



**Measure M**  
**Taxpayers Oversight Committee**  
at the Orange County Transportation Authority  
600 S. Main Street, Orange CA, Room 103  
December 13, 2011  
6:00 p.m.



**AGENDA**

- 1. Welcome**
- 2. Pledge of Allegiance**
- 3. Approval of Minutes/Attendance Report for October 11, 2011**
- 4. Chairman's Report**
- 5. Action Items**
  - A. M1/M2 2011 Annual Revenue & Expenditure Reports  
Presentation – Ken Phipps, Executive Director, Finance & Administration
  - B. M1/M2 Quarterly Revenue & Expenditure Reports (Sept 2011)  
Presentation – Ken Phipps, Executive Director, Finance & Administration
- 6. Presentation Items**
  - A. Sales Tax Actuals Review  
Presentation – Ken Phipps, Executive Director, Finance & Administration
  - B. Capital Action Plan Update  
Presentation – Jim Biel, Executive Director, Development
  - C. Signal Synchronization Program Update  
Presentation – Anup Kulkarni, Section Manager, Strategic Planning
  - D. Pavement Management Program Update  
Presentation – Kia Mortazavi, Executive Director, Planning
  - E. Annual Hearing Planning  
Presentation – Alice Rogan, Strategic Communications Manager
- 7. Annual Eligibility Review Subcommittee Report**
- 8. Audit Subcommittee Report**
- 9. Environmental Oversight Committee Member Report**
- 10. Committee Member Reports**
- 11. OCTA Staff Update**
- 12. Public Comments\***
- 13. Adjournment**

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

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

**Measure M  
Taxpayers Oversight Committee Meeting**

**October 11, 2011  
Meeting Minutes**

**Committee Members Present:**

David Sundstrom, County Auditor-Controller, Chairman  
Richard Egan, First District Representative  
Howard Mirowitz, Second District Representative  
Dowling Tsai, Third District Representative  
Randy Holbrook, Third District Representative  
John Stammen, Fourth District Representative  
James Kelly, Fifth District Representative  
Tony Rouff, Fifth District Representative

**Committee Member(s) Absent:**

Diana Hardy, First District Representative  
Anh-Tuan Le, Second District Representative  
Gregory Pate, Fourth District Representative

**Orange County Transportation Authority Staff Present:**

Jennifer Bergener, Director of Rail Programs & Facilities Engineering  
Kelly Hart, Senior Transportation Analyst, Rail Programs & Facilities Engineering  
Rodney Johnson, Deputy Treasurer, Finance and Administration  
Janice Kadlec, Public Reporter  
Gabby McClenahan, Manager of Local Programs  
Kia Mortazavi, Executive Director of Development  
Andy Oftelie, Director of Finance  
Ken Phipps, Executive Director of Finance and Administration  
Alice Rogan, Community Relations Officer  
Jim Biel, Executive Director of the Capital Program

**Guests**

Dave Biondolillo, Santa Ana Project Manager, Santa Ana/Garden Grove Fixed Guideway  
Linda Johnson, Anaheim Project Manager, Anaheim Rapid Connection

**1. Welcome**

Chairman David Sundstrom began the meeting at 6:05 p.m. and welcomed everyone.

**2. Pledge of Allegiance**

Chairman David Sundstrom led everyone in the pledge of allegiance.

### **3. Approval of Minutes/Attendance Report for August 9, 2011**

Chairman David Sundstrom asked if there were any additions or corrections to the August 9, 2011 meeting minutes or attendance report. James Kelly had the following correction:

- Page 8, Item 13, second sentence: "The next meeting of the Taxpayers Oversight Committee will be ~~August 9, 2011~~ **October 11, 2011** at the OCTA offices."

A motion was made by Tony Rouff, seconded by James Kelly, and carried unanimously to approve the August 9, 2011 meeting minutes and attendance report as corrected.

### **4. Chairman's Report**

Chairman David Sundstrom had no Chairman's Report.

### **5. Action Items**

- A. Project T: Jennifer Bergener gave a brief update on Project T, specifically the Anaheim Regional Transportation Intermodal Center (ARTIC). She said that the city of Anaheim received bids to build the exterior, but since the bids came in higher than anticipated, the city was going to revise the scope.

Tony Rouff asked how detailed were the bids for this project. Jennifer Bergener said the bids submitted are line item detailed.

A motion was made by Richard Egan, seconded by Tsai Dowling, and carried unanimously to receive and file the Project T, Anaheim Regional Transportation Intermodal Center (ARTIC) report.

- B. Fiscal Year 2011/2012 Local Jurisdiction Eligibility Report: Tony Rouff Chairman of the Annual Eligibility Review (AER) Subcommittee reported the Subcommittee met and reviewed the required documents provided by the local jurisdictions. The AER Subcommittee found all local jurisdictions submitted the necessary documents required to meet the eligibility requirements in the Measure M2 Ordinance for the Fiscal Year 2011/12 and recommended the TOC approve their findings and forward the findings to the OCTA Board of Directors for approval.

Howard Mirowitz asked if the requested Expenditure Report being filled out by the local jurisdictions would impact the AER Subcommittee findings. Gabby McClenahan said the Expenditure Reports are due six months after the end of the fiscal year (December 31). Staff will review the reports and meet with the AER Subcommittee sometime in February/March 2012. The AER Subcommittee will bring their findings to the TOC for approval.

It was moved, seconded and passed unanimously to approve the findings of the AER Subcommittee and forward the recommendations to the OCTA Board of Directors for approval.

## 6. Presentation Items

- A. Project S, Fixed Guideways: Kelly Hart gave an overview of the Go Local Fixed Guideway Program.

Linda Johnson from the City of Anaheim gave an overview of the Anaheim Rapid Connection (ARC) Fixed Guideway Project.

Richard Egan asked if OCTA already provided bus service to the area. Linda Johnson said yes. Richard Egan asked if this project was a duplication of effort. Linda Johnson said the project area has been identified as a high bus transit usage area, but it has to compete with Katella Ave. and Harbor Blvd. which are main commuter highways. Bus service is slowed in these areas because of traffic. The ARC Project would allow for a quicker connection between ARTIC and destinations in Anaheim.

Randy Holbrook said in the Anaheim presentation the ARTIC station indicated Cal Nevada High Speed Rail coming into the ARTIC Station. A recent newspaper article indicated Fullerton as a key point in the Cal Nevada High Speed Rail. Does this have anything to do with the Anaheim Project? Linda Johnson said the Cal-Nevada High Speed Rail project is still in the Southern California Association of Governments (SCAG) long-range plans and the recent talks about this have been to maintain the Anaheim Airport (Anaheim Airport- this is unclear)connection. Jim Beil said the newspaper article mentioned was about the California-Nevada Rail Express, a private entity planning heavy rail. Their current concept for the project is from the Fullerton Station using traditional rail lines through the Burlington Northern Santa Fe Railroad and Union Pacific to Las Vegas.

James Kelly asked how much is the seeking of Federal funds for this project coordinated with OCTA. Kelly Hart said recently the OCTA Board approved serving as the *grantee* to the Federal Transit Administration. This means OCTA would be the recipient of any federal funds either of the cities would receive and OCTA would oversee the management of these funds.

Dave Biondolillo from the City of Santa Ana gave an overview of the Santa Ana/Garden Grove Fixed Guideway Project.

Richard Egan asked what would be drawing people into the Santa Ana area. Dave Biondolillo said Santa Ana is like the downtown of Orange County, the civic

center and government buildings support the entire County. Over 400 jurors a day come in and over 100,000 vehicle trips come in and out every day. He said the proposed project would encourage attorneys to get out of their cars, use Metrolink, and then ride the projects' streetcar to court. Dave Biondolillo said they also believe the residents in the area will use the street car system to go to the market and entertainment venues. It would also be a tool for redevelopment and transform parts of the city. Chair David Sundstrom said the County has close to 11,000 employees who commute to work and need the extra link to get them where they want to go.

Chair David Sundstrom asked if the two projects presented were competing for funds. Dave Biondolillo said the Santa Ana/Garden Grove project is applying for 'Small Starts' which is for projects under \$250 million. The Anaheim project is applying for 'New Starts' money.

Chair David Sundstrom asked if any consideration had been given to using the same type of technology so at some time in the future these projects might be able to connect. Linda Johnson said the City of Anaheim is looking at more cost effective alternatives and a street car could potentially be a good fit in the corridor. Dave Biondolillo said Santa Ana and Garden Grove are looking at regional connectivity and possibly extending the street car system into the Anaheim Resort area.

Kelly Hart said OCTA does not look at these two projects as competing they look at them as two systems that enhance the mobility and connectivity of two of Orange County's largest, and most densely populated cities.

Howard Mirowitz asked why the Santa Ana/Garden Grove Project was not looked at as an elevated project. Dave Biondolillo replied that an elevated system did not fit with some of the evaluation criteria for the project which include cost effectiveness, ease of project delivery and visual impacts.

Randy Holbrook asked how the Anaheim Rapid Connection Project would accommodate the luggage some travelers would have who were going to the hotels and airport. Linda Johnson said the automated people mover system is very accessible to luggage. Kelly Hart said OCTA and both cities have been coordinating with other cities nationwide who are building similar projects with various vehicles and technologies that provide easy access.

Chair David Sundstrom asked if Project S contains more than the Fixed Guideway Projects. Kelly Hart said yes, Project S Transit Extensions to Metrolink includes the Rubber Tire Bus Shuttle Projects and the Fixed Guideway Projects. Alice Rogan said the TOC will be receiving a report in December 2011 on the Rubber Tire Bus Shuttle Projects.

**B. Debt and Investment Report:** Rodney Johnson gave a report on the OCTA Debt and Investment Program.

Howard Mirowitz asked what he would describe as Medium Term Notes. Rodney Johnson said Medium Term Notes are one to five years. Howard Mirowitz asked if Agency Notes are primarily Freddy and Fanny Mae. Rodney Johnson said correct.

Howard Mirowitz asked if the portion of the portfolio invested in the different categories vary widely with the four different managers. Rodney Johnson said no, the individual investment manager accounts are fairly consistent.

Chair David Sundstrom asked if OCTA has an Investment Policy approved by the OCTA Board. Rodney Johnson said they do. Chair Sundstrom asked if it has the ranges defined. Rodney Johnson said yes, it includes asset allocations maximums. Chair Sundstrom asked how often the compliances are checked. Rodney Johnson said it is checked daily. As each individual manager purchases a security staff looks up the security immediately to see if it appropriate to the portfolio. They also report to the Finance and Administration Committee on a quarterly basis and the OCTA Board on a monthly basis.

James Kelly asked if the amount of money for the advanced bonding issue was cash drawn or available as a credit line. Rodney Johnson said they issued Fixed Rate bonds and took the \$250 million in funds. James Kelly asked if they borrowed money at 4.8 percent and are investing the cash at 1.7 percent. Rodney Johnson said this is correct. The reason the debt was issued was to fund programs which are starting now; the money has a draw schedule. James Kelly asked if any of the investment managers were involved in the underwriting of the bond issue. Rodney Johnson said no.

Howard Mirowitz asked what the investment managers are being paid. Rodney Johnson said between 5 and 9 basis points.

**7. Annual Eligibility Review Subcommittee Report**

There was nothing further to report from the Annual Eligibility Review Subcommittee Report.

**8. Audit Subcommittee Report**

Chairman David Sundstrom reported on the Audit Subcommittee meeting held earlier in the evening.

**9. Environmental Oversight Committee Report**

James Kelly reported OCTA was recently awarded a Grant of \$1.7 million from the U.S. Fish and Wildlife Services to help develop the conservation planning related effort.

**10. Committee Member Reports**

Howard Mirowitz asked about a letter in the TOC Agenda Package from the OCTA CEO Will Kempton to the Transportation 2020 Committee. On Page two of the letter there is a table showing the planned expenditures and the remaining balance of M1. The narrative above the table said there was a remaining balance over and above any current M1 obligations but the table showed the M1 planned expenditures table is greater than the remaining balance. He asked for an explanation. Kia Mortazavi said in the Freeway category there is approximation \$42 million remaining and \$12 million of that was committed to contracts leaving \$30 million with no commitment. Any remaining money from M1 will go to M2 to be used for the same purpose.

James Kelly asked if the expected sales tax true-up occurred in September and was it surprising in any way up or down. Ken Phipps said they did get a true-up in September and it was slightly higher than expected but not surprisingly higher.

**11. OCTA Staff Update**

Alice Rogan passed out the TOC member roster and gave an update on the new Measure M webpage.

**12. Public Comments**

There were no comments by the public.

**13. Adjournment**

The meeting adjourned at 7:25 p.m. The next meeting of the Taxpayers Oversight Committee will be December 13, 2011 at the OCTA offices.

**Taxpayers Oversight Committee**  
**Fiscal Year 2011-2012**  
**Attendance Record**



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

Meeting Date	12-Jul	9-Aug	13-Sep	11-Oct	8-Nov	13-Dec	10-Jan	14-Feb	13-Mar	10-Apr	8-May	12-Jun
Richard Egan		X		X								
Diana Hardy		X		E								
Merrill Holbrook		X		X								
James Kelly		X		X								
Anh-Tuan Le		X		E								
Howard Mirowitz		X		X								
Gregory Pate		X		E								
Tony Rouff		X		X								
John Stammen		X		X								
David Sundstrom		X		X								
Dowling Tsai		X		X								

**Absences Pending Approval**

Meeting Date                      Name                                      Reason



# *Action Items*

**Measure M1**  
**Schedule of Revenues, Expenditures and Changes in Fund Balance**  
**as of June 30, 2011**

(\$ in thousands)	Quarter Ended June 30, 2011	Year to Date June 30, 2011 (A)	Period from Inception through June 30, 2011 (B)
<b>Revenues:</b>			
Sales taxes	\$ 1,836	\$ 175,170	\$ 4,003,972
Other agencies' share of Measure M1 costs:			
Project related	13,930	48,122	458,904
Non-project related	-	-	614
Interest:			
Operating:			
Project related	-	-	1,052
Non-project related	(131)	6,136	262,369
Bond proceeds	-	-	136,067
Debt service	-	425	82,054
Commercial paper	-	-	6,072
Orange County bankruptcy recovery	-	-	42,268
Capital grants	-	-	156,434
Right-of-way leases	144	437	5,583
Proceeds on sale of assets held for resale	-	-	24,575
Miscellaneous:			
Project related	-	-	26
Non-project related	-	-	775
Total revenues	<u>15,779</u>	<u>230,290</u>	<u>5,180,765</u>
<b>Expenditures:</b>			
Supplies and services:			
State Board of Equalization (SBOE) fees	557	2,600	56,883
Professional services:			
Project related	4,429	9,234	198,486
Non-project related	875	1,905	34,052
Administration costs:			
Project related	350	1,626	21,034
Non-project related	998	7,659	91,467
Orange County bankruptcy loss	-	-	78,618
Other:			
Project related	177	278	1,807
Non-project related	39	210	15,943
Payments to local agencies:			
Turnback	8,281	31,564	594,009
Other	64,615	92,991	800,903
Capital outlay	13,173	36,169	2,052,897
Debt service:			
Principal payments on long-term debt	-	82,795	1,003,955
Interest on long-term debt and commercial paper	296	4,919	561,842
Total expenditures	<u>93,790</u>	<u>271,950</u>	<u>5,511,896</u>
Deficiency of revenues under expenditures	<u>(78,011)</u>	<u>(41,660)</u>	<u>(331,131)</u>
<b>Other financing sources (uses):</b>			
Transfers out:			
Project related	(2,200)	(128,237)	(382,901)
Non-project related	-	-	(5,116)
Transfers in:			
Project related	-	-	1,829
Bond proceeds	-	-	1,169,999
Advance refunding escrow	-	-	(931)
Payment to refunded bond escrow agent	-	-	(152,930)
Total other financing sources (uses)	<u>(2,200)</u>	<u>(128,237)</u>	<u>629,950</u>
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	<u>\$ (80,211)</u>	<u>\$ (169,897)</u>	<u>\$ 298,819</u>

