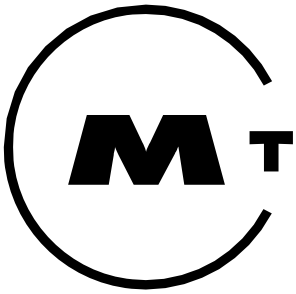
2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

MTC Resolution No. 4128

For the Nine-County San Francisco Bay Area Region
Fiscal Year 2014-15 through FY 2018-19



METROPOLITAN

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COMMISSION

December 18, 2013

http://www.mtc.ca.gov

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December 20, 2013

Andre Boutros, Executive Director
California Transportation Commission
1120 N Street, Room 2221 – MS 52
Sacramento, CA 95814

Attention: Laurel Janssen

Dear Mr. Andre Boutros:

With this letter, I am pleased to transmit MTC's proposed projects for the 2014 Regional Transportation Improvement Program (RTIP).

The 2014 STIP Fund Estimate included $132 million of new capacity available to the region. MTC's 2014 RTIP proposes approximately $140 million in new programming. Of this amount, $92 million is for highway improvements, $35 million is for transit improvements, $11 million is for local street improvements, and $8 million is for Planning, Programming, and Monitoring (PPM) activities. The 2014 RTIP will also program $18 million in new bicycle and pedestrian projects from MTC's share of Transportation Enhancement (TE) Reserve, and delete remaining county share TE Reserve.

The region also proposes to transfer STIP funds previously programmed to the Freeway Performance Initiative (FPI) project in Contra Costa County to the I-680/SR-4 Interchange (Phase 3) project as part of a conditional agreement to deliver the FPI sooner (funding is in FY 2015-16 but it is ready to list in FY 2013-14). Programming of these projects is the region's top priority after PPM. The region also prioritizes Contra Costa County's request to overprogram its county share by $10 million for the I-680 Southbound HOV Lane Gap Closure project in Walnut Creek.

MTC plans to amend the 2014 RTIP in January 2014 to reflect additional bicycle and pedestrian projects in Marin and San Mateo Counties, and to substitute a federally-eligible BART project in lieu of the eBART project in Contra Costa County.

Please feel free to contact me at (510) 817-5850, or Kenneth Kao of my staff at (510) 817-5768 if you need further information about our proposal. We look forward to working with you in finalizing the 2014 STIP.

Sincerely,

Alix A. Bockelman
Director
Programming & Allocations Section

AAB:KK

cc: Rachel Falsetti, Caltrans HQ
Bijan Sartipi, Caltrans District 4

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2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

INTRODUCTION

METROPOLITAN TRANSPORTATION COMMISSION
2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

INTRODUCTION
DECEMBER 18, 2013

Attached is the Metropolitan Transportation Commission's (MTC's) proposal for the 2014 Regional Transportation Improvement Program (RTIP). The RTIP is a listing of transit, state highway, local road, bicycle and pedestrian projects that the region proposes for funding through the State Transportation Improvement Program (STIP). The 2014 RTIP is assumed to contain a mix of federal and state funds, and assumed not to have annual funding targets. As the Regional Transportation Planning Agency for the Bay Area, MTC is responsible for developing the region's funding priorities for the STIP, and for submitting the projects to the California Transportation Commission (CTC) by way of the RTIP.

MTC's 2014 RTIP submittal includes the following sections:

- 2014 RTIP Incremental Project List (Net Changes in 2014 RTIP from the 2012 STIP)
- 2014 RTIP Final Resulting Project Lists by County with changes incorporated
- MTC Policies, Procedures and Project Selection Criteria – MTC Resolution No. 4118
- MTC STIP Amendment Procedures
- Cost Effectiveness/Performance Measure Analysis
- 2014 RTIP Adoption - MTC Resolution No. 4128
- Project Programming Request (PPR) Forms for all projects, by County

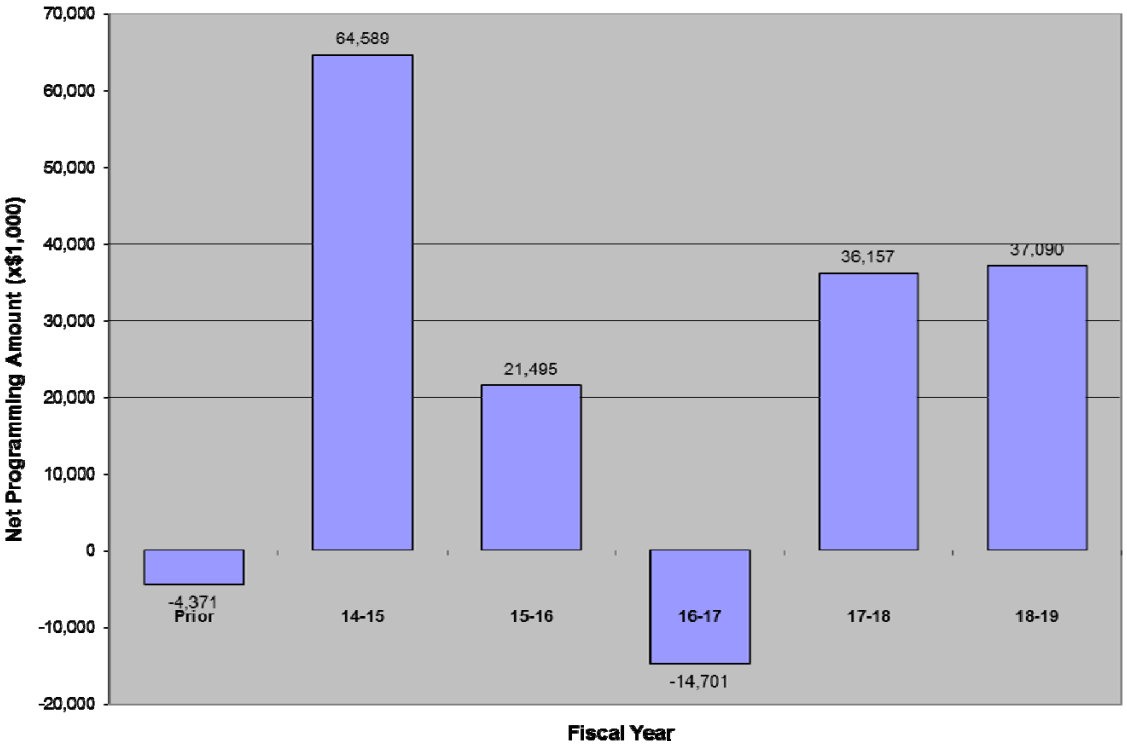
The proposed projects were developed by the county Congestion Management Agencies (CMAs), in consultation with Caltrans, and with MTC's guidance, and are consistent with the policies and procedures set forth in MTC Resolution No. 4118 and with the STIP guidelines adopted by the CTC on August 6, 2013.

2014 STIP Programming Capacity

In August 2013, the CTC adopted the 2014 Fund Estimate for FY 2014-15 through FY 2018-19. The fund estimate included a total of $132 million in new programming capacity for the Bay Area, which includes carryover balances and lapses. The 2014 STIP eliminates Transportation Enhancement (TE) funding; therefore, MTC proposes to program $18 million in TE Reserve (MTC Share) to federally-eligible bicycle and pedestrian projects, and delete the remaining TE Reserve (County Share). MTC's proposed treatment of TE programming capacity will be discussed later in this introduction.

Since the Fund Estimate did not identify annual funding targets for the 2014 STIP, the region proposes programming new projects and advancing existing projects to the year in which funding is needed. The region's 2014 RTIP net programming breakdown by year is shown in the following chart.

Chart 1: MTC's RTIP: Net Programming of New and Existing Funds ($1,000s)



The main reason for the large net increase in proposed programming in FY 2014-15 and net decrease in FY 2016-17 is due to the proposed advancement of the Alameda SR-84 Expressway project in Livermore for $47 million. This project is ready for construction in FY 2014-15, but was programmed in FY 2016-17 in the 2012 STIP. Alameda County Transportation Commission (ACTC) placed this project on the AB 3090 Plan of Projects in 2012.

The funding split by project type is detailed in Table 1 below by county.

Table 1: MTC's 2014 RTIP New Programming by Type (thousands)

County	Highway		Transit		Planning		Local Streets		TE (Bike/ Ped)*		Total
Alameda	24,000	+	8,195	+	1,590	+	0	+	0	=	33,785
Contra Costa	32,500	+	0	+	1,088	+	4,650	+	-1,486	=	36,752
Marin	0	+	0	+	297	+	0	+	0	=	297
Napa	0	+	0	+	196	+	6,119	+	-198	=	6,117
San Francisco	0	+	12,498	+	807	+	0	+	0	=	13,305
San Mateo	21,428	+	0	+	821	+	0	+	-1,964	=	20,285
Santa Clara	4,456	+	14,672	+	1,888	+	0	+	-1,858	=	19,158
Solano	9,360	+	0	+	492	+	0	+	0	=	9,852
Sonoma	102	+	0	+	606	+	0	+	0	=	708
Total	**91,846**	**+**	**35,365**	**+**	**7,785**	**+**	**10,769**	**+**	**-5,506**	**=**	**140,259**

* Note that the "TE" category includes bicycle and pedestrian type projects, and the 2014 RTIP shows a net negative in programming. The net negative programming is due to the elimination of TE Reserve, which is treated as existing programming. Actually, MTC's RTIP proposes to program roughly $18 million in new bicycle and pedestrian type investments throughout the region, with the programming capacity coming from the deleted TE Reserve (MTC share). The net decrease in bicycle and pedestrian type programming comes from the elimination of TE Reserve (County share). The deleted county share reserves were returned to the counties for programming on other projects.

2014 RTIP Projects

The region's proposed 2014 RTIP programming is roughly $140 million, which exceeds the region's $132 million target by about $8 million. The main reason for overprogramming is in Contra Costa County, requesting $10 million over their county target for the I-680 Southbound HOV Gap Closure project (to be discussed later in this introduction). Marin and Sonoma Counties programmed planning funds which exceed their zero shares. Napa County leaves $0.7 million unprogrammed, as Napa plans on programming a new project that has not yet completed its Project Study Report (PSR); Napa will request a STIP amendment to program the project after adoption of the 2014 STIP. San Mateo County leaves $0.9 million unprogrammed. Solano County leaves $1.3 million unprogrammed to account for potential cost increases on the SR-12 Jameson Canyon Widening project.

A list of the major projects requesting over $5 million in RTIP funds is listed in Table 2 below.

Table 2: New Projects Over $5 million Programmed in 2014 RTIP

County	Project Description	Amount ($millions)
Alameda	AC Transit East Bay Bus Rapid Transit	$ 8.0
Alameda	SR-84 Expressway (East-West Connector) in Fremont	$12.0
Alameda	SR-84 Expressway in Livermore, Southern Segment 2	$10.0
Contra Costa	I-680/SR-4 Interchange, Widening of SR-4 (Phase 3)	$30.3
Contra Costa	I-680 Southbound HOV Lane Gap Closure project	$10.0
Contra Costa	I-80 San Pablo Dam Road Interchange Reconstruction, Phase 2	$ 9.2
San Francisco	Central Subway	$12.5
San Mateo	SR-92 Improvements Phase 2: 92/101 IC Improvements	$21.4
Santa Clara	BART Extension from Berryessa to Santa Clara	$14.7
Solano	Jepson Parkway (Leisure Town from Marshall to Commerce)	$ 9.3

Other important issues of the 2014 RTIP include:

Prior Commitment to Freeway Performance Initiative

In 2009, the region committed $105 million in regional American Recovery and Reinvestment Act of 2009 (ARRA) funds to the Caldecott Tunnel Fourth Bore project, to replace state bond and STIP funds that were unavailable. The region's commitment freed up $31 million in RTIP funds, $24 million of which was programmed in the 2012 STIP, and $7 million of which is available for programming in the 2014 STIP. The federal Moving Ahead for Progress in the 21st Century (MAP-21) Act STP/CMAQ Cycle 1 Programming, adopted by the MTC in December 2009, assigned these funds to Freeway

Performance Initiative (FPI) projects. Per regional policy, programming of these funds is the region's top priority after PPM. In the 2014 RTIP, $27 million of these funds are now proposed for programming on Contra Costa Transportation Authority's (CCTA) I-680/SR-4 Interchange project, with $4 million remaining on the FPI program (split $2 million each in Alameda and Contra Costa Counties). The programming of these two projects in the requested year remains the region's top priority after PPM. This is part of a regional agreement to deliver the FPI project in FY 2013-14 (as the project is ready-to-list) rather than FY 2015-16 (as currently programmed), and is conditioned upon the CTC accepting the programming of $27 million for the I-680/SR-4 Interchange project in FY 2015-16.

Contra Costa County Overprogramming
In order to close a major gap in the region's high-occupancy vehicle (HOV) network, Contra Costa County requests programming an additional $10 million in RTIP funds to the I-680 Southbound HOV Lane Gap Closure project in Walnut Creek. This amount exceeds Contra Costa's STIP share by $10 million. The region believes the project is a worthy candidate for overprogramming since closing the HOV gap will create a continuous HOV lane from the Benicia-Martinez Bridge to the Alameda/Contra Costa County line. The project is ready for construction in FY 2016-17. Taken regionally, the overprogramming represents an increase of only 6% of the nine counties' STIP share. This is a high priority for the 2014 RTIP.

One Bay Area Grant (OBAG) Programming
As adopted in MTC Resolution No. 4035, Revised (One Bay Area Grant (OBAG) STP/CMAQ Cycle 2 Programming), a total of $18 million of STIP Transportation Enhancement (TE) Reserve was available to the counties for programming as a part of OBAG. Since the MAP-21 and the 2014 STIP eliminated TE funding, MTC's commitment of this $18 million in OBAG programming comes from regular STIP funds through the de-programming of MTC's share of STIP TE Reserve. These $18 million in projects are proposed to be the second highest priority for programming after the FPI/CCTA projects described above.

