecasts produced by the three universities. As shown in Exhibit 31, a 2012 forecast produced by MuniServices was within 1 percentage point of the actual growth rate in sales tax revenue over the last four fiscal years. In comparison, the blended forecast growth rate used by OCTA was off by as much as 3.5 percentage points over the same period. From Fiscal Year 2015-2016 forward, OCTA's sales tax revenue forecast will use MuniServices for the first 5 years of projections and the average of the blended university forecasts over the remaining life of M2 collections.

EXHIBIT 31. MUNISERVICES 2012 GROWTH FORECAST COMPARED TO OCTA BLENDED RATE GROWTH FORECAST AND ACTUAL GROWTH RATE

Fiscal Year	2012 MuniServices Forecast	OCTA Blended Forecast Rate	Actual Growth Rate	MuniServices Variance	OCTA Blended Variance
2013	7.1%	5.6%	6.2%	0.9%	(0.6%)
2014	4.7%	6.6%	4.8%	(0.1%)	1.8%
2015	4.3%	7.8%	4.3%	0.0%	3.5%
2016	3.5%	6.7%	3.3%	0.2%	3.4%

Source: Reproduced from OCTA's March 28, 2018 Report to the Finance and Administration Committee.

OCTA's ability to Leverage M2 Sales Tax Dollars with Additional State and Federal Funding Helped Mitigate the Impact of the Decline in Sales Tax Revenue

When the Ordinance was passed in 2006, the spending plan did not include revenues from state or federal sources. OCTA's Finance and Administration Division indicated they did not initially expect to leverage sales tax funds with other state and federal funding, and took a conservative approach to financial planning. This conservative approach shielded OCTA from much of the impact of the Great Recession. Not only was OCTA able to offset the decline in forecasted revenues through leveraging of M2 revenues with external state and federal funding, it also advanced projects to take advantage of a favorable cost environment.

External Funds were Leveraged

While initial forecasts estimated sales tax collections would total roughly $3.1 billion between Fiscal Year 2010-2011 and Fiscal Year 2017-2018 and actual collections totaled approximately $2.1 billion, OCTA has more than offset the difference through securing approximately $1.5 billion from federal, state, and other local sources as shown in Exhibit 32. This external funding resulted in a leverage ratio of 1:0.61 program-wide; that is, for every $1 in M2 funding, OCTA secured $0.61 from state, federal, and other local sources.[25] These results were similar when focused solely on the capital projects within the freeway program—the largest component of the M2 Ordinance. For the freeway program, OCTA leveraged M2 funds at a rate of 1:0.62 between Fiscal Year 2010-2011 and Fiscal Year 2017-2018; for every $1 in M2 funding allocated to the freeway program, OCTA secured a $0.62 from these external local sources.[26]

EXHIBIT 32. ACTUAL M2 PROGRAM SOURCES OF FUNDS, FISCAL YEAR 2010-2011 THROUGH FISCAL YEAR 2017-2018

Overall Program

Bond Proceeds $269.8
Interest $49.0
Sales Tax Revenue $2,080.7
Local, State, & Federal Funding $1,456.5

- 54% Sales Tax Revenue
- 38% Local, State, & Federal Funding
- 1% Interest
- 7% Bond Proceeds

Freeway Program

Bond Proceeds $95.4
Interest $17.6
Sales Tax Revenue $849.5
Local, State, & Federal Funding $601.2

- 54 % Sales Tax Revenue
- 39% Local, State, & Federal Funding
- 1% Interest
- 6% Bond Proceeds
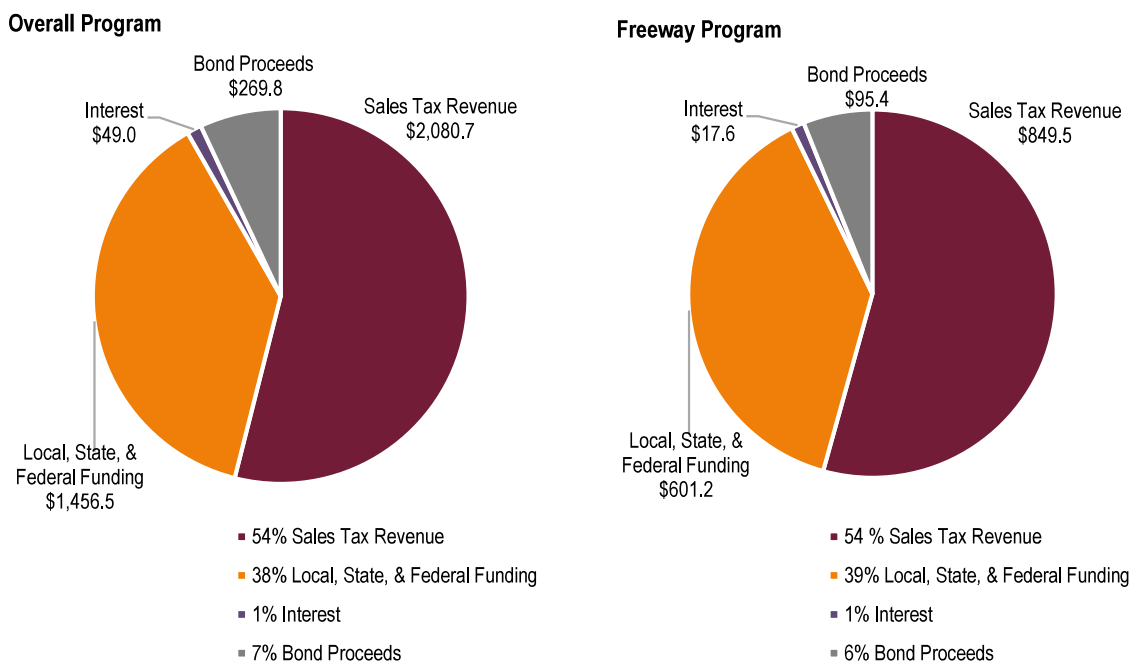
Source: OCTA cash flow data.
Note: Dollar values shown in millions.

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[25] External Funding $1,456.5 million/Sales Tax, Bond Proceeds, and Interest ($2,080.7 million + $269.8 million +$49 million = $0.61 or 1:0.61
[26] External Funding $601.2 million/Sales Tax, Bond Proceeds, and Interest ($849.5 million + $95.4 million +$17.6 million) = $0.62 or 1:0.62.

Assumptions for Future Funding and Leveraged Funds Projections were Reasonable

As shown in Exhibit 33, OCTA's most recent cash flow planning documents included external funding for Fiscal Year 2018-2019 through Fiscal Year 2040-2041 totaling roughly $1.8 billion within the freeway program and roughly $2.1 billion for the M2 Program as a whole. External funding within the freeway program accounts for 22 percent of the roughly $8 billion in planned revenue over the remaining period of Measure M2, and 14 percent of the $14.8 billion in total planned M2 Program revenues. Meeting those totals would require OCTA to leverage Freeway program funds at a rate of 1:0.30, raising $0.30 in external funding for every $1 dollar of projected M2 funding; for the M2 Program as a whole, the planned leveraging ratio is 1:0.23—for every $1 dollar of M2 funding, OCTA expects to secure $0.23 in external funding from federal, state, and other local sources.

EXHIBIT 33. ESTIMATED M2 FREEWAY PROGRAM FUTURE SOURCES OF FUNDS, FISCAL YEAR 2018-2019 THROUGH FISCAL YEAR 2040-2041
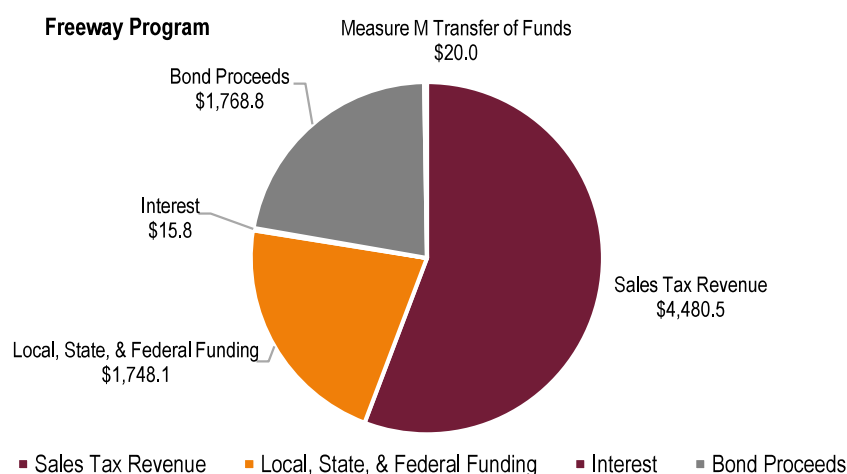
Source: OCTA cash flow data.
Note: $ in millions.

Most of the future external funding expected was anticipated from the following state and federal formula funds, block grants, and project-specific awards—all historically stable funding sources with amounts that can reasonably be estimated and programmed for projects in the near term:

- **State Transportation Improvement Program**: From this multi-year capital improvement program funded by the State, State Transportation Improvement Program funds are programmed on a two-year cycle, releasing fund estimates in Year 1 and formally adopted by the California Transportation Commission in Year 2. Thus, funds are programmed every other year for a 5-year period.

- **Surface Transportation Block Grant Program**: This program provides funds to the State pursuant to U.S. Code which are allocated to local transportation agencies through the Regional Surface Transportation Program in proportion to their relative shares of the State's population.

- **Congestion Mitigation and Air Quality Improvement Program**: This program provides funding for surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief. Funds are distributed through an established funding formula.

- **Senate Bill 1, The Road Repair and Accountability Act of 2017**:
Recently passed and withstanding a voter-attempted recall in 2018, Senate Bill 1 increased several gasoline and transportation-related taxes and fees to create new revenue sources for transportation infrastructure including both formula and competitive funding elements.

- **Miscellaneous Other State/Federal Funds**: Several other funding sources are available. For instance, the State Highway Operation and Protection Program provides funding for the rehabilitation and reconstruction of state highways and bridges, including the supporting infrastructure, Caltrans districts work with Regional Transportation Planning Agencies throughout the State—such as OCTA—to determine projects eligible for funding.

In addition, the majority of external funding included in OCTA's cash flows was programmed as part of the "Next 10" delivery plan. As shown in Exhibit 34, current cash flows from 2018 included approximately $10 million per year in projected, but not programmed, external funding from Fiscal Year 2021-2022 through Fiscal Year 2035-2036.

EXHIBIT 34. PROGRAMMED AND PROJECTED STATE AND FEDERAL FUNDING BY FISCAL YEAR
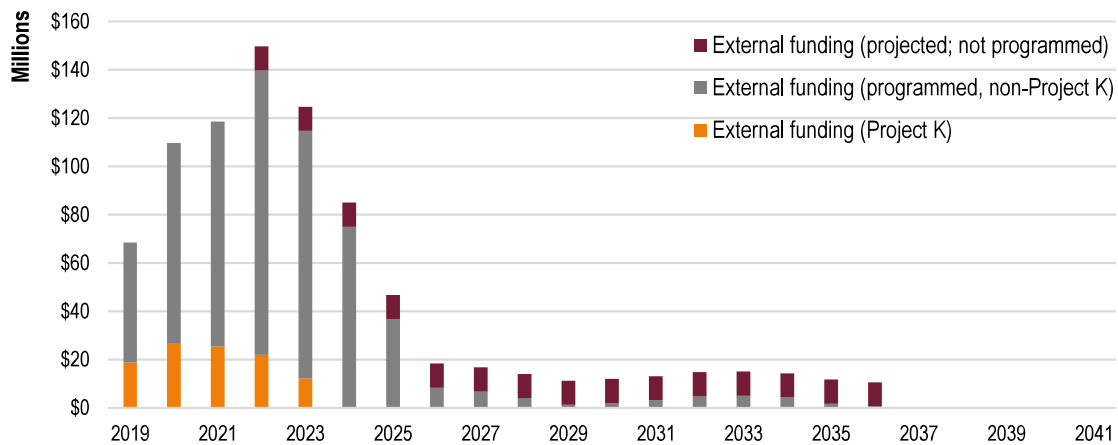
Source: OCTA cash flow data.
Note: Project K refers to the I-405 San Diego Freeway Design-Build Project. Fiscal Year 2019=7/1/2018 to 6/30/2019, etc.