See Notes to Measure M1 Status Report (Unaudited)

**Measure M1**  
**Schedule of Calculations of Net Tax Revenues and Net Bond Revenues (Debt Service)**  
**as of June 30, 2011**

(\$ in thousands)	Quarter Ended June 30, 2011 (actual)	Year Ended June 30, 2011 (actual) (C.1)	Period from Inception through June 30, 2011 (actual) (D.1)	Period from July 1, 2011 forward forecast (forecast) (E.1)	Total (F.1)
<b>Tax revenues:</b>					
Sales taxes	\$ 1,836	\$ 175,170	\$ 4,003,972	\$ -	\$ 4,003,972
Other agencies' share of Measure M1 costs	-	-	614	-	614
Operating interest	(131)	6,136	262,369	3,555	265,924
Orange County bankruptcy recovery	-	-	20,683	-	20,683
Miscellaneous, non-project related	-	-	775	-	775
<b>Total tax revenues</b>	<b>1,705</b>	<b>181,306</b>	<b>4,288,413</b>	<b>3,555</b>	<b>4,291,968</b>
<b>Administrative expenditures:</b>					
SBOE fees	557	2,600	56,883	-	56,883
Professional services, non-project related	875	1,905	25,191	-	25,191
Administration costs, non-project related	998	7,659	91,467	1,282	92,749
Operating transfer out, non-project related	-	-	5,116	-	5,116
Orange County bankruptcy loss	-	-	29,792	-	29,792
Other, non-project related	39	210	6,843	-	6,843
<b>Total administrative expenditures</b>	<b>2,469</b>	<b>12,374</b>	<b>215,292</b>	<b>1,282</b>	<b>216,574</b>
<b>Net tax revenues</b>	<b>\$ (764)</b>	<b>\$ 168,932</b>	<b>\$ 4,073,121</b>	<b>\$ 2,273</b>	<b>\$ 4,075,394</b>
<b>Bond revenues:</b>					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 1,169,999	\$ -	\$ 1,169,999
Interest revenue from bond proceeds	-	-	136,067	-	136,067
Interest revenue from debt service funds	-	425	82,054	-	82,054
Interest revenue from commercial paper	-	-	6,072	-	6,072
Orange County bankruptcy recovery	-	-	21,585	-	21,585
<b>Total bond revenues</b>	<b>-</b>	<b>425</b>	<b>1,415,777</b>	<b>-</b>	<b>1,415,777</b>
<b>Financing expenditures and uses:</b>					
Professional services, non-project related	-	-	8,861	-	8,861
Payment to refunded bond escrow	-	-	153,861	-	153,861
Bond debt principal	-	82,795	1,003,955	-	1,003,955
Bond debt interest expense	296	4,919	561,842	-	561,842
Orange County bankruptcy loss	-	-	48,826	-	48,826
Other, non-project related	-	-	9,100	-	9,100
<b>Total financing expenditures and uses</b>	<b>296</b>	<b>87,714</b>	<b>1,786,445</b>	<b>-</b>	<b>1,786,445</b>
<b>Net bond revenues (debt service)</b>	<b>\$ (296)</b>	<b>\$ (87,289)</b>	<b>\$ (370,668)</b>	<b>\$ -</b>	<b>\$ (370,668)</b>

See Notes to Measure M1 Status Report (Unaudited)

**Measure M1  
Schedule of Revenues and Expenditures  
as of June 30, 2011**

Project Description (G)	Net Tax Revenues Program to date Actual (H)	Total Net Tax Revenues (I)	Project Budget (J)	Estimate at Completion (K)	Variance Total Net Tax Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures through June 30, 2011 (N)	Reimbursements through June 30, 2011 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
<b>Freeways (43%)</b>										
I-5 between I-405 (San Diego Fwy) and I-605 (San Gabriel Fwy)	\$ 982,130	\$ 982,676	\$ 810,010	\$ 789,022	\$ 193,654	\$ 20,988	\$ 871,309	\$ 85,584	\$ 785,725	97.0%
I-5 between I-5/I-405 Interchange and San Clemente	68,736	68,774	57,836	59,936	8,838	(2,100)	70,294	10,358	59,936	103.6%
I-5/I-405 Interchange	87,242	87,290	72,802	73,075	14,215	(273)	98,157	25,082	73,075	100.4%
SR-55 (Costa Mesa Fwy) between I-5 and SR-91 (Riverside Fwy)	58,161	58,194	44,511	49,349	8,845	(4,838)	55,514	6,172	49,342	110.9%
SR-57 (Orange Fwy) between I-5 and Lambert Road	29,081	29,097	24,128	22,758	6,339	1,370	25,617	2,859	22,758	94.3%
SR-91 (Riverside Fwy) between Riverside Co. line & Los Angeles Co. line	125,575	125,645	116,136	105,389	20,256	10,747	123,995	18,606	105,389	90.7%
SR-22 (Garden Grove Fwy) between SR-55 and Valley View St.	400,518	400,742	313,297	310,943	89,799	2,354	629,003	318,525	310,478	99.1%
<b>Subtotal Projects</b>	<b>1,751,443</b>	<b>1,752,418</b>	<b>1,438,720</b>	<b>1,410,472</b>	<b>341,946</b>	<b>28,248</b>	<b>1,873,889</b>	<b>467,186</b>	<b>1,406,703</b>	
<b>Net (Bond Revenue)/Debt Service</b>			<b>311,917</b>	<b>311,917</b>	<b>(311,917)</b>	<b>-</b>	<b>311,917</b>		<b>311,917</b>	
<b>Total Freeways</b>	<b>\$ 1,751,443</b>	<b>\$ 1,752,418</b>	<b>\$ 1,750,637</b>	<b>\$ 1,722,389</b>	<b>\$ 30,029</b>	<b>\$ 28,248</b>	<b>\$ 2,185,806</b>	<b>\$ 467,186</b>	<b>\$ 1,718,620</b>	<b>45.5%</b>
<b>%</b>				<b>42.6%</b>					<b>45.5%</b>	
<b>Regional Street and Road Projects (11%)</b>										
Smart Streets	\$ 153,615	\$ 153,701	\$ 151,292	\$ 151,292	\$ 2,409	\$ -	\$ 155,110	\$ 11,739	\$ 143,371	94.8%
Regionally Significant Interchanges	89,609	89,659	89,659	89,659	-	-	65,445	146	65,299	72.8%
Intersection Improvement Program	128,012	128,084	128,084	128,084	-	-	107,321	214	107,107	83.6%
Traffic Signal Coordination	64,006	64,042	64,042	64,042	-	-	60,888	1,513	59,375	92.7%
Transportation Systems Management and Transportation Demand Management	12,801	12,808	12,808	12,808	-	-	8,562	149	8,413	65.7%
<b>Subtotal Projects</b>	<b>448,043</b>	<b>448,294</b>	<b>445,885</b>	<b>445,885</b>	<b>2,409</b>	<b>-</b>	<b>397,326</b>	<b>13,761</b>	<b>383,565</b>	
<b>Net (Bond Revenue)/Debt Service</b>			<b>2,409</b>	<b>2,409</b>	<b>(2,409)</b>	<b>-</b>	<b>2,409</b>		<b>2,409</b>	
<b>Total Regional Street and Road Projects</b>	<b>\$ 448,043</b>	<b>\$ 448,294</b>	<b>\$ 448,294</b>	<b>\$ 448,294</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 399,735</b>	<b>\$ 13,761</b>	<b>\$ 385,974</b>	<b>10.2%</b>
<b>%</b>				<b>11.1%</b>					<b>10.2%</b>	

See Notes to Measure M1 Status Report (Unaudited)

**Measure M1**  
**Schedule of Revenues and Expenditures**  
**as of June 30, 2011**

Project Description (G)	Net Tax Revenues Program to date Actual (H)	Total Net Tax Revenues (I)	Project Budget (J)	Estimate at Completion (K)	Variance Total Net Tax Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures through June 30, 2011 (N)	Reimbursements through June 30, 2011 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
<i>(\$ in thousands)</i>										
<b>Local Street and Road Projects (21%)</b>										
Master Plan of Arterial Highway Improvements	\$ 163,186	\$ 163,333	\$ 163,333	\$ 163,333	\$ -	\$ -	\$ 131,685	\$ 99	\$ 131,586	80.6%
Streets and Roads Maintenance and Road Improvements	592,169	592,500	592,500	592,500	-	-	594,025	-	594,025	100.3%
Growth Management Area Improvements	100,000	100,000	100,000	100,000	-	-	90,003	431	89,572	89.6%
Subtotal Projects	855,355	855,833	855,833	855,833	-	-	815,713	530	815,183	
Net (Bond Revenue)/Debt Service							-		-	
<b>Total Local Street and Road Projects</b>	<b>\$ 855,355</b>	<b>\$ 855,833</b>	<b>\$ 855,833</b>	<b>\$ 855,833</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 815,713</b>	<b>\$ 530</b>	<b>\$ 815,183</b>	
<b>%</b>				<b>21.2%</b>					<b>21.6%</b>	
<b>Transit Projects (25%)</b>										
Pacific Electric Right-of-Way	\$ 19,709	\$ 19,720	\$ 15,000	\$ 14,000	\$ 5,720	\$ 1,000	\$ 16,903	\$ 2,958	\$ 13,945	93.0%
Commuter Rail	367,603	367,820	352,619	361,194	6,626	(8,575)	411,438	60,805	350,633	99.4%
High-Technology Advanced Rail Transit	446,729	446,979	428,507	440,688	6,291	(12,181)	354,109	66,398	287,711	67.1%
Elderly and Handicapped Fare Stabilization	20,000	20,000	20,000	20,000	-	-	20,000	-	20,000	100.0%
Transitways	164,239	164,330	146,381	126,625	37,705	19,756	162,659	36,765	125,894	86.0%
Subtotal Projects	1,018,280	1,018,849	962,507	962,507	56,342	-	965,109	166,926	798,183	
Net (Bond Revenue)/Debt Service			56,342	56,342	(56,342)	-	56,342		56,342	
<b>Total Transit Projects</b>	<b>\$ 1,018,280</b>	<b>\$ 1,018,849</b>	<b>\$ 1,018,849</b>	<b>\$ 1,018,849</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,021,451</b>	<b>\$ 166,926</b>	<b>\$ 854,525</b>	
<b>%</b>				<b>25.2%</b>					<b>22.6%</b>	
<b>Total Measure M1 Program</b>	<b>\$ 4,073,121</b>	<b>\$ 4,075,394</b>	<b>\$ 4,073,613</b>	<b>\$ 4,045,365</b>	<b>\$ 30,029</b>	<b>\$ 28,248</b>	<b>\$ 4,422,705</b>	<b>\$ 648,403</b>	<b>\$ 3,774,302</b>	

See Notes to Measure M1 Status Report (Unaudited)

**Measure M2**  
**Schedule of Revenues, Expenditures and Changes in Fund Balance**  
**as of June 30, 2011**  
**(Unaudited)**

<i>(\$ in thousands)</i>	Quarter Ended June 30, 2011	Year to Date June 30, 2011 (A)	Period from Inception through June 30, 2011 (B)
<b>Revenues:</b>			
Sales taxes	\$ 61,121	\$ 61,121	\$ 61,121
Other agencies' share of Measure M2 costs:			
Project related	6,629	11,932	14,159
Interest:			
Bond proceeds	720	2,248	2,248
Debt service	4	8	8
Commercial paper	-	-	393
Total revenues	<u>68,228</u>	<u>75,309</u>	<u>77,929</u>
<b>Expenditures:</b>			
Supplies and services:			
State Board of Equalization (SBOE) fees	636	636	636
Professional services:			
Project related	13,242	33,212	90,624
Non-project related	688	1,658	4,478
Administration costs:			
Project related	910	3,563	8,214
Non-project related	3,477	5,173	11,605
Other:			
Project related	18	23	155
Non-project related	120	2,305	3,326
Payments to local agencies:			
Project related	26,973	35,261	66,274
Capital outlay:			
Project related	30,685	46,096	49,411
Non-project related	-	-	26
Debt service:			
Interest on long-term debt and commercial paper	85	3,663	4,689
Total expenditures	<u>76,834</u>	<u>131,590</u>	<u>239,438</u>
Deficiency of revenues under expenditures	<u>(8,606)</u>	<u>(56,281)</u>	<u>(161,509)</u>
<b>Other financing sources (uses):</b>			
Transfers out:			
Project related	(193)	(193)	(377)
Transfers in:			
Project related	13,490	19,392	23,699
Bond proceeds	-	358,593	358,593
Total other financing sources (uses)	<u>13,297</u>	<u>377,792</u>	<u>381,915</u>
Excess of revenues over expenditures and other sources (uses)	<u>\$ 4,691</u>	<u>\$ 321,511</u>	<u>\$ 220,406</u>

See Notes to Measure M2 Status Report (Unaudited)

**Measure M2**  
**Schedule of Calculations of Net Tax Revenues and Net Bond Revenues (Debt Service)**  
**as of June 30, 2011**  
**(Unaudited)**

<i>(\$ in thousands)</i>	Quarter Ended June 30, 2011 (actual)	Year Ended June 30, 2011 (actual) (C.1)	Period from Inception through June 30, 2011 (actual) (D.1)	Period from July 1, 2011 through March 31, 2041 (forecast) (E.1)	Total (F.1)
<b>Tax revenues:</b>					
Sales taxes	\$ 61,121	\$ 61,121	\$ 61,121	\$ 15,303,595	\$ 15,364,716
Operating interest	(246)	-	-	367,504	367,504
Total tax revenues	<u>60,875</u>	<u>61,121</u>	<u>61,121</u>	<u>15,671,099</u>	<u>15,732,220</u>
<b>Administrative expenditures:</b>					
SBOE fees	636	636	636	229,644	230,280
Professional services, non-project related	623	1,138	1,816	102,517	104,333
Administration costs, non-project related	3,477	5,173	11,605	390,776	402,381
Operating transfer out, non-project related	-	-	-	21,421	21,421
Other, non-project related	120	2,305	3,326	29,072	32,398
Capital outlay, non-project related	-	-	26	-	26
Environmental cleanup	337	1,086	1,582	313,422	315,004
Total expenditures	<u>5,193</u>	<u>10,338</u>	<u>18,991</u>	<u>1,086,852</u>	<u>1,105,843</u>
<b>Net tax revenues</b>	<u>\$ 55,682</u>	<u>\$ 50,783</u>	<u>\$ 42,130</u>	<u>\$ 14,584,247</u>	<u>\$ 14,626,377</u>
<b>Bond revenues:</b>					
Proceeds from issuance of bonds	\$ -	\$ 358,593	\$ 358,593	\$ 740,000	\$ 1,098,593
Interest revenue from bond proceeds	720	2,248	2,248	55,700	57,948
Interest revenue from debt service funds	4	8	8	36,202	36,210
Interest revenue from commercial paper	-	-	393	-	393
Total bond revenues	<u>724</u>	<u>360,849</u>	<u>361,242</u>	<u>831,902</u>	<u>1,193,144</u>
<b>Financing expenditures and uses:</b>					
Professional services, non-project related	65	520	2,662	-	2,662
Bond debt principal	-	-	-	1,092,570	1,092,570
Bond debt interest expense	-	3,223	3,223	1,002,058	1,005,281
Commercial paper and other interest expense	85	440	1,466	19,063	20,529
Total financing expenditures and uses	<u>150</u>	<u>4,183</u>	<u>7,351</u>	<u>2,113,691</u>	<u>2,121,042</u>
<b>Net bond revenues (debt service)</b>	<u>\$ 574</u>	<u>\$ 356,666</u>	<u>\$ 353,891</u>	<u>\$ (1,281,789)</u>	<u>\$ (927,898)</u>