Additional Programming/Amendments in January 2014
Marin and San Mateo Counties had not yet finalized their project selections for OBAG at the time of RTIP adoption. MTC staff will work with those two counties to complete the programming of OBAG and amend the RTIP in January 2014 in order to include their projects. These projects are included in the 2014 RTIP project list as placeholder projects.

Contra Costa County also plans to amend its RTIP project listing to substitute the BART Station Modernization project in lieu of the Eastern Contra Costa BART Extension (eBART) project. The eBART project requires state-only funding which is not guaranteed; the Station Modernization project can accept federal funds. The funding amount and year remain the same. This additional request will also be considered by MTC in January 2014.

MTC's Endorsed Interregional Transportation Improvement Program (ITIP) Projects
MTC has endorsed a near-term list of ITIP projects consistent with the principles included in Plan Bay Area and the 2014 RTIP Policies and Procedures (MTC Resolution No. 4118). All projects except for the Alameda project are also on Caltrans District 4's ITIP candidate list. These projects are strong ITIP candidates due to the interregional and complementary nature of the proposed improvements to the state highway system. MTC's recommended projects are in Table 3, below:

Table 3: MTC's Endorsed ITIP Project List

County	Route	Project	Amount ($millions)
Alameda	580	FPI from San Joaquin Co. to Foothill	$ 8.6
Santa Clara	152	Reconstruction and Toll Facilities (PE only)	$17.0
Solano	80/680/12	I-80/680/12 Interchange: Red Top I/C (ROW only)	$ 6.7
Sonoma	101	Marin-Sonoma Narrows Contract B-2 Ph. 2: HOV lanes in South Petaluma	$25.3

Performance Measure Analysis
The CTC continues to require performance measure analysis data as part of the 2014 STIP. This cycle also adds additional analysis requirements as part of the State's ongoing Sustainable Communities Strategy (SCS) effort. Regions are required to submit a program-level analysis and project-level analysis for new STIP projects with either a total cost of over $50 million, over $15 million in STIP programming, or will use over 50% of a county's STIP share. The region has 4 new projects that require a project-level analysis, which are included at the end of the Performance Measure Analysis section and are provided by the project sponsors.

Programming in the 2014 RTIP proposal contributes to the goals of MTC's regional transportation plan/sustainable communities strategy *Plan Bay Area*, with many projects contributing to multiple policy goals.

RTIP Reporting
The 2014 STIP Guidelines requires reporting on completed projects since the adoption of the last RTIP, and addressing Caltrans's state highway needs.

Completed Project Discussion
MTC adopted the 2012 RTIP on December 21, 2011, and the 2014 RTIP on December 18, 2013. In that time, 24 projects funded with STIP funds were completed and opened to traffic. A summary of the completed projects is shown in Tables 4a and 4b, below.

Table 4a: Completed Projects Table (Construction Funds)

	Construction Phase (numbers in thousands)					
	STIP Funds			Other Funds (Local/Federal)		
County	**Pgrmd**	**Allocated**	**Expended**	**Pgrmd**	**Allocated**	**Expended**
Alameda	57,506	57,506	57,123	18,384	18,384	18,384
Contra Costa	16,191	16,077	15,852	34,495	34,495	34,495
Marin	0	0	0	0	0	0
Napa	0	0	0	0	0	0
San Francisco	2,705	2,705	957	933	933	526
San Mateo	6,295	4,372	3,688	4,676	4,676	3,656
Santa Clara	1,621	1,621	1,511	382	382	276
Solano	0	0	0	0	0	0
Sonoma	692	692	692	852	852	399
Total	**85,010**	**82,973**	**79,823**	**59,722**	**59,722**	**57,736**

Table 4b: Completed Projects Table (Pre-Construction Funds)

	Pre-Construction Phases (numbers in thousands)					
	STIP Funds			Other Funds (Local/Federal)		
County	**Pgrmd**	**Allocated**	**Expended**	**Pgrmd**	**Allocated**	**Expended**
Alameda	248	248	248	6,350	6,350	6,350
Contra Costa	30	30	30	4,622	4,622	4,622
Marin	0	0	0	0	0	0
Napa	0	0	0	0	0	0
San Francisco	359	359	284	159	159	118
San Mateo	1,036	1,036	1,036	1,250	1,250	1,250
Santa Clara	0	0	0	243	243	241
Solano	0	0	0	0	0	0
Sonoma	0	0	0	0	0	0
Total	**1,673**	**1,673**	**1,598**	**12,624**	**12,624**	**12,581**

Each county CMA, in consultation with their project sponsors and Caltrans, reported these figures to MTC. Some sponsors transferred their federalized STIP projects to the Federal Transit Administration; in these cases, the completion date of the FTA transfer was used as "project completion."

The STIP Guidelines also require additional reporting on completed projects over $50 million in project cost, or have over $15 million in STIP funds programmed. The region has one project meeting these criteria: the Bay Area Rapid Transit District's (BART) Transbay Tube Seismic Retrofit project (PPNO 1014). This project, utilizing $38 million in Alameda County's STIP share, was completed in December 2012. BART elects to defer reporting on the project benefits of this project until early 2014, as permitted by the STIP Guidelines.

Caltrans State Highway Needs

Caltrans provided MTC with its list of STIP state highway remaining needs in September 2013. The list includes four projects that have remaining needs as identified by the Caltrans project managers. The projects are listed in Table 5 below, with an explanation of the project's current funding status.

Table 5: Region Response to Caltrans State Highway Needs (thousands)

County	Route	PPNO	Project	Remaining Need	Discussion
Alameda	880	16S	I-880 Landscaping – Replacement Planting	$761	Landscaping is not a county priority for the 2014 RTIP
Marin	101	360L	MSN Landscape/ Mitigation and Soundwall	$1,165	Proposed PCR to combine with 342L to fully fund mitigation; landscaping to be completed in future
Napa	12	376	SR-12/29/221 Intersection Improvements (pre-const)	$7,050	Insufficient funding; Napa working with Caltrans to discuss priorities
San Mateo	1	632C	Calera Parkway (Phase 1)	$1,136	Shortfall met with local funds

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

PROJECT SUMMARY LISTS
NEW AND AMENDED PROJECTS

Attachment A

MTC 2014 Regional Transportation Improvement Program

December 10, 2013
(all numbers in thousands)

County	Agency	PPNO	Project	Total	2014 RTIP Funding by Fiscal Year					
					Prior	14-15	15-16	16-17	17-18	18-19
Proposed 2014 RTIP - New or Amended Funding in STIP										
Alameda	ACTC	2179	Planning, programming, and monitoring	**1,315**	0	0	0	0	750	565
Alameda	MTC	2100	Planning, programming, and monitoring	**275**	0	0	0	0	135	140
Alameda	ACTC	81D	SR-84 East-West Connector in Fremont	**12,000**	0	0	0	0	0	12,000
Alameda	Caltrans	81H	SR-84 Expressway in Livermore (Southern Segment 2)	**-37,030**	0	0	0	-37,030	0	0
Alameda	Caltrans	81H	SR-84 Expressway in Livermore (Southern Segment 2)	**47,030**	0	47,030	0	0	0	0
Regional	Caltrans	0521K	I-680 Freeway Performance Initiative, Phase 2	**2,000**	0	0	2,000	0	0	0
Alameda	AC Transit	new	AC Bus Rapid Transit (BRT) Project	**7,995**	0	0	7,995	0	0	0
San Mateo	BART	new	Daly City BART Station Intermodal Improvements	**200**	0	0	0	200	0	0
Alameda-TE	MTC	2100C	TE Reserve (MTC Share)	**-3,726**	0	0	-3,726	0	0	0
Alameda-OBAG	BART	new	Downtown Berkeley BART Plaza/Transit Area Improvements	**3,726**	0	3,726	0	0	0	0
Alameda-TE	ACTC	2100J	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $33,785	**33,785**	0	50,756	6,269	-36,830	885	12,705
Contra Costa	CCTA	2011O	Planning, programming, and monitoring	**909**	0	0	0	0	455	454
Contra Costa	MTC	2118	Planning, programming, and monitoring	**179**	0	0	0	0	88	91
Contra Costa	CCTA	0222E	I-680 SB HOV Gap Closure (N Main - Livorna)	**10,000**	0	0	-5,557	15,557	0	0
Contra Costa	CCTA	0242J	I-80/San Pablo Dam Rd. Interchange Reconstruction, Ph. 1	**-15,000**	0	-7,000	-8,000	0	0	0
Contra Costa	CCTA	0242J	I-80/San Pablo Dam Rd. Interchange Reconstruction, Ph. 1	**15,000**	0	15,000	0	0	0	0
Contra Costa	CCTA	new	I-80/San Pablo Dam Rd. Interchange Reconstruction, Ph. 2	**9,200**	0	0	9,200	0	0	0
Regional	Caltrans	0521K	I-680 Freeway Performance Initiative, Phase 2	**-22,000**	0	0	-22,000	0	0	0
Contra Costa	CCTA	0298E	I-680/SR-4 Interchange, NB 680 to WB 4	**-1,310**	0	-1,310	0	0	0	0
Contra Costa	CCTA	new	I-680/SR-4 Interchange, Widening of SR-4 (Phase 3)	**36,610**	0	0	36,610	0	0	0
Contra Costa	CCTA	new	Kirker Pass Rd. NB Truck Climbing Lane	**2,650**	0	0	0	0	2,650	0
Contra Costa	CCTA	new	I-80/Central Ave. Interchange Ph. 2 (Local Rd Realignment)	**2,000**	0	0	0	0	2,000	0
Contra Costa-TE	MTC	2118F	TE Reserve (MTC Share)	**-2,384**	-1,192	-1,192	0	0	0	0
Contra Costa-OBA	Concord		Detroit Ave. Bicycle and Pedestrian Improvements	**1,189**	0	1,189	0	0	0	0
Contra Costa-OBA	Concord		Concord BART Station Bicycle and Ped. Access Improvements	**1,195**	0	188	1,007	0	0	0
Contra Costa-TE	CCTA	2118F	TE Reserve (County Share)	**-1,486**	0	0	0	-1,486	0	0
			Target = $26,752	**36,752**	-1,192	6,875	11,260	14,071	5,193	545
Marin	TAM	2127C	Planning, programming, and monitoring	**246**	0	0	0	40	206	0
Marin	MTC	2127	Planning, programming, and monitoring	**51**	0	0	0	0	25	26
Marin	Caltrans	0342L	MSN Landscape/Mitigation and Soundwall	**-3,900**	0	-3,900	0	0	0	0
Marin	Caltrans	0342L	MSN San Rafael Irwin Creek/Brookdale	**1,655**	37	1,618	0	0	0	0
Marin	Caltrans	0360L	MSN Novato Soundwall	**2,245**	0	2,245	0	0	0	0

MTC 2014 Regional Transportation Improvement Program

December 10, 2013
(all numbers in thousands)

					2014 RTIP Funding by Fiscal Year					
County	**Agency**	**PPNO**	**Project**	**Total**	**Prior**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**
Marin-TE	MTC	2127B	TE Reserve (MTC Share)	**-707**	-353	-354	0	0	0	0
Marin-OBAG			Pending 1 (Fairfax)	**300**	0	45	255	0	0	0
Marin-OBAG			Pending 2	**407**	0	0	407	0	0	0
Marin-TE	TAM	2127B	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $0	**297**	-316	-346	662	40	231	26
Napa	NCTPA	1003E	Planning, programming, and monitoring	**165**	0	0	0	0	165	0
Napa	MTC	2130	Planning, programming, and monitoring	**31**	0	0	0	0	15	16
Napa	American Cyn	2130K	Lena Dr and Stenson Dr, Rehabilitation	**-268**	0	0	-268	0	0	0
Napa	Napa County	2130L	Silverado Tr, Howell Mt, and Denaweal, Rehabilitation	**-1,595**	0	0	-1,595	0	0	0
Napa	Napa City	new	Silverado Five-Way Intersection Improvements	**1,153**	0	0	0	0	1,153	0
Napa	American Cyn	new	Devlin Rd and Vine Trail Extension	**1,962**	0	0	297	0	1,665	0
Napa	American Cyn	new	Eucalyptus Dr Extension	**1,154**	0	0	0	0	1,154	0
Napa (+OBAG)	Napa City	new	California Ave Roundabouts	**1,501**	0	431	1,070	0	0	0
Napa	Calistoga	new	Petrified Forest Rd and SR-128, Intersection Improvements	**580**	0	0	105	50	425	0
Napa	Yountville	new	Hopper Creek Pedestrian Path (Oak Cir - Mission)	**500**	0	25	0	75	400	0
Napa	Napa County	new	Airport Blvd Rehabilitation	**1,332**	0	0	0	57	1,275	0
Napa	St. Helena	new	SR-29 and Grayson Ave, Install traffic signal (State only funds)	**300**	0	300	0	0	0	0
Napa	NCTPA	new	STIP Reserve (not programmable: $705k)	**0**	0	0	0	0	0	0
Napa-TE	MTC	2130B	TE Reserve (MTC Share)	**-431**	-215	-216	0	0	0	0
Napa-TE	NCTPA	2130J	TE Reserve (County Share)	**-267**	0	0	-267	0	0	0
			Target = $6,822	**6,117**	-215	540	-658	182	6,252	16
San Francisco	SFCTA	2007	Planning, programming, and monitoring	**667**	0	0	0	0	667	0
San Francisco	MTC	2131	Planning, programming, and monitoring	**140**	0	0	0	0	69	71
San Francisco	SFMTA	new	Central Subway	**12,498**	0	0	0	12,498	0	0
San Francisco-TE	SFCTA	2007S	TE Reserve (MTC Share)	**-1,910**	-955	-955	0	0	0	0
San Francisco-OBA	SFDPW		Chinatown Broadway Complete Streets, Phase 4	**1,910**	0	1,910	0	0	0	0
San Francisco-TE	MTC	2007S	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $13,305	**13,305**	-955	955	0	12,498	736	71
San Mateo	SM C/CAG	2140A	Planning, programming, and monitoring	**676**	0	0	0	0	338	338
San Mateo	MTC	2140	Planning, programming, and monitoring	**145**	0	0	0	0	71	74
San Mateo	SM CTA	690A	US-101 Willow Rd Interchange Reconstruction	**-20,471**	0	0	0	-20,471	0	0
San Mateo	SM CTA	690A	US-101 Willow Rd Interchange Reconstruction	**20,471**	0	0	0	3,072	17,399	0
San Mateo	Pacifica	632C	SR-1 Calera Parkway Operational Imps. in Pacifica	**-6,900**	0	-6,900	0	0	0	0
San Mateo	Pacifica	632C	SR-1 Calera Parkway Operational Imps. in Pacifica	**6,900**	0	0	6,900	0	0	0
San Mateo	SM C/CAG	668D	SR-92 Improvements Phase 2: Env Study for 92/101 IC Imprs	**-2,411**	0	0	-2,411	0	0	0
San Mateo	SM C/CAG	668D	SR-92 Improvements Phase 2: 92/101 IC Improvements	**23,839**	0	0	0	2,411	3,217	18,211
San Mateo	SM C/CAG	2140E	Countywide ITS Improvements	**-4,298**	0	-800	-3,498	0	0	0