Assumptions about future external funding sources and amounts reflected in OCTA's cash flow planning over the past several years appeared reasonable based on both the assumed external funding from identified, stable funding sources that were already programmed or were reasonably estimated as well as historic leveraging of state, federal, and other local funds between Fiscal Year 2010-2011 and Fiscal Year 2017-2018 that was projected, but not programmed. Moreover, this external funding included in OCTA's cash flows was reasonable and consistent with OCTA's general approach to planning—and likely a conservative estimate of future external funding.

Project-Level Cash Flow Planning Allowed OCTA to Focus on Both Immediate and Long Term Financing Needs

OCTA's ability to deliver the M2 Program depends in large part on the success of the agency's planning efforts—not only does OCTA have to ensure it has the revenue to meet project costs, but it also must coordinate funding streams and project resources to ensure that the M2 Program can be completed by 2041. As part of our performance assessment, we found OCTA's planning process was effective in connecting detailed project-level revenues and expenses to program level totals, focused on projects to be completed in the near-term while also programming projects over the life of Measure M2, and took a generally-conservative approach when estimating future revenues and expenses.

Annually, OCTA conducted M2 cash flow planning as part of the Comprehensive Business Plan process and included results in the Next 10 delivery plans when adopted or updated. The process included updates to sales tax revenue forecasts, external funding assumptions and amounts, investment strategies and projected rates-of-return on investments, project cost assumptions, and project delivery timelines. Throughout the process, OCTA took a conservative approach to external funding assumptions and amounts. The majority of external funding assumed in the cash flow plan was from stable sources that were either programmed or reasonably estimated in the short term. When projected, but not programmed, external funding was included in cash flows, such as funding from the State Transportation Improvement Plan, OCTA's estimated funding amounts were consistent with, and typically less than, amounts historically received in the past.

Over the life of Measure M2, OCTA used this planning process to appropriately assess a variety of risks to program delivery. For instance, in the aftermath of the Great Recession, OCTA developed a scenario where sales tax collections amounted to just 85 percent of current forecasts. More recently, OCTA prepared alternative cash flows in the event that voters overturned Senate Bill 1, potentially impacting the timing of external funding from the state. As a result of OCTA's planning process, it reasonably projected cash flows meeting project needs while still providing flexibility for OCTA to respond to emerging issues. Current cash flows were based on the assumption that all projects will be delivered well ahead of the end of Measure M2 in 2041, and staff built in program-level contingencies to guard against potential increases in construction costs as much as can be reasonably expected at this juncture in the Measure M2 lifecycle. The ability to include such contingencies, while maintaining a conservative approach, reflects positively on the planning process employed by OCTA.

OCTA Took a Conservative Approach When Issuing Debt

In November 2010, the OCTA Board of Directors adopted a comprehensive debt management policy allowing the issuance of debt to help fulfill OCTA's mission to enhance the quality of life in Orange County by delivering safer, faster, and more efficient transportation solutions. While the policy stated that pay-as-you-go was the preferred method of financing, it also allowed OCTA to use bond financing as an alternative if the scope of expenditures made pay-as-you-go unfeasible. As such, we found OCTA took a conservative debt approach and issued very little debt when compared to others.

Specifically, consistent with the preference for pay-as-you-go expressed in the ordinance, OCTA issued just two bond series secured by M2 sales tax revenue as depicted in Exhibit 35. In 2010, OCTA issued taxable municipal Build America Bonds featuring tax credits and/or federal subsidies for bondholders as part of the American Reinvestment and Recovery Act. The bonds allowed OCTA to advance projects and take advantage of the favorable construction cost environment that emerged at the tail end of the Great Recession.

EXHIBIT 35. OCTA's BOND ISSUANCES TO DATE

Year Issued	Description	Secured By	Annual Debt Service	Total Issued
2010	Build America Bonds, Series A	M2 Sales Tax Revenues	$13,409,389	$293,540,000
2010	Build America Bonds, Series B	M2 Sales Tax Revenues	$8,913,100	$59,030,000

Source: OCTA Bond data.

Like OCTA, many peer transportation agencies issued debt secured by future sales tax revenues to fund their capital improvement programs as well as shown in Exhibit 36. For instance, the Riverside County Transportation Committee issued significantly more debt than OCTA and with a much smaller sales tax base. Similarly, the San Diego Association of Governments decided to issue significant debt early in the life of their 40-year transportation program; however, the San Diego Association of Governments will transition to a pay-as-you-go model in the early 2020s, relying on rising future sales tax revenues to provide funds for projects while still meeting their considerable debt obligations. However, not all transportation agencies relied on debt financing—the Maricopa Association of Governments), with a larger sales tax base than OCTA, used the pay-as-you-go approach to fund their capital improvement program.

EXHIBIT 36. OCTA DEBT SECURED BY SALES TAX REVENUE COMPARED TO OTHER SIMILAR ENTITIES

Agency	Program Duration	Financing Method	Budgeted Sales Tax Revenue for Fiscal Year 2017-2018	Annual Debt Service	Outstanding Debt
Riverside County Transportation Committee, Riverside, CA	9th year of 30-year program	Debt	$187.0 M	$96.6 M	$878.9 M
San Diego Association of Governments, San Diego, CA	10th Year of 40-year program	Debt (2008-2021) Pay-go (2022-2048)	$292.1 M	$105.3 M	$2,263.2 M
Regional Transportation Authority, Tucson, AZ	13th year of 20-year program	Debt	$88.2 M	$17.4 M	$248.2 M
Maricopa Association of Governments, Phoenix, AZ	12th year of 20-year program	Pay-go	$458.6 M	N/A	N/A
OCTA	**7th year of 30-year program**	**Debt**	**$316.5 M**	**$44.4 M**	**$310.2 M**

Source: Generated from data provided by OCTA. Other entity data obtained from budget documents and publicly-available information posted on each agency's website.

How an entity approached funding capital programs (pay-as-you-go vs. debt) and timing of debt (whether consistent over the life of the program or taking on large debt early in the program) was heavily influenced by the structure of each entity's capital transportation improvement program and the specific commitments made to voters and residents. OCTA's approach to debt was consistent with the preference for pay-as-you-go expressed in the Ordinance and OCTA's generally conservative approach to cash flow planning.

OCTA will Significantly Increase its Bonding Activity Starting in Fiscal Year 2018-2019

Over the remaining life of Measure M2, OCTA has programmed seven additional bond issuances in its 2018 cash flow plans that are expected to raise an additional $1.77 billion between Fiscal Years 2018-2019 and 2040-2041. Five of those bond issuances are planned to occur every other year between Fiscal Year 2018-2019 and Fiscal Year 2026-2027 to provide needed cash flow for several capital construction projects. All planned bond issuance shown in Exhibit 37 will be secured by M2 sales tax revenues.

EXHIBIT 37. OCTA's PLANNED BOND ISSUANCES

Year of Planned Issuance	Secured By	Bond Proceeds (in Millions)
2019	M2 Sales Tax Revenues	$348.8
2021	M2 Sales Tax Revenues	$398.6
2023	M2 Sales Tax Revenues	$199.3
2025	M2 Sales Tax Revenues	$224.2
2027	M2 Sales Tax Revenues	$224.2
2032	M2 Sales Tax Revenues	$274.0
2034	M2 Sales Tax Revenues	$99.7
	Total:	$1,768.8

Source: OCTA Cash flow data.

OCTA's Debt Service Coverage Met Board Requirements and Appeared Sufficient to Meet Future Repayment Obligations

Board policy required OCTA to maintain a debt service coverage ratio of 1.3—meaning projected sales tax revenues should be 1.3 times greater than debt service obligations each year over the life of Measure M2. As shown in Exhibit 38, revenues were projected to be significantly higher than planned debt service over the remaining life of Measure M2. Based on OCTA's cash flows, debt service coverage for the M2 Program is expected to be 3 times or greater in each year between Fiscal Year 2018-2019 and Fiscal Year 2040-2041 with projected annual sales tax revenues estimated at three times higher than the annual amounts owed on OCTA's bond debt.

EXHIBIT 38. M2 ANNUAL PROJECTED SALES TAX REVENUE AND DEBT SERVICES, FISCAL YEAR 2018-2019 THROUGH FISCAL YEAR 2040-2041
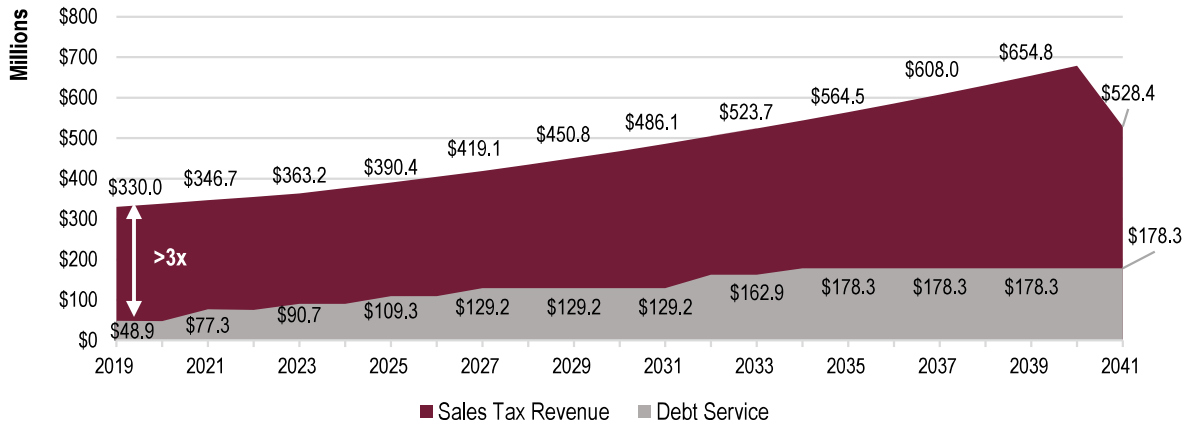
Source: Cash flows provided by OCTA.

Within the M2 Program, the majority of bond proceeds were anticipated to fund the freeway capital construction projects because the other M2 Program areas, including environmental mitigation and funding for local streets and roads, can be scaled to match available revenues. While the majority of bond funds will be directed to the freeway program, bonds issued by OCTA will be secured by all M2 sales tax revenues, not just the portion of revenues allocated to the freeway program. Current cash flow projections show that 91 percent of the more than $2 billion in expected bond proceeds will be allocated to the freeway program, while debt service was expected to account for 87 percent of total M2 debt service costs.

Exhibit 39 shows forecasted sales tax revenues and debt service expenses just for the freeway program within M2. While debt service coverage for the freeway program was only projected to be 1.9x in total between Fiscal Year 2010-2011 and Fiscal Year 2040-2041, that coverage was still well within the 1.3x required by Board policy.