See Notes to Measure M2 Status Report (Unaudited)

**Measure M2**  
**Schedule of Revenues and Expenditures**  
**as of June 30, 2011**  
**(Unaudited)**

Project	Description	Net Tax Revenues Program to date Actual	Total Net Tax Revenues	Project Budget	Estimate at Completion	Variance Total Net Tax Revenues to Est at Completion	Variance Project Budget to Est at Completion	Expenditures through June 30, 2011	Reimbursements through June 30, 2011	Net Project Cost	Percent of Budget Expended
(G)		(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
<b>Freeways (43% of Net Tax Revenues)</b>											
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 1,660	\$ 576,500	\$ 576,480	\$ 576,480	\$ 20	\$ -	\$ 56	\$ -	\$ 56	0.0%
B,C,D	I-5 Santa Ana/San Diego Freeway Improvements	4,187	1,453,711	1,280,317	1,280,317	173,394	-	8,866	-	8,866	0.7%
E	SR-22 Garden Grove Freeway Access Improvements	424	147,192	147,191	147,191	1	-	1	-	1	0.0%
F	SR-55 Costa Mesa Freeway Improvements	1,293	448,934	448,595	448,595	339	-	413	-	413	0.1%
G	SR-57 Orange Freeway Improvements	914	317,366	299,406	299,406	17,960	-	24,435	604	23,831	8.0%
H,I,J	SR-91 Riverside Freeway Improvements	5,234	1,817,171	1,813,750	1,813,750	3,421	-	13,496	5,192	8,304	0.5%
K,L	I-405 San Diego Freeway Improvements	2,896	1,005,422	582,015	582,015	423,407	-	12,187	-	12,187	2.1%
M	I-605 Freeway Access Improvements	71	24,532	24,532	24,532	-	-	-	-	-	0.0%
N	All Freeway Service Patrol	530	183,989	183,989	183,989	-	-	-	-	-	0.0%
	Freeway Mitigation	906	314,525	270,211	270,211	44,314	-	24,228	-	24,228	9.0%
	Subtotal Projects	18,115	6,289,342	5,626,486	5,626,486	662,856	-	83,682	5,796	77,886	
	Net (Bond Revenue)/Debt Service	-	-	662,856	662,856	(662,856)	-	2,106	-	2,106	
	<b>Total Freeways</b>	<b>\$ 18,115</b>	<b>\$ 6,289,342</b>	<b>\$ 6,289,342</b>	<b>\$ 6,289,342</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 85,788</b>	<b>\$ 5,796</b>	<b>\$ 79,992</b>	<b>44.4%</b>
	<b>%</b>				<b>43.0%</b>						
<b>Street and Roads Projects (32% of Net Tax Revenues)</b>											
O	Regional Capacity Program	\$ 4,213	\$ 1,462,622	\$ 1,326,204	\$ 1,326,204	\$ 136,418	\$ -	\$ 47,878	\$ -	\$ 47,878	3.6%
P	Regional Traffic Signal Synchronization Program	1,685	585,023	584,875	584,875	148	-	289	-	289	0.0%
Q	Local Fair Share Program	7,584	2,632,796	2,632,796	2,632,796	-	-	2,799	-	2,799	0.1%
	Subtotal Projects	13,482	4,680,441	4,543,875	4,543,875	136,566	-	50,966	-	50,966	
	Net (Bond Revenue)/Debt Service	-	-	136,566	136,566	(136,566)	-	1,302	-	1,302	
	<b>Total Street and Roads Projects</b>	<b>\$ 13,482</b>	<b>\$ 4,680,441</b>	<b>\$ 4,680,441</b>	<b>\$ 4,680,441</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 52,268</b>	<b>\$ -</b>	<b>\$ 52,268</b>	<b>29.0%</b>
	<b>%</b>				<b>32.0%</b>						

See Notes to Measure M2 Status Report (Unaudited)



**Measure M2**  
**Schedule of Revenues and Expenditures**  
**as of June 30, 2011**  
**(Unaudited)**

Project	Description	Net Tax Revenues Program to date Actual (G) (\$ in thousands)	Total Net Tax Revenues (H)	Project Budget (I)	Estimate at Completion (J)	Variance Total Net Tax Revenues to Est at Completion (K)	Variance Project Budget to Est at Completion (L)	Expenditures through June 30, 2011 (M)	Reimbursements through June 30, 2011 (N)	Net Project Cost (O)	Percent of Budget Expended (P)
<b>Transit Projects (25% of Net Tax Revenues)</b>											
R	High Frequency Metrolink Service	\$ 3,772	\$ 1,309,376	\$ 1,257,618	\$ 1,257,618	\$ 51,758	\$ -	\$ 78,335	\$ 32,062	\$ 46,273	3.7%
S	Transit Extensions to Metrolink	3,719	1,291,170	1,282,788	1,282,788	8,382	-	19	-	19	0.0%
T	Metrolink Gateways	843	292,579	225,583	225,583	66,996	-	2	-	2	0.0%
U	Expand Mobility Choices for Seniors and Persons with Disabilities	1,264	438,740	438,740	438,740	-	-	469	-	469	0.1%
V	Community Based Transit/Circulators	842	292,450	292,450	292,450	-	-	-	-	-	0.0%
W	Safe Transit Stops	93	32,279	32,279	32,279	-	-	-	-	-	0.0%
	Subtotal Projects	10,533	3,656,594	3,529,458	3,529,458	127,136	-	78,825	32,062	46,763	
	Net (Bond Revenue)/Debt Service	-	-	127,136	127,136	(127,136)	-	1,252	-	1,252	
	<b>Total Transit Projects</b>	<b>\$ 10,533</b>	<b>\$ 3,656,594</b>	<b>\$ 3,656,594</b>	<b>\$ 3,656,594</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 80,077</b>	<b>\$ 32,062</b>	<b>\$ 48,015</b>	<b>26.6%</b>
	<b>%</b>					<b>25.0%</b>					
	<b>Measure M2 Program</b>	<b>\$ 42,130</b>	<b>\$ 14,626,377</b>	<b>\$ 14,626,377</b>	<b>\$ 14,626,377</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 218,133</b>	<b>\$ 37,858</b>	<b>\$ 180,275</b>	

See Notes to Measure M2 Status Report (Unaudited)

**Measure M2  
Schedule of Revenues and Expenditures  
as of June 30, 2011  
(Unaudited)**

Project	Description	Revenues Program to date Actual (H.1)	Total Revenues (I.1)	Project Budget (J)	Estimate at Completion (K)	Variance Total Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures through June 30, 2011 (N)	Reimbursements through June 30, 2011 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
<b>Environmental Cleanup (2% of Revenues)</b>											
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 1,221	\$ 314,643	\$ 313,303	\$ 313,303	\$ 1,340	\$ -	\$ 1,582	\$ -	\$ 1,582	0.5%
	Subtotal Projects	1,221	314,643	313,303	313,303	1,340	-	1,582	-	1,582	
	Net (Bond Revenue)/Debt Service	-	-	1,340	1,340	(1,340)	-	42	-	42	
	<b>Total Environmental Cleanup %</b>	<b>\$ 1,221</b>	<b>\$ 314,643</b>	<b>\$ 314,643</b>	<b>\$ 314,643</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,624</b>	<b>\$ -</b>	<b>\$ 1,624</b>	<b>2.0%</b>

See Notes to Measure M2 Status Report (Unaudited)

**Measure M1**  
**Schedule of Revenues, Expenditures and Changes in Fund Balance**  
**as of September 30, 2011**

(\$ in thousands)	Quarter Ended Sept 30, 2011	Year to Date Sept 30, 2011 (A)	Period from Inception through Sept 30, 2011 (B)
<b>Revenues:</b>			
Sales taxes	\$ -	\$ -	\$ 4,003,972
Other agencies share of Measure M1 costs:			
Project related	5,033	5,033	463,937
Non-project related	2	2	616
Interest:			
Operating:			
Project related	-	-	1,052
Non-project related	1,984	1,984	264,353
Bond proceeds	-	-	136,067
Debt service	-	-	82,054
Commercial paper	-	-	6,072
Orange County bankruptcy recovery	-	-	42,268
Capital grants	-	-	156,434
Right-of-way leases	110	110	5,693
Proceeds on sale of assets held for resale	-	-	24,575
Miscellaneous:			
Project related	-	-	26
Non-project related	-	-	775
<b>Total revenues</b>	<b>7,129</b>	<b>7,129</b>	<b>5,187,894</b>
<b>Expenditures:</b>			
Supplies and services:			
State Board of Equalization (SBOE) fees	-	-	56,883
Professional services:			
Project related	103	103	198,589
Non-project related	602	602	34,654
Administration costs:			
Project related	307	307	21,341
Non-project related	1,606	1,606	93,073
Orange County bankruptcy loss	-	-	78,618
Other:			
Project related	26	26	1,832
Non-project related	-	-	15,943
Payments to local agencies:			
Turnback	-	-	594,009
Other	4,240	4,240	805,143
Capital outlay	2,694	2,694	2,055,591
Debt service:			
Principal payments on long-term debt	-	-	1,003,955
Interest on long-term debt and commercial paper	-	-	561,842
<b>Total expenditures</b>	<b>9,578</b>	<b>9,578</b>	<b>5,521,473</b>
<b>Excess (deficiency) of revenues over (under) expenditures</b>	<b>(2,449)</b>	<b>(2,449)</b>	<b>(333,579)</b>
<b>Other financing sources (uses):</b>			
Transfers out:			
Project related	(363)	(363)	(383,264)
Non-project related	-	-	(5,116)
Transfers in:			
Project related	-	-	1,829
Bond proceeds	-	-	1,169,999
Advance refunding escrow	-	-	(931)
Payment to refunded bond escrow agent	-	-	(152,930)
<b>Total other financing sources (uses)</b>	<b>(363)</b>	<b>(363)</b>	<b>629,587</b>
<b>Excess (deficiency) of revenues over (under) expenditures and other sources (uses)</b>	<b>\$ (2,812)</b>	<b>\$ (2,812)</b>	<b>\$ 296,008</b>

See accompanying notes to Measure M1 Schedules

**Measure M1**  
**Schedule of Calculations of Net Tax Revenues and Net Bond Revenues (Debt Service)**  
**as of September 30, 2011**

(\$ in thousands)	Quarter Ended Sept 30, 2011 (actual)	Year Ended Sept 30, 2011 (actual) (C.1)	Period from Inception through Sept 30, 2011 (actual) (D.1)	Period from October 1, 2011 forward (forecast) (E.1)	Total (F.1)
<b>Tax revenues:</b>					
Sales taxes	\$ -	\$ -	\$ 4,003,972	\$ -	\$ 4,003,972
Other agencies share of Measure M1 costs	2	2	616	-	616
Operating interest	1,984	1,984	264,353	2,980	267,333
Orange County bankruptcy recovery	-	-	20,683	-	20,683
Miscellaneous, non-project related	-	-	775	-	775
Total tax revenues	<u>1,986</u>	<u>1,986</u>	<u>4,290,399</u>	<u>2,980</u>	<u>4,293,379</u>
<b>Administrative expenditures:</b>					
SBOE fees	-	-	56,883	-	56,883
Professional services, non-project related	602	602	25,793	-	25,793
Administration costs, non-project related	1,606	1,606	93,073	1,128	94,201
Operating transfer out, non-project related	-	-	5,116	-	5,116
Orange County bankruptcy loss	-	-	29,792	-	29,792
Other, non-project related	-	-	6,843	-	6,843
Total administrative expenditures	<u>2,208</u>	<u>2,208</u>	<u>217,500</u>	<u>1,128</u>	<u>218,628</u>
<b>Net tax revenues</b>	<u>\$ (222)</u>	<u>\$ (222)</u>	<u>\$ 4,072,899</u>	<u>\$ 1,852</u>	<u>\$ 4,074,751</u>
<b>Bond revenues:</b>					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 1,169,999	\$ -	\$ 1,169,999
Interest revenue from bond proceeds	-	-	136,067	-	136,067
Interest revenue from debt service funds	-	-	82,054	-	82,054
Interest revenue from commercial paper	-	-	6,072	-	6,072
Orange County bankruptcy recovery	-	-	21,585	-	21,585
Total bond revenues	<u>-</u>	<u>-</u>	<u>1,415,777</u>	<u>-</u>	<u>1,415,777</u>
<b>Financing expenditures and uses:</b>					
Professional services, non-project related	-	-	8,861	-	8,861
Payment to refunded bond escrow	-	-	153,861	-	153,861
Bond debt principal	-	-	1,003,955	-	1,003,955
Bond debt interest expense	-	-	561,842	-	561,842
Orange County bankruptcy loss	-	-	48,826	-	48,826
Other, non-project related	-	-	9,100	-	9,100
Total financing expenditures and uses	<u>-</u>	<u>-</u>	<u>1,786,445</u>	<u>-</u>	<u>1,786,445</u>
<b>Net bond revenues (debt service)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (370,668)</u>	<u>\$ -</u>	<u>\$ (370,668)</u>

See accompanying notes to Measure M1 Schedules

**Measure M1  
Schedule of Revenues and Expenditures Summary  
as of September 30, 2011**

Project Description (G)	Net Tax Revenues Program to date Actual (H)	Total Net Tax Revenues (I)	Project Budget (J)	Estimate at Completion (K)	Variance Total Net Tax Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures through Sept 30, 2011 (N)	Reimbursements through Sept 30, 2011 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
<b>Freeways (43%)</b>										
I-5 between I-405 (San Diego Fwy) and I-605 (San Gabriel Fwy)	\$ 982,074	\$ 982,522	\$ 810,010	\$ 789,022	\$ 193,500	\$ 20,988	\$ 871,139	\$ 85,604	\$ 785,535	97.0%
I-5 between I-5/I-405 Interchange and San Clemente	68,732	68,763	57,836	59,936	8,827	(2,100)	70,294	10,358	59,936	103.6%
I-5/I-405 Interchange	87,237	87,277	72,802	73,075	14,202	(273)	98,157	25,082	73,075	100.4%
SR-55 (Costa Mesa Fwy) between I-5 and SR-91 (Riverside Fwy)	58,158	58,184	44,511	49,349	8,835	(4,838)	55,514	6,172	49,342	110.9%
SR-57 (Orange Fwy) between I-5 and Lambert Road	29,079	29,092	24,128	22,758	6,334	1,370	25,617	2,859	22,758	94.3%
SR-91 (Riverside Fwy) between Riverside Co. line & Los Angeles Co. line	125,568	125,625	116,136	105,389	20,236	10,747	123,995	18,606	105,389	90.7%
SR-22 (Garden Grove Fwy) between SR-55 and Valley View St.	400,497	400,679	313,287	310,943	89,736	2,354	630,376	321,907	308,469	98.5%
<b>Subtotal Projects</b>	<b>1,751,345</b>	<b>1,752,142</b>	<b>1,438,720</b>	<b>1,410,472</b>	<b>341,670</b>	<b>28,248</b>	<b>1,875,092</b>	<b>470,588</b>	<b>1,404,504</b>	
Net (Bond Revenue)/Debt Service			311,917	311,917	(311,917)	-	311,917		311,917	
<b>Total Freeways</b>	<b>\$ 1,751,345</b>	<b>\$ 1,752,142</b>	<b>\$ 1,750,637</b>	<b>\$ 1,722,389</b>	<b>\$ 29,753</b>	<b>\$ 28,248</b>	<b>\$ 2,187,009</b>	<b>\$ 470,588</b>	<b>\$ 1,716,421</b>	<b>45.4%</b>
<b>%</b>				<b>42.6%</b>					<b>45.4%</b>	
<b>Regional Street and Road Projects (11%)</b>										
Smart Streets	\$ 153,606	\$ 153,676	\$ 151,267	\$ 151,267	\$ 2,409	\$ -	\$ 155,112	\$ 11,739	\$ 143,373	94.8%
Regionally Significant Interchanges	89,604	89,645	89,645	89,645	-	-	65,258	146	65,112	72.6%
Intersection Improvement Program	128,005	128,064	128,064	128,064	-	-	107,321	1,506	105,815	82.6%
Traffic Signal Coordination	64,003	64,032	64,032	64,032	-	-	61,160	1,513	59,647	93.2%
Transportation Systems Management and Transportation Demand Management	12,801	12,806	12,806	12,806	-	-	8,801	149	8,652	67.6%
<b>Subtotal Projects</b>	<b>448,019</b>	<b>448,223</b>	<b>445,814</b>	<b>445,814</b>	<b>2,409</b>	<b>-</b>	<b>397,652</b>	<b>15,053</b>	<b>382,599</b>	
Net (Bond Revenue)/Debt Service			2,409	2,409	(2,409)	-	2,409		2,409	
<b>Total Regional Street and Road Projects</b>	<b>\$ 448,019</b>	<b>\$ 448,223</b>	<b>\$ 448,223</b>	<b>\$ 448,223</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 400,061</b>	<b>\$ 15,053</b>	<b>\$ 385,008</b>	<b>10.2%</b>
<b>%</b>				<b>11.1%</b>					<b>10.2%</b>	