MTC 2014 Regional Transportation Improvement Program

December 10, 2013
(all numbers in thousands)

					2014 RTIP Funding by Fiscal Year					
County	**Agency**	**PPNO**	**Project**	**Total**	**Prior**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**
San Mateo	SM C/CAG	2140E	Countywide ITS Improvements	**4,298**	0	0	800	3,498	0	0
San Mateo-TE	MTC	2140C	TE Reserve (MTC Share)	**-1,991**	-995	-996	0	0	0	0
San Mateo-OBAG			Pending	**1,991**	0	0	1,991	0	0	0
San Mateo-TE	SM C/CAG	2140L	TE Reserve (County Share)	**-1,964**	0	-1,964	0	0	0	0
			Target = $21,145	**20,285**	-995	-10,660	3,782	-11,490	21,025	18,623
Santa Clara	VTA	2255	Planning, programming, and monitoring	**1,567**	0	0	0	0	784	783
Santa Clara	MTC	2144	Planning, programming, and monitoring	**321**	0	0	0	0	158	163
Santa Clara	VTA	new	I-680 Soundwall from Capitol to Mueller	**4,456**	0	0	95	408	94	3,859
Santa Clara	VTA	new	BART Extension from Berryessa to Santa Clara	**14,672**	0	14,672	0	0	0	0
Santa Clara-TE	MTC	2255B	TE Reserve (MTC Share)	**-4,350**	0	0	-2,175	-2,175	0	0
Santa Clara-OBAG	Palo Alto		US-101/Adobe Creek Bicycle and Pedestrian Bridge	**3,000**	0	0	3,000	0	0	0
Santa Clara-OBAG	San Jose		The Alameda "Beautiful Way" Grand Boulevard Phase 2	**1,350**	0	1,350	0	0	0	0
Santa Clara-TE	VTA	2255	TE Reserve (County Share)	**-1,858**	0	0	-1,093	-765	0	0
			Target = $19,158	**19,158**	0	16,022	-173	-2,532	1,036	4,805
Solano	STA	2263	Planning, programming, and monitoring	**407**	0	0	0	0	203	204
Solano	MTC	2152	Planning, programming, and monitoring	**85**	0	0	0	0	42	43
Solano	STA	new	Jepson Parkway (Leisure Town from Marshall to Commerce)	**9,360**	0	0	0	9,360	0	0
Solano-TE	MTC	5152A	TE Reserve (MTC Share)	**0**	0	0	0	0	0	0
Solano-TE	STA	5152K	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $11,108	**9,852**	0	0	0	9,360	245	247
Sonoma	SCTA	0770E	Planning, programming, and monitoring	**504**	0	0	0	0	504	0
Sonoma	MTC	2156	Planning, programming, and monitoring	**102**	0	0	0	0	50	52
Sonoma	Caltrans	0360L	MSN Landscape/Mitigation and Soundwall	**-995**	0	-995	0	0	0	0
Sonoma	Caltrans	0789F	US-101 HOV Lanes Landscaping (Steele)	**-2,180**	0	-2,180	0	0	0	0
Sonoma	Caltrans	0789F	US-101 HOV Lanes Landscaping (Steele)	**3,277**	0	3,277	0	0	0	0
Sonoma-TE	MTC	5156A	TE Reserve (MTC Share)	**-1,396**	-698	-698	0	0	0	0
Sonoma-OBAG	Santa Rosa		Downtown Santa Rosa Streetscape	**353**	0	0	353	0	0	0
Sonoma-OBAG	SMART		SMART Bicycle/Pedestrian Pathway	**1,043**	0	1,043	0	0	0	0
Sonoma-TE	SCTA	5156I	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $0	**708**	-698	447	353	0	554	52
MTC Region			**Regional Target = $132,075**	**140,259**	-4,371	64,589	21,495	-14,701	36,157	37,090
						60,218	81,713	67,012	103,169	140,259

J:\PROJECT\Funding\RTIP\14 RTIP\[RTIP_2014_Draft_2013-12-10 Dec PAC-Comm.xlsx]2014_List Note: Detail on project programming by year and phase will be submitted to CTC

ATTACHMENT 1 - 2014 Regional Transportation Improvement Program (RTIP)
MTC Region - Program Summary
December 10, 2013

(amounts in thousands)

County	Current Revised 2014 RTIP County Share *				OBAG Enhancements (Previously MTC share of TE reserve)			GARVEE - Not Counted Against Targets -			AB 3090 Reimbursements (Included in RTIP Share)			Total (RTIP Share + TE + GARVEE + AB 3090 Reimbursements)		
	Funding Target	Programmed		Balance Remaining	Funding Available	Programmed		RTIP County Share	Programmed		RTIP County Share	Programmed		Funding Available	Programmed	
		Amount	Percent			Amount	Percent		Amount	Percent		Amount	Percent		Amount	Percent
Alameda	$78,869	$78,869	100.0%	$0	$3,726	$3,726	100%	$78,869	$0	0%	$78,869	$0	0%	$78,869	$78,869	100.0%
Contra Costa	$103,487	$113,487	109.7%	($10,000)	$2,384	$2,384	100%	$103,487	$0	0%	$103,487	$0	0%	$103,487	$113,487	109.7%
Marin	($20,649)	$9,278	0.0%	($29,927)	$707	$0	0%	($20,649)	$0	0%	($20,649)	$0	0%	($20,649)	$9,278	0.0%
Napa	$10,900	$10,195	93.5%	$705	$431	$431	100%	$10,900	$0	0%	$10,900	$0	0%	$10,900	$10,195	93.5%
San Francisco	$17,564	$17,564	100.0%	$0	$1,910	$1,910	100%	$17,564	$0	0%	$17,564	$0	0%	$17,564	$17,564	100.0%
San Mateo	$66,960	$66,100	98.7%	$860	$1,991	$0	0%	$66,960	$0	0%	$66,960	$0	0%	$66,960	$66,100	98.7%
Santa Clara	$34,774	$34,774	100.0%	$0	$4,350	$4,350	100%	$50,623	$15,849	31%	$34,774	$0	0%	$34,774	$50,623	145.6%
Solano	$51,485	$50,229	97.6%	$1,256	$0	$0	0%	$51,485	$0	0%	$51,485	$0	0%	$51,485	$50,229	97.6%
Sonoma	($1,167)	$7,064	0.0%	($8,231)	$1,396	$1,396	100%	($1,167)	$0	0%	($1,167)	$0	0%	($1,167)	$7,064	0.0%
MTC Total	$342,223	$387,560	113.2%	($45,337)	$16,895	$14,197	84%	$358,072	$15,849	4%	$342,223	$0	0%	$342,223	$403,409	117.9%

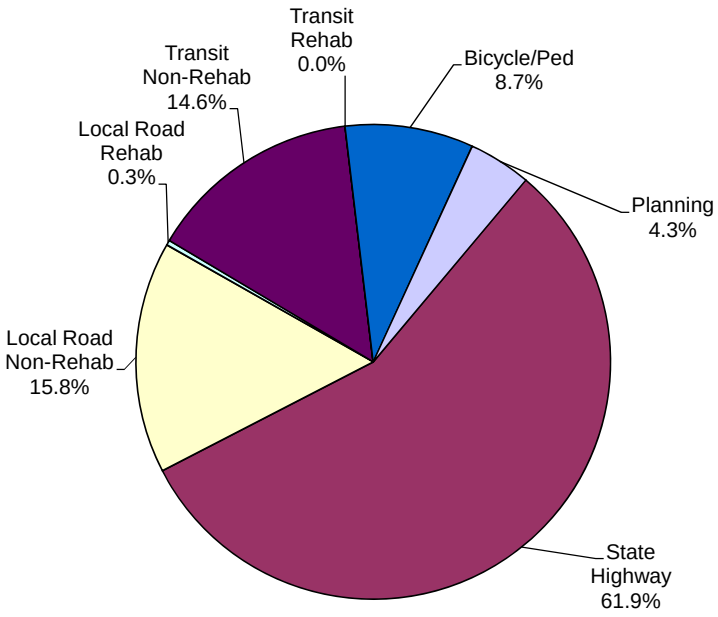
* Current RTIP County Share Totals Includes AB3090s and GARVEEs, however, GARVEEs are not counted against 2014 RTIP Targets

2014 RTIP Categories

County	State Highway	Local Road Non-Rehab	Local Road Rehab	Transit Non-Rehab	Transit Rehab	Bicycle/Ped	Planning	Total
Amount Programmed ** - Project Category								
Alameda	$61,030	$0	$0	$8,195	$0	$6,789	$2,855	$78,869
Contra Costa	$78,367	$4,650	$0	$23,400	$0	$4,474	$2,596	$113,487
Marin	$7,105	$0	$0	$0	$0	$1,640	$533	$9,278
Napa	$850	$6,650	$1,332	$0	$0	$876	$487	$10,195
San Francisco	$0	$0	$0	$12,498	$0	$3,458	$1,608	$17,564
San Mateo	$56,210	$4,298	$0	$0	$0	$3,589	$2,003	$66,100
Santa Clara	$20,305	$0	$0	$14,672	$0	$10,938	$4,708	$50,623
Solano	$0	$48,113	$0	$0	$0	$945	$1,171	$50,229
Sonoma	$3,277	$0	$0	$0	$0	$2,573	$1,214	$7,064
MTC Total	$227,144	$63,711	$1,332	$58,765	$0	$35,282	$17,175	$403,409

County	Number of Projects	Prior	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Year of Programming **								
Alameda	8	$0	$50,878	$10,121	$4,280	$885	$12,705	$78,869
Contra Costa	13	$0	$16,887	$67,421	$23,441	$5,193	$545	$113,487
Marin	9	$37	$7,136	$1,047	$801	$231	$26	$9,278
Napa	12	$0	$1,689	$1,555	$683	$6,252	$16	$10,195
San Francisco	4	$0	$2,133	$64	$14,560	$736	$71	$17,564
San Mateo	7	$0	$419	$9,923	$16,110	$21,025	$18,623	$66,100
Santa Clara	10	$0	$35,666	$3,870	$5,246	$1,036	$4,805	$50,623
Solano	7	$0	$228	$38,890	$10,619	$245	$247	$50,229
Sonoma	5	$0	$4,365	$525	$1,568	$554	$52	$7,064
Total	75	$37	$119,401	$133,416	$77,308	$36,157	$37,090	$403,409

** Amount Programmed and Year of Programming Includes AB 3090s but does NOT include GARVEEs



2014 RTIP - Project Category Summary
- Including Enhancement (TE) and AB 3090 Reimbursements -

Alameda

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
ACTC	81D	SR-84 East-West Connector in Fremont	New project	**12,000**	0	0	0	0	0	12,000	0	12,000	0	0	0	0
ACTC	81H	SR-84 Expressway in Livermore, Widening, seg. 2	Add $10m, advance 2 yrs to FY 15	**47,030**	0	47,030	0	0	0	0	0	42,130	0	0	0	4,900
Caltrans	521K	I-680 Freeway Performance Initiative Project Ph. 2	Add $2m in const-support in FY 16	**2,000**	0	0	2,000	0	0	0	0	0	0	0	0	2,000
AC Transit		AC East Bay Bus Rapid Transit (BRT) Project	New project	**7,995**	0	0	7,995	0	0	0	0	7,995	0	0	0	0
BART		Daly City BART Station Intermodal Improvements	New project, SM Payback	**200**	0	0	0	200	0	0	0	200	0	0	0	0
MTC	2100	Planning, programming, and monitoring	Add funding	**654**	0	122	126	131	135	140	0	654	0	0	0	0
ACTC	2179	Planning, programming, and monitoring	Add funding	**2,201**	0	0	0	886	750	565	0	2,201	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**3,063**	0	0	0	3,063	0	0	0	3,063	0	0	0	0
MTC	2100C	TE reserve (MTC share)	Delete reserve; transfer to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
BART		Downtown Berkeley BART Plaza/Transit Area Imps.	New OBAG project	**3,726**	0	3,726	0	0	0	0	0	3,726	0	0	0	0
	Adopted 2014 RTIP Total - Alameda County			**78,869**	**0**	**50,878**	**10,121**	**4,280**	**885**	**12,705**	**0**	**71,969**	**0**	**0**	**0**	**6,900**