EXHIBIT 39. FREEWAY PROGRAM PROJECTED SALES TAX REVENUE AND DEBT SERVICE, FISCAL 2018-2019 THROUGH FISCAL YEAR 2040-2041
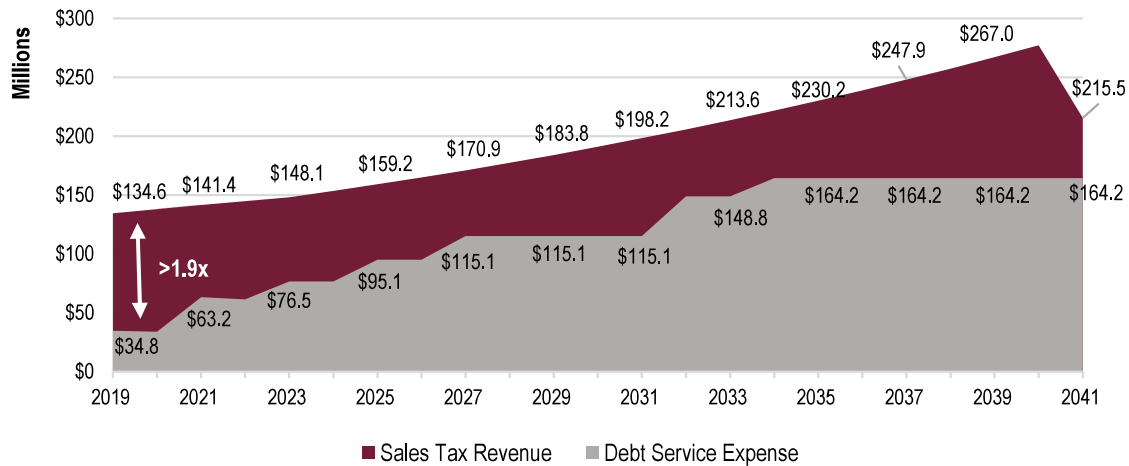
Source: Cash flows provided by OCTA.

Although increased bonding activity between Fiscal Year 2018-2019 and Fiscal Year 2033-2034 will move OCTA further away from its preference for pay-as-you-go to fund projects, debt service was structured in an appropriate manner that should continue to provide positive cash flow from sales tax revenues each year within the freeway program while also minimizing the risk that debt service for the freeway program will impact other program areas.

Investment Practices Balanced Security with Rate of Return for Cash Flow Needs

In order to deliver the promised M2 projects, OCTA needs adequate revenues at the appropriate time to coincide with project expenses. To that end, OCTA invested funds to preserve capital and provide necessary cash flows with a goal of achieving a market-average rate of return on invested funds. OCTA's investment activities were guided by a Board-adopted investment policy.

The investment policy established portfolio limits for various investment instruments. As shown in Exhibit 40, OCTA's investment portfolio was consistent with the maximum percentages outlined in the investment policy as of October 31, 2018.

EXHIBIT 40. OCTA INVESTMENT PORTFOLIO, AS OF OCTOBER 31, 2018

Investment Instruments	Dollar Amount Invested	Percent of Portfolio	Investment Policy Maximum
U.S. Treasuries	$579,074,619	37.3%	100%
Medium Term Maturity Corporate Securities	$340,858,918	22.0%	30%
Federal Agencies & U.S. Government Sponsored-	$188,145,920	12.1%	100%
Mortgage and Asset-backed Securities	$159,156,459	10.3%	20%
Money Market Funds & Mutual Funds	$101,524,818	6.5%	20%
State of California & Local Agencies	$40,922,800	2.6%	25%
Variable & Floating Rate Securities	$39,009,707	2.5%	30%
Commercial Paper	$38,529,892	2.5%	25%
Negotiable Certificates of Deposit	$25,000,000	1.6%	30%
Orange County Investment Pool (OCIP)	$17,795,270	1.1%	$40 Million
Local Agency Investment Fund (LAIF)	$10,480,795	0.7%	$40 Million
Repurchase Agreements	$9,476,363	0.6%	75%
Bank Deposits	$807,525	0.1%	5%
Total (including instruments not shown)	**$1,550,510,086**	**100.0%**	

Source: OCTA Monthly Report to the Finance and Administration Committee, October 31, 2018. Actual balance is $1,551,203,087 that includes other instruments not shown in the list.

On a monthly basis, OCTA prepared and presented a report to the Finance and Administration Committee detailing the current investment portfolio, performance relative to benchmarks, and compliance with Board policy. In addition to presenting portfolio information, the monthly report detailed both the liquid portfolio, which was used to meet immediate cash needs, and the short-term portfolio which included investments maturing over the next 5 years to meet project funding needs.

To manage its short-term portfolio, OCTA used four external investment firms—Logan Circle Partners, Chandler Asset Management, Payden and Rygel Investment Council, and Public Financial Management. Board policy stated that OCTA's portfolio shall be designed to attain a market-average rate of return with rates of return compared against four nationally-recognized benchmarks. Over the past three fiscal years, the funds managed by the four investment firms achieved rates-of-return consistent with these benchmarks. Further, OCTA's investment program was consistent with the investment policy established by the Board with investments that were within policy's percentage limits and rates of return that were within the established benchmarks. In addition, detailed monthly reporting to the Finance and Administration Committee ensured that decision-makers were provided timely, accurate information with respect to OCTA's investment program.

Construction Cost Increases Could Pose a Significant Future Risk to OCTA's Ability to Deliver the Promised M2 Freeway and Transit Projects

Since M2 collections began in 2011, OCTA saw significant changes in the construction cost environment. During the first several years of the M2 Program, the same factors that lead to the decline in revenue actually helped create a favorable cost environment with a large number of bidders competing for a relatively smaller number of projects and thereby reducing construction cost bid prices. Like OCTA, other entities reviewed chose to advance projects and issue Build America Bonds to take advantage of the favorable cost environment.

Beginning in 2013, however, the cost environment began to change rapidly. As shown in Exhibit 41, the growth in construction costs began to outpace the annual growth in sales tax revenue.[27] This trend continued through 2017, and if the trend continues into the future, it could create additional challenges to OCTA's ability to deliver the M2 Program.

EXHIBIT 41. HISTORIC SALES TAX AND CONSTRUCTION COST GROWTH RATES, FISCAL YEAR 2006-2007 THROUGH FISCAL YEAR 2017-2018
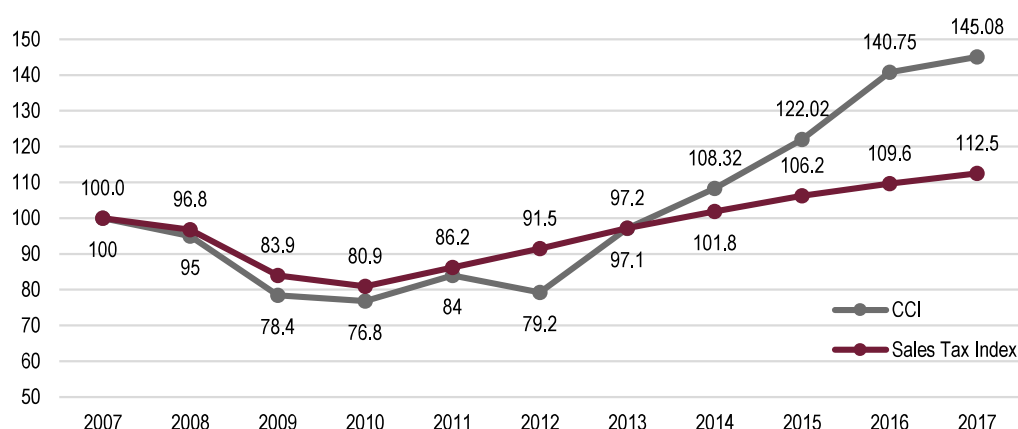
Source: Reproduced from OCTA's Updated Next 10 Delivery Plan.

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[27] Growth in construction costs was measured by the Caltrans Construction Cost Index (CCI).

In recognition of these risks and as part of OCTA's Next 10 Plan, OCTA commissioned a market conditions forecast and risk analysis from the Orange County Business Council. The analysis presented to the Executive Committee on September 7, 2017 identified the following seven risks to OCTA's ability to deliver the M2 Program—six of which related to the cost environment:

1. Sustained low unemployment
2. Increases in residential construction
3. Consolidation in the public works construction industry
4. Increases in interest rates
5. Neighboring county transportation construction programs
6. Construction wage pressure
7. Future recession

Further, four factors were identified as potentially significant near-term risks—namely, neighboring county transportation construction programs, construction wage pressure, sustained low unemployment, and increased residential construction demand. In light of these cost pressures, OCTA took reasonable steps to better account for and guard against potential increases in construction costs. First, the agency adopted a construction cost pressure index to track four near-term cost pressures including economic trends (captured through building permits and unemployment), material costs, wage pressures, and economic conditions.

As shown in Exhibit 42 OCTA expected larger cost fluctuations between 6 and 11 percent in 2018 and more reasonable fluctuations for 2019 and 2020 at 2 to 6 percent.

EXHIBIT 42. OCTA'S COST PRESSURE INDEX FORECAST

Year	Forecasted Range of Cost Fluctuation
2018	6%-11%
2019	2%-6%
2020	2%-6%

Source: Reproduced from OCTA's Next 10 Delivery Plan.

The index has the potential to be a valuable planning tool as long as OCTA is committed to regularly revisiting the model by comparing projections to actual cost fluctuations and making adjustments to its methodology as appropriate. While OCTA has no influence over the cost pressures themselves, the index can serve as an early warning indicator providing some advanced notice of potentially large increases that staff can begin to address before they materialize.

To guard against these potential increases, OCTA's staff included a line item expense for economic uncertainty in the most recent cash flow projection. According to the cash flow projection, the economic uncertainty expenses were set at roughly 11 percent of all freeway expenditures between Fiscal Year 2018-2019 and Fiscal Year 2027-2028 as shown in Exhibit 43.

EXHIBIT 43. FREEWAY PROGRAM CONTINGENCY RESERVES BY FISCAL YEAR
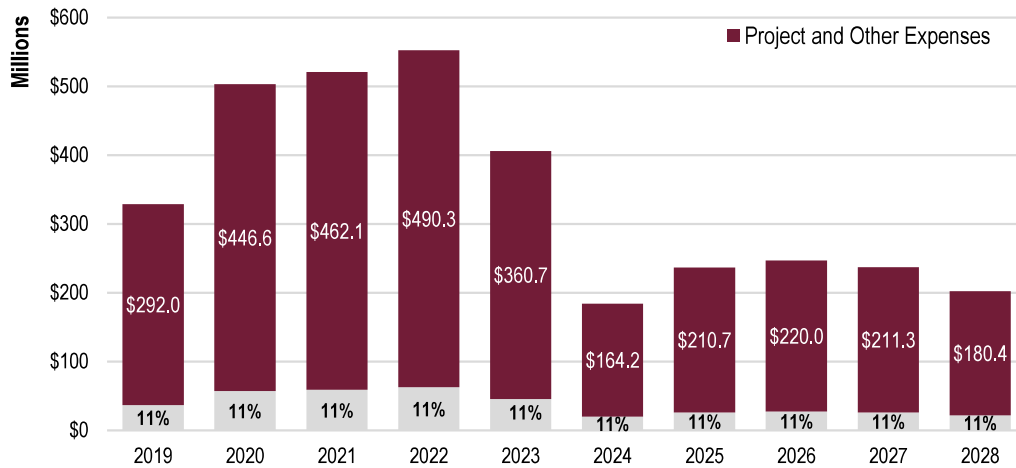
Source: OCTA Cash Flow Data. Fiscal Year 2019=6/30/2108 to 7/1/2019, etc.

While current construction cost trends pose a risk to OCTA's ability to deliver the M2 Program that is largely outside the agency's control, staff attempted to mitigate that risk in two ways. First, OCTA developed a construction cost pressure index to identify potential cost increases before they occur. Second, OCTA included freeway program-level reserves to guard against construction cost increases over the next ten years and help ensure OCTA remains on track to complete the M2 Program by Fiscal Year 2040-2041.

Recommendations

No recommendations.

Chapter 6: OCTA Was Transparent and Accountable to the Public

Transparency and accountability is paramount to OCTA's mission and culture in addition to being a critical measure of success of the M2 Program. As such, we found OCTA was highly focused on accountability to the promises made in the Ordinance and transparency in its outreach, actions, decisions, and data communicated to its Board, Taxpayer Oversight Committee, stakeholders, and general public.