**Measure M1**  
**Schedule of Revenues and Expenditures Summary**  
**as of September 30, 2011**

Project Description (G)	Net Tax Revenues Program to date Actual (H)	Total Net Tax Revenues (I)	Project Budget (J)	Estimate at Completion (K)	Variance Total Net Tax Revenues to Est at Completion (L)	Variance Project Budget to Est at Completion (M)	Expenditures through Sept 30, 2011 (N)	Reimbursements through Sept 30, 2011 (O)	Net Project Cost (P)	Percent of Budget Expended (Q)
<b>Local Street and Road Projects (21%)</b>										
Master Plan of Arterial Highway Improvements	\$ 163,172	\$ 163,292	\$ 163,292	\$ 163,292	\$ -	\$ -	\$ 132,934	\$ 99	\$ 132,835	81.3%
Streets and Roads Maintenance and Road Improvements	592,137	592,406	592,406	592,406	-	-	594,025	-	594,025	100.3%
Growth Management Area Improvements	100,000	100,000	100,000	100,000	-	-	92,953	431	92,522	92.5%
Subtotal Projects	855,309	855,698	855,698	855,698	-	-	819,912	530	819,382	
Net (Bond Revenue)/Debt Service							-		-	
<b>Total Local Street and Road Projects</b>	<b>\$ 855,309</b>	<b>\$ 855,698</b>	<b>\$ 855,698</b>	<b>\$ 855,698</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 819,912</b>	<b>\$ 530</b>	<b>\$ 819,382</b>	
<b>%</b>				21.2%					21.7%	
<b>Transit Projects (25%)</b>										
Pacific Electric Right-of-Way	\$ 19,708	\$ 19,717	\$ 15,000	\$ 14,000	\$ 5,717	\$ 1,000	\$ 16,923	\$ 3,043	\$ 13,880	92.5%
Commuter Rail	367,583	367,759	352,545	361,033	6,726	(8,488)	411,438	60,805	350,633	99.5%
High-Technology Advanced Rail Transit	446,705	446,908	428,420	440,688	6,220	(12,268)	356,092	66,762	289,330	67.5%
Elderly and Handicapped Fare Stabilization	20,000	20,000	20,000	20,000	-	-	20,000	-	20,000	100.0%
Transitways	164,230	164,304	146,381	126,625	37,679	19,756	162,660	36,765	125,895	86.0%
Subtotal Projects	1,018,226	1,018,688	962,346	962,346	56,342	-	967,113	167,375	799,738	
Net (Bond Revenue)/Debt Service			56,342	56,342	(56,342)	-	56,342		56,342	
<b>Total Transit Projects</b>	<b>\$ 1,018,226</b>	<b>\$ 1,018,688</b>	<b>\$ 1,018,688</b>	<b>\$ 1,018,688</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,023,455</b>	<b>\$ 167,375</b>	<b>\$ 856,080</b>	
<b>%</b>				25.2%					22.7%	
<b>Total Measure M1 Program</b>	<b>\$ 4,072,899</b>	<b>\$ 4,074,751</b>	<b>\$ 4,073,246</b>	<b>\$ 4,044,998</b>	<b>\$ 29,753</b>	<b>\$ 28,248</b>	<b>\$ 4,430,437</b>	<b>\$ 653,546</b>	<b>\$ 3,776,891</b>	

See accompanying notes to Measure M1 Schedules

**Measure M2**  
**Schedule of Revenues, Expenditures and Changes in Fund Balance**  
**as of September 30, 2011**  
**(Unaudited)**

<i>(\$ in thousands)</i>	Quarter Ended Sept 30, 2011	Year to Date Sept 30, 2011 (A)	Period from Inception to Sept 30, 2011 (B)
<b>Revenues:</b>			
Sales taxes	\$ 56,198	\$ 56,198	\$ 117,319
Other agencies share of Measure M2 costs:			
Project related	704	704	14,863
Interest:			
Bond proceeds	4,162	4,162	6,410
Debt service	1	1	9
Commercial paper	-	-	393
Right-of-way leases	29	29	29
Miscellaneous	5	5	5
	<u>61,099</u>	<u>61,099</u>	<u>139,028</u>
<b>Total revenues</b>			
<b>Expenditures:</b>			
Supplies and services:			
State Board of Equalization (SBOE) fees	-	-	636
Professional services:			
Project related	192	192	90,816
Non-project related	115	115	4,593
Administration costs:			
Project related	958	958	9,172
Non-project related	1,240	1,240	12,845
Other:			
Project related	5	5	160
Non-project related	45	45	3,371
Payments to local agencies:			
Project related	6,113	6,113	72,386
Capital outlay:			
Project related	9,659	9,659	59,070
Non-project related	-	-	26
Debt service:			
Interest on long-term debt and commercial paper	11,263	11,263	15,952
	<u>29,590</u>	<u>29,590</u>	<u>269,027</u>
<b>Total expenditures</b>			
<b>Excess (deficiency) of revenues over (under) expenditures</b>	<u>31,509</u>	<u>31,509</u>	<u>(129,999)</u>
Transfers out:			
Project related	(395)	(395)	(773)
Transfers in:			
Project related	(10,041)	(10,041)	13,658
Bond proceeds	-	-	358,593
	<u>(10,436)</u>	<u>(10,436)</u>	<u>371,478</u>
<b>Total other financing sources (uses)</b>			
<b>Excess (deficiency) of revenues over (under) expenditures and other sources (uses)</b>	<u>\$ 21,073</u>	<u>\$ 21,073</u>	<u>\$ 241,479</u>

**Measure M2**  
**Schedule of Calculations of Net Tax Revenues and Net Bond Revenues (Debt Service)**  
**as of September 30, 2011**  
**(Unaudited)**

<i>(\$ in thousands)</i>	Quarter Ended Sept 30, 2011 (actual)	Year Ended Sept 30, 2011 (actual)	Period from Inception through Sept 30, 2011 (actual)	Period from October 1, 2011 through March 31, 2041 (forecast)	Total
	(C.1)	(C.1)	(D.1)	(E.1)	(F.1)
<b>Tax revenues:</b>					
Sales taxes	\$ 56,198	\$ 56,198	\$ 117,319	\$ 15,335,704	\$ 15,453,023
Operating interest	-	-	-	366,218	366,218
Total tax revenues	<u>56,203</u>	<u>56,203</u>	<u>117,324</u>	<u>15,701,922</u>	<u>15,819,246</u>
<b>Administrative expenditures:</b>					
SBOE fees	-	-	636	230,128	230,764
Professional services, non-project related	100	100	1,916	104,266	106,182
Administration costs, non-project related	1,240	1,240	12,845	146,455	159,300
Operating transfer out, non-project related	-	-	-	21,467	21,467
Other, non-project related	45	45	3,371	27,600	30,971
Capital outlay, non-project related	-	-	26	-	26
Environmental cleanup	131	131	1,713	314,039	315,752
	<u>1,516</u>	<u>1,516</u>	<u>20,507</u>	<u>843,954</u>	<u>864,461</u>
<b>Net tax revenues</b>	<u>\$ 54,687</u>	<u>\$ 54,687</u>	<u>\$ 96,817</u>	<u>\$ 14,857,967</u>	<u>\$ 14,954,784</u>
<b>Bond revenues:</b>					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 358,593	\$ 740,000	\$ 1,098,593
Interest revenue from bond proceeds	4,162	4,162	6,410	55,200	61,610
Interest revenue from debt service funds	1	1	9	36,191	36,200
Interest revenue from commercial paper	-	-	393	-	393
Total bond revenues	<u>4,163</u>	<u>4,163</u>	<u>365,405</u>	<u>831,391</u>	<u>1,196,796</u>
<b>Financing expenditures and uses:</b>					
Professional services, non-project related	15	15	2,677	-	2,677
Bond debt principal	-	-	-	1,092,570	1,092,570
Bond debt and other interest expense	11,263	11,263	15,952	1,009,858	1,025,810
Total financing expenditures and uses	<u>11,278</u>	<u>11,278</u>	<u>18,629</u>	<u>2,102,428</u>	<u>2,121,057</u>
<b>Net bond revenues (debt service)</b>	<u>\$ (7,115)</u>	<u>\$ (7,115)</u>	<u>\$ 346,776</u>	<u>\$ (1,271,037)</u>	<u>\$ (924,261)</u>



**Measure M2**  
**Schedule of Revenues and Expenditures Summary**  
**as of September 30, 2011**  
**(Unaudited)**

Project	Description	Net Tax Revenues Program to date Actual	Total Net Tax Revenues	Project Budget	Estimate at Completion	Variance Total Net Tax Revenues to Est at Completion	Variance Project Budget to Est at Completion	Expenditures through Sept 30, 2011	Reimbursements through Sept 30, 2011	Net Project Cost	Percent of Budget Expended
(G)		(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
<i>(\$ in thousands)</i>											
<b>Freeways (43% of Net Tax Revenues)</b>											
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 3,816	\$ 589,444	\$ 589,424	\$ 589,424	\$ 20	\$ -	\$ 71	\$ -	\$ 71	0.0%
B,C,D	I-5 Santa Ana/San Diego Freeway Improvements	9,623	1,486,351	1,313,637	1,313,637	172,714	-	9,297	36	9,261	0.7%
E	SR-22 Garden Grove Freeway Access Improvements	974	150,497	150,496	150,496	1	-	2	-	2	0.0%
F	SR-55 Costa Mesa Freeway Improvements	2,972	459,014	458,677	458,677	337	-	433	-	433	0.1%
G	SR-57 Orange Freeway Improvements	2,101	324,492	306,602	306,602	17,890	-	24,774	1,718	23,056	7.5%
H,I,J	SR-91 Riverside Freeway Improvements	12,028	1,857,972	1,854,564	1,854,564	3,408	-	13,664	5,297	8,367	0.5%
K,L	I-405 San Diego Freeway Improvements	6,655	1,027,997	606,250	606,250	421,747	-	12,159	627	11,532	1.9%
M	I-605 Freeway Access Improvements	162	25,083	25,083	25,083	-	-	-	-	-	0.0%
N	All Freeway Service Patrol	1,218	188,121	188,121	188,121	-	-	-	-	-	0.0%
	Freeway Mitigation	2,082	321,587	277,446	277,446	44,141	-	24,332	-	24,332	8.8%
	<b>Subtotal Projects</b>	<b>41,631</b>	<b>6,430,558</b>	<b>5,770,300</b>	<b>5,770,300</b>	<b>660,258</b>	<b>-</b>	<b>84,732</b>	<b>7,678</b>	<b>77,054</b>	
	<b>Net (Bond Revenue)/Debt Service</b>	<b>-</b>	<b>-</b>	<b>660,258</b>	<b>660,258</b>	<b>(660,258)</b>	<b>-</b>	<b>4,707</b>	<b>-</b>	<b>4,707</b>	
	<b>Total Freeways</b>	<b>\$ 41,631</b>	<b>\$ 6,430,558</b>	<b>\$ 6,430,558</b>	<b>\$ 6,430,558</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 89,439</b>	<b>\$ 7,678</b>	<b>\$ 81,761</b>	
	<b>%</b>				<b>43.0%</b>					<b>38.2%</b>	
<b>Street and Roads Projects (32% of Net Tax Revenues)</b>											
O	Regional Capacity Program	\$ 9,682	\$ 1,495,462	\$ 1,359,578	\$ 1,359,578	\$ 135,884	\$ -	\$ 56,858	\$ 69	\$ 56,789	4.2%
P	Regional Traffic Signal Synchronization Program	3,872	598,158	598,011	598,011	147	-	357	-	357	0.1%
Q	Local Fair Share Program	17,427	2,691,911	2,691,911	2,691,911	-	-	8,880	-	8,880	0.3%
	<b>Subtotal Projects</b>	<b>30,981</b>	<b>4,785,531</b>	<b>4,649,500</b>	<b>4,649,500</b>	<b>136,031</b>	<b>-</b>	<b>66,095</b>	<b>69</b>	<b>66,026</b>	
	<b>Net (Bond Revenue)/Debt Service</b>	<b>-</b>	<b>-</b>	<b>136,031</b>	<b>136,031</b>	<b>(136,031)</b>	<b>-</b>	<b>3,491</b>	<b>-</b>	<b>3,491</b>	
	<b>Total Street and Roads Projects</b>	<b>\$ 30,981</b>	<b>\$ 4,785,531</b>	<b>\$ 4,785,531</b>	<b>\$ 4,785,531</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 69,586</b>	<b>\$ 69</b>	<b>\$ 69,517</b>	
	<b>%</b>				<b>32.0%</b>					<b>32.5%</b>	

See Notes to Measure M2 Status Report (Unaudited)