Contra Costa

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

					2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
Agency	**PPNO**	**Project**	**Comments**	**Total**	**Prior**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**R/W**	**Const**	**E & P**	**PS&E**	**R/W Sup**	**Con Sup**
Caltrans	521K	I-680 Freeway Performance Initiative Project Ph. 2	Transfer $22m to 680/4 below	**2,000**	0	0	2,000	0	0	0	0	700	0	0	0	1,300
CCTA	298E	I-680/SR-4 Interchange, NB 680 to WB 4	Delete project, transfer to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
CCTA	298E	I-680/SR-4 Interchange, Widening of SR-4	Add funding from above, update scope	**36,610**	0	0	36,610	0	0	0	0	36,610	0	0	0	0
CCTA	242J	I-80/San Pablo Dam Rd Interchange (Ph. 1)	Consolidate funds into Const	**15,000**	0	15,000	0	0	0	0	0	15,000	0	0	0	0
CCTA		I-80/San Pablo Dam Rd Interchange (Ph. 2)	New project	**9,200**	0	0	9,200	0	0	0	9,200	0	0	0	0	0
CCTA	222E	I-680 SB HOV Gap Closure (N. Main-Livorna)	Move to CON, add $10m, delay 1 year	**15,557**	0	0	0	15,557	0	0	0	15,557	0	0	0	0
CCTA		Kirker Pass Rd NB Truck Climbing Lane	New project	**2,650**	0	0	0	0	2,650	0	0	2,650	0	0	0	0
CCTA		I-80/Central Ave Interchange, Ph 2 (Local Rd Realign)	New project	**2,000**	0	0	0	0	2,000	0	2,000	0	0	0	0	0
BART	2010B	Walnut Creek BART TOD Intermodal Project	No changes	**5,300**	0	0	5,300	0	0	0	0	5,300	0	0	0	0
BART	2010A	East Contra Costa BART Extension (eBART)	No changes	**13,000**	0	0	13,000	0	0	0	0	13,000	0	0	0	0
Hercules	2025G	Hercules Intermodal Transit Center (Building)	No changes	**5,100**	0	0	0	5,100	0	0	0	5,100	0	0	0	0
MTC	2118	Planning, programming, and monitoring	Add funding	**425**	0	79	82	85	88	91	0	425	0	0	0	0
CCTA	2011O	Planning, programming, and monitoring	Add funding	**2,171**	0	431	222	609	455	454	0	2,171	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**2,090**	0	0	0	2,090	0	0	0	2,090	0	0	0	0
MTC	2118F	TE reserve (MTC Share)	Delete reserve; transfer to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Concord		Detroit Ave. Bicycle and Pedestrian Improvements	New OBAG project	**1,189**	0	1,189	0	0	0	0	0	1,189	0	0	0	0
Concord		Concord BART Station Bike/Ped Access Improvemts	New OBAG project	**1,195**	0	188	1,007	0	0	0	0	1,007	0	188	0	0
	Adopted 2014 RTIP Total - Contra Costa County			**113,487**	**0**	**16,887**	**67,421**	**23,441**	**5,193**	**545**	**11,200**	**100,799**	**0**	**188**	**0**	**1,300**

Marin

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
Caltrans	342L	US-101 HOV Lanes (segment 5A) Landscaping	Delete and reassign to 2 projs below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Caltrans	342L	US-101 MSN San Rafael Irwin Creek/Brookdale	New project	**1,655**	37	1,618	0	0	0	0	0	1,075	37	343	0	200
Caltrans	0360L	US-101 MSN - Landscaping, Mitigation, Soundwall	Add funding	**5,450**	0	5,450	0	0	0	0	0	4,070	0	705	0	675
TAM	2127C	Planning, programming, and monitoring	Add funding	**412**	0	0	0	206	206	0	0	412	0	0	0	0
MTC	2127	Planning, programming, and monitoring	Add funding	**121**	0	23	23	24	25	26	0	121	0	0	0	0
Marin Co PW	2127S	Miller Creek Rd. Class 2 Bike Lns and Ped Imps	No changes	**362**	0	0	362	0	0	0	0	362	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**571**	0	0	0	571	0	0	0	571	0	0	0	0
MTC	2127B	TE reserve (MTC share)	Pending OBAG programming	**0**	0	0	0	0	0	0	0	0	0	0	0	0
		Pending OBAG Project 1 (Fairfax)	Will come in January for programming	**300**	0	45	255	0	0	0	0	255	0	45	0	0
		Pending OBAG Project 2	Will come in January for programming	**407**	0	0	407	0	0	0	0	407	0	0	0	0
	Adopted 2014 RTIP Total - Marin County			**9,278**	**37**	**7,136**	**1,047**	**801**	**231**	**26**	**0**	**7,273**	**37**	**1,093**	**0**	**875**

Napa

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

					2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
Agency	**PPNO**	**Project**	**Comments**	**Total**	**Prior**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**R/W**	**Const**	**E & P**	**PS&E**	**R/W Sup**	**Con Sup**
Caltrans	367J	SR-12 Jameson Canyon - Landscaping Segment 3	No changes	**850**	0	850	0	0	0	0	0	710	0	0	0	140
Napa City	new	Silverado Five-Way Intersection Improvements	New project	**1,153**	0	0	0	0	1,153	0	0	1,153	0	0	0	0
American Cyn	new	Devlin Rd and Vine Trail Extension	New project	**1,962**	0	0	297	0	1,665	0	0	1,665	297	0	0	0
American Cyn	new	Eucalyptus Dr Extension	New project	**1,154**	0	0	0	0	1,154	0	0	1,154	0	0	0	0
Napa City	new	California Ave Roundabouts	New project, also add $431 TE Res OBAG	**1,501**	0	431	1,070	0	0	0	431	1,070	0	0	0	0
Calistoga	new	Petrified Forest Rd and SR-128, Intersection Improvements	New project	**580**	0	0	105	50	425	0	50	425	0	105	0	0
Yountville	new	Hopper Creek Pedestrian Path (Oak Cir - Mission)	New project	**500**	0	25	0	75	400	0	0	400	25	75	0	0
Napa County	new	Airport Blvd Rehabilitation	New project	**1,332**	0	0	0	57	1,275	0	0	1,275	0	57	0	0
St. Helena	new	SR-29 and Grayson Ave, Install traffic signal	New project	**300**	0	300	0	0	0	0	0	300	0	0	0	0
American Cyn	2130K	Lena-Stenson Pavement Rehabilitation	Delete project	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Napa Co.	2130L	Silverado Trail Ph. G and H Pavement Rehabilitation	Delete project	**0**	0	0	0	0	0	0	0	0	0	0	0	0
MTC	2130	Planning, programming, and monitoring	Add funding	**74**	0	14	14	15	15	16	0	74	0	0	0	0
Napa TPA	1003E	Planning, programming, and monitoring	Add funding	**413**	0	69	69	110	165	0	0	413	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**376**	0	0	0	376	0	0	0	376	0	0	0	0
MTC	2130B	TE reserve (MTC share)	Delete reserve; transfer to Calif. Ave.	**0**	0	0	0	0	0	0	0	0	0	0	0	0
	Adopted 2014 RTIP Total - Napa County			**10,195**	**0**	**1,689**	**1,555**	**683**	**6,252**	**16**	**481**	**9,015**	**322**	**237**	**0**	**140**

San Francisco

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
SF MTA	new	Central Subway	New project	**12,498**	0	0	0	12,498	0	0	0	12,498	0	0	0	0
SFCTA	2007	Planning, programming, and monitoring	Add funding	**1,275**	0	161	0	447	667	0	0	1,275	0	0	0	0
MTC	2131	Planning, programming, and monitoring	Add funding	**333**	0	62	64	67	69	71	0	333	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**1,548**	0	0	0	1,548	0	0	0	1,548	0	0	0	0
MTC	2007S	TE reserve (MTC share)	Delete reserve; transfer to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
		Chinatown Broadway Complete Streets, Ph. 4	New OBAG project	**1,910**	0	1,910	0	0	0	0	0	1,910	0	0	0	0
	Adopted 2014 RTIP Total - San Francisco County			**17,564**	**0**	**2,133**	**64**	**14,560**	**736**	**71**	**0**	**17,564**	**0**	**0**	**0**	**0**

San Mateo

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
Caltrans	690A	US-101 Willow Rd Interchange Reconstruction	Delay const by 1 year	**20,471**	0	0	0	3,072	17,399	0	2,217	13,719	0	0	855	3,680
Caltrans	632C	SR-1 Calera Parkway - Pacifica, Phase 1	Delay by 1 year, move to ROW	**6,900**	0	0	6,900	0	0	0	6,900	0	0	0	0	0
Caltrans	2140E	Countywide ITS Project	Delay all phases by 1 year	**4,298**	0	0	800	3,498	0	0	0	3,498	300	500	0	0
San Mateo	668A	SR-92 Improvements Phase 1: Op Imprs at 92/ECR IC	No changes	**5,000**	0	0	0	5,000	0	0	0	5,000	0	0	0	0
SM C/CAG	668D	SR-92 Improvements Phase 2: 92/101 Interchange Imps	Update scope/schedule, add funding	**23,839**	0	0	0	2,411	3,217	18,211	0	18,211	2,411	3,217	0	0
MTC	2140	Planning, programming, and monitoring	Add funding	**345**	0	64	67	69	71	74	0	345	0	0	0	0
SM C/CAG	2140A	Planning, programming, and monitoring	Add funding	**1,658**	0	355	165	462	338	338	0	1,658	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**1,598**	0	0	0	1,598	0	0	0	1,598	0	0	0	0
MTC	2140C	TE reserve (MTC share)	Pending OBAG programming	**0**	0	0	0	0	0	0	0	0	0	0	0	0
		Pending OBAG Projects	Will come in January for programming	**1,991**	0	0	1,991	0	0	0	0	1,991	0	0	0	0
	Adopted 2014 RTIP Total - San Mateo County			**66,100**	**0**	**419**	**9,923**	**16,110**	**21,025**	**18,623**	**9,117**	**46,020**	**2,711**	**3,717**	**855**	**3,680**

Santa Clara

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
SCVTA	409C	GARVEE debt (I-880 Coleman)		**7,315**	0	7,315	0	0	0	0	0	7,315	0	0	0	0
SCVTA	443N	GARVEE debt (SR-87 HOV North)		**3,969**	0	3,969	0	0	0	0	0	3,969	0	0	0	0
SCVTA	443S	GARVEE debt (SR-87 HOV South)		**4,565**	0	4,565	0	0	0	0	0	4,565	0	0	0	0
VTA	new	I-680 Soundwall from Capitol to Mueller	New project	**4,456**	0	0	95	408	94	3,859	94	3,859	95	408	0	0
VTA	new	BART Extension from Berryessa to Santa Clara	New project	**14,672**	0	14,672	0	0	0	0	0	0	14,672	0	0	0
San Jose	9035L	Park Ave. Multi-Modal Improvements	No changes	**1,456**	0	1,456	0	0	0	0	0	1,456	0	0	0	0
San Jose	9035M	Saint John St. Multi-Modal Improvements, Ph. 1	No changes	**1,500**	0	1,500	0	0	0	0	0	1,500	0	0	0	0
MTC	2144	Planning, programming, and monitoring	Added funding	**764**	0	143	147	153	158	163	0	764	0	0	0	0
SCVTA	2255	Planning, programming, and monitoring	Added funding	**3,944**	0	696	628	1,053	784	783	0	3,944	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**3,632**	0	0	0	3,632	0	0	0	3,632	0	0	0	0
MTC	2255B	TE reserve (MTC share)	Delete reserve; transfer to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Palo Alto		US-101/Adobe Creek Bicycle and Pedestrian Bridge	New OBAG project	**3,000**	0	0	3,000	0	0	0	0	3,000	0	0	0	0
San Jose		The Alameda "Beautiful Way" Grand Blvd Ph. 2	New OBAG project	**1,350**	0	1,350	0	0	0	0	0	1,350	0	0	0	0
Adopted 2014 RTIP Total - Santa Clara County				**50,623**	**0**	**35,666**	**3,870**	**5,246**	**1,036**	**4,805**	**94**	**35,354**	**14,767**	**408**	**0**	**0**

Solano

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
Solano TA	5301	Jepson Pkwy (Vanden from Peabody to Leisure Town)	No changes	**30,457**	0	0	30,457	0	0	0	0	30,457	0	0	0	0
Solano TA	5301	Jepson Pkwy (Leisure Town from Vanden to Marshall)	No changes	**8,296**	0	0	8,296	0	0	0	0	8,296	0	0	0	0
Solano TA		Jepson Pkwy (Leisure Town from Marshall to Commerce)	New project	**9,360**	0	0	0	9,360	0	0	0	9,360	0	0	0	0
MTC	2152	Planning, programming, and monitoring	Added funding	**201**	0	37	39	40	42	43	0	201	0	0	0	0
STA	2263	Planning, programming, and monitoring	Added funding	**970**	0	191	98	274	203	204	0	970	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**945**	0	0	0	945	0	0	0	945	0	0	0	0
MTC	5152A	TE reserve (MTC share)	Already allocated to OBAG commitmei	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Adopted 2014 RTIP Total - Solano County				**50,229**	**0**	**228**	**38,890**	**10,619**	**245**	**247**	**0**	**50,229**	**0**	**0**	**0**	**0**

Sonoma

2014 RTIP as adjusted

December 10, 2013

(all numbers in thousands)

Agency	PPNO	Project	Comments	Total	2014 RTIP Funding by Fiscal Year						2014 RTIP Funding by Component					
					Prior	14-15	15-16	16-17	17-18	18-19	R/W	Const	E & P	PS&E	R/W Sup	Con Sup
Caltrans	0360L	US-101 MSN Landscaping/Mitigation, Soundwall	Delete Sonoma funds, move to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Caltrans	789F	US-101 HOV Lanes Landscaping (Steele)	Add funds, transfer phases, pend PCR	**3,277**	0	3,277	0	0	0	0	0	2,452	0	310	0	515
MTC	2156	Planning, programming, and monitoring	Add funds	**242**	0	45	47	48	50	52	0	242	0	0	0	0
SCTA	770E	Planning, programming, and monitoring	Add funds	**972**	0	0	125	343	504	0	0	972	0	0	0	0
BATA/CT/CTC	9051A	Improved Bike/Ped Connectivity to East Span SFOBB	No changes	**1,177**	0	0	0	1,177	0	0	0	1,177	0	0	0	0
MTC	5156A	TE reserve (MTC share)	Delete reserve; transfer to below	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Santa Rosa		Downtown Santa Rosa Streetscape	New OBAG project	**353**	0	0	353	0	0	0	0	353	0	0	0	0
SMART		SMART Bicycle and Pedestrian Pathway	New OBAG project	**1,043**	0	1,043	0	0	0	0	0	1,043	0	0	0	0
Adopted 2014 RTIP Total - Sonoma County				**7,064**	**0**	**4,365**	**525**	**1,568**	**554**	**52**	**0**	**6,239**	**0**	**310**	**0**	**515**

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

POLICIES, PROCEDURES AND PROJECT SELECTION CRITERIA

MTC RESOLUTION NO. 4118

Date: September 25, 2013
W.I.: 1515
Referred by: PAC

ABSTRACT

Resolution No. 4118

This resolution adopts the policies, procedures and project selection criteria for developing the 2014 Regional Transportation Improvement Program (RTIP) for the San Francisco Bay Area, for submission to the California Transportation Commission (CTC), consistent with the provisions of Senate Bill 45 (Chapter 622, Statutes 1997).