Our review noted that OCTA effectively informed the general public and stakeholders about M2 Programs and projects through a variety of traditional methods. For instance, OCTA resourcefully utilized strategic outreach methods including website, subscriber email blasts and mailers, social media, videos, blogs, press releases, and various community events to inform and involve the public. Surveys and M2 rebranding efforts were regularly employed to gauge and enhance public awareness. Further, there seemed to be continuous effort to keep the community and stakeholders heavily involved including OCTA's use of the Taxpayer Oversight Committee in accordance with Ordinance provisions.

Outreach Efforts provided Access to Information and Key Staff

Throughout our discussions and document review, we found that OCTA staff were committed to being transparent and accountable to the public through regular collaboration of multiple divisions efficiently informing and involving the public through decisions and actions that were openly communicated. In particular, several divisions at OCTA—namely, the Project Management Office, External Affairs, Capital Projects, and Government Relations—were deeply involved with properly informing the public as follows:

- Program Management Office was the primary monitor for the M2 Program, and was responsible for timely updates to ensure information posted to the public is accurate and consistent.
- External Affairs Marketing Department was predominately responsible for engaging and promoting the new M2 branding—known as OC Go—with expertise in graphic design, copy write support, web development, and marketing strategy.
- External Affairs Capital Project Outreach Department functioned as OCTA representatives and community spokespersons for individual highway and rail projects. The Capital Project Outreach project managers and the Capital Programs Rail and Highway project managers worked together when developing and sharing project information with the public.
- A Public Information Officer was the official spokesperson for the Chief Executive Officer and the OCTA Board, and was used to communicate items or issues related to the M2 Program.

Together, these departments coordinated and provided access to information through a variety of methods such as quarterly and annual reports, signage, website, updates and informational pop-ups. For instance, Capital Projects Outreach staff within External Affairs were involved for all phases of highway and rail projects employing specific beginning-to-end community outreach campaigns for each project and participated in community meetings. As project spokespersons, staff were responsible for creating content relevant to assigned projects as developed from direct knowledge and data gathered during individual project development team meetings where External Affairs staff focused on securing data that was consistent, accurate, and current. Further, recognizing that the methods of communication for various

groups was fluid and differed between demographics, OCTA conducted regular surveys to better understand how to best target each market and how the public received M2 information.

Outreach Methods were Similar to Others

During our assessment period, OCTA informed the public about M2 Programs and projects using typical outreach methods used by other entities including website, social media, quarterly reports, factsheets, media publications, blogs, and other various methods as shown in Exhibit 44. OCTA staff were committed to delivering accurate and relevant information to the public and external stakeholders.

EXHIBIT 44. VARIOUS COMMUNICATION AND OUTREACH METHODS USED TO INFORM ON M2

Types of Communication and Outreach Methods	OCTA	SANDAG	SFCTA	MAG	RTA
Direct Mail	✓	Not able to locate on website			
Social Media—General	✓	✓	✓	✓	✓
Social Media—Project Specific	✓	✓		Not able to locate	Not able to locate
Facebook, Twitter, and Instagram	✓	✓	Note [1]	✓	Note [2]
YouTube Videos	✓	✓	✓	✓	✓
Advertising Signage	✓	✓	unknown	unknown	unknown
Email blasts to subscribers	✓	✓	✓	unknown	✓
Mobile Apps for real time traffic and detours	✓	✓	No	unknown	✓
Website- Projects Map	✓	✓	✓	✓	unknown
Press Release	✓	Not able to locate	✓	✓	✓
Website & Links to Social Media	✓	✓	✓	✓	✓
Newsletter	✓	Not able to locate	✓	✓	✓
Consistent Logo Specific to Sales Tax Measure	✓	✓			

Source: Individual websites for OCTA, SANDAG, SFCTA, MAG, and RTA viewed as of November 8, 2018.

Notes: [1] SFCTA did not use Instagram, but used Facebook and Twitter. [2] RTA primarily used Twitter.

Moreover, we found that OCTA seemed to use more personal face-to-face methods on a regular basis to enhance its outreach methods such as:

- Neighborhood door hangers
- Pop-up information booths in areas most effected by M2 projects
- Open houses and town halls
- Public meetings and neighborhood meetings
- Door-to-door business visits

In fact, having personal interactions with stakeholders and the public were important tenets of the M2 outreach strategy. As part of the I-405 Improvement Project, staff met with and held town halls with stakeholder groups—such as the Greater Irvine Chamber representing 800 business members and 70,000

employees—to coordinate efforts and ensure that surrounding businesses and organizations were aware of current and upcoming projects. In addition, the External Affairs Capital Projects team implemented a plan to visit 1,400 business located within the vicinity to meet, educate, and form strategic partnerships for open communication with parties potentially affected by the I-405 Improvement Project.

Additionally, as part of its 2014 Long Range Transportation Plan public improvement program and Renewed Measure M Comprehensive Ten-Year Review issued in 2015, OCTA sought to inform and educate the public about transportation improvements with the M2 Plan through infographics highlighting projects and major milestones, press releases, newsletters, and blogs.

Website was Informative, although Certain Features could be Enhanced

One of the most standard tools used by OCTA for transparency and public information—similar to other entities—was its website. We found that the OCTA website was aesthetically functional and user-friendly. Compared to other like entities, the quality of OCTA's efforts was inline or better in several ways such as:

- **Creating awareness** through immediate displays of the OC Go logo and clear and concise information about the measure and what OCTA is doing by putting "local tax dollars to work."

- **Ease of use** with clear features and labeling allowing easy navigation to information.

- **Quick links to publications** about and by OCTA such as press releases, annual reports, fact sheets, and project specific information including project overviews, details about phases and schedule of the project and detour maps.

To compare OCTA to other entities, the prior 2015 Triennial Assessment team conducted a thorough review OCTA's website comparing user function and availability of project information between OCTA, the San Diego Association of Governments, and LA Metro. That assessment found that OCTA's website had clear and accessible information, although the reviewers mentioned improvements could be made such as interactive map displays to provide project updates.

Social Media Followers Increased

As mentioned in earlier sections, OCTA used social media platforms such as Facebook, Twitter, and Instagram to promote initiatives, garner public perspective through surveys and contests, and inform and engage the public through media videos. For each platform, staff created individual pages to differentiate certain services provided such as OCTA, OC Bus, OC Metrolink and M2-funded project specific pages such as the I-405 Improvement Project—as such, staff managed multiple social media pages for Facebook, Twitter, and Instagram. Our review found that activity increased in terms of the number of followers, fans, and likes for each of the pages reviewed as described in the sections that follow.

- Facebook:
  Out of the three platforms used, Facebook seemed to have the most activity. In fact, across the OCTA, OC Bus, and OC Metrolink services provided by OCTA, followers nearly doubled from 29,664 in Fiscal Year 2015-2016 to 41,419 followers by Fiscal Year 2017-2018—a 40 percent increase. Further, the number of fans for project-specific Facebook pages also increased by more than 200 percent, on average, with individual increases ranging from 25 percent to 405 percent as shown in Exhibit 45.

EXHIBIT 45. PROJECT-SPECIFIC FACEBOOK METRICS

Facebook Pages	Number of Fans as of July 2015	Number of Fans as of June 2018	Variance	% Change
5 South	1087	5439	4352	400.67%
5 Central	79	399	320	405.06%
OC Bridges	273	460	187	68.50%
405 Improvement Project	591	1764	1173	198.47%
CA-57	484	606	122	25.21%
91 Express Lanes	426	722	296	69.48%
Totals	**2940**	**9390**	**6450**	**219.39%**

Source: Data provided by External Affairs Capital Projects Outreach Team.

- Twitter:
  In terms of Twitter social media, followers increased from 7,056 in Fiscal Year 2015-2016 to 8,009 followers by Fiscal Year 2017-2018 across the three Twitter pages for OCTA, OC Bus, and OC Metrolink—a growth of 13.5 percent. For pages related to specific projects, followers remained relatively constant over the period of our assessment other than increases shown for the newly created pages for the I-5 South and I-405 Improvement Projects.

- Instagram:
  Of the three platforms maintained by OCTA, Instagram was used the least. Starting in Fiscal Year 2016-2017, OCTA began with 1,500 followers that grew to a total of 3,268 followers by Fiscal Year 2017-2018—an overall increase of nearly 118 percent in just one year.

Social Media Content could be Enhanced

With the increased use of social networking and mobile platforms as a source of information for the public, OCTA recognized the importance of communicating via social media. According to the External Affairs Division, OCTA actively updated their social media platforms to be more user and mobile friendly in part to make complex transportation-related information less technical to the public. While significant efforts seemed to be employed, some enhancements could be made to the social media content.

For instance, OCTA could more clearly promote the M2 Program—or OC Go rebranding—through its social media posts to its existing OCTA Facebook page or other social media usage. Based on our high-level review, OCTA's posts did not provide many linkages to the M2 program or significant content about the transportation improvements and accomplishments funded through M2. There were posts related to environmental clean-up efforts or receiving the federal full funding grant agreement for the OC Streetcar, but there was no clear association to make a follower aware that the M2 Program funded the activity. In other OCTA Facebook posts, we saw content related to guided-hikes and tours that were likely made possible through the M2 environmental efforts to preserve open space; yet, there was no association between these hikes to the M2 program. Further, there were missed opportunities to communicate the purpose and goals of the M2 Program, OCTA's role in administering the M2 Program, and accomplishments funded through the M2 Program through the existing social media sites.

Alternately, OCTA may want to consider having a separate Facebook page dedicated to M2. When we initially searched for a unique M2 page by performing a simple Google search for M2/Facebook, we were

directed to a private individual's personal page named "On the Go OC." While that page was unrelated to OCTA or M2, it could be very confusing to the public looking for the M2 Program—or the new OC GO rebranding—on social media.

Stakeholder Awareness and Public Perception Results Showed Improvement

External Affairs frequently sought public opinion and feedback through various methods, including the use of surveys such as an Attitudinal and Awareness Survey conducted every two to five years. Between 2015 and 2018, OCTA conducted two Attitudinal and Awareness surveys that gauged overall public awareness and perceptions of OCTA as well as sought to understand Orange County residents travel behavior, use of transportation systems, communication preferences, and demographic factors. Overall, OCTA garnered a positive public perception with survey participants generally knowing what OCTA did as an organization and agreeing that transportation improvements were evident in Orange County. Additionally, the percent of survey respondents that had heard of M2 significantly increased between the 2015 and 2018 surveys.

Public Opinion of OCTA was Positive and Showed Slight Improvement

Although OCTA provided many transportation services and programs in addition to transit operations, staff also spent significant effort administering the M2 Program and its related projects. Thus, while it cannot be determined whether survey responses related to opinions of OCTA correlate to its efforts on the M2 Program or to other services provided, the results provided some indication of the public's perception on OCTA's performance.

Overall, there was an increase in awareness of OCTA since 2004 with the highest level of awareness reported in 2018. According to survey results, there was a four percent increase in awareness of OCTA, from 84.3 percent in 2015 to 88.3 percent in 2018 as shown in Exhibit 46—with the number of survey respondents remaining relatively stable. Moreover, 48.6 percent gave OCTA a favorable rating—a slight increase from 2015—with another 31.7 percent of respondents preferring not to answer.