**Measure M2**  
**Schedule of Revenues and Expenditures Summary**  
**as of September 30, 2011**  
**(Unaudited)**

Project	Description	Net Tax Revenues Program to date Actual	Total Net Tax Revenues	Project Budget	Estimate at Completion	Variance Total Net Tax Revenues to Est at Completion	Variance Project Budget to Est at Completion	Expenditures through Sept 30, 2011	Reimbursements through Sept 30, 2011	Net Project Cost	Percent of Budget Expended
(G)		(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
	<b>Transit Projects (25% of Net Tax Revenues)</b>										
R	High Frequency Metrolink Service	\$ 8,667	\$ 1,338,775	\$ 1,287,221	\$ 1,287,221	\$ 51,554	\$ -	\$ 78,322	\$ 20,803	\$ 57,519	4.5%
S	Transit Extensions to Metrolink	8,547	1,320,161	1,311,812	1,311,812	8,349	-	25	-	25	0.0%
T	Metrolink Gateways	1,937	299,148	232,414	232,414	66,734	-	2	-	2	0.0%
U	Expand Mobility Choices for Seniors and Persons with Disabilities	2,904	448,591	448,591	448,591	-	-	1,488	-	1,488	0.3%
V	Community Based Transit/Circulators	1,936	299,016	299,016	299,016	-	-	-	-	-	0.0%
W	Safe Transit Stops	214	33,004	33,004	33,004	-	-	-	-	-	0.0%
	<b>Subtotal Projects</b>	<b>24,205</b>	<b>3,738,695</b>	<b>3,612,058</b>	<b>3,612,058</b>	<b>126,637</b>	<b>-</b>	<b>79,837</b>	<b>20,803</b>	<b>59,034</b>	
	<b>Net (Bond Revenue)/Debt Service</b>	<b>-</b>	<b>-</b>	<b>126,637</b>	<b>126,637</b>	<b>(126,637)</b>	<b>-</b>	<b>3,515</b>	<b>-</b>	<b>3,515</b>	
	<b>Total Transit Projects</b>	<b>\$ 24,205</b>	<b>\$ 3,738,695</b>	<b>\$ 3,738,695</b>	<b>\$ 3,738,695</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 83,352</b>	<b>\$ 20,803</b>	<b>\$ 62,549</b>	
	<b>%</b>				<b>25.0%</b>					<b>29.3%</b>	
	<b>Measure M2 Program</b>	<b>\$ 96,817</b>	<b>\$ 14,954,784</b>	<b>\$ 14,954,784</b>	<b>\$ 14,954,784</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 242,377</b>	<b>\$ 28,550</b>	<b>\$ 213,827</b>	

See Notes to Measure M2 Status Report (Unaudited)

**Measure M2**  
**Schedule of Revenues and Expenditures Summary**  
**as of September 30, 2011**  
**(Unaudited)**

Project	Description	Revenues Program to date Actual	Total Revenues	Project Budget	Estimate at Completion	Variance Total Revenues to Est at Completion	Variance Project Budget to Est at Completion	Expenditures through Sept 30, 2011	Reimbursements through Sept 30, 2011	Net Project Cost	Percent of Budget Expended
(G)		(H.1)	(I.1)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
	<b>Environmental Cleanup (2% of Revenues)</b>										
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 2,346	\$ 316,385	\$ 315,050	\$ 315,050	\$ 1,335	\$ -	\$ 1,713	\$ -	\$ 1,713	0.5%
	Subtotal Projects	2,346	316,385	315,050	315,050	1,335	-	1,713	-	1,713	
	Net (Bond Revenue)/Debt Service	-	-	1,335	1,335	(1,335)	-	105	-	105	
	<b>Total Environmental Cleanup %</b>	<b>\$ 2,346</b>	<b>\$ 316,385</b>	<b>\$ 316,385</b>	<b>\$ 316,385</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,818</b>	<b>\$ -</b>	<b>\$ 1,818</b>	<b>1.5%</b>
						2.0%					

See Notes to Measure M2 Status Report (Unaudited)

# *Presentation Items*

*Attachments  
Available  
Upon Request*



**November 7, 2011**

**To:** Executive Committee

**From:** Will Kempton, Chief Executive Officer

**Subject:** Capital Programs Division - First Quarter Fiscal Year 2011-12  
Capital Action Plan Performance Metrics Update

### **Overview**

The Orange County Transportation Authority's 2011 Strategic Plan key strategies and objectives to achieve the goals for mobility and stewardship include delivery of all Capital Action Plan projects on time and within budget. The Capital Action Plan is used as the performance metric to assess capital project delivery progress on highway, grade separation, rail, and facility projects. This report provides an update on the Capital Action Plan delivery and metrics.

### **Recommendation**

Receive and file as an information item.

### **Background**

The Orange County Transportation Authority (OCTA) Capital Programs Division is responsible for project development and delivery of highway, grade separation, rail, and facility projects from the beginning of the environmental phase to construction completion. Project delivery commitments reflect defined project scope, costs, and schedules. Project delivery commitments shown in the Capital Action Plan are key strategies and objectives to achieve Strategic Plan goals for mobility and stewardship.

This report focuses on the Capital Action Plan. The Capital Programs Division also provides separate quarterly Metrolink commuter rail system ridership, revenue, and on-time performance reports and metrics which are posted on the OCTA dashboard website.

### ***Discussion***

The Capital Programs Division objective is to deliver projects on schedule and within the approved project budget. Key projects' cost and schedule commitments are captured in the Capital Action Plan which is regularly updated with new projects and project status (Attachment A). The Capital Action Plan is categorized into four key groupings of projects; freeway projects, grade separation projects, rail and station projects, and key facility projects. Simple milestones represent the plan, progress, and performance in capital project delivery. Fiscal year (FY) metrics for each milestone are used to gauge annual performance of the capital project delivery efforts.

#### **Project Cost**

Capital project costs represent the total cost of the project across all phases, including support costs, and right-of-way and construction capital costs. The cost of either the approved budget or plan is shown in comparison to the actual or forecast cost. Budget or planned total project costs may be shown as to-be-determined (TBD) if project scoping or other approval documents have not been approved, and may be updated as project milestones are achieved. Actual or forecast costs represent the total project cost as the project progresses. Measure M2 (M2) program projects are identified with the corresponding project letter and the M2 logo.

#### **Project Schedule**

The Capital Action Plan summarizes the very complex capital project critical path schedules into eight key delivery milestones.

<b>Begin Environmental</b>	The date work on the environmental clearance, project report, or preliminary engineering phase begins.
<b>Complete Environmental</b>	The date environmental clearance and project approval is achieved.
<b>Begin Design</b>	The date final design work begins, or the date when a design-build contract begins.
<b>Complete Design</b>	The date final design work is 100 percent complete and approved.

Construction Ready	The date contract bid documents are ready for advertisement, including certification of right-of-way, all agreements executed, and contract constraints cleared.
Advertise for Construction	The date a construction contract is advertised for bids.
Award Contract	The date the construction contract is awarded.
Construction Complete	The date all construction work is completed, and the project is open to public use.

Project schedules reflect the approved milestone date shown in comparison to the actual or forecast milestone date. Milestone dates may be shown as TBD if project scoping or approval documents have not been approved, or the delivery schedule has not been negotiated with the party performing the work of the specific phase. Planned milestone dates can be revised to reflect new dates from approved baseline schedule changes. Actual dates will be updated when milestones are achieved, and forecast dates will be updated to reflect project delivery status.

#### Key Findings

First quarter FY 2011-12 actions and milestones achieved in the Capital Action Plan include:

#### Freeway Projects

- The M2 project to extend the carpool lanes on Interstate 5 (I-5) southerly to Avenida Pico in San Clemente now shows three separate project segment delivery schedules. The forecast delivery milestones for all three segments, design and construction phases, have been established and reflect significant acceleration compared to the existing single project baseline schedule.
- Construction was completed on the I-5 Avenida Vaquero Soundwall in San Clemente. The project is now in a one-year replacement planting establishment period.
- The M2 State Route 57 (SR-57) northbound widening project between Katella Avenue and Lincoln Avenue was advertised for construction, and bids were opened on September 22, 2011. The apparent low bidder was



C.C. Myers Inc., who submitted a bid approximately 34 percent below the engineers estimate.

- Environmental clearance and project approval work began on the project to install continuous access carpool lane striping on I-5, from Oso Creek to Grand Avenue and from SR-57 to State Route 91 (SR-91).
- The baseline schedule for the M2 SR-91 westbound widening between State Route 55 and Tustin Avenue was revised to reflect an earlier construction award date. This was a result of the OCTA Board of Directors (Board) approval of State-Local Partnership Program and M2 matching funds to replace previously programmed regional State Transportation Improvement Program (STIP) funding.
- Environmental clearance and project approval work began on the project to install continuous access carpool lane striping on Interstate 405 (I-405) from I-5 to State Route 73 (SR-73).

#### **Grade Separation Projects**

- Federal funding was removed from the M2 Raymond Avenue Railroad Grade Separation Project. Federal environmental clearance is no longer required, and the environmental completion milestone is now shown as complete as of the state environmental clearance date, November 2009.
- The M2 Placentia Avenue Railroad Grade Separation Project construction contract was awarded to Flatiron West, Inc.
- The M2 Kraemer Avenue Railroad Grade Separation Project was awarded to Atkinson Contractors, LP.
- Design work was completed on the M2 Tustin/Rose Avenue Railroad Grade Separation Project.

#### **Rail and Station Projects**

- The M2 Metrolink Service Expansion Program plan and forecast construction completion dates were revised to June 2012 to reflect addition of the Control Point Stadium and Maintenance of Way Spurs scope.
- The M2 Anaheim Rapid Connection Fixed-Guideway project was added with the current baseline and forecast schedule.
- The M2 Santa Ana/Garden Grove Fixed-Guideway project was added with the current baseline and forecast schedule based on a Federal Transit Administration Small Starts approval process.
- The Placentia Metrolink Station project includes a new baseline schedule for completing design based on the cooperative agreement

with the City of Placentia for the City of Placentia to produce a consolidated mixed-use parking plan and modify the station design accordingly.

- The Orange Metrolink Station Parking Expansion project forecast schedule dates, through the construction ready milestone, were delayed to reflect the City of Orange's effort to re-scope the project. However, the advertise construction date is now two months earlier than originally planned as a result of OCTA Board approval of the Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account and federal funding to replace previously programmed STIP – Public Transportation Account funding.
- The City of Fullerton contract to design, furnish, and install the Fullerton Metrolink Station video surveillance system (VSS) achieved design completion and construction ready status and is being coordinated with the SOCO West Parking Structure project.

The following project milestones missed the planned delivery in the first quarter of FY 2011-12.

- The first quarter begin environmental clearance and project approval work for the M2 project to widen I-5 from SR-73 to El Toro Road. The milestone was achieved on October 5, 2011.
- The first quarter construction contract award for the M2 SR-57 northbound widening project between Katella Avenue and Lincoln Avenue. This was due to prior delays of availability of state bond funding for construction. The project is currently pending award by the California Department of Transportation.
- The first quarter environmental approval for the M2 Anaheim Regional Transportation Intermodal Center (ARTIC). The City of Anaheim has not yet obtained the final federal approval of the Environmental Assessment.
- The first quarter contract award for the ARTIC shell and enclosure contract. The City of Anaheim cancelled the construction bid for the fabrication and construction of the ARTIC shell and enclosure. All plan and forecast dates from completion of design to construction completion have been revised pending new information from the City of Anaheim.
- The first quarter construction completion for the contract to design, furnish, and install the Santa Ana Metrolink Station VSS was delayed to the second quarter of FY 2011-12 due to material delivery delays.

The new milestone forecast dates for these projects are included in the Capital Action Plan.

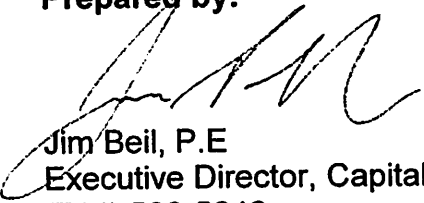
**Summary**

Significant capital project delivery progress continues to be made and reflected in the Capital Action Plan. The Capital Action Plan and the related performance metrics have been updated to reflect FY 2011-12 accomplishments, add new projects approved for delivery, and provide dashboard metrics for the FY 2011-12 milestones. Staff will continue to manage project costs and schedules across all project phases to meet project delivery commitments. The updated Capital Action Plan and related metrics will be posted on OCTA's website in November 2011.

**Attachment**

- A. Capital Action Plan, Through September 2011

**Prepared by:**

  
Jim Beil, P.E  
Executive Director, Capital Programs  
(714) 560-5646

Capital Projects	Cost		Schedule															
	Budget/Forecast		Plan/Forecast															
	(millions)		Begin Environmental	FY 12	Complete Environmental	FY 12	Begin Design	FY 12	Complete Design	FY 12	Construction Ready	FY 12	Advertise Construction	FY 12	Award Contract	FY 12	Complete Construction	FY 12
<b>Freeway Projects:</b>																		
I-5, Pico to Vista Hermosa	\$114.5		Jun-09		Dec-11	Q2	Jun-11		Jun-14		Dec-14		Feb-15		May-15		Jun-18	
Project C	\$114.5		Jun-09		Oct-11		Jun-11		Oct-13		Feb-14		Apr-14		Jul-14		Jul-16	
I-5, Vista Hermosa to Pacific Coast Highway	\$84.2		Jun-09		Dec-11	Q2	Jun-11		Jun-14		Dec-14		Feb-15		May-15		Jun-18	
Project C	\$84.2		Jun-09		Oct-11		Jun-11		Feb-13		Jun-13		Aug-13		Oct-13		Aug-15	
I-5, Pacific Coast Highway to San Juan Creek Rd.	\$71.7		Jun-09		Dec-11	Q2	Jun-11		Jun-14		Dec-14		Feb-15		May-15		Jun-18	
Project C	\$71.7		Jun-09		Oct-11		Jun-11		Jan-13		Jun-13		Jul-13		Oct-13		Jul-15	
I-5, I-5/Ortega Interchange	\$90.9		Sep-05		Jun-09		Jan-09	Q2	Nov-11	Q2	Mar-12	Q3	Jun-12	Q4	Aug-12		Nov-14	
Project D	\$90.9		Sep-05		Jun-09		Jan-09		Dec-11		Jun-12		Jul-12		Oct-12		Jan-15	
I-5, Avenida Vaquero Soundwall	\$3.0		N/A		N/A		Feb-08		Jan-09		Mar-09		Aug-10		Nov-10		Oct-11	Q2
	\$2.5		N/A		N/A		Feb-08		Mar-09		Apr-09		Aug-10		Nov-10		Aug-11	Q1
I-5, El Camino Real Soundwall	\$5.3		N/A		N/A		Jan-08		Jan-09		Mar-09		Aug-10		Dec-10		Feb-12	Q3
	\$4.9		N/A		N/A		Jan-08		Jan-09		Apr-09		Aug-10		Dec-10		Feb-12	
I-5, SR-73 to El Toro Road	TBD		Sep-11	Q1	Jun-14		TBD		TBD		TBD		TBD		TBD		TBD	
Project C & D	\$558.7		Oct-11		Jun-14		Jun-14		Jul-17		Jan-18		Mar-18		Jun-18		Jun-22	
I-5, SR-55 to SR-57	TBD		Jul-11		Jun-13		TBD		TBD		TBD		TBD		TBD		TBD	
Project A	\$46.4		Jun-11		Jun-13		Jul-13		Mar-15		Jul-15		Aug-15		Nov-15		Nov-17	
I-5, SR-91 to Los Angeles (LA) County Line	\$334.1		N/A		Dec-99		Sep-99		Jun-04		Dec-04		Jan-05		Apr-05		Mar-11	
	\$326.5		N/A		Dec-99		Sep-99		Jul-05		Aug-05		Sep-05		Apr-06		Jan-11	
I-5, SR-91 to LA County Line (Landscape)	\$1.7		N/A		N/A		Jan-08		Jul-10		Sep-10		Nov-10		Feb-11		Apr-12	Q4
	\$1.7		N/A		N/A		Jan-08		Jul-10		Sep-10		Nov-10		Feb-11		Apr-12	
I-5, Continuous HOV Lane Access	TBD		Jul-11	Q1	Mar-12	Q3	Feb-12	Q3	Jan-13		Apr-13		May-13		Aug-13		Dec-13	
	\$7.7		Aug-11	Q1	Apr-12		Apr-12		Jan-13		Apr-13		May-13		Aug-13		Dec-13	
SR- 22, Additional Soundwalls	\$4.0		N/A		N/A		Mar-08		Jan-09		Mar-09		Apr-09		Jun-09		Mar-11	
	\$3.2		N/A		N/A		Mar-08		Jun-09		Nov-09		Dec-09		Apr-10		Mar-11	
SR-55, High-Occupancy Vehicle Continuous (HOV) Access	\$1.5		May-10		Aug-10		May-10		Oct-10		Dec-10		Dec-10		Feb-11		Jun-11	
	\$1.1		May-10		Oct-10		May-10		Oct-10		Dec-10		Dec-10		Feb-11		May-11	
SR-55, I-405 to I-5	TBD		Feb-11		Nov-13		TBD		TBD		TBD		TBD		TBD		TBD	
Project F	\$274.9		May-11		Jan-14		Feb-14		Dec-16		Jun-17		Aug-17		Oct-17		Oct-20	
SR-57 Northbound (NB), Katella to Lincoln	\$78.7		Apr-08		Jul-09		Jul-08		Nov-10		Mar-11		May-11	Q1	Aug-11	Q1	Mar-15	
Project G	\$37.8		Apr-08		Nov-09		Aug-08		Dec-10		Apr-11		Jul-11	Q1	Oct-11		Jul-14	
SR-57 (NB), Orangethorpe to Yorba Linda	\$80.2		Aug-05		Dec-07		Feb-08		Dec-09		Apr-10		Jun-10		Oct-10		Mar-14	
Project G	\$57.5		Aug-05		Dec-07		Feb-08		Jul-09		Dec-09		May-10		Oct-10		Mar-14	
SR-57 (NB), Yorba Linda to Lambert	\$79.3		Aug-05		Dec-07		Feb-08		Dec-09		Apr-10		Jun-10		Oct-10		Jul-14	
Project G	\$56.5		Aug-05		Dec-07		Feb-08		Jul-09		Mar-10		May-10		Oct-10		Jul-14	
SR-91 Westbound (WB), I-5 to SR-57	\$78.1		Jul-07		Apr-10		Oct-09		Feb-12	Q3	Jul-12		Aug-12		Nov-12		Nov-15	
Project H	\$78.0		Jul-07		Jun-10		Mar-10		Apr-12		Jul-12		Sep-12		Nov-12		Nov-15	
SR-91 (WB), Tustin Interchange to SR-55	\$49.9		Jul-08		Jul-11		Jul-11		Mar-13		Jul-13		Aug-13		Oct-13		May-15	
Project I	\$49.9		Jul-08		May-11		Jun-11		Mar-13		Jul-13		Aug-13		Oct-13		May-15	