Further discussion of these actions is contained in the MTC Executive Director's Memorandum to the MTC Programming and Allocations Committee dated September 11, 2013.

Attachment 1 – Policies, Procedures and Project Selection Criteria for the 2014 RTIP (with attachments)

Attachment 2 – STIP Amendment / Extension Rules and Procedures

Date: September 25, 2013
W.I.: 1515
Referred by: PAC

RE: Adoption of 2014 Regional Transportation Improvement Program (RTIP) Program Policies, Procedures, and Project Selection Criteria

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4118

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 *et seq.*; and

WHEREAS, MTC has adopted and periodically revises, pursuant to Government Code Sections 66508 and 65080, a Regional Transportation Plan (RTP); and

WHEREAS, MTC adopts, pursuant to Government Code Section 65080, a Regional Transportation Improvement Program (RTIP) when additional State Transportation Improvement Program funding is available, that is submitted, pursuant to Government Code Section 14527, to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans); and

WHEREAS, MTC has developed, in cooperation with Caltrans, operators of publicly owned mass transportation services, congestion management agencies, countywide transportation planning agencies, and local governments, policies, procedures and project selection criteria to be used in the development of the 2014 RTIP, to include projects programmed in fiscal years 2014-15 through 2018-19; and

WHEREAS, using the process and criteria set forth in the Attachments to this resolution, attached hereto as though set forth at length, a set of capital priorities for the 2014 Regional Transportation Improvement Program (RTIP) will be developed; and

WHEREAS, the 2014 RTIP will be subject to public review and comment; now, therefore, be it

RESOLVED, that MTC approves the process and criteria to be used in the evaluation of candidate projects for inclusion in the 2014 RTIP, as set forth in Attachment 1 of this resolution, and be it further

RESOLVED, that MTC approves the STIP Amendment / Extension Rules and Procedures to be used in processing STIP amendment and extension requests, as set forth in Attachment 2 of this resolution, and be it further

RESOLVED, that the Executive Director shall forward a copy of this resolution, and such other information as may be required to the CTC, Caltrans, and to such other agencies as may be appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

Amy Rein Worth, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on September 25, 2013.

2014
Regional Transportation Improvement Program

Policies, Procedures, and Project Selection Criteria

September 25, 2013

MTC Resolution No. 4118
Attachment 1

Metropolitan Transportation Commission
Programming and Allocations Section
http://www.mtc.ca.gov/funding/

2014 RTIP
Regional Transportation Improvement Program
Policies, Procedures and Project Selection Criteria
Table of Contents

2014 Regional Transportation Improvement Program (RTIP)
Policies, Procedures and Project Selection Criteria

Background

The State Transportation Improvement Program (STIP) provides funding for a significant number of transportation projects around the State. As the Regional Transportation Planning Agency (RTPA) for the Bay Area, the Metropolitan Transportation Commission (MTC) is responsible for developing regional project priorities for the STIP for the nine counties of the Bay Area.

The Regional Transportation Improvement Program (RTIP) is the region's proposal to the State for STIP funding, due to the California Transportation Commission (CTC) by December 15, 2013. The 2014 STIP will include programming for the five fiscal years from 2014-15 through 2018-19. The region may request advancement of future county shares.

2014 RTIP Development

The following principles will frame the development of MTC's 2014 RTIP, the region's contribution to the 2014 STIP.

- MTC will work with CTC staff, CMA's, transit operators, Caltrans, and project sponsors to prepare the 2014 STIP.

- Investments made in the RTIP must carry out the objectives of the Regional Transportation Plan (RTP), and be consistent with its improvements and programs.

- MTC may choose to consult with counties to consider programming a portion of their RTIP shares for projects that will meet a regional objective.

- MTC will continue to work with CMAs, transit operators, Caltrans and project sponsors to aggressively seek project delivery solutions. Through the use of AB 3090 authority, GARVEE financing, and federal, regional, and local funds and funding exchanges, MTC will work with its transportation partners to deliver projects in the region.

- Each county's project list must be constrained within the county share limits unless arrangements have been made with other counties to aggregate the county share targets. MTC continues to support aggregation of county share targets to deliver ready-to-go projects in the region. CMAs that submit a list that exceeds their county share must identify and prioritize those projects that exceed the county share target.

Key Policies and Guidance

The following policies serve as the primary guidance in the development of the 2014 RTIP.

Key Eligibility Policies

Consistency with Regional and Local Plans

RTP Consistency

Plan Bay Area, the 2013 Regional Transportation Plan (RTP), lays out a vision of what the Bay Area transportation network should look like in 2040. The purpose of Plan Bay Area is to encourage and promote the safe and efficient management, operation and development of a regional intermodal transportation system that will serve the mobility needs of people and goods. Programming policies governing the STIP and other flexible, multi-modal discretionary funding sources such as the federal Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement (CMAQ), and Regional Transportation Improvement Program (RTIP) funds must be responsive to the strategies and goals of the Plan. New projects submitted for RTIP consideration must include a statement addressing how the project meets the strategies and goals set forth in the RTP.

Local Plans

Projects included in the RTIP must be included in a Congestion Management Plan (CMP) or Capital Improvement Program (CIP).

CTC Guidance

The California Transportation Commission (CTC) 2014 STIP guidelines were adopted on August 6, 2013. The MTC 2014 RTIP Policies, Procedures and Project Selection Criteria includes all changes in STIP policy implemented by the CTC. The entire CTC STIP Guidelines are available on the internet at: http://www.dot.ca.gov/hq/transprog/ocip.htm. All CMAs and project sponsors are required to follow the MTC and CTC STIP guidelines in the development and carrying out of the 2014 RTIP/STIP.

2014 RTIP Development Schedule

Development of the 2014 RTIP under these procedures will be done in accordance with the schedule outlined in Attachment A of these policies and procedures.

RTIP County Share Targets

Attachment B of the Policies and Procedures provides the county share targets for each county for the 2014 RTIP. Each county's project list, due to MTC in draft form by October 16, 2013, should be constrained within these county share limits; however, there may be limited opportunities to advance future county shares. It is expected that MTC's RTIP will be developed using a region-wide aggregate of county-share targets and advancement of future county shares.

Project Eligibility

SB 45 (Chapter 622, Statutes 1997) considerably expanded the range of projects that are eligible for consideration in the RTIP. Eligible projects include, state highway improvements, local road improvements and rehabilitation, public transit, intercity rail, pedestrian, and bicycle facilities, and grade separation, transportation system management, transportation demand management, soundwall projects, intermodal facilities, and safety.

RTIP Project Solicitation

Each county congestion management agency (CMA), or countywide transportation planning agency for those counties that have opted out of the CMA requirement, is responsible for soliciting projects for its county share of the RTIP where the county target is greater than $0. The CMA must notify all eligible project sponsors, including Caltrans and transit operators, of the process and deadlines for applying for RTIP funding.

Public Involvement Process

MTC is committed to having the CMAs as full partners in development of the RTIP. That participation likewise requires the full commitment of the CMAs to a broad, inclusive public involvement process consistent with MTC's Public Participation Plan (available online at http://www.mtc.ca.gov/get_involved/participation_plan.htm) and federal regulations, including Title VI. Federal regulations call for active outreach strategies in any metropolitan planning process, and opportunities for the public to get involved are important with the project selection process for the RTIP.

RTIP Projects in the Transportation Improvement Program (TIP)

In response to state and federal requirements, RTIP funds must be programmed in the TIP prior to seeking a CTC allocation. In addition, a federal authorization to proceed (E-76) request must be submitted simultaneously with the RTIP allocation request to Caltrans and the CTC when the request includes federal funds. In the 2014 RTIP, all projects are subject to be a mix of federal and state funds, and require a federal authorization to proceed. Additionally, all STIP projects are considered regionally significant and must have funds escalated to the year of expenditure, in accordance with federal regulations.

Regional Policies

ARRA RTIP Backfill Programming

In order to expedite obligation and expenditure of American Recovery and Reinvestment Act of 2009 (ARRA) funds, and to address the State's lack of funding, MTC programmed $31 million in ARRA funds to backfill unavailable STIP funds for the Caldecott Tunnel Fourth Bore project. Of the $31 million, $29 million came from Contra Costa's STIP county share, and $2 million from Alameda's STIP county share. As part of MTC Resolution No. 3925, First Cycle Federal New Act Program, these funds were to be directed to Freeway Performance Initiative (FPI) projects. These amounts were not programmed by the CTC in the 2010 RTIP due to insufficient program capacity, while $24 million (in Contra Costa's share) was programmed in the 2012 RTIP to the I-680 Freeway Performance Initiative (FPI) project. MTC will have discretion to program the remaining $7 million in the 2014 RTIP, in freed up RTIP capacity from these two counties. As a result, Contra Costa's available programming capacity will be reduced by $5 million, and Alameda's available programming capacity will be reduced by $2 million. The programming of these funds to regional projects will have priority for programming in the first two years of the 2014 RTIP.

San Francisco County Programming Priorities

MTC Resolution No. 4035, Revised, which sets forth the second cycle of federal Surface Transportation Program/Congestion Mitigation and Air Quality Improvement (STP/CMAQ) funding, advanced $34 million in federal funds for the Doyle Drive Replacement / Presidio Parkway project. In exchange, $34 million San Francisco's STIP share shall be reserved for regional Freeway

Performance Initiative (FPI)/Express Lanes projects. San Francisco shall commit these funds after PPM programming and the remaining $88 million commitment to the Central Subway project.

Regional Planning, Programming, and Monitoring (PPM) funds

Passage of Assembly Bill 2538 (Wolk, 2006) allows all counties to program up to 5% of their county share to Planning, Programming, and Monitoring (PPM) purposes in the STIP. Attachment B gives amounts of PPM amounts each county may program in FY 2016-17, FY 2017-18, and FY 2018-19. There is no new PPM in FY 2014-15 and FY 2015-16. As agreed with the CMAs, MTC will program a portion of each county's PPM for regional PPM activities each year, with the new regional PPM amounts for FY 2017-18 and FY 2018-19 shown in Attachment B. MTC's currently programmed amounts for regional PPM activities in FY 2014-15, FY 2015-16, and FY 2016-17, will not change in the 2014 RTIP.

Caltrans Project Nomination

Senate Bill 1768 (Chapter 472, Statutes 2002) authorizes the Department of Transportation to nominate or recommend projects to be included in the RTIP to improve state highways using regional transportation improvement funds. To be considered for funding in the RTIP, the Department must submit project nominations directly to the applicable CMA (or countywide transportation planning agency for those counties that have opted out of the CMA requirement). The Department should also identify any additional state highway improvement needs within the county that could be programmed within the 3 years beyond the end of the current STIP period. The Department must submit these programming recommendations and identification of state highway improvement needs to the CMA within the timeframe and deadline prescribed by the applicable CMA. In addition, the Department must also provide a list of projects and funding amounts for projects currently planned on the State Highway System over the 2014 STIP period to be funded with local and regional funds.

Title VI Compliance

Investments made in the RTIP must be consistent with federal Title VI requirements. Title VI prohibits discrimination on the basis of race, color, disability, and national origin in programs and activities receiving federal financial assistance. Public outreach to and involvement of individuals in low income and minority communities covered under Title VI of the Civil Rights Act and the Executive Order pertaining to Environmental Justice is critical to both local and regional decisions. The CMA must consider equitable solicitation and selection of project candidates in accordance with federal Title VI and Environmental Justice requirements.

Intelligent Transportation Systems Policy

In collaboration with federal, state, and local partners, MTC is developing the regional Intelligent Transportation Systems (ITS) architecture. The San Francisco Bay Area Regional ITS Plan is a roadmap for transportation systems integration in the Bay Area over the next 10 years. The plan provides methods to make the most out of technological advances by developing a strategy for deployment and a framework, or architecture, for linking the region's transportation systems.

MTC, state and federal agencies require projects funded with federal highway trust funds to meet applicable ITS architecture requirements. Since the 2006 RTIP, MTC requires that all applicable projects conform to the regional ITS architecture. Through the on-line Fund Management System

(FMS) application process, 2014 RTIP project sponsors will identify the appropriate ITS category, if applicable. Information on the regional ITS architecture can be found at: http://www.mtc.ca.gov/planning/ITS/index.htm.