EXHIBIT 46. NUMBER OF SURVEY RESPONDENTS AWARE OF OCTA
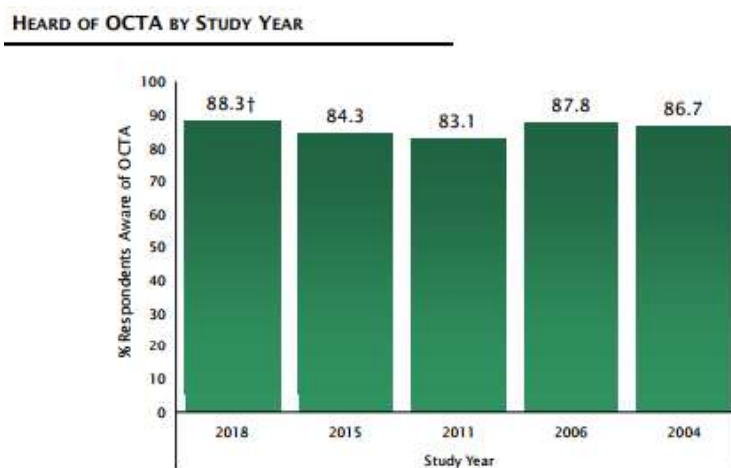
Source: OCTA Attitudinal and Awareness Survey 2018, Figure 7.

Survey results also indicated that 57.3 percent of respondents generally agreed that OCTA helped by improving transportation system, 48 percent believed that OCTA actively sought solutions for transportation issues, and 53.2 percent agreed that OCTA was an agency that can be trusted. Moreover, the percent of respondents who disagreed with those statements remained steady at approximately 20 percent in each area as shown in Exhibit 47.

EXHIBIT 47. SURVEY RESPONDENTS' AGREEMENT WITH STATEMENTS ABOUT OCTA

FIGURE 16 AGREEMENT WITH STATEMENTS ABOUT OCTA

Legend: ■ Strongly agree ■ Somewhat agree ■ Somewhat disagree ■ Strongly disagree ■ Not sure

Question	Statement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not sure
Q6f	Helps local, regional economies by improving transportation system	19.4	37.9	13.0	7.9	21.8
Q6c	Is a public agency I trust	14.6	38.6	10.0	7.8	29.1
Q6e	Has made many transportation improvements in past 5 yrs	17.8	33.1	13.1	9.1	27.0
Q6b	Is actively seeking solutions to our transportation issues	14.4	33.6	11.4	8.3	32.4
Q6a	Makes good use of public funds	10.0	27.2	11.6	10.1	41.0
Q6d	Listens to the general public	8.7	27.2	12.3	10.7	41.0

% Respondents

Source: OCTA Attitudinal and Awareness Survey 2018, Figure 16.

Taxpayers were more Aware of the M2 Program, Although Awareness was still Relatively Low

As part of its regular Attitudinal and Awareness Surveys, OCTA assessed the public's awareness of the M2 Program among other items with the most recent survey occurring in 2018. Those results revealed a growth of 25.8 percent in the level of survey respondent awareness of the M2 Program increasing from 26.4 percent of respondents hearing of the measure in 2015 to 33.2 percent hearing of the measure by 2018—although the majority of respondents had not or were not sure that they had heard of M2. These results aligned with other entities' measures we reviewed where the public did not necessarily correlate their individual sales tax measure with the transportation improvement efforts made available from that local funding despite advertising and marketing efforts.

Further, when asked to describe M2 in their own words, the majority of respondents (45.9 percent) described it as a half-cent sales tax, bond, or money to fund transportation projects and improvements. Another 32.9 percent reported that they were not sure what it was, but they had heard of it. While 6.8 percent of respondents confused the Orange County M2 Program with a similar program in Los Angeles County, the remaining respondents responded that it was a general voter-approved measure, proposal for transportation projects, or traffic congestion reduction effort as shown in Exhibit 48.

EXHIBIT 48. SURVEY RESPONDENTS' STATEMENTS ON KNOWLEDGE OF M2

FIGURE 49 MEASURE M DESCRIPTORS

Not sure, only heard of it	32.9
Half-cent sales tax to fund transportation projects, improvements	22.4
Bond to fund transportation projects, improvements	14.6
Money, budget for transportation projects, improvements	8.9
LA County Traffic Improvement Plan	6.8
Reduces, addresses traffic congestion	6.6
Proposal, plan for transportation projects, improvements	4.8
Voter-approved measure, funding in general	2.8
Gas tax	0.8

% Respondents Who Had Heard of Measure M

Source: OCTA Attitudinal and Awareness Survey 2018, Figure 49.

To increase awareness and reduce possible confusion with a similar measure in Los Angeles County, OCTA approved moving forward with a rebranding of M2 as OC Go in September 2017 as well as developed signage guidelines and material development for each of the Ordinance areas—freeway, streets and roads, transit, and environmental projects. On the 2018 Attitudinal and Awareness Survey, OCTA asked respondents whether they had heard of OC Go prior to taking the survey. Results showed that 17 percent had heard of OC Go (introduced externally five months earlier) with another 5 percent unsure, and the majority of respondents (78 percent) not yet recognizing the OC Go brand.

While Survey Respondents were not always Aware of M2, the M2 Goal Related to Traffic Congestion will Address Reported Concerns

One of the survey questions asked respondents to rate important issues for Orange County. Results showed that respondents consistently placed traffic or traffic congestion among the top 4 issues since 2011 as shown in Exhibit 49. Although mentioned by far fewer respondents, public transportation, infrastructure, and maintenance ranked among the top 10 concern areas. While the previous section revealed that survey respondents were not always aware of M2, the Ordinance's overarching goals of reducing congestion correlated to the respondents' top interests.

EXHIBIT 49. SURVEY RESPONDENTS' RATINGS OF TOP ISSUES IN ORANGE COUNTY

TABLE 1 TOP MOST IMPORTANT ISSUES FACING ORANGE COUNTY BY STUDY YEAR

| | Study Year | |
2018	2015	2011
Homelessness	Water issues, drought	Economy, unemployment
Real estate, housing	Not sure / Can't think of anything	Not sure / Can't think of anything
Not sure / Can't think of anything	Traffic	Education, schools
Traffic congestion	Economy, unemployment	Traffic
Cost of living	Real estate, housing	Public safety / Crime
Population, overcrowding	Cost of living	Budget, spending
Illegal immigration issues	Public safety	Real estate, housing
Public transportation	Population, overcrowding	Transportation infrastructure
Public safety	Education, schools	Population, overcrowding
Infrastructure maintenance, repair	Homelessness	Cost of living

Source: OCTA Attitudinal and Awareness Survey 2018, Table 1.

Surveys were conducted via phone or online, with an estimated survey time of 20 minutes. Because the length of the survey could be a deterrence for full completion, attention to questions, and comprehension of the question at hand, OCTA might want to consider restructuring their approach to use short small surveys on a more frequent basis, rather than one long survey every few years.

Taxpayer Oversight Committee Functions as Envisioned in the Ordinance

According to the M2 Ordinance, the Taxpayer Oversight Committee (TOC) was formed as a safeguard to ensure taxpayer revenues were spent in accordance with the Ordinance and Plan. In fact, the TOC was charged with annually reviewing and certifying whether expenditures were in compliance with the Ordinance and independently and discretionarily performed ongoing monitoring and reviews to ensure Measure M was implemented as approved by voters. Our assessment found that the TOC fulfilled its responsibilities and followed sound practices.

TOC fulfilled its Responsibilities

According to its "Responsibilities, Operating Practices, Objectives and Procedures," the TOC had several key responsibilities as follows:

1. Vote on M2 Plan amendments
2. Hold annual public meeting to determine whether OCTA is proceeding in accordance with the Plan
3. Annually certify whether revenues have been spent in compliance with the Plan
4. Contract for independent analysis or examinations, as necessary

5. Determine local agency eligibility by reviewing Congestion Management Program, Mitigation Fee Program, Expenditure Reports, Traffic Signal Synchronization Plans, and Pavement Management Plans

6. Review triennial performance assessment

Based on our review of TOC meeting minutes, the TOC generally met on a bi-monthly basis and fulfilled their responsibilities as established in its procedures. Moreover, the TOC formed two subcommittees to help fulfill responsibilities—an Audit Subcommittee and an Annual Eligibility Review Subcommittee. Meeting minutes demonstrated a general commitment from both TOC and OCTA to follow set procedures and operate in an open and transparent environment where issues were brought to light and discussed as necessary.

Selection Process was Robust and more Independent than Others

Each year, new members were recruited and selected to fill upcoming vacancies for any expiring terms. Members were screened and qualified by the Grand Jurors Association of Orange County (GJAOC). The GJAOC formed a five-member Taxpayer Oversight Committee Selection Panel (Panel) and screened all applications, reviewed conflict of interest forms provided with applications, conducted interviews, and recommended candidates for membership on the TOC. Once recommended, the candidates were grouped by supervisorial district and selected through a public lottery process.

For example, in 2018, the Panel screened 42 applications from interested citizens and interviewed 32 candidates to fill four vacancies. After a detailed review of qualifications, ability, and availability of the candidates, the Panel recommended 18 for possible membership—members were selected during a public "lottery" with candidate names drawn from a hat in a public setting. The first name drawn from each district became the selected member, with remaining names kept on a contingency list if needed to fill future vacancies.

When compared with other similar entities, we found OCTA's process more independent than others where taxpayer oversight or accountability committee members were specifically selected to represent member jurisdictions by the Board in place over those entities including the Citizen Advisory Committee in San Francisco, California and the Citizen Accountability for Regional Transportation Committee in Tucson, Arizona.

TOC Expertise was Similar to some Entities Reviewed

To be considered for TOC membership, candidates were evaluated on the basis of their commitment and ability to participate in meetings, lack of financial conflicts of interest, and demonstrated interest and history of participation in community activities—with a special emphasis on transportation-related activities. While we found that TOC expertise complied with the Ordinance, the Ordinance did not require specific types of experience—similar to several other entities reviewed where only a general knowledge of transportation was requested.

Yet, certain other entities required greater levels of diversity in expertise. For instance, in San Diego, California, the experience requirements for the San Diego Association of Governments' Independent

Taxpayer Oversight Committee members were more restrictive than OCTA requiring a specific breadth of expertise in a variety of areas. Specifically, the San Diego Association of Governments required one committee member to be a "licensed architect, civil engineer, or traffic engineer with demonstrated experience of ten years or more in the fields of transportation and/or urban design" and another committee member to possess experience in the field of "municipal/public finance and/or budgeting" among other areas of expertise in real estate, right of way, and environmental sciences.

Moreover, the Independent Taxpayer Oversight Committee for local Measure A in Sacramento, California required members possessing credentials including a licensed civil engineer, a transportation planner, a manager of large development or construction projects, and a senior-level professional in municipal auditing, finance or budget. Likewise, a peer oversight committee in Marin County, California required certain members to have expertise in planning, the environment, and paratransit.

Structuring a diverse committee with robust expertise related to transportation matters at hand helps with understanding and guiding the risks and activities of complex transportation projects. Thus, OCTA could consider, at a minimum, adding a short biography on its website highlighting each TOC member's experience and expertise to enhance transparency of those providing oversight.

Internal Audit Function Provides Additional Layer of Oversight and Accountability

Complementing the TOC function and requirements for annual financial audits, OCTA also used its internal audit function to assist in "evaluating the effectiveness and efficiency of projects, programs, and operations, while ensuring that adequate controls and safeguards are in place to protect the Orange County Transportation Authority's assets and resources." While internal audits and related activities were varied and related to both M2 and general OCTA areas, the internal audit function also provided information to the TOC Audit Subcommittee to assist in their M2 expenditure oversight responsibilities.

For instance, during our assessment period, the internal audit function assisted in the development of agreed-upon procedures for testing compliance with M2 Local Fair Share, Project U Senior Mobility Program, and Senior Non-Emergency Medical Transportation Expenditures. Additionally, audits conducted related to the M2 Program included reviews of contract compliance and oversight controls of project management on the I-405 Improvement Project, right-of-way acquisition activities on Project K, and local jurisdiction compliance with M2 Ordinance and policies of the Comprehensive Transportation Funding Program projects to name a few.