**Capital Action Plan**

Status Thru September 2011

Updated: October 24, 2011

Capital Projects	Cost Budget/Forecast  (millions)	Schedule Plan/Forecast															
		Begin Environmental	FY 12	Complete Environmental	FY 12	Begin Design	FY 12	Complete Design	FY 12	Construction Ready	FY 12	Advertise Construction	FY 12	Award Contract	FY 12	Complete Construction	FY 12
SR-91, SR-55 to SR-241	\$128.4	Jul-07		Jul-09		Jun-09		Jan-11		Apr-11		Jun-11		Sep-11		Dec-12	
Project J	\$80.9	Jul-07		Apr-09		Apr-09		Aug-10		Dec-10		Feb-11		May-11		Dec-12	
SR-91 Eastbound, SR-241 to SR-71	\$104.5	Mar-05		Dec-07		Jul-07		Dec-08		Mar-09		May-09		Jul-09		Nov-10	
Project J	\$60.2	Mar-05		Dec-07		Jul-07		Dec-08		May-09		Jun-09		Aug-09		Jan-11	
I-405, Continuous HOV Lane Access	TBD	Jul-11	Q1	Apr-12	Q4	Mar-12	Q3	Jan-13		Apr-13		May-13		Aug-13		Nov-13	
	\$3.5	Aug-11	Q1	Mar-12		Mar-12		Jan-13		Apr-13		May-13		Aug-13		Nov-13	
I-405, SR-55 to I-605	TBD	Mar-09		Mar-13		TBD		TBD		TBD		TBD		TBD		TBD	
Project K	\$1,789.4	Mar-09		Mar-13		Apr-13		Mar-16		Sep-16		Nov-16		Mar-17		Mar-22	
I-405/SR-22 HOV Connector	\$195.9	N/A		N/A		Sep-07		Sep-09		Mar-10		May-10		Aug-10		Aug-14	
	\$120.9	N/A		N/A		Sep-07		Jun-09		Sep-09		Feb-10		Jun-10		Aug-14	
I-405/I-605 HOV Connector	\$260.4	N/A		N/A		Sep-07		Sep-09		Mar-10		May-10		Oct-10		Jan-15	
	\$169.6	N/A		N/A		Sep-07		Sep-09		Feb-10		May-10		Oct-10		Jan-15	
<b>Grade Separation Projects:</b>																	
Sand Canyon Grade Separation	\$55.6	N/A		Sep-03		Jan-04		Jul-10		Jul-10		Oct-10		Feb-11		May-14	
Project R	\$55.2	N/A		Sep-03		Jan-04		Jul-10		Jul-10		Oct-10		Feb-11		May-14	
Raymond Grade Separation	\$77.2	Feb-09		Nov-09		Mar-10		Aug-12		Nov-12		Feb-13		May-13		Mar-16	
Project O	\$78.2	Feb-09		Nov-09		Mar-10		May-12		Nov-12		Feb-13		May-13		Mar-16	
State College Grade Separation	\$73.6	Dec-08		Jan-11		Jul-06		Aug-12		Nov-12		Feb-13		May-13		Mar-16	
Project O	\$74.6	Dec-08		Apr-11		Jul-06		Mar-12		Nov-12		Feb-13		May-13		Mar-16	
Placentia Grade Separation	\$78.2	Jan-01		May-01		Jan-09		Mar-10		May-10		Mar-11		Jun-11	Q1	Jul-14	
Project O	\$69.2	Jan-01		May-01		Jan-09		Jun-10		Jan-11		Mar-11		Jul-11	Q1	Oct-14	
Kraemer Grade Separation	\$70.4	Jan-01		Sep-09		Jan-09		Jul-10		Jul-10		Apr-11		Aug-11	Q1	May-14	
Project O	\$65.5	Jan-01		Sep-09		Feb-09		Jul-10		Jan-11		Jun-11		Sep-11	Q1	Sep-14	
Orangethorpe Grade Separation	\$117.4	Jan-01		Sep-09		Feb-09		Dec-11	Q2	Dec-11	Q2	Feb-12	Q3	May-12	Q4	Mar-15	
Project O	\$109.6	Jan-01		Sep-09		Feb-09		Oct-11		Apr-12		Jun-12		Sep-12		Jul-15	
Tustin/Rose Grade Separation	\$103.0	Jan-01		Sep-09		Feb-09		Dec-11	Q2	Mar-12	Q3	May-12	Q4	Aug-12		Mar-15	
Project O	\$88.0	Jan-01		Sep-09		Feb-09		Jul-11	Q1	May-12		Jul-12		Oct-12		May-15	
Lakeview Grade Separation	\$70.2	Jan-01		Sep-09		Feb-09		Oct-11	Q2	Oct-12		Feb-13		May-13		Sep-15	
Project O	\$79.0	Jan-01		Sep-09		Feb-09		Dec-11		Dec-12		Feb-13		May-13		Sep-15	
<b>Rail and Station Projects:</b>																	
Rail-Highway Grade Crossing Safety Enhancement	\$94.4	Jan-08		Oct-08		Jan-08		Sep-08		Sep-08		Sep-08		Aug-09		Dec-11	Q2
Project R	\$94.4	Jan-08		Oct-08		Jan-08		Sep-08		Sep-08		Sep-08		Aug-09		Dec-11	
Metrolink Service Expansion Program	\$134.0	May-07		Apr-08		Jul-07		Mar-09		Mar-09		Sep-08		Mar-09		Jun-12	Q4
	\$134.0	May-07		Apr-08		Jul-07		Mar-09		Mar-09		Sep-08		Mar-09		Jun-12	
Anaheim Rapid Connection	TBD	Jan-09		Oct-14		Apr-13		Apr-14		Dec-14		TBD		TBD		TBD	
Project S	\$676.0	Jan-09		Nov-14		Jun-13		May-14		May-15		Apr-14		May-15		Aug-18	
Santa Ana/Garden Grove Fixed Guideway	TBD	Aug-09		Mar-12	Q3	TBD		TBD		TBD		TBD		TBD		TBD	
Project S	\$252.0	Aug-09		Mar-12		Sep-12		Oct-14		Jan-15		Jan-15		Apr-15		May-17	

Capital Action Plan

September 2011

Updated: October 24, 2011

Capital Projects	Cost Budget/Forecast  (millions)	Schedule Plan/Forecast															
		Begin Environmental	FY 12	Complete Environmental	FY 12	Begin Design	FY 12	Complete Design	FY 12	Construction Ready	FY 12	Advertise Construction	FY 12	Award Contract	FY 12	Complete Construction	FY 12
Placentia Metrolink Station & Parking Structure	TBD	Jan-03		May-07		Oct-08		Aug-12		Aug-12		Aug-12		Nov-12		Jan-15	
	TBD	Jan-03		May-07		Oct-08		Aug-12		Aug-12		Aug-12		Nov-12		Jan-15	
Orange Station Parking Expansion	\$23.7	Dec-09		May-12	Q4	Sep-10		Jul-12		Jul-12		Jun-13		Aug-13		Dec-16	
	\$23.7	Dec-09		Dec-12		Nov-10		Apr-13		Apr-13		Apr-13		Jul-13		Nov-14	
Tustin Station Parking Expansion	\$17.6	Apr-07		Nov-07		Apr-09		Mar-10		Mar-10		Apr-10		Aug-10		Sep-11	Q1
	\$17.4	Apr-07		Nov-07		Apr-09		May-10		May-10		Jun-10		Aug-10		Sep-11	Q1
Fullerton Station Parking Expansion	\$42.0	Jul-06		Mar-07		Sep-07		Aug-09		Aug-09		May-10		Aug-10		Apr-12	Q4
	\$32.9	Jul-06		Mar-07		Sep-07		Aug-09		Aug-09		May-10		Aug-10		Apr-12	
Anaheim Regional Transportation Intermodal Center Project R & T	\$227.4	Apr-09		Feb-11	Q1	Jun-09		Feb-12	Q3	Dec-11	Q2	May-11 (1)		Jul-11	Q1	Apr-15	
	\$227.4	Apr-09		Dec-11		Jun-09		Jun-12		Aug-12		Aug-12		Nov-12		Jan-15	
LOSSAN Fiber Optic Communications	\$24.6	N/A		N/A		Oct-07		Mar-10		Mar-10		Apr-10		Dec-10		Aug-12	
	\$24.6	N/A		N/A		Oct-07		Sep-10		Sep-10		Oct-10		Dec-10		Sep-12	
Tustin Station Video Surveillance System (VSS) (Design-Furnish-Install)	\$0.8	N/A		N/A		Mar-11		Jun-11		Jun-11		N/A		N/A		Oct-11	Q2
	\$0.8	N/A		N/A		Apr-11		Jun-11		Jun-11		N/A		N/A		Dec-11	
Santa Ana Station VSS (Design-Furnish-Install)	\$0.8	N/A		N/A		Jan-11		Feb-11		Feb-11		N/A		N/A		Sep-11	Q1
	\$0.8	N/A		N/A		Jan-11		Feb-11		Apr-11		N/A		N/A		Nov-11	
Fullerton Station VSS (Design-Furnish-Install)	\$0.8	N/A		N/A		Apr-11		Aug-11	Q1	Aug-11	Q1	N/A		N/A		Jun-12	Q4
	\$0.8	N/A		N/A		Jun-11		Aug-11	Q1	Aug-11	Q1	N/A		N/A		Jun-12	

Grey = Milestone achieved

Green = Forecast milestone meets or exceeds plan

Yellow = Forecast milestone is one to three months later than plan

Red = Forecast milestone is over three months later than plan

Notes: (1) Planned start of terminal shell and structure package

**Begin Environmental:** The date work on the environmental clearance, project report, or preliminary engineering phase begins.

**Complete Environmental:** The date environmental clearance and project approval is achieved.

**Begin Design:** The date final design work begins, or the date when a design-build contract begins.

**Complete Design:** The date final design work is 100 percent complete and approved.

**Construction Ready:** The date contract bid documents are ready for advertisement, including certification of right-of-way, all agreements executed, contract constraints are cleared.

**Advertise for Construction:** The date a construction contract is both funded and advertised for bids.

**Award Contract:** The date the construction contract is awarded.

**Construction Complete:** The date all construction work is completed and the project is open to public use.

Acronyms

I-5 - Santa Ana Freeway (Interstate 5)

SR-73 - San Joaquin Freeway (State Route 73)

SR-55 - Costa Mesa Freeway (State Route 55)

SR-57 - Orange Freeway (State Route 57)

SR-91 - Riverside Freeway (State Route 91)

SR-22 - Garden Grove Freeway (State Route 22)

I-405 - San Diego Freeway (Interstate 405)

SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)

I-605 - San Gabriel River Freeway (Interstate 605)

LOSSAN - Los Angeles - San Diego - San Luis Obispo



BOARD COMMITTEE TRANSMITTAL

**December 12, 2011**

**To:** Members of the Board of Directors  
*WK*  
**From:** Wendy Knowles, Clerk of the Board  
**Subject:** Proposition 1B Traffic Light Synchronization Program Phase II  
Project Results – Orangethorpe Avenue Corridor and Edinger  
Avenue Corridor

Highways Committee Meeting of December 5, 2011

**Present:** Directors Bates, Cavecche, Crandall, Galloway, Hansen,  
Herzog, and Nelson  
**Absent:** Director Glaab

**Committee Vote**

No action was taken on this receive and file information item.

**Staff Recommendation**

Receive and file as an information item.



**December 5, 2011**

**To:** Highways Committee

*Will Kempton*

**From:** Will Kempton, Chief Executive Officer

**Subject:** Proposition 1B Traffic Light Synchronization Program Phase II Project Results – Orangethorpe Avenue Corridor and Edinger Avenue Corridor

### **Overview**

The Orange County Transportation Authority has been working with local agencies, the County of Orange, and the California Department of Transportation on the implementation of the Traffic Light Synchronization Program. This report provides a summary of results achieved on the Orangethorpe Avenue corridor in north Orange County and on the Edinger Avenue corridor stretching from central Orange County to south Orange County.

### **Recommendation**

Receive and file as an information item.

### **Background**

The Orange County Transportation Authority (OCTA) is working to implement multi-agency signal synchronization as part of Traffic Light Synchronization Program (TLSP). The program targets 153 miles of arterials and 533 signalized intersections for improved signal synchronization and infrastructure upgrades along ten regionally significant corridors throughout Orange County. The Orangethorpe Avenue TLSP Project budget is \$697,585. The Edinger Avenue TLSP Project budget is \$846,218. These projects were both funded by California Proposition 1B TLSP and matching funds from Orange County Measure M.

### **Discussion**

Orangethorpe Avenue corridor is comprised of 44 signalized intersections and approximately 15 miles of roadway in seven jurisdictions. The project limits are from Valley View Street on the west to Fairlynn Boulevard on the east.