MTC Resolution No. 4104 Compliance – Traffic Operations System Policy

All major new freeway projects included in the Transportation 2030 Plan and subsequent regional transportation plans shall include the installation and activation of freeway traffic operations system (TOS) elements to effectively operate the region's freeway system and coordinate with local transportation management systems. MTC requires that all applicable RTIP projects conform to the regional policy. For purposes of this policy, a major freeway project is a project that adds lanes to a freeway, constructs a new segment of freeway, upgrades a segment to freeway status, modifies a freeway interchange, modifies freeway ramps, or reconstructs an existing freeway. A project is considered new if it did not have an approved Project Study Report (PSR) or applicable scoping document by December 2004, or did not have funds programmed for the construction phase in the STIP as of December 2004. TOS elements may include, but are not limited to, changeable message signs, closed-circuit television cameras, traffic monitoring stations and detectors, highway advisory radio, and ramp meters.

As set forth in MTC Resolution No. 4104, any jurisdiction in which MTC finds that ramp metering and TOS elements are installed but not activated or in operation, MTC will consider suspending fund programming actions for STIP funding until the Ramp Metering Plan is implemented and the ramp meters and related TOS elements are activated and remain operational, and MTC deems the requirements of the regional TOS policy have been met. Furthermore, in any county in which a jurisdiction fails to include the installation and activation of TOS elements in an applicable freeway project, including ramp metering as identified in the Ramp Metering Plan, projects to install and activate the appropriate ramp meters and TOS elements omitted from the project shall have priority for programming of new STIP funding for that county.

Freeway Performance Initiative and Express Lane (HOT) Network

All projects on the state highway system must demonstrate a scope and funding plan that includes Traffic Operations System (TOS) elements, consistent with the section above. Projects must also include any additional traffic operations recommendations resulting from the Freeway Performance Initiative (FPI). Additionally, projects on the state highway system proposed for programming in the 2014 RTIP should be consistent with the planned Regional Express Lane (High-Occupancy Toll) Network and the FPI. For new RTIP funding commitments on the Regional Express Lane Network, the CMAs should work with MTC to determine the appropriateness of advance construction elements (such as structures and conduit) to support the future conversion of HOV lanes to express lanes if identified.

Bay Area Interregional Transportation Improvement Program (ITIP) Priorities

In order to support Caltrans District 4 in successfully programming ITIP projects in the Bay Area, MTC worked with the CMAs and District to formulate four guiding principles for prioritizing ITIP projects. The principles are:

- Support high cost-benefit ratio projects on the State Highway System (such as Freeway Performance Initiative (FPI) projects)

- Support High-Occupancy Vehicle (HOV) lane gap closures, with emphasis on those that support the Regional Express Lane Network.
- Support high speed rail early investments and intercity/commuter rail
- Support future goods movement and trade corridors

These principles are consistent with Plan Bay Area assumptions. With CMA and Caltrans input, MTC will follow these principles to establish a list of regionally-supported projects for ITIP consideration. The prioritized list of ITIP projects may be adopted as part of the 2014 RTIP adoption, and submitted to Caltrans. The list may be updated with each RTIP cycle going forward.

MTC Resolution No. 3866 Compliance – Transit Coordination Implementation Plan

On February 24, 2010, MTC approved Resolution No. 3866, which documents coordination requirements for Bay Area transit operators to improve the transit customer experience when transferring between transit operators and in support of regional transit projects. *If a transit operator fails to comply with Res. 3866 requirements, MTC may withhold, restrict or reprogram funds or allocations*. Res. 3866 supersedes MTC's earlier coordination plan, Res. 3055.

One goal of MTC staff in organizing Res. 3866 was to incorporate some detailed project information through reference rather than directly in the resolution in order to facilitate future updates of project-specific requirements. For this reason, some documents are referenced in Res. 3866 and available for download at http://www.mtc.ca.gov/planning/tcip. Transit operators must comply with these more detailed documents in order to comply with Res. 3866. MTC may periodically update these documents in consultation with transit agencies.

Accommodations for Bicyclists, Pedestrians and Persons with Disabilities

Federal, state and regional policies and directives emphasize the accommodation of bicyclists, pedestrians, and persons with disabilities when designing transportation facilities. Of particular note is Caltrans Deputy Directive 64 which stipulates: "pedestrians, bicyclists and persons with disabilities must be considered in all programming, planning, maintenance, construction, operations, and project development activities and products." In addition, MTC's Resolution No. 3765 requires project sponsors to complete a checklist that considers the needs of bicycles and pedestrians for applicable projects. MTC's Regional Bicycle Plan, adopted as a component of the 2001 RTP, requires that "all regionally funded projects consider enhancement of bicycle transportation consistent with Deputy Directive 64".

In selecting projects for inclusion in the RTIP, the CMAs and project sponsors must consider federal, state and regional policies and directives regarding non-motorized travel, including, but limited to, the following:

Federal Policy Mandates

The Federal Highways Administration Program Guidance on bicycle and pedestrian issues makes a number of clear statements of intent, and provides a best practices concept as outlined in the US DOT "Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure." (http://www.fhwa.dot.gov/environment/bikeped/Design.htm)

State Policy Mandates

The California Complete Streets Act (AB 1358) of 2008 encourages cities to make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity to reduce vehicle miles traveled (VMT). Government Code Section 65302(b)(2)(A) and (B) states that any substantial revision of the circulation element of the General Plan to consider all users.

California Government Code Section 65089(b)(1)(B)(5) requires that the design, construction and implementation of roadway projects proposed for funding in the RTIP must consider maintaining bicycle access and safety at a level comparable to that which existed prior to the improvement or alteration.

Caltrans Deputy Directive 64 (http://www.dot.ca.gov/hq/tpp/offices/bike/sites_files/DD-64-R1_Signed.pdf), states: "the Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists, and persons with disabilities) in all programming, planning, maintenance, construction, operations, and project development activities and products. This includes incorporation of the best available standards in all of the Department's practices. The Department adopts the best practices concept in the US DOT Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure."

Regional Policy Mandates

All projects programmed during the RTIP must consider the impact to bicycle transportation, pedestrians and persons with disabilities, consistent with MTC Resolution No. 3765. The Complete Streets Checklist (also known as "Routine Accommodations Checklist") is incorporated as Part 5 of the Project Application. Furthermore, it is encouraged that all bicycle projects programmed in the RTIP support the Regional Bicycle Network. Guidance on considering bicycle transportation can be found in MTC's 2009 Regional Bicycle Plan (a component of Transportation 2035) and Caltrans Deputy Directive 64. MTC's Regional Bicycle Plan, containing federal, state and regional polices for accommodating bicycles and non-motorized travel, is available on MTC's Web site at: http://www.mtc.ca.gov/planning/bicyclespedestrians/.

State Policies

Grant Anticipation Revenue Vehicle (GARVEE) Bonding

Chapter 862 of the Statutes of 1999 (SB 928) authorizes the State Treasurer to issue GARVEE bonds and authorizes the California Transportation Commission (CTC) to select projects for accelerated construction from bond proceeds. Bond repayment is made through annual set asides of the county share of future State Transportation Improvement Program (STIP) funds. Bond repayments are typically made over several STIP programming periods.

In accordance with state statute and the CTC GARVEE guidelines, GARVEE debt repayment will be the highest priority for programming and allocation within the particular county Regional Improvement Program (RIP) share until the debt is repaid. In the event that the RIP county share balance is insufficient to cover the GARVEE debt service and payment obligations, the RIP county share balance for that particular county will become negative through the advancement of future RIP county share. Should a negative balance or advancement of capacity be unattainable, then funding

for other projects using RIP county share within that particular county would need to be reprogrammed or deleted, to accommodate the GARVEE debt service and payment obligations.

The CTC is responsible for programming the funds, derived from federal sources, as GARVEE debt service and the State Treasurer is responsible for making the debt service payments for these projects. In the 2014 STIP, CTC will consider new GARVEE projects via STIP amendment only, and not during the 2014 STIP process.

AB 3090 Project Replacement or Reimbursement

AB 3090 (Statutes of 1992, Chapter 1243) allows a local jurisdiction to advance a project included in the STIP to an earlier fiscal year through the use of locally-controlled funds. With the concurrence of the appropriate CMA, MTC, the California Transportation Commission and Caltrans, one or more replacement state transportation project shall be identified and included in the STIP for an equivalent amount and in the originally scheduled fiscal year or a later year of the advanced project. Alternately, the advanced project can be reimbursed in the originally scheduled fiscal year or a later year.

Projects approved for AB 3090 consideration must award a contract within six months of the CTC approval. Section 2.c of the AB 3090 Policy, adopted by the CTC in April 2003 states, "The local agency commits to award a contract or otherwise begin delivery of the project component within 12 months of the Commission's approval, with the understanding that the arrangement may be cancelled if that condition is not met." Note that the CTC adopted a new 6 month award deadline in June 2006, and the 6 month deadline supercedes the April 2003 language. This is further strengthened in the 2012 STIP Guidelines amendment regarding AB 3090s, approved by CTC on June 27, 2012.

The allocation of AB 3090 reimbursement projects is the highest priority in the MTC region. In the 2014 STIP, CTC will consider new AB 3090 requests via STIP amendment only, and not during the 2014 STIP process. Sponsors thinking of using AB 3090s for their projects should contact MTC and CTC for inclusion in the AB 3090 Plan of Projects, which is updated on an as-needed basis.

SB 184 Advance Expenditure of Funds

SB 184 (Statutes of 2007, Chapter 462) authorizes a regional or local entity to expend its own funds for any component of a transportation project within its jurisdiction that is programmed in the current fiscal year and for which the Commission has not made an allocation. The amount expended would be authorized to be reimbursed by the state, subject to annual appropriation by the Legislature, if (1) the commission makes an allocation for, and the department executes a fund transfer agreement for, the project during the same fiscal year as when the regional or local expenditure was made; (2) expenditures made by the regional or local entity are eligible for reimbursement in accordance with state and federal laws and procedures; and (3) the regional or local entity complies with all legal requirements for the project, as specified.

MTC discourages the use of SB 184 since allocation of funds is not guaranteed. Therefore, sponsors are exposing themselves to the risk of expending local funds with no guarantee that the STIP funds will be allocated.

Should a sponsor want to proceed with an SB 184 request, the sponsor must notify the CMA, MTC and Caltrans in writing on agency letterhead in accordance with Caltrans Local Assistance procedures.

AB 608 Contract Award Provisions

AB 608 authorizes the adjustment by the CTC of a programmed project amount in the STIP if the Caltrans-sponsored construction contract award amount for a project is less than 80% of the engineer's final estimate, excluding construction engineering.

The CTC will not approve any AB 608 request after 120 days from the contract award. Sponsors intending to take advantage of AB 608 project savings must notify Caltrans and the CMA within 30 days of the contract award, to ensure the request to the CTC can be processed in time to meet the CTC's deadline.

Limitations on State-Only Funding

In 2011, the State adopted AB 105, which eliminates the sales tax on gasoline and replaces it with a commensurate increase in the excise tax on gasoline. Excise taxes are deposited into the State Highway Account, which also includes federal funds. Therefore, projects programmed in the 2014 STIP will receive a combination of state and federal funds. Project sponsors must federalize their projects by completing NEPA documentation and complying with federal project delivery rules, unless they are granted a state-only funding exception by the CTC.

Article XIX Compliance for Transit Projects

Article XIX of the California State Constitution restricts the use of State Highway Account (SHA) funds on transit projects. In order for existing and new projects to be programmed in the STIP, the project sponsor or the CMA must provide documentation that verifies the STIP transit project is either 1) eligible for federal funds, or 2) meets Article XIX requirements that only fixed guideway projects in a county that has passed a measure authorizing the use of SHA funds on transit projects may use SHA funds. Also refer to the next section regarding "Matching Requirements."

Matching Requirements on Highway and Transit Projects

A local match is not required for projects programmed in the STIP, except under special situations affecting projects subject to Article XIX restrictions established by the State Constitution. Article XIX limits the use of state revenues in the State Highway Account (SHA) to state highways, local roads, and fixed guideway facilities. Other projects, such as rail rolling stock and buses, are not eligible to receive state funds from the SHA. Article XIX restricted projects must therefore be funded with either a combination of federal STIP funding and matching STIP funds from the Pubic Transportation Account (PTA), or with 100 percent federal STIP funds in the State Highway Account (which requires a non-federal local match of 11.47% from a non-STIP local funding source or approved use of toll credits).

Project sponsors wishing to use STIP PTA funds as matching funds for Article XIX restricted projects must note such a request in the "Special Funding Conditions" section of the RTIP Application Nomination sheet, and obtain approval from Caltrans through the state-only approval process as previously described. Otherwise, the CTC may assume any Article XIX restricted STIP project will be funded with 100 percent federal funds.

Santa Clara GARVEE Debt Service

In accordance with MTC Resolution No. 3538, the debt service for the I-880/Coleman Avenue, SR-87 HOV Lanes (SR 85 to I-280), and the SR-87 HOV Lanes (I-280-Julian Street) projects will be paid from the Santa Clara County RIP county share balance. In the 2014 RTIP, all Santa Clara GARVEE commitments have been fully programmed, and no new GARVEE commitments are due from Santa Clara's new 2014 RTIP county shares.

Transportation Enhancement (TE) Funding

Elimination of TE Funds in the 2014 STIP

In 2012, Congress passed and the President signed into law the Moving Ahead for Progress in the 21st Century (MAP-21) legislation to replace the former federal transportation act. MAP-21 eliminates Transportation Enhancement (TE) as a source of funding, and replaces it with Transportation Alternatives (TA) funds. The State combined various alternative transportation funding, including the TA program, into a new Active Transportation Program (ATP).

The 2014 STIP will not contain any TE or TA funds. TE projects still programmed in the 2014 STIP may remain in the STIP using non-TE funds, if eligible for STIP federal or state-only funds.

Treatment TE Reserves and Regional TE Projects

Due to the elimination of TE funds in the STIP, all TE Reserves programmed in the STIP must be deleted. TE Reserves attributed to the County must be deleted; the freed up TE Reserve funding may be used to augment a county's programmable target. However, TE Reserves attributed to MTC remain under MTC's discretion, and may not be used to augment a county's target.