Other more overarching audits still benefited the M2 Program as they reviewed general operational areas that touched both M2 projects and non-M2 efforts. Those audits included reviews of prices proposed by architectural and engineering firms to ensure fairness and reasonableness in addition to grant close-out processes to ensure propriety of expenditures.

Recommendations

To augment its strong transparency and accountability, OCTA could consider the following:

7. Enhance awareness of the M2/OC Go Program, M2-funded projects, and related M2 accomplishments on social media through posts on currently existing OCTA social media pages or through using separate social media dedicated to M2.

8. Add a short biography on the OCTA website highlighting Taxpayer Oversight Committee members' experience and expertise to enhance transparency of those providing oversight.

Appendix A: Detailed Assessment Methodology

As part of the M2 Ordinance, OCTA must undergo a performance assessment at least once every three years to evaluate efficiency, effectiveness, economy, and program results of OCTA in satisfying the provisions and requirements of the Ordinance including its transportation investment plan. Three performance assessments have been completed covering program activities since Fiscal Year 2006-2007.

Sjoberg Evashenk, was contracted by OCTA to conduct the fourth performance assessment for the three-year period covering July 1, 2015 through June 30, 2018, except where we needed to obtain contextual or underlying support data from periods prior to July 1, 2015 or more recent information to fully analyze program activities or practices.

Specifically, OCTA asked Sjoberg Evashenk to examine OCTA's performance on a range of activities surrounding the planning, management, and delivery of M2 Program components to ensure necessary tools and practices are in place to successfully implement the plan over its remaining life. This included, but was not limited to, a review of OCTA's:

- Effectiveness and efficiency in developing and implementing the M2 projects and programs;

- Approach to program management with regard to addressing prior assessment findings, interdivisional coordination, progress reporting mechanisms, function and functionality of the M2 program management office, and security over cyber-attacks;

- Practices to ensure compliance with monitoring and reporting on M2 Ordinance provisions.

- Fiscal responsibilities when funding local grants, reporting on expenditures, and established practices surrounding long-term financial and investment decisions given anticipated revenue shortfalls; and

- Transparency and accountability in informing the public and decision-makers on M2 matters, public involvement when planning for M2 projects, and functioning and functionality of taxpayer safeguards such as the Taxpayer Oversight Committee.

To fulfill these objectives, we conducted a series of tasks involving data mining and analysis, documentary examinations, peer comparisons, and source data verification as follows. Note for peer comparisons, the agencies considered included San Diego Association of Governments in San Diego California, San Francisco County Transportation Authority in San Francisco California, Riverside County Transportation Commission in Riverside County California, Maricopa Association of Governments in Maricopa County, Arizona, and Regional Transportation Authority in Pima County Arizona.

To assess OCTA's effectiveness and efficiency in developing and implementing M2 projects and programs, we performed the following:

- Reviewed various delivery plans including the Early Action Delivery Plan, M2020 Plan, Updated Next 10 Delivery Plan, Capital Project Selection Guiding Principles, the M2 Ordinance and Transportation Improvement Plan, as well as other underlying documents to gain an understanding of the full complement of programs, projects, and promises made.

- Using M2 progress reports such as the M2 Quarterly Reports, M2 website, capital project documents, Primavera schedules, Program Management Office tracking files, and other available budget and cost data to assert the status of the M2 programs and projects as of June 30, 2018.

  - This included an assessment of how and whether M2 Program goals were met by capturing and trending performance outcome data such as for congestion relief and pavement condition using Caltrans PeMS, U.S. Census and other available data. Where applicable and relevant, compared M2 performance to other similar entities.

- For a sample of projects, verified scope for completed projects aligned with intent of the M2 Ordinance by reconciling the improvement made to the recommendations from the final Program Environmental Impact Report that served as the guiding document in developing the M2 Ordinance.

- Compiled a universe of M2 programs and capital projects (see Appendix B) to compare budgets to actuals for both costs and schedules, as well as identify the current status of projects. For projects where variances were greater than 30 percent or 300 days, reviewed further documentation to conclude on the reasonableness of the variances.

- Reviewed program and construction management procedures for elements found in leading practices as determined by the Project Management Institute's Construction Extension to the Project Management Body of Knowledge Guide, Construction Management Association's Construction Management Standards of Practice, Federal Highway Administration guidance, and Caltrans Local Assistance Manual.

- Tested a sample of M2 contract files for compliance with OCTA procurement guidelines as established in its Contracts Administration and Materials Management manual.

- Reviewed successes and challenges with the environmental mitigation program.

To understand OCTA's approach to program management, we:

- Reviewed OCTA's Program Management Office charter and compared its functions to similar entities.

- Compared the M2 management organizational structure to similar entities to identify differences and similarities.

- Reviewed all prior performance assessments reports to determine the current status of prior recommendations, whether findings were adequately addressed, or if there were any carryover items or follow-ups needed.

- Assessed OCTA's processes for calculating and monitoring administrative costs to ensure limits complied with the M2 Ordinance.

- Reviewed OCTA's cyber security policies, procedures, and protocols, and determined whether those aligned with leading practices established by the United States Department of Commerce National Institute of Standards and Technology, United States Department of Transportation Cybersecurity, California Office of Information Security, Information Systems Audit and Control Association , among others.

To evaluate practices in place to ensure compliance with M2 monitoring and reporting provisions, we:

- Identified all compliance areas required by the M2 Ordinance and reviewed OCTA's Ordinance Compliance Tracking Matrix for completeness.

- Compared M2 local eligibility guidelines and grant practices with other similar entities. This included testing of a sample of (1) approved grants for evidence of a robust selection process including availability of supporting documentation such as scoring sheets, technical reviews, and overall adherence to grant purpose and proposed project as well as (2) grant reimbursements for rigor in reviewing requests for adequate support, mathematical accuracy, verification of eligible costs and submission of required reports.

- Verified capital project schedule and cost data presented to the public reconciled with and across internal reports.

To evaluate fiscal responsibilities and decisions made by OCTA to-date, we:

- Assessed and compared OCTA's management of sales tax revenues with similar entities with regard to revenue projection methodologies, leveraging of funds, debt financing, investment practices, and cash flow planning.

- Determined whether fiscal practices in place allow for the delivery of the entire program within the M2 prescribed timeframe. This included a review of safeguards put in place to mitigate for impacts of future projected revenue shortfalls.

To review OCTA's public transparency and accountability, and involvement of the public when planning for M2 projects, as well as the functioning of the Taxpayer Oversight Committee, we:

- Reviewed outreach tools employed and content provided to inform the public about M2 programs and projects. Summarized and assessed surveys of public awareness and attitude towards M2 looking for trends and compared OCTA practices to similar entities.

- Determined whether the Taxpayer Oversight Committee functions as intended by the Ordinance by reviewing meeting minutes for items discussed or issues raised.

- Compared the Taxpayer Oversight Committee to similar entities in terms of selection process, structure, and expertise.

- Assessed OCTA's internal audit function with regard to providing an additional layer of oversight.

Finally, we also met with OCTA executives, managers, staff, and consultants over areas related to planning, finance/administration, internal audit, capital programs, and external affairs on multiple occasions to understand, assess, and vet practices employed implementing the M2 Program. Additional M2 Program stakeholders were interviewed to garner views and perspective, including representatives from the Southern California Association of Governments, Auto Club of SoCal, Rancho Mission Viejo, Citizen Advisory Committee, Environmental Oversight Committee, Taxpayer Oversight Committee, Technical Advisory Committee, and Caltrans. We also made multiple requests for an interview with a representative from the Orange County Taxpayer Association, but we were unable to schedule a meeting during the review period.

Appendix B: Universe of M2 Projects

Using the M2 Ordinance and Transportation Improvement Plan, M2 Quarter 4 Fiscal Year 2017-2018 Report, internal OCTA project status reports and schedules through June 2018, and PMO internal progress tracking worksheets, the status of M2 Program components is summarized in Exhibit 50 that follows. Due to the complex nature of the information, additional clarification is provided in the bullets that follow.

- "Completion Status as of June 30, 2018" column:
  - Dates in "green" font highlight all projects open to traffic.
  - Dates in "red" font represents projects that have not yet completed the environmental phase or have not yet started. Thus, cost shown do not include design or construction cost estimates. Similarly, the dates shown represent the environmental document completion date only and not completion of the entire planned improvement.
  - All other dates represent the current construction completion estimate.

- "Current Cost (Millions, Year of Expenditure (YOE) column: Amounts shown represent total expenditures for completed projects. For projects in-progress, amounts shown are inclusive of actual expenditures plus future costs.

Exhibit 50. Universe of M2 Projects

24 Project Letters	Project Title	Ordinance Budget (Millions, 2005$)	Segments	Current Baseline (Millions, YOE)	Current Estimate (Millions, YOE)	Dollar Variance	Percent Variance	Completion Status as of June 30, 2018	Project Scope
Freeways									
I-5 Santa Ana Freeway Interchange Improvements									
A	Santa Ana Freeway (I-5) Improvements between Costa Mesa Freeway (SR-55) and "Orange Crush" Area (SR-57)	$ 470.0	not applicable	$ 38.12	$ 41.66	$ 3.54	9%	Oct-20	add new HOVL; both directions; 3 miles
B	Santa Ana Freeway (I-5) Improvements from the Costa Mesa Freeway (SR-55) to El Toro "Y" Area	$ 300.2	not applicable	$ 9.56	$ 9.15	$ (0.41)	-4%	Apr-19	new GPL, both directions; 9 miles
I-5 Santa Ana Freeway/San Diego Freeway									
C	San Diego Freeway (I-5) Improvements South of the El Toro "Y"	$ 627.0	I-5: SR-73 to Oso Pkwy	$ 151.87	$ 188.12	$ 36.25	24%	Dec-24	GPL, both directions; 2.2 miles; new interchange
			I-5: Oso Pkwy to Alicia Pkwy	$ 196.17	$ 188.64	$ (7.53)	-4%	Oct-23	new GPL; both directions; 2.6 miles; reconstruct interchange
			I-5: Alicia Pkwy to El Toro Rd	$ 133.55	$ 164.17	$ 30.62	23%	Jun-24	new GPL, extend HOVL; both directions; 1.7 miles
			I-5: SR-73 to El Toro Rd Landscape	n/a project not yet started	$ 12.37	n/a project not yet started		Dec-25	replace landscape, both directions; 6.5 miles; reconstruct interchange
			I-5: Pico to Vista Hermosa	$ 113.01	$ 85.85	$ (27.16)	-24%	Jul-18	new HOVL, both directions; 0.7 miles; reconstruct interchange
			I-5: Vista Hermosa to PCH	$ 75.63	$ 71.43	$ (4.20)	-6%	Jul-17	new HOVL, both directions; 2.5 miles
			I-5: PCH to San Juan Creek Rd	$ 70.67	$ 71.19	$ 0.52	1%	Jul-18	new HOVL, both directions; 2.5 miles