The Orangethorpe Avenue project route varies from four to six lanes and carries daily traffic ranging from over 20,000 vehicles per day to approximately 35,000 vehicles in certain areas. The project location map is included in Attachment A. The following agencies were participants of this TLSP project:

- City of Anaheim
- City of Buena Park
- City of Fullerton
- City of La Palma
- City of Placentia
- County of Orange
- California Department of Transportation (Caltrans)

Edinger Avenue corridor is comprised of 109 signalized intersections and approximately 22 miles of roadway in seven local jurisdictions, plus Caltrans. The project limits are from Edinger Avenue at State Route 55 on the north to Del Obispo Street on the south. The project route varies from four to six lanes and carries daily traffic ranging from over 15,000 vehicles per day to approximately 43,000 vehicles in certain areas. The project location map is included in Attachment B. The following agencies were participants of this TLSP project:

- City of Aliso Viejo
- City of Dana Point
- City of Irvine
- City of Laguna Hills
- City of Laguna Niguel
- City of Laguna Woods
- City of Tustin
- Caltrans

For both projects, coordinated signal timing plans were developed and implemented for three weekday operational peaks (AM, midday, and PM) and the weekend peak periods. Care was taken in developing these new timing plans to not adversely affect existing operations on crossing arterials. Additionally, as part of the implementation phase, existing traffic signal controllers were upgraded to newer advanced technology controllers with improved state-of-the-art traffic signal communications; modifications or additions to central advanced traffic management systems; and global positioning systems time source units were installed at strategic project locations and intersections.

To measure the overall project success, before and after travel time studies were conducted to evaluate improvements gained with new signal timing. The studies were conducted by driving specially-equipped vehicles that recorded various measures within the coordinated traffic flow during each peak time period. These measures show reductions in total travel times, decreases in the number of stops, and increases in average speeds. Additionally, decreases in fuel consumption, greenhouse gases, and other vehicle emissions were identified. The reduction of greenhouse gases is made possible by reducing the number of stops and by smoothing the flow of traffic. This reduces the amount of deceleration and acceleration of vehicles, which is a prime factor affecting the production of vehicle-related greenhouse gases.

Historically, individual agency traffic signal timing optimization efforts result in improvements in various parameters of between five percent and 15 percent. Comparisons of the Orangethorpe Avenue corridor before and after studies indicate much better results with a reduction of travel times between 11 percent and 23 percent for the prevailing direction of travel, depending on the peak period. Additionally, the project results indicate a reduction in average number of stops between 34 percent and 50 percent throughout the project corridor. Average speeds on the corridor improved between 12 percent and 30 percent. The project is also expected to reduce greenhouse gases by over 24.292 million pounds and fuel consumption by 1.252 million gallons over a three-year period. At \$3.90 per gallon of fuel, consumers could save approximately \$4.883 million over that three-year period. Attachment C provides tabular comparisons of the project improvements.

Comparisons of the Edinger Avenue corridor before and after studies indicate very good results with a reduction of travel times between four percent and 21 percent for the prevailing direction of travel, depending on the peak period. Additionally, the project results indicate a reduction in average number of stops between 20 percent and 54 percent throughout the project corridor. Average speeds on the corridor improved between six percent and 28 percent. Attachment D provides tabular comparisons of the project improvements. The project is also expected to reduce greenhouse gases of over 34.006 million pounds and fuel consumption by 1.733 million gallons over a three-year period. At \$3.90 per gallon of fuel, consumers could save approximately \$6.794 million over that three-year period.

**Next Steps**

OCTA will continue to monitor the Orangethorpe Avenue and Edinger Avenue corridors and refine the signal synchronization parameters through June 2012. Changes in traffic patterns may require periodic fine-tuning to ensure coordinated operation.

***Summary***

OCTA has implemented TLSP on the Orangethorpe Avenue corridor and the Edinger Avenue corridor. The synchronization of traffic signals along these two significant regional corridors resulted in significant improvements to traffic flow including reductions in total travel times and stops, increases in average speeds, and decreases in overall vehicle emissions.

***Attachments***

- A. Orangethorpe Avenue Corridor TSLP Project
- B. Edinger Avenue Corridor TLSP Project
- C. Orangethorpe Avenue Corridor Traffic Signal Synchronization Project Results
- D. Edinger Avenue Corridor Traffic Signal Synchronization Project Results

**Prepared by:**



**Anup Kulkarni  
Section Manager  
(714) 560-5867**

**Approved by:**



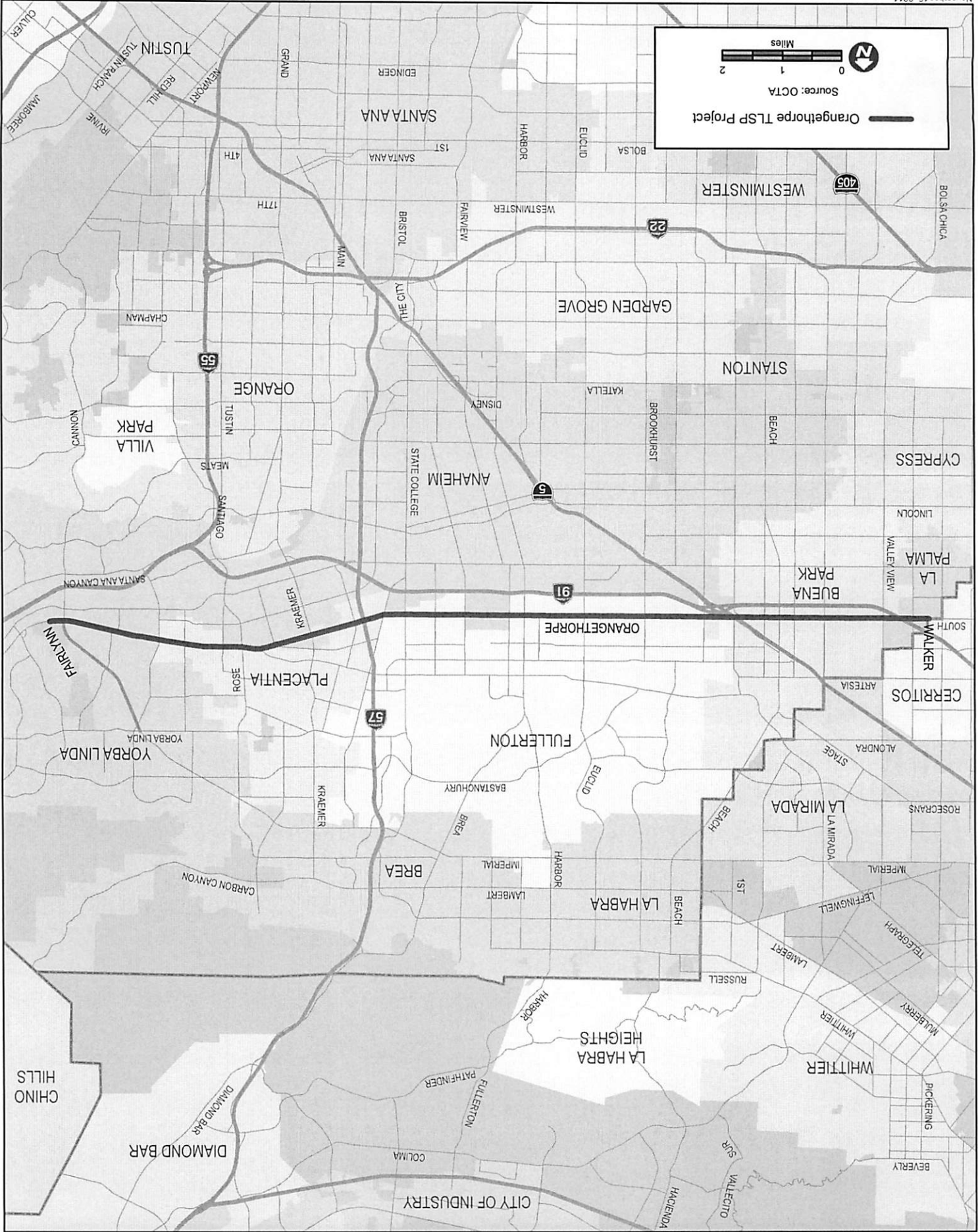
**Kia Mortazavi  
Executive Director, Planning  
(714) 560-5741**

Orangehorpe TSP Project

Source: OCTA

Miles

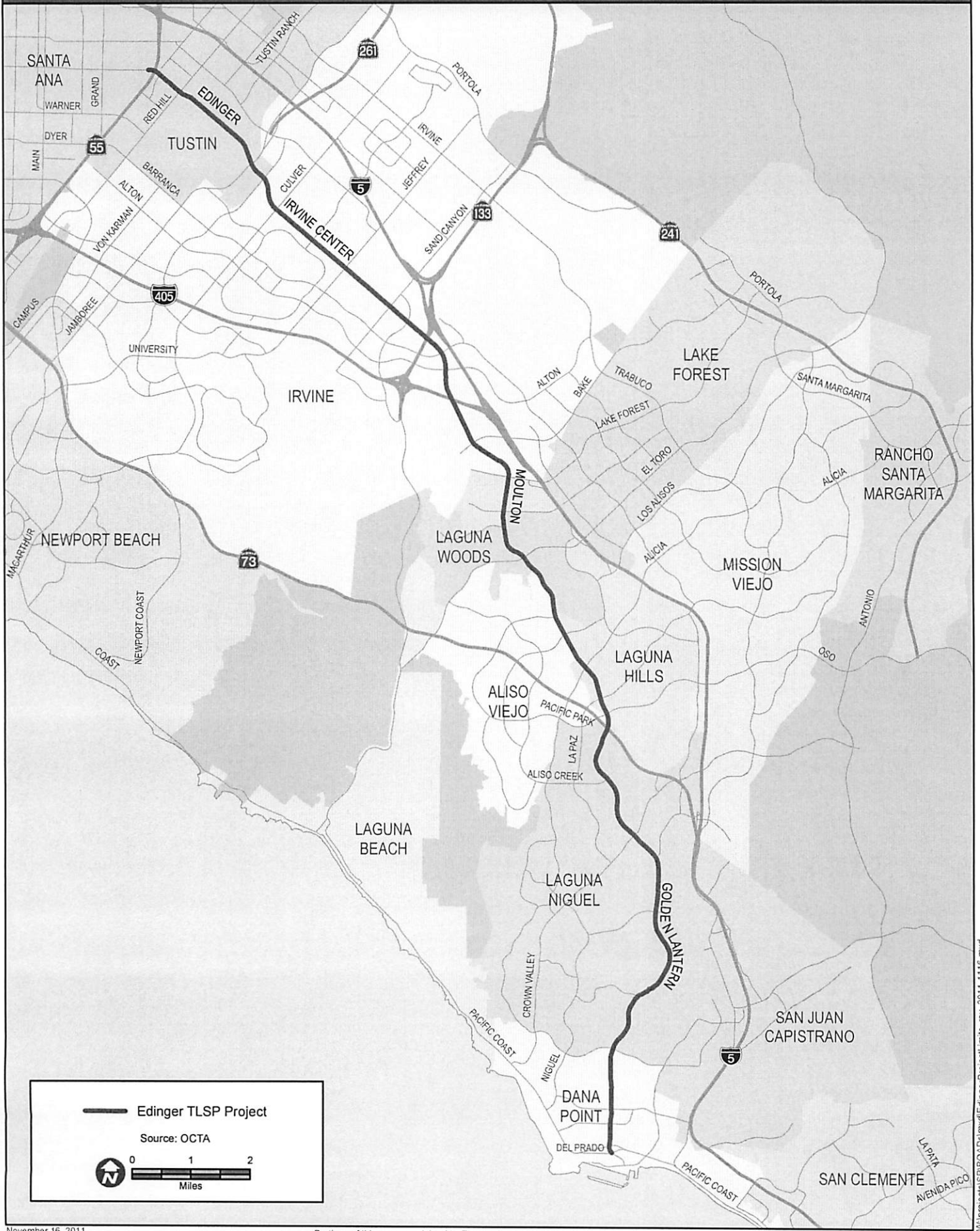
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# Edinger Avenue Corridor TLSP Project

ATTACHMENT B



**Orangethorpe Avenue Corridor Traffic Signal Synchronization Project Results**

Peak Period \ Direction	Travel Time Benefit					
	Eastbound			Westbound		
	Before	After	Improvement (%)	Before	After	Improvement (%)
<b>Morning Peak Period</b>						
Travel Time (min)	35.3	28.7	19%	39.7	30.4	23%
Number of Stops	20.0	10.4	48%	21.4	10.6	50%
Average Speed (mph)	24.8	30.5	23%	22.1	28.8	30%
<b>Midday Peak Period</b>						
Travel Time (min)	33.3	29.8	11%	34.8	28.5	18%
Number of Stops	17.2	11.2	35%	19.2	11.2	42%
Average Speed (mph)	26.3	29.4	12%	25.2	30.7	22%
<b>Evening Peak Period</b>						
Travel Time (min)	35.7	30.5	15%	36.4	31.3	14%
Number of Stops	20.8	13.0	38%	20.8	13.8	34%
Average Speed (mph)	24.5	28.7	17%	24.1	28.0	16%

Project Benefit	Greenhouse Gas and Fuel Savings					
	Fuel Reduction (gal)			Greenhouse Gas Reduction (lbs)		
	Before	After	Reduction	Before	After	Reduction
1 Year	3,734,320	3,316,919	417,401	72,445,809	64,348,232	8,097,576
3 Years	11,202,960	9,950,758	1,252,203	217,337,426	193,044,696	24,292,729
<b><u>Total Fuel Cost Savings (\$)</u></b>						
1 year: \$1,627,863						
3 years: \$4,883,590						

**Edinger Avenue Corridor Traffic Signal Synchronization Project Results**

Peak Period \ Direction	Travel Time Benefit					
	Southbound/Eastbound			Northbound/Westbound		
	Before	After	Improvement (%)	Before	After	Improvement (%)
<b>Morning Peak Period</b>						
Travel Time (min)	46.5	41.7	10%	44.6	39.9	11%
Number of Stops	25	17	32%	21.1	13.8	35%
Average Speed (mph)	29.3	32.9	11%	30	33.9	13%
<b>Midday Peak Period</b>						
Travel Time (min)	47.3	45.6	4%	46.4	41.9	10%
Number of Stops	28.8	23	20%	27.2	17.8	35%
Average Speed (mph)	28.2	29.8	6%	28.8	32.2	12%
<b>Evening Peak Period</b>						
Travel Time (min)	44.1	39.8	10%	48.7	38.6	21%
Number of Stops	19.8	13.8	30%	24.2	11.2	54%
Average Speed (mph)	30.4	34.5	13%	27.4	35.2	28%

Project Benefit	Greenhouse Gas and Fuel Savings					
	Fuel Reduction (gal)			Greenhouse Gas Reduction (lbs)		
	Before	After	Reduction	Before	After	Reduction
1 Year	4,936,878	4,359,124	577,754	96,860,480	85,525,030	11,335,450
3 Years	14,810,633	13,077,371	1,733,262	290,581,439	256,575,089	34,006,350
<b>Total Fuel Cost Savings (\$)</b>						
1 Year: \$2,264,796						
3 Years: \$6,794,388						



BOARD COMMITTEE TRANSMITTAL

**December 12, 2011**

**To:** Members of the Board of Directors  
*WK*  
**From:** Wendy Knowles, Clerk of the Board  
**Subject:** Countywide Pavement Management Program Guidelines

Highways Committee Meeting of December 5, 2011

**Present:** Directors Bates, Cavecche, Crandall, Galloway, Hansen,  
Herzog, and Nelson  
**Absent:** Director Glaab

***Committee Vote***

No action was taken on this receive and file information item.

***Staff Recommendation***

Receive and file as an information item.





**December 5, 2011**

**To:** Highway Committee

**From:** Will Kempton, Chief Executive Officer

**Subject:** Countywide Pavement Management Program Guidelines

**Overview**

The Orange County Transportation Authority has developed a countywide pavement management system as required by Measure M2. All local agencies have submitted pavement management programs consistent with the Countywide Pavement Management Program Guidelines adopted by the Orange County Transportation Authority Board of Directors in May 2010. The overall countywide Pavement Condition Index for Orange County based on the numerical average is 77.8 and falls within the "good" rating category. This compares to an average statewide pavement condition index of 66, which falls within the "fair" category.