The Gateway Park project, programmed as a regional TE project in the 2012 STIP, will remain programmed in the 2014 STIP using federal funds.

General Guidance

Project Advancements

If a project or project component is ready for implementation earlier than the fiscal year that it is programmed in the STIP, the implementing agency may request an allocation in advance of the programmed year. The CTC will consider making advanced allocations based on a finding that the allocation will not delay availability of funding for other projects programmed in earlier years than the project to be advanced and with the approval of the responsible regional agency if county share funds are to be advanced. Project advancements are unlikely during the 2014 STIP period. In project and financial planning, sponsors should not expect the CTC to advance any projects.

Programming to Reserves

The counties and the region may propose to leave county share STIP funds unprogrammed for a time to allow adequate consideration of funding options for future projects. The CTC particularly encourages Caltrans and the regional agencies to engage in early consultations to coordinate their ITIP and RTIP proposals for such projects. Counties intending to maintain an unprogrammed balance of its county share for future program amendments prior to the next STIP must include a statement of the intentions for the funds, including the anticipated use of the funds, as well as the amount and timing of the intended STIP amendment(s). However, access to any unprogrammed

balance is subject to availability of funds, and is not expected to be approved by the CTC until the next STIP programming cycle.

Countywide RTIP Listing

By October 16, 2013, each county Congestion Management Agency or countywide transportation planning agency must submit to MTC a draft proposed countywide RTIP project listing showing the proposed programming of county shares. The final list is due to MTC by November 7, 2013, and must include the final project applications for any new projects added to the STIP (or any significantly revised existing STIP projects) and appropriate project level performance measure analysis.

Project Screening Criteria, Including Readiness

In addition to the CTC Guidelines, all projects included in the 2014 RTIP must meet all MTC project-screening criteria listed in Attachment C of this guidance. Of utmost importance are the project readiness requirements.

RTIP Applications

Project sponsors must complete an application for each new project proposed for funding in the RTIP, consisting of the items included in Attachment D of this guidance. In addition to MTC's Fund Management System (FMS) application, project sponsors must use the Project Programming Request (PPR) forms provided by Caltrans for all projects. CMAs should submit PPRs for all projects (including existing projects with no changes) on the revised form provided by Caltrans. The nomination sheet must be submitted electronically for upload into the regional and statewide databases. Existing projects already programmed in the STIP with proposed changes should still submit "Part 1: Resolution of Local Support" of Attachment D, as well as propose an amendment in MTC's FMS, and submit both electronically and in hard copy a revised PPR provided by Caltrans.

STIP Performance Measures: Regional and Project-Level Analyses

The CTC continues to require performance measures into the RTIP and ITIP review process for the 2014 RTIP. According to the STIP guidelines, a regional, system-level performance report must be submitted along with the RTIP submission. MTC staff will compile this report, focusing on applying the measures at the Regional Transportation Plan (RTP) level.

In addition, the 2014 STIP Guidelines require a project-level performance measure evaluation on all projects with total project costs over $50 million or over $15 million in STIP funds programmed. The project-level evaluation should address performance indicators and measures identified in Table A of the 2014 STIP Guidelines (see Attachment D-4). The evaluation should also include a Caltrans-generated benefit/cost estimate and estimated impacts the project will have on the annual cost of operating and maintaining the state's transportation system. The project-level evaluation must also be completed, if it has not already, on existing STIP projects with construction programmed, that exceed $50 million in total project cost/$15 million in STIP programming, and have had CEQA completed after December 2011. The CMAs are required to submit the project-level performance measures to MTC by the final application due date.

Completed Project Reporting

The 2014 STIP Guidelines require a report on all RTIP projects over $20 million in total project cost completed between the adoption of the RTIP and the adoption of the previous RTIP (from December 2011 to December 2013). The report must include a summary of the funding plan and programming/allocation/expenditure history, as well as a discussion of project benefits that were anticipated prior to construction compared with an estimate of the actual benefits achieved. The CMAs are required to submit the completed project reporting information to MTC by the final application due date.

Regional Projects

Applications for projects with regionwide or multi-county benefits should be submitted to both MTC and the affected county CMAs for review. Regional projects will be considered for programming in the context of other county project priorities. MTC staff will work with the interested parties (CMAs and project sponsors) to determine the appropriate level of funding for these projects and negotiate county contributions of the project cost. County contributions would be based on population shares of the affected counties, or other agreed upon distribution formulas.

85-115% Adjustments

MTC may, pursuant to Streets and Highways Code Section 188.8 (k), pool the county shares within the region, provided that each county shall receive no less than 85 percent and not more than 115 percent of its county share for any single STIP programming period and 100 percent of its county share over two STIP programming cycles.

MTC may recommend use of the 85%-115% rule provided for in SB 45 to ensure, as needed, that the proper scope of projects submitted for programming can be accommodated. MTC will also work with CMAs to recommend other options, such as phased programming across STIP cycles, to ensure that sufficient funding and concerns such as timely use of funds are adequately addressed.

MTC Resolution No. 3606 Compliance – Regional Project Delivery Policy

SB 45 established strict timely use of funds and project delivery requirements for transportation projects programmed in the STIP. Missing critical milestones could result in deletion of the project from the STIP, and a permanent loss of the funds to the county and region. Therefore, these timely use of funds deadlines must be considered in programming the various project phases in the STIP. While SB 45 provides some flexibility with respect to these deadlines by allowing for deadline extensions under certain circumstances, the CTC is very clear that deadline extensions will be the exception rather than the rule. MTC Resolution No. 3606, Revised, details the Regional Project Delivery Policy for Regional Discretionary Funding, which may be more restrictive than the State's delivery policy. See Attachment 2 to MTC Resolution No. 4118 for additional extension and amendment procedures.

Allocation of Funds - Requirements

To ensure there is no delay in the award of the construction contract (which CTC guidelines and MTC Resolution No. 3606 require within six months of allocation), STIP allocation requests for the construction phase of federally-funded projects must be accompanied with the complete and accurate Request for Authorization (RFA) package (also known as the E-76 package). Concurrent submittal of the CTC allocation request and the RFA will minimize delays in contract award. Additionally, for the

allocation of any non-environmental phase funds (such as for final design, right of way, or construction), the project sponsor must demonstrate that both CEQA and NEPA documents are completed and certified for federalized projects.

Notice of Cost Increase

For projects with a total estimated cost over $25 million, the implementing agency must perform quarterly project cost evaluations. If a cost increase greater than 10 percent of the total estimated cost of the particular phase is identified, the implementing agency must notify and submit updated STIP Project Programming Request (PPR) form to the appropriate CMA and MTC. In the event that a project is divided into sub-elements, the implementing agency will include all project sub-elements (i.e. landscaping, soundwalls, adjacent local road improvements) in the quarterly cost evaluation.

Early notification of cost increases allows the CMA and MTC to assist in developing strategies to manage cost increases and plan for future county share programming.

Cost Escalation for Caltrans-Implemented Projects

Recently, CTC has been very critical of unexpected cost increases to projects funded by the STIP. In order to ensure that the amounts programmed in the STIP are accurate, MTC encourages the CMAs to consult with Caltrans and increase Caltrans project costs by an agreed-upon escalation rate if funds are proposed to be shifted to a later year. This will currently only apply to projects implemented by Caltrans.

Notice of Contract Award

Caltrans has developed a procedure (Local Programs Procedures LPP-01-06) requiring project sponsors to notify Caltrans immediately after the award of a contract. Furthermore, Caltrans will not make any reimbursements for expenditures until such information is provided. Project sponsors must also notify MTC and the appropriate CMA immediately after the award of a contract. To ensure proper monitoring of the Timely Use of Funds provisions of SB 45, project sponsors are required to provide MTC and the county CMA with a copy of the LPP-01-06 “Award Information for STIP Projects – Attachment A” form, when it is submitted to Caltrans. This will assist MTC and the CMA in maintaining the regional project monitoring database, and ensure accurate reporting on the status of projects in advance of potential funding lapses. In accordance with CTC and Caltrans policies, construction funds must be encumbered in a contract within six months of allocation.

METROPOLITAN TRANSPORTATION COMMISSION
2014 Regional Transportation Improvement Program
Development Schedule (Subject to Change)
September 5, 2013

March 5, 2013	Caltrans presentation of draft STIP Fund Estimate Assumptions (CTC Meeting – SF)
May 7, 2013	CTC adoption of STIP Fund Estimate Assumptions (CTC Meeting – Los Angeles)
June 11, 2013	Caltrans presentation of the draft STIP Fund Estimate and draft STIP Guidelines (CTC Meeting – Sacramento)
June 17, 2013	Partnership Technical Advisory Committee (PTAC) / Programming and Delivery Working Group (PDWG) discussion and review of initial issues and schedule for 2014 RTIP
June 28, 2013	Governor signs State Budget
July 15, 2013	PTAC and PDWG review of proposed RTIP Policies and Procedures
July 18, 2013	CTC holds STIP Fund Estimate Workshop and STIP Guidelines Hearing (Sacramento)
August 6, 2013	CTC adopts STIP Fund Estimate and STIP Guidelines (CTC Meeting – San Diego)
September 1, 2013	Caltrans STIP project cost increase and Caltrans-identified needs information due to MTC
September 4, 2013	Draft RTIP Policies and Procedures published online and emailed to stakeholders for public comment
September 11, 2013	MTC Programming and Allocations Committee (PAC) scheduled review and recommendation of final proposed RTIP Policies and Procedures
September 25, 2013	MTC Commission scheduled adoption of RTIP Policies and Procedures
October 16, 2013	**Draft Project Listings Due:** CMAs submit to MTC, RTIP projects summary listings and identification of projects requiring project-level performance measure analysis. Deadline to submit Complete Streets Checklist for new projects.
October 21, 2013	PTAC scheduled review of draft RTIP
November 7, 2013	**Final Complete Applications Due:** Final Project Programming Request (PPR) forms due to MTC. Final RTIP project listing, project-level performance measure analysis, completed project reports, and explanation of unaddressed Caltrans needs due to MTC. Final PSR (or PSR Equivalent), Resolution of Local Support, and Certification of Assurances due to MTC.
December 4, 2013	Draft RTIP scheduled to be available for public review
December 11, 2013	PAC scheduled review of RTIP and referral to Commission for approval
December 16, 2013	2014 RTIP due to CTC (PAC approved project list will be submitted)
December 18, 2013	**2014 RTIP Adoption:** MTC Commission scheduled approval of 2014 RTIP (Full RTIP to be transmitted to CTC within one week of Commission approval)
January 30, 2014	CTC 2014 STIP Hearing – Northern California (Location TBD)
February 4, 2014	CTC 2014 STIP Hearing – Southern California (Location TBD)
February 28, 2014	CTC Staff Recommendations on 2014 STIP released
March 20, 2014	**2014 STIP Adoption:** CTC adopts 2014 STIP (CTC Meeting – Orange County)

Shaded Area – Actions by Caltrans or CTC

MTC Resolution No. 4118
Attachment 1-B

2014 STIP Fund Estimate County Targets

8/6/2013

Metropolitan Transportation Commission

All numbers in thousands

Table 1: County Share Targets

	a	b	c	a+b+c=d	e	d+e=f
	FY 2017-18 FY 2018-19 New Distrib.	**2012 STIP Carryover Balance**	**Lapses and Expired TE Reserve***	**2014 STIP Net Capacity**	**ARRA Backfill (Caldecott)**	**2014 STIP CMA Program Capacity**
Alameda	**30,031**	2,000	0	**32,031**	(2,000)	**30,031**
Contra Costa	**20,552**	5,000	1,486	**27,038**	(5,000)	**22,038**
Marin	**5,617**	(39,820)	245	**(33,958)**		**0**
Napa	**3,698**	2,678	497	**6,873**		**6,873**
San Francisco	**15,241**	(2,827)	0	**12,414**		**12,414**
San Mateo	**15,511**	3,728	2,964	**22,203**		**22,203**
Santa Clara	**35,676**	(19,262)	2,518	**18,932**		**18,932**
Solano	**9,308**	1,256	0	**10,564**		**10,564**
Sonoma	**11,444**	(21,840)	1,204	**(9,192)**		**0**
Bay Area Totals	**147,078**	**(69,087)**	**8,914**	**86,905**	**(7,000)**	**123,055**

Note: New County Share Total is the sum of unprogrammed balances, lapses, and new capacity for FY 2017-18 and FY 2018-19. Counties with negatives have a "$0" new share/capacity.
* Prior year lapsed funds returned to county share, and County Share TE Reserve now expired.

Table 2: Planning, Programming, and Monitoring Amounts
FY 2016-17, FY 2017-18, and FY 2018-19

	g	h	g-h=i	j	i-j	f-i
	PPM Limit FY 2016-17 FY 2017-18 FY 2018-19	**Currently Programmed for FY 2016-17**	**PPM Available for Programming MTC+CMA**	**MTC Share for FY 2017-18 FY 2018-19**	**CMA Share for FY 2017-18 FY 2018-19**	**2014 STIP CMA Program Capacity less PPM****
Alameda	**2,519**	1,017	**1,502**	275	**1,227**	**28,529**
Contra Costa	**1,722**	694	**1,028**	179	**849**	**21,010**
Marin	**470**	190	**280**	51	**229**	**0**
Napa	**310**	125	**185**	31	**154**	**6,688**
San Francisco	**1,276**	514	**762**	140	**622**	**11,652**
San Mateo	**1,306**	531	**775**	145	**630**	**21,428**
Santa Clara	**2,990**	1,206	**1,784**	321	**1,463**	**17,148**
Solano	**779**	314	**465**	85	**380**	**10,099**
Sonoma	**963**	391	**572**	102	**470**	**0**
Bay Area Totals	**12,335**	**4,982**	**7,353**	**1,329**	**6,024**	**116,554**

** Assumes CMA programs up to PPM limit.

2014 Regional Transportation Improvement Program
Policies, Procedures and Project Selection Criteria
Attachment C: 2014 RTIP Project Screening Criteria

Eligible Projects

A. Eligible Projects. SB 45 (Chapter 622, Statutes 1997) expanded the range of projects that are eligible for consideration in the RTIP. Eligible projects include, state highway improvements, local road improvements and rehabilitation, public transit, intercity rail, grade separation, pedestrian and bicycle facilities, transportation system management, transportation demand management, soundwall projects, intermodal facilities, and safety. Due to the current fund make up of the STIP, sponsors should expect that all projects programmed in the STIP should be eligible for federal funds.