24 Project Letters	Project Title	Ordinance Budget (Millions, 2005$)	Segments	Current Baseline (Millions, YOE)	Current Estimate (Millions, YOE)	Dollar Variance	Percent Variance	Completion Status as of June 30, 2018	Project Scope
D	Santa Ana Freeway/San Diego Freeway (I-5) Local Interchange Upgrades[28]	$ 258.0	I-5/El Toro Road Interchange	$ 5.37	$ 5.37	$ 0	0%	Nov-19	reconstruct interchange
			I-5/Ortega Highway Interchange	$ 90.95	$ 75.12	$ (15.83)	-17%	Jan-16	reconstruct interchange
SR-22 Garden Grove Freeway									
E	Garden Grove Freeway (SR-22) Access Improvements	$ 120.0	Improvements at 3 interchanges along SR-22 completed in 2008 as "bonus project" paid for by M1						
SR-55 Costa Mesa Freeway									
F	Costa Mesa Freeway (SR-55) Improvements	$ 366.0	SR-55: I-405 to I-5	$ 410.91	$ 410.91	$ 0	0%	Aug-25	new GPL, HOVL, both directions; 8 miles
			SR-55: I-5 to SR-91	$ 5.60	$ 5.60	$ 0	0%	Jan-20	new GPL, both directions; 5 miles; operational improvements only
SR-57 Orange Freeway									
G	Orange Freeway (SR-57) Improvements	$ 258.7	SR-57: NB Orangewood to Katella	$ 2.59	$ 2.59	$ 0	0%	Jan-19	new GPL, NB; 1 mile
			SR-57: Katella to Lincoln	$ 78.72	$ 38.00	$ (40.73)	-52%	Apr-15	New GPL, NB; 2.8 miles
			SR-57: Orangethorpe to Yorba Linda	$ 80.25	$ 52.30	$ (27.85)	-35%	Nov-14	new GPL, NB, widen existing lanes to standard widths; 2.4 miles
			SR-57: Yorba Linda to Lambert	$ 79.33	$ 54.06	$ (24.49)	-31%	May-14	new GPL, NB, widen existing lanes to standard widths; 2.5 miles
			SR-57: Lambert to Tonner Canyon	$ -	$ 5.00	$ 5.00	n/a ED not yet completed	Jan-23	new GPL; NB, 2.5 miles
SR-91 Riverside Freeway									
H	Riverside Freeway (SR-91) Improvements from the Santa Ana Freeway (I-5) to the Orange Freeway (SR-57)	$ 140.0	SR-91: WB I-5 to SR-57	$ 78.09	$ 58.95	$ (18.40)	-24%	Jun-16	new GPL, WB; 4.5 miles
I	Riverside Freeway (SR-91) Improvements from Orange Freeway (SR-57) to the Costa Mesa Freeway (SR-55) Interchange Area	$ 416.5	SR-91: Tustin Avenue to SR-55 Interchange	$ 49.92	$ 42.63	$ (7.16)	-14%	Jul-16	new AUXL, WB; 2 miles
			SR-91: SR-57 to SR-55	$ 8.87	$ 8.87	$ 0	0%	Aug-19	new GPL, both directions; 5 miles
J	Riverside Freeway (SR-91) Improvements from Costa Mesa Freeway (SR-55) to the Orange/Riverside County Line (RCL)	$ 352.0	SR-91: SR-241 to SR-71	$ 104.53	$ 57.77	$ (46.76)	-45%	Jan-11	new GPL, EB, widen existing lanes to standard widths; 6 miles
			SR-91: SR-55 to SR-241/East of Weir Canyon	$ 128.40	$ 79.74	$ (48.66)	-38%	Mar-13	new GPL, both directions, widen existing lanes to standard widths; 6 miles
			SR-91: SR-241 to RCL	n/a project not yet started					new GPL
I-405 San Diego Freeway									
K	San Diego Freeway (I-405) Improvements between the I-605 Freeway in Los Alamitos Area and Costa Mesa Freeway (SR-55)	$ 1,072.8	I-405: SR-55 to I-605 Design-Build	$ 1,900.00	$ 1,900.00	$ 0	0%	May-23	new GPL, both directions; 14 miles; new Express lanes, both directions; 16 miles [29]
L	San Diego Freeway (I-405) Improvements between Costa Mesa Freeway (SR-55) and Santa Ana Freeway (I-5)	$ 319.7	I-405: I-5 to SR-55	$ 6.83	$ 6.99	$ 0.16	2%	Aug-18	new GPL, both directions; 8.5 miles

[28] There are five interchanges under Project D—three are completed as part of Project C improvements and the remaining two are completed under Project D.

[29] The GPL portion of this project is a M2 project funded with sales tax dollars ($1.425 Billion). The Express Lanes are externally funded primarily through a low interest federal loan (TIFIA) to be paid back with toll revenues ($475 Million not tied or guaranteed by M2).

24 Project Letters	Project Title	Ordinance Budget (Millions, 2005$)	Segments	Current Baseline (Millions, YOE)	Current Estimate (Millions, YOE)	Dollar Variance	Percent Variance	Completion Status as of June 30, 2018	Project Scope
I-605 Freeway Access Improvements									
M	I-605 Freeway Access Improvements	$ 20.0	I-605/Katella Ave. IC	$ 1.82	$ 1.82	$ 0	0%	Nov-18	modify interchange ramps and lane configurations
A-M	Freeway Mitigation	$ 243.5	Supports all Projects A – M.	Restore and preserve habitat impacted by freeway construction. To-date, 1,300 acres have been acquired and preserved as open space, 350 acres restored, and removed 14 dams.					
Freeway Service Patrol									
N	Freeway Service Patrol	$ 150.0	not applicable	M2 funded program to assist stranded motorists on the freeway network. To-date, approximately 69,265 assists have occurred.					
	Sub-Total Freeway	**$4,870.9**		**$ 3,820.8**	**$ 3,640.1**				
Streets & Roads									
O	Regional Capacity Program	$ 1,132.8	Raymond Ave. Undercrossing	$ 77.19	$ 128.41	$ 51.22	66%	May-18	new rail undercrossing
			State College Blvd. Undercrossing	$ 73.65	$ 96.97	$ 23.32	32%	Jan-18	new rail undercrossing
			Placentia Ave. Undercrossing	$ 78.23	$ 64.55	$ (13.68)	-17%	Dec-14	new rail undercrossing
			Kraemer Blvd. Undercrossing	$ 70.43	$ 63.82	$ (6.61)	-9%	Dec-14	new rail undercrossing
			Orangethorpe Ave. Overcrossing	$ 117.38	$ 108.60	$ (8.78)	-7%	Oct-16	new rail overcrossing
			Tustin Ave./Rose Dr. Overcrossing	$ 102.99	$ 98.25	$ (4.74)	-5%	Oct-16	new rail overcrossing
			Lakeview Ave. Overcrossing	$ 70.17	$ 110.64	$ 40.47	58%	Jun-17	new rail overcrossing
			Orange County Master Plan for Arterial Highways (MPAH) Local Match	Provides improvements on Orange County's MPAH. Awarded to locals via competitive grants, requiring local match. To-date, approximately 146 projects totaling $295 million in M2 funds have awarded through 8 calls for projects.					
P	Regional Traffic Signal Synchronization Program	$ 453.1	not applicable	Provides funding to implement signal synchronization projects to coordinate signals and reduce congestion. Awarded to locals via competitive grants, requiring local match. To-date, approximately 103 projects totaling $98 million in M2 funds have been awarded through 8 calls for projects.					
Q	Local Fair Share Program	$ 2,039.1	not applicable	Awarded on a formula basis to all locals on a bi-monthly basis. To-date, M2 has provided $342.4 million.					
	Sub-Total Streets & Roads	**$3,625.0**		**$ 590.0**	**$ 671.2**				
Transit Projects									
R	High Frequency Metrolink Service	$1,129.8	Sand Canyon Grade Separation	$ 55.60	$ 61.87	$ 6.27	11%	Jan-16	Reconstruct undercrossing.
			Rail-Highway Grade Crossing Safety Enhancement	$ 94.43	$ 90.42	$ (4.01)	-4%	Dec-11	50 at-grade rail-highway crossings with focus on safety improvements (new medians, new gate arms, upgrading traffic signals, new pedestrian swing gates, etc.)
			17th Street Grade Separation - LOSSAN (Environmental Only)	$ 3.24	$ 2.48	$ (0.76)	-23%	Nov-17	Construct highway-rail grade separation in City of Santa Ana.
			Laguna Niguel/San Juan Capistrano Passing Siding	$ 25.27	$ 30.83	$ 5.56	22%	Feb-21	Construct 1.8 miles of new passing siding track adjacent to existing main track.
			Laguna Niguel/Mission Viejo Station Surface Parking Lot	$ 4.34	$ 4.14	$ (0.20)	-5%	Oct-13	Construct parking lot.
			Laguna Niguel/Mission Viejo Station ADA Ramps	$ 3.55	$ 5.18	$ 1.63	46%	Sep-17	Upgrade station facilities to be ADA compliant.

24 Project Letters	Project Title	Ordinance Budget (Millions, 2005$)	Segments	Current Baseline (Millions, YOE)	Current Estimate (Millions, YOE)	Dollar Variance	Percent Variance	Completion Status as of June 30, 2018	Project Scope
			Placentia Metrolink Rail Station & Parking Structure	$ 34.83	$ 34.82	$ (0.01)	0%	Jan-21	Construct new station including parking structure, bus stop, and passenger loading zone.
			Anaheim Canyon Station	$ 27.91	$ 27.91	$ 0	0%	Mar-21	Construct 3400 linear feet of second station tracks, new second platform and upgrade parking lot to be ADA compliant.
			Orange Station Parking Improvements	$ 33.18	$ 32.29	$ (0.89)	-3%	Feb-19	Construct new parking structure.
			Tustin Station Parking Expansion	$ 17.60	$ 15.39	$ (2.21)	-13%	Sep-11	Construct new parking structure.
			Fullerton Station Parking Expansion	$ 41.97	$ 29.76	$ (12.21)	-29%	Jun-12	Construct new parking structure.
			Fullerton Transportation Center Elevator Upgrades	$ 3.50	$ 4.60	$ 1.10	31%	Dec-18	Modify pedestrian bridge, add elevators.
			San Clemente Beach Trail Safety Enhancements	$ 6.01	$ 5.00	$ (1.01)	-17%	Mar-14	Enhancing safety features at pedestrian crossings (audible warning system, new pedestrian swing gates, fencing, widening crossing surface, etc.).
S	Transit Extension to Metrolink	$ 1,000.0	OC Streetcar	$ 310.44	$ 418.86	$ 108.42	35%	Aug-21	Construct 4.15-mile streetcar line connecting the SARTC to Downtown Santa Ana.
			Bus and Station Van Extension Projects	Projects intended to increase frequency of service to connect to Metrolink. Four projects totaling $730,000 has been awarded through one call for projects..					
T	Convert Metrolink Station(s) to Regional Gateway that Connect Orange County with High-Speed Rail System	$ 57.9	Anaheim Regional Transportation Intermodal Center (ARTIC)	$ 227.36	$ 232.19	$ 4.83	2%	Dec-14	Construct multi-modal transit center serving existing rail and bus and future CA high-speed train.
U	Expand Mobility Choices to Seniors and Persons with Disabilities	$ 392.8	Senior Mobility Program	Projects intended to expand transportation services for seniors. 1,955,000 boardings have been provided with M2 paying for $17.4 million.					
			Senior Non-Emergency Medical Transportation Program	Projects intended to supplement existing non-emergency medical transportation to seniors. 727,000 boardings have been provided with M2 paying for $19 million.					
			Fare Stabilization Program	Program intended to stabilize fares and provide fare discounts to seniors and persons with disabilities. 96 million boardings have been supported with M2 paying for $22 million.					
V	Community Based Transit/Circulators	$ 226.5	Projects intended to provide local bus transit service in areas not adequately served by regional transit. Awarded to locals via competitive grants with funding depended on meeting ridership requirements. Approximately 29 projects and 7 planning studies have been awarded, totaling $43.6 million in M2 funds have awarded through 3 calls for projects.						
W	Safe Transit Stops	$ 25.0	Projects intended to improve passenger amenities at the 100 busiest transit stops across the County. Awarded to locals via competitive grants. $1.6 million has been awarded to locals supporting over 51 projects through one call for projects.						
	Sub-Total Transit	**$ 2,832.0**		**$ 889.2**	**$ 995.7**				
Environmental Cleanup									
X	Environmental Cleanup	$ 237.2	Tier 1	Awarded to locals via competitive grants. There have been 7 rounds of funding under the Tier 1 grants program with awards totaling $20.1 million for 154 projects.					
			Tier 2	Awarded to locals via competitive grants. There have been 2 rounds of funding under the Tier 2 grants program with awards totaling $27.9 million for 22 projects.					
	Total	**$11,565.1**		**$ 5,300.4**	**$ 5,307.0**				

Source: Generated from M2 Ordinance, M2 Quarterly Progress Reports, OCTA Internal Monthly Status Reports, and M2 Program Website.