**Recommendation**

Receive and file as an information item.

**Background**

Each local jurisdiction is required to adopt a pavement management plan (PMP) in order to be eligible to receive Measure M2 (M2) funding. Additionally, a local match reduction of ten percent for competitive Regional Capacity Program projects is available if a local agency has measureable improvements in paved road conditions or maintains road pavement conditions within the highest 20 percent of the scale for road pavement conditions countywide, which is considered to be a pavement condition index (PCI) of 75 or higher, a condition rating of good.

The countywide assessment of existing and future pavement needs, completed by the Orange County Transportation Authority (OCTA) in 2006, demonstrated the benefits of establishing uniform criteria for local PMP systems. The report noted that the different pavement condition data collection efforts and

evaluation methodologies used by local agencies make it difficult to evaluate countywide pavement conditions. As a result, M2 established requirements for developing consistent methodology for local agency pavement management programs.

After a review of pavement management software currently in use and the benefits of a single system, the Technical Advisory Committee, at its July 23, 2008 meeting, approved MicroPaver as the countywide pavement software. This software was already being utilized by 20 of the 35 local agencies. The OCTA Board of Directors (Board) approved the M2 Eligibility Guidelines on January 25, 2010, which included the use of MicroPaver as part of the requirements to receive M2 funds. The Pavement Management Guidelines, developed to implement and administer the pavement management program in Orange County, were approved by the Board on May 24, 2010. The first submittals of local agency PMPs fully compliant with the new guidelines were completed in June 2011.

### ***Discussion***

The Pavement Management Plan Guidelines (PMPG) are intended to provide a consistent means of assessing pavement conditions countywide for the Master Plan of Arterial Highways (MPAH) and the local street systems. These guidelines are also intended to track changes in pavement conditions, forecast expected improvements resulting from the local agencies' maintenance and rehabilitation plans, and identify alternative strategies and funding necessary to improve road pavement conditions. Reliable, consistent, and uniform pavement data collection practices are essential to ensure the long-term success of the program.

Each local agency must adopt and update biennially its PMP consistent with the specific requirements of M2, and issue a report every two years regarding status of road pavement conditions and implementation of the PMP. To establish eligibility for receipt of M2 funds, each jurisdiction must submit a copy of the local PMP certification form to OCTA during the annual eligibility review cycle. The PMP submittal must also include an overview highlighting conditions that may have developed between review cycles and provide information concerning projects funded as part of the PMP.

The pavement management guidelines address: 1) the methodology used to collect pavement information, as well as the frequency of inspections; 2) the specific measures that quantify pavement conditions; and 3) the types and quality of information local agencies should provide to OCTA. These requirements are generally the same as those provided as part of the M2 eligibility process.

In 1998, OCTA adopted the countywide pavement condition assessment standards for treatments as shown in Table 1.

Table 1	
Pavement Quality	PCI Thresholds
Very Good	86 -100
Good	75 - 85
Fair	60 - 74
Poor	41 - 59
Very Poor	0 - 40

California statewide local streets and roads needs assessments were completed in April 2009 and February 2011 under the sponsorship of the California Association of Counties and other agencies. The primary focus of these assessments has been on pavement condition and needs. The current study indicated countywide PCIs for all streets ranging from a low of 31 (Lake County) to a high of 77 (Placer County), with a weighted average of 66. The statewide assessment showed Orange County with a PCI of 76, which is slightly less than the numerical average PCI of 77.8 based on the recent local agency PMP submittals. Orange County has the best rating of any urban county in California based on this analysis.

The current PCI range for Orange County local agencies is shown in Table 2.

Table 2			
Classification	Current PCI		
	Lowest	Highest	Average
MPAH	61.0	96.0	79.4
Local Streets	61.0	92.3	77.4
Overall Network	62.0	91.8	77.8

The PMPG also require submittal of a seven-year maintenance and rehabilitation plan projecting future annual expenditures based on three scenarios:

- 1) Current budget and/or anticipated available funding.
- 2) Funding needed to maintain the PCIs at current levels for the overall network, MPAH and local street systems.
- 3) Funding needed to improve the overall network PCI at the end of the seven-year maintenance and rehabilitation plan.

Overall PCIs for about two-thirds of the local agencies are expected to decline over the next seven years, but still remain in good condition based on the numerical averages shown in Table 3, and assuming current budgets.

Classification	Projected PCI		
	Lowest	Highest	Average
MPAH	49.7	95.0	77.6
Local Streets	52.0	86.0	74.1
Overall Network	51.9	88.3	75.1

The attached maps (Attachment A) show the current and projected network PCIs for each local agency, as well as the range of changes in pavement quality after seven years.

Attachment B shows the pavement quality for Orange County jurisdictions in 2011 and as projected for 2018.

In order to maintain pavement in good condition, it is necessary to more clearly identify the unmet needs by jurisdiction, identify available funding, and assess the most cost effective means to meet these needs. With pavements in good condition, relatively inexpensive pavement preservation strategies utilizing surface treatments can extend pavement life upwards of ten years before major rehabilitation is needed. Costs can increase rapidly as pavement deterioration accelerates with aging of the pavement. Declining gas tax receipts and less than projected sales tax revenue have increased the challenge in maintaining good pavements.

### ***Summary***

The countywide PMPG were to satisfy the requirements of M2 for a system that will provide reliable, consistent, and comparable road pavement data. The guidelines will assist in determining current road pavement conditions and projecting future needs. The first round of local agency PMP submittals was completed in June 2011. The overall countywide PCI is 77.8 based on the numerical average of local agency PMIs. This rating indicates an overall good condition for pavements countywide. However, maintaining good pavements is constrained by limited or declining revenue growth.

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**Attachments**

- A. Network Pavement Quality
- B. 2011 Countywide Pavement Quality

**Prepared by:**



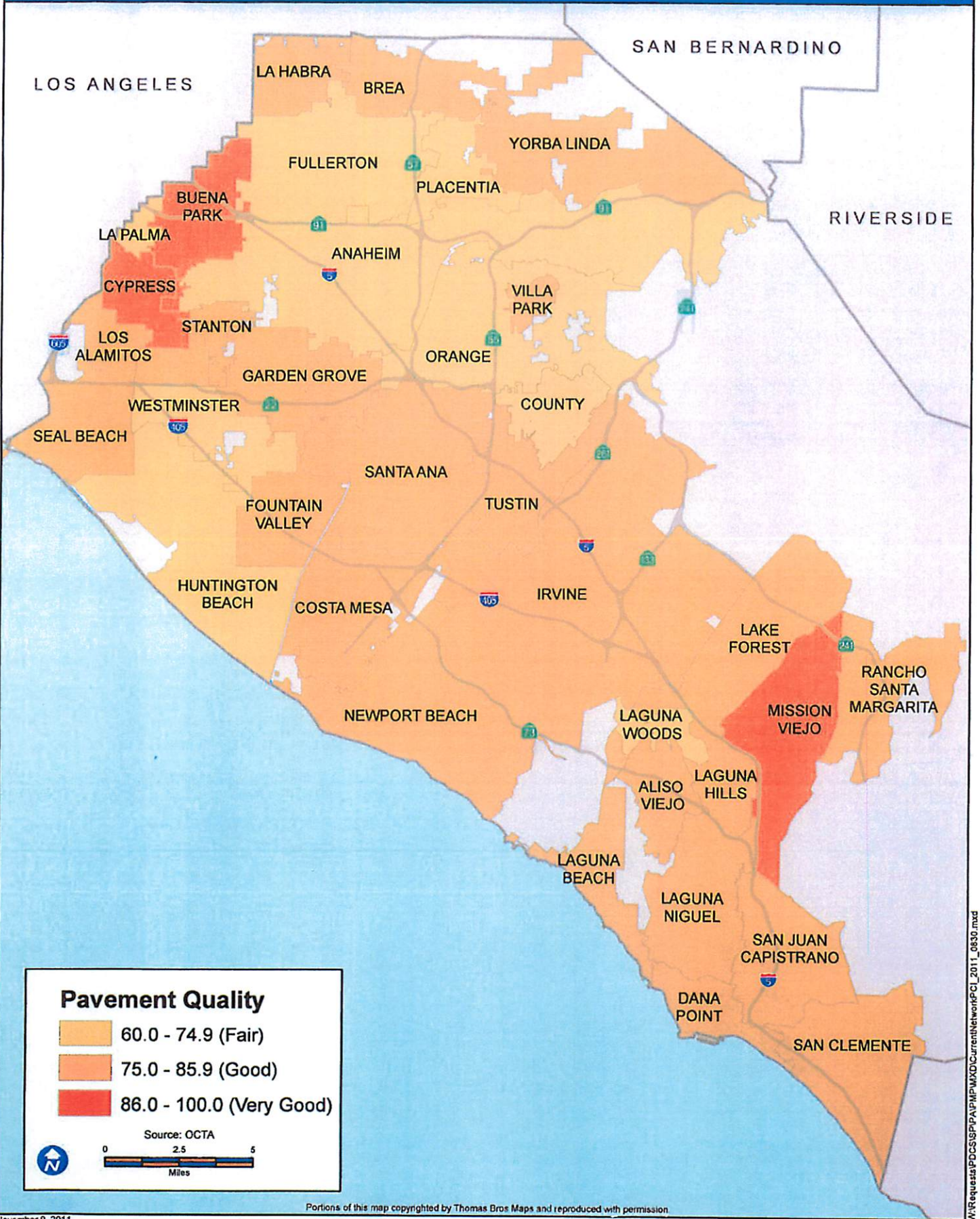
Harry W. Thomas  
Project Manager  
(714) 560-5617

**Approved by:**



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

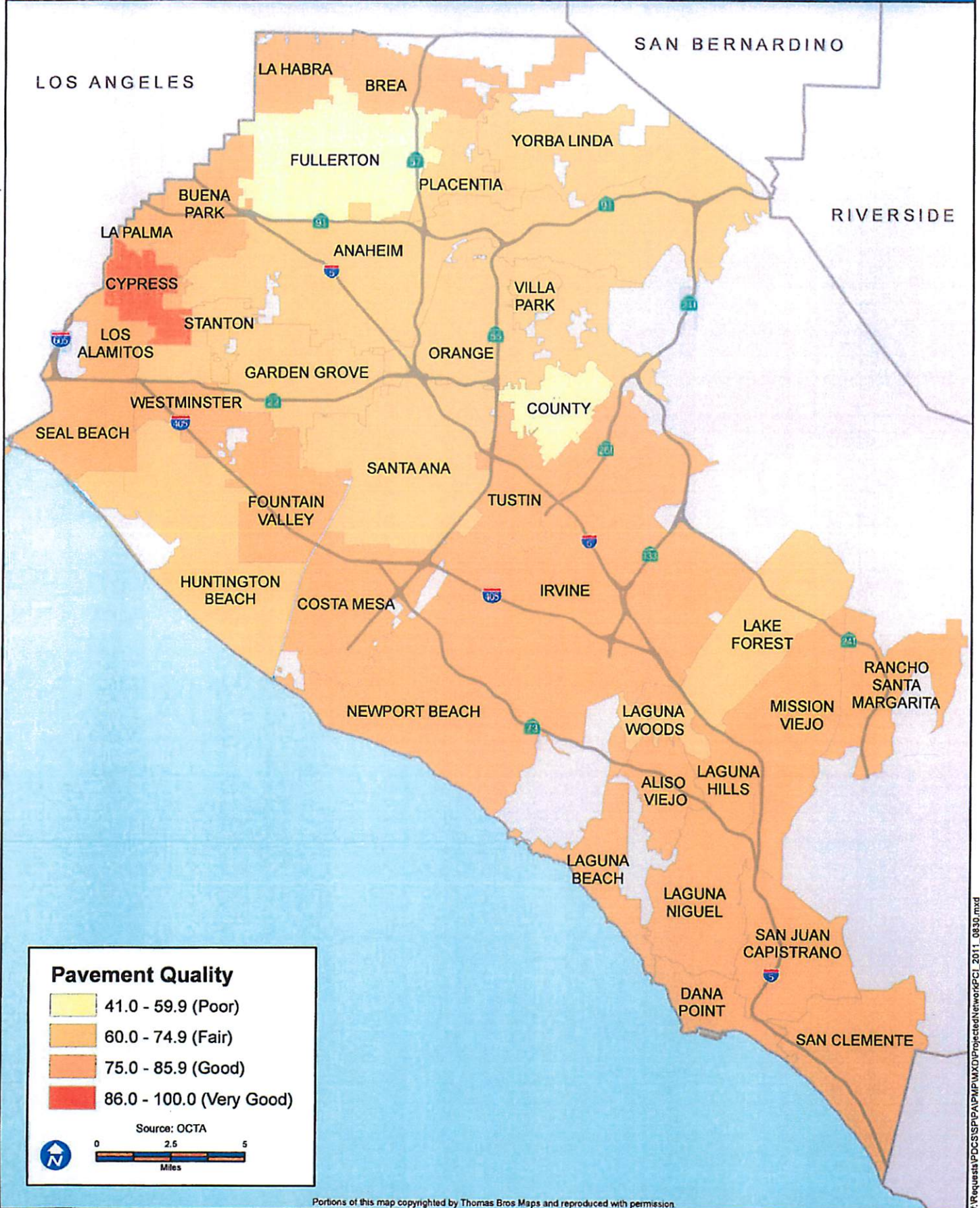
Current



Map 1

# Network Pavement Quality

## Projected



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### Map 2

November 9, 2011

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# Projected Change



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**2011 COUNTYWIDE PAVEMENT QUALITY**

Agency	Current Condition			Projected Condition		
	Network	MPAH	Local	Network	MPAH	Local
Aliso Viejo	G	G	G	G	G	G
Anaheim	F	F	F	F	F	F
Brea	G	G	G	G	G	G
Buena Park	VG	G	VG	G	G	VG
Costa Mesa	G	G	G	G	G	F
County of Orange	F	F	F	P	P	P
Cypress	VG	VG	VG	VG	VG	G
Dana Point	G	G	G	G	G	G
Fountain Valley	G	G	F	G	G	F
Fullerton	F	F	F	P	P	P
Garden Grove	G	G	F	F	G	F
Huntington Beach	F	F	F	F	F	F
Irvine	G	VG	G	G	VG	G
La Habra	G	G	G	G	VG	G
La Palma	F	F	F	G	G	G
Laguna Beach	G	VG	G	G	G	G
Laguna Hills	G	G	G	G	G	G
Laguna Niguel	G	G	G	G	G	G
Laguna Woods	F	F	N/A	F	F	N/A
Lake Forest	G	G	G	F	F	F
Los Alamitos	G	VG	F	G	VG	F
Mission Viejo	VG	VG	VG	G	G	G
Newport Beach	G	G	F	G	G	G
Orange	F	F	G	F	F	G
Placentia	F	F	F	F	F	F
Rancho Santa Margarita	G	G	G	G	G	G
San Clemente	G	G	G	G	G	G
San Juan Capistrano	G	G	G	G	G	F
Santa Ana	G	G	G	F	F	F
Seal Beach	G	G	VG	G	F	G
Stanton	G	G	G	F	G	F
Tustin	G	G	G	G	G	G
Villa Park	G	VG	F	F	VG	F
Westminster	F	F	F	G	G	G
Yorba Linda	G	G	G	F	P	F

<b>COUNTYWIDE</b>	G	G	G	G	F	G
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N/A - All local streets are private

VG - Very Good (86-100)

G - Good (75-85)

F - Fair (60-74)

P - Poor (41-59)

VP - Very Poor (0-40)