Notes: Variance columns=current baselines minus current costs. I=interstate. SR=state route. HOVL=high-occupancy vehicle lane, GPL=general purpose lane. AUXL=auxiliary lane. WB=west bound. EB=east bound. Miles shown represent the mileage count in one-direction.

July 2015 - June 2018 M2 Performance Assessment
Recommendations and Action Plan

Consultant Recommendation	OCTA Response
Chapter 1: Program Goals Have Been Met Thus Far	
1. Consider identifying measures to capture progress towards each of the six key M2 Ordinance goals and on a periodic basis report on how results achieved correlate to those goals - relieving congestion, fixing potholes and resurfacing streets, reducing air and water pollution, synchronizing traffic lights, expanding Metrolink and providing transit at reduced rates to seniors/persons with disabilities.	The M2 Ordinance specifies projects and programs to be implemented and as such, OCTA reports on progress towards completion and delivery of projects and programs. Staff sees added value in reporting on the goals as suggested and will investigate the best approach for reporting using one of OCTA's existing communication pieces such as possibly the M2/OC Go Annual Report.
Chapter 2: OCTA Demonstrated Strong Program Management	
2. Implement in-progress plans to update cyber security training policy and require annual training as well as establish a timeline for implementation.	OCTA is in progress updating the security training policy. The policy will include an established timeline and annual training requirements.
3. Regularly monitor the training status of all employees to ensure cybersecurity training is complete within the required timeframe including defining specific roles and responsibilities, timelines and frequency of monitoring, verification methods, and documentation of status.	A training program that allows for the tracking and targeting of employee training would be beneficial as a best practice for OCTA. Staff will update our current training program/policy and make recommendations for approval and implementation.
Chapter 3: While Still Early in the M2 Life Cycle, Substantial Progress was Made Across All Program Areas	
4 Create a methodology to gather quantitative accomplishment data and track project outputs and accomplishments against Transportation Investment Plan anticipated goals.	Staff will research options for addressing this recommendation and see what modifications can reasonably be made to achieve this utilizing the existing systems in place.
5. Demonstrate a stronger link between capital project selection guiding principles and the actual implementation order for capital projects by formally memorializing discussions and decisions made.	Staff reports and follows guiding principles on capital program delivery. These decisions are incorporated into board adopted delivery plans. Staff will more formally reference decisions to ensure they are more appropriately memorialized.
Chapter 4: OCTA Approaches Ensured Compliance with M2 Ordinance	
6. Include additional links, where appropriate, to underlying support documentation to validate compliance efforts and activities tracked and evaluated in the Program Management Office's Compliance Matrix.	Staff began incorporation of additional links as the annual review of the Ordinance Matrix was in progress during this review.
Chapter 5: OCTA's Sound Fiscal Practices Helped Mitigate Risks Associated with Rising Costs and Decreased Sales Tax Revenue – No Recommendation	
Chapter 6: OCTA was Transparent and Accountable to The Public	
7. Enhance awareness of the M2/OC Go Program, M2 funded projects, and related M2 accomplishments on social media through posts on currently existing OCTA social media pages or through using separate social media dedicated to M2.	Staff will ensure incorporation as appropriate.
8. Add a short biography on the OCTA website highlighting TOC members' experience and expertise to enhance transparency of those providing oversight.	Staff will incorporate this recommendation on OCTA's website.

Acronyms
M2 – Measure M2 / OCTA – Orange County Transportation Authority / TOC – Taxpayers Oversight Committee

MEASURE M2

PERFORMANCE ASSESSMENT REPORT

MARCH 4, 2019

ORANGE COUNTY TRANSPORTATION AUTHORITY

Presented by:

Catherine Brady

Lien Luu

SJOBERG EVASHENK
CONSULTING, INC

ASSESSMENT FOCUS

- Triennial Performance Assessment required by M2 Ordinance — 4th assessment to date

- Main areas of focus included project delivery, program management & responsiveness, compliance, fiscal responsibility, and transparency & accountability.

- Additional review of status of prior assessment findings, performance of OCTA's delivery of M2 projects and programs, and opportunities for improvement.

SJOBERG ☀ EVASHENK

OVERALL SUMMARY AND PROGRAM GOALS

RESULTS

- On track with meeting primary goals of M2 Ordinance and fulfilling promises.

- Significant progress made in all M2 areas.

- Incorporated many leading industry practices.

- Sound Fiscal Practices in place.

- Aligns well with peers reviewed.

RECOMMENDATIONS

✓ Consider identifying measures to capture progress towards M2 Goals on a periodic basis

SJOBERG ☀ EVASHENK

3

PROGRESS ON M2 GOALS

#	M2 Goal	Results Thus Far (as of June 30, 2018)
1	Relieve Congestion	• Congestion increased overall, but so did Vehicle Miles Traveled. • Delay is down on SR-91.
2	Fix Potholes & Resurface Streets	• PCI improved from 77 in 2014 to 79 in 2016—best in State.
3	Expand Metrolink Rail	• 8 of 13 currently identified expansion projects were completed. • Includes 50 at-grade rail crossing enhancements. • OC Streetcar ready to start construction.
4	Provide Reduced Cost Transit Services to Seniors and Persons with Disabilities	• $22 million provided to stabilize fares. • $36.4 million provided to projects to expand senior transportation services. • 6.8 million reduced fare passes issued to seniors FY15/16 to FY17/18. • 2.7 million reduced fare passes issued to persons with disabilities FY15/16 to FY17/18. • 96 million fare stabilization program-related boardings provided.
5	Synchronize Traffic Lights	• 2,258 traffic lights synchronized.
6	Reduce Air and Water Pollution and Protect Local Beaches through Cleanup of Roadway Oil Runoff	• 6.2 million cubic feet of trash removed. • 1,300 acres preserved as open space and 350 acres restored.

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STRONG PROGRAM MANAGEMENT EXISTS

RESULTS

- PMO oversight is strong and more robust than peers reviewed.

- Clear roles and functions ensured appropriate oversight and buy-in.

- Continuous improvement valued and prior assessments findings implemented.

- Administrative costs closely monitored and compliant.

- Strong framework and leading practices in place over cybersecurity.

RECOMMENDATIONS

- Implement in-progress plans to update cybersecurity training policy and require annual training.

- Regularly monitor cybersecurity training status including identification of responsibilities, frequency, verification, results, and documentation of monitoring efforts.

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5

SIGNIFICANT PROGRESS & ACCOMPLISHMENTS

RESULTS

- Many accomplishments to date such as:

  - 43 new freeway miles
  - 5 new interchanges
  - 8 railroad grade separations
  - $342 million in fair share dollars provided to cities to improve local infrastructure
  - 6.2 million cubic feet trash collected, 1,300 acres of open space preserved, and 350 acres restored

- Good controls in place over capital budgets and schedule—although some challenges faced.

- Solid Policies & Procedures over contracting and construction were followed.

RECOMMENDATIONS

- ✓ Create a methodology to gather and track outputs and accomplishments against M2 anticipated goals.

- ✓ Demonstrate a stronger link between capital project selection guidance and project prioritization by memorializing discussions and/or decisions.

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APPROACHES ENSURED COMPLIANCE

RESULTS

- Philosophy of adherence to voter promises permeated throughout the organization.

- Robust system used to track compliance—well beyond peers reviewed.

- Local eligibility requirements were robust and thoroughly reviewed by OCTA—again, leading the peer group reviewed.

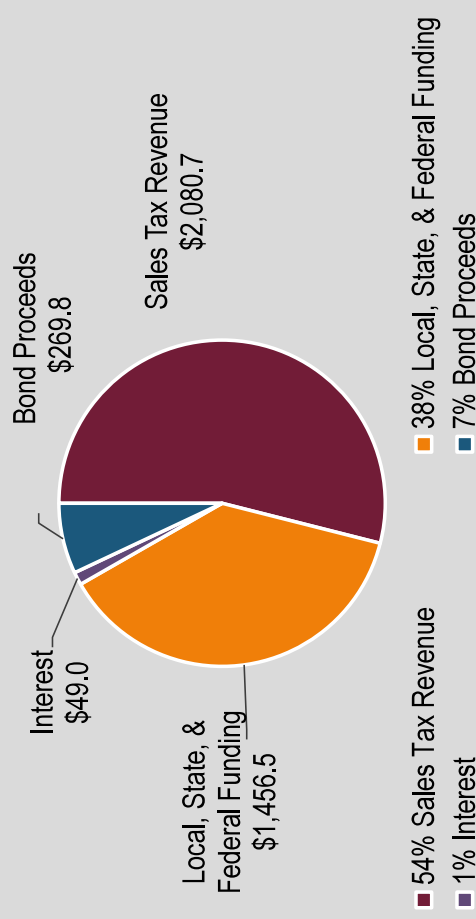- Grant award and monitoring practices were sound.

RECOMMENDATIONS

✓ Ensure PMO's Compliance Matrix includes links, where appropriate, to underlying support, further demonstrating and validating compliance.

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GOOD FISCAL PRACTICES IN PLACE

- Used a careful and modest approach allowing great progress when faced with rising costs and declining revenues.

- Forecast methodology was sound and cash flow practices were more robust than many peers.

- Although future construction cost increases could pose a risk, OCTA adopted a cost pressure index to monitor risk and built in an economic uncertainty factor into cash flow projections to mitigate risk.

RESULTS

- Leveraged approximately $1.5 Billion in external revenue sources program-wide.

Bond Proceeds
$269.8

Sales Tax Revenue
$2,080.7

Interest
$49.0

Local, State, &
Federal Funding
$1,456.5

- 54% Sales Tax Revenue
- 1% Interest
- 38% Local, State, & Federal Funding
- 7% Bond Proceeds

No recommendations.

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GOOD FISCAL PRACTICES IN PLACE (CONT.)

■ OCTA's approach to debt financing was conservative, consistent with the Ordinance, in-line with similar transportation agencies, and debt service coverage appeared sufficient to meet future repayment obligations.

Agency	Program Duration	Financing Method	Budgeted Sales Tax Revenue for Fiscal Year 2017-2018	Annual Debt Service	Outstanding Debt
RCTC (Riverside County Transportation Committee, Riverside County, CA)	9th year of 30-year program	Debt	$187.0 M	$96.6 M	$878.9 M
SANDAG (San Diego Association of Governments, San Diego County, CA)	10th Year of 40-year program	Debt (2008-2021) Pay-go (2022-2048)	$292.1 M	$105.3 M	$2,263.2 M
RTA (Regional Transportation Authority, Pima County, AZ)	13th year of 20-year program	Debt	$88.2 M	$17.4 M	$248.2 M
MAG (Maricopa Association of Governments, Maricopa County, AZ)	12th year of 20-year program	Pay-go	$458.6 M	N/A	N/A
OCTA	7th year of 30-year program	Debt	$316.5 M	$44.4 M	$310.2 M

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OCTA IS TRANSPARENT & ACCOUNTABLE

RESULTS

- Highly focused on accountability with great transparency of actions, decisions, and data communicated to Board and public stakeholders.

- Outreach efforts aligned with peers reviewed.

- Public perception results were positive and showed more awareness.

- TOC functioned as envisioned and internal audit function provides additional layer of accountability.

RECOMMENDATIONS

✓ Enhance awareness of M2/OC Go on social media through more M2-focused content or through media dedicated solely to M2/OC Go.

✓ Add TOC member bios on website to enhance transparency of those providing taxpayer oversight.

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