Planning Prerequisites

B. RTP Consistency. Projects included in the RTIP must be consistent with the adopted Regional Transportation Plan (RTP), which state law requires to be consistent with federal planning and programming requirements. Each project to be included in the RTIP must identify its relationship with meeting the goals and objectives of the RTP, and where applicable, the RTP ID number.

C. CMP Consistency. Local projects must also be included in a County Congestion Management Plan (CMP), or in an adopted Capital Improvement Program (CIP) for counties that have opted out of the CMP requirement, prior to inclusion in the RTIP.

D. PSR or PSR Equivalent is Required. Projects in the STIP must have a complete project study report or, for a project that is not on a state highway, a project study report equivalent or major investment study. The intent of this requirement is to ensure that the project scope, cost and schedule have been adequately defined and justified. Projects with a circulating draft or final environmental document do not need a PSR. This requirement is particularly important in light of SB 45 timely use of funds requirements, discussed below.

The required format of a PSR or PSR equivalent varies by project type. Additional guidance on how to prepare these documents is available on the internet at the addresses indicated within Part 3 (Project Study Report (PSR), or equivalent) of Attachment D: 2014 RTIP Project Application, which includes a table categorizing PSR and PSR equivalent requirements by project type.

Project Costs and Phases

E. Escalated Costs. All projects will count against share balances on the basis of their fully escalated (inflated) costs. All RTIP project costs must be escalated to the year of expenditure.

As required by law, inflation estimates for Caltrans operations (support) costs are based on the annual escalation rate established by the Department of Finance.

Local project sponsors may use the state escalation rates or their own rates in determining the escalated project cost in the year programmed.

F. Project Phases. Projects must be separated into the following project components:

1. Completion of all studies, permits and environmental studies (ENV)
2. Preparation of all Plans, Specifications, and Estimates (PS&E)
3. Acquisition of right-of-way (ROW)
4. Construction and construction management and engineering, including surveys and inspections." (CON)
   Note: Right-of-way and construction components on Caltrans projects must be further separated into capital costs and Caltrans support costs (ROW-CT and CON-CT).

The project sponsor/CMA must display the project in these four components (six for Caltrans projects) in the final submittal. STIP funding amounts programmed for any component shall be rounded to the nearest $1,000. Additionally, unless substantially justified, no project may program more than one project phase in a single fiscal year. Caltrans-sponsored projects are exempt from this prohibition. Additionally, right of way (ROW) funds may be programmed in the same year as final design (PS&E) if the environmental document is approved. ROW funds may be programmed in the same year as construction (CON) only if the project does not have significant right of way acquisition or construction costs that require more than a simple Categorical Exemption or basic permitting approvals (see section L). The CTC will not allocate PS&E, ROW, or CON funding until CEQA and NEPA (if federalized) documents are complete and submitted to CTC.

All requests for funding in the RTIP for projects on the state highway system and implemented by an agency other than the Department must include any oversight fees within each project component cost, as applicable and as identified in the cooperative agreement. This is to ensure sufficient funding is available for the project component.

G. Minimum Project Size. New projects or the sum of all project components per project cannot be programmed for less than $500,000 for counties with a population over 1 million (from 2010 U.S. Census data: Alameda, Contra Costa, and Santa Clara Counties), and $250,000 for counties with a population under 1 million (Marin, Napa, San Francisco, San Mateo, Solano, and Sonoma Counties), with the following exceptions:

(a) Funds used to match federal funds;
(b) Planning, Programming and Monitoring (PPM);
(c) Projects for landscaping and mitigation of State highway projects, including soundwalls;
(d) Caltrans project support components not allocated by the Commission; and
(e) Right-of-way capital outlay for Caltrans, which is not allocated by the Commission on a project basis.
(f) Other exceptions may be made on a case-by-case basis.

H. Fiscal Years of Programming. The 2014 STIP covers the five-year period from FY 2014-15 through 2018-19. The 2014 STIP has a shortfall in funding in the first three years, which may require counties to delay certain projects in order to align programming with available funding. If a project will not be ready for allocation in a certain year, project sponsors should delay funds to a later year of the five-year STIP period.

Readiness Standards

I. Project Phases Must Be Ready in the Year Proposed. Funds designated for each project component will only be available for allocation until the end of the fiscal year in which the funds are programmed in the STIP. Once allocated, the sponsor will have two additional years beyond the end of the programmed fiscal year to expend funds. For construction, the sponsor will have six months to award a contract and three years to expend funds after project award. Project sponsors must invoice at least once in a six-month period following the allocation of funds. It is therefore very important that projects be ready to proceed in the year programmed.

J. Completion of Environmental Process. Government Code Section 14529(c) requires that funding for right-of-way acquisition and construction for a project may be included in the STIP only if the CTC makes a finding that the sponsoring agency will complete the environmental process and can proceed with right-of-way acquisition or construction within the five year STIP period. Furthermore, in compliance with Section 21150 of the Public Resources Code, the CTC may not allocate funds to local agencies for design, right-of-way, or construction prior to documentation of environmental clearance under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) for federally-funded projects. Therefore, project sponsors must demonstrate to MTC that these requirements can be reasonably expected to be met prior to programming final design, right-of-way, or construction funds in the RTIP. Final CEQA documents (aside from Categorical Exemptions, or CEs) must be submitted to CTC prior to allocation. Additional information is available at: http://www.catc.ca.gov/programs/environ.htm.

K. Programming Project Components in Sequential STIP Cycles. Project components may be programmed sequentially. That is, a project may be programmed for environmental work only, without being programmed for plans, specifications, and estimates (design). A project may be programmed for design without being programmed for right-of-way or construction. A project may be programmed for right-of-way without being programmed for construction. The CTC recognizes a particular benefit in programming projects for environmental work only, since projects costs and particularly project scheduling often cannot be determined with meaningful accuracy until environmental studies have been completed. As the cost, scope and schedule of the project is refined, the next phases of the project may be programmed with an amendment or in a subsequent STIP.

When proposing to program only preconstruction components for a project, the implementing agency must demonstrate the means by which it intends to fund the construction of a useable segment, consistent with the regional transportation plan or the Caltrans interregional transportation strategic plan. The anticipated total project cost and source of any uncommitted future funding must be identified.

L. Sequential Phasing. For most projects, the different project phases should be programmed sequentially in the STIP, i.e. environmental before design before right of way before construction. Projects with significant right of way acquisition or construction costs that require more than a simple Categorical Exemption or basic permitting approvals, must not be programmed with the right of way and construction components in the same year as the environmental. Project sponsors must provide sufficient time between the scheduled allocation of environmental funds and the start of

design, right of way or construction. As prescribed in Section F, projects may not have more than one phase programmed per fiscal year, with the exceptions of Caltrans-sponsored preconstruction phases, and right of way (ROW) funds programmed with final design (PS&E) or construction (CON) where there are no significant ROW acquisitions necessary.

M. The Project Must Be Fully Funded. All local projects must be accompanied by an authorizing resolution stating the sponsor's commitment to complete the project as scoped with the funds requested. A model resolution including the information required is outlined in Attachment D - Part 1 of this guidance.

The CTC will program a project component only if it finds that the component itself is fully funded, either from STIP funds or from other committed funds. The CTC will regard non-STIP funds as committed when the agency with discretionary authority over the funds has made its commitment to the project by ordinance or resolution. For federal formula funds, including RSTP, CMAQ, and Federal formula transit funds, the commitment may be by Federal TIP adoption. For federal discretionary funds, the commitment may be by federal approval of a full funding grant agreement or by grant approval.

All regional agencies with rail transit projects shall submit full funding plans describing each overall project and/or useable project segment. Each plan shall list Federal, State, and local funding categories by fiscal year over the time-frame that funding is sought, including funding for initial operating costs. Moreover, should the project schedule exceed the funding horizon, then the amount needed beyond what is currently requested shall be indicated. This information may be incorporated in the project application nomination sheets.

N. Field Review for Federally Funded Local Projects. One way to avoid unnecessary STIP amendment and extension requests is to conduct a field review as early as possible, so potential issues may be identified with sufficient time for resolution.

For all projects in the 2014 RTIP (anticipated to be a mix of federal and state funding), the project sponsor agrees to contact Caltrans and schedule and make a good faith effort to complete a project field review within 6-months of the project being included in the Transportation Improvement Program (TIP). For the 2014 STIP, Caltrans field reviews should be completed by September 1, 2014 for federal aid projects programmed in 2014-15 and 2015-16. The requirement does not apply to planning activities, state-only funded projects, or STIP funds to be transferred to the Federal Transit Administration (FTA).

Other Requirements

O. Availability for Audits. Sponsors must agree to be available for an audit if requested. Government Code Section 14529.1 "The commission [CTC] shall request that the entity receiving funds accept an audit of funds allocated to it by the commission, if an audit is deemed necessary."

P. Interregional Projects May Be Proposed Under Some Restrictive Circumstances. The project must be a usable segment and be more cost-effective than a Caltrans alternative project. Government Code Section 14527 (c) "A project recommended for funding by the RTPA in the Interregional

Improvement Program shall constitute a usable segment, and shall not be a condition for inclusion of other projects in the RTIP." Government Code Section 14529 (k) "... the commission [CTC] must make a finding, based on an objective analysis, that the recommended project is more cost-effective than a project submitted by the department…."

Q. Premature Commitment of Funds. The project sponsor may not be reimbursed for expenditures made prior to the allocation of funds by the CTC (or by Caltrans under delegation authority), unless the provisions of Senate Bill 184 are met in accordance with the CTC Guidelines for Implementation of SB 184. Under no circumstances may funds be reimbursed for expenditures made prior to the funds being programmed in the STIP or prior to the fiscal year in which the project phase is programmed. In addition, the sponsor must make a written request to Caltrans prior to incurring costs, in accordance with Caltrans Locals Assistance Procedures for SB 184 implementation.

R. State-Only Funding. The 2014 RTIP is expected to be funded with a mix of federal and state funds. Project sponsors must federalize their projects by completing NEPA documentation and complying with federal project delivery rules, unless they are granted a state-only funding exception by the CTC. Project sponsors are expected to meet all requirements of Article XIX in selecting projects receiving state-only funding. This includes sponsors or the CMA providing documentation verifying the county passed a measure allowing for the use of state-only State Highway Account funds on fixed guideway projects, should RTIP funds be proposed for use on non-federalized fixed guideway transit projects.

S. Federal Transportation Improvement Program. All projects programmed in the STIP must also be programmed in the federal Transportation Improvement Program (TIP), regardless of fund source. Project sponsors are encouraged to submit TIP amendment requests immediately following inclusion of the project into the STIP by the CTC. The project listing in the TIP must include total project cost by phase regardless of the phase actually funded by the CTC. STIP projects using federal funds will not receive federal authorization to proceed without the project being properly listed in the TIP.

T. Agency Single Point of Contact. Project sponsors shall assign a single point of contact within the agency to address programming and project delivery issues that may arise during the project life cycle. The name, title, and contact information of this person shall be furnished to the CMA and MTC at the time of project application submittal. This shall also serve as the agency contact for all FHWA-funded projects.

2014 Regional Transportation Improvement Program (RTIP)
Attachment D: 2014 RTIP Project Application

Project sponsors must submit a completed project application for each project proposed for funding in the 2014 RTIP. The application consists of the following five parts and are available on the Internet (as applicable) at: http://www.mtc.ca.gov/funding/

1. Resolution of local support
2. Project Study Report (PSR), or equivalent
3. RTIP Project Programming Request (PPR) form (with maps) (must be submitted electronically)
4. Performance Measures Worksheet (if applicable)
5. Routine Accommodations Checklist (if applicable: check with CMA or on MTC's website, listed above)

Part 1: Sample Resolution of Local Support

Resolution No. _____
Authorizing the filing of an application for funding assigned to MTC and committing any necessary matching funds and stating the assurance to complete the project

WHEREAS, (INSERT APPLICANT NAME HERE) (herein referred to as APPLICANT) is submitting an application to the Metropolitan Transportation Commission (MTC) for (INSERT FUNDING $ AMOUNT HERE) in funding assigned to MTC for programming discretion, which includes federal funding administered by the Federal Highway Administration (FHWA) and federal or state funding administered by the California Transportation Commission (CTC) such as Surface Transportation Program (STP) funding, Congestion Mitigation and Air Quality Improvement (CMAQ) funding, Transportation Alternatives (TA) funding, and Regional Transportation Improvement Program (RTIP) funding (herein collectively referred to as REGIONAL DISCRETIONARY FUNDING) for the (INSERT PROJECT TITLE(S) HERE) (herein referred to as PROJECT) for the (INSERT MTC PROGRAM(S) HERE) (herein referred to as PROGRAM); and

WHEREAS, the Moving Ahead for Progress in the 21st Century Act (Public Law 112-141, July 6, 2012) and any extensions or successor legislation for continued funding (collectively, MAP 21) authorize various federal funding programs including, but not limited to the Surface Transportation Program (STP) (23 U.S.C. § 133), the Congestion Mitigation and Air Quality Improvement Program (CMAQ) (23 U.S.C. § 149) and the Transportation Alternatives Program (TA) (23 U.S.C. § 213); and

WHEREAS, state statutes, including California Streets and Highways Code §182.6 and §182.7 and California Government Code §14527, provide various funding programs for the programming discretion of the Metropolitan Planning Organization (MPO) and the Regional Transportation Planning Agency (RTPA); and

WHEREAS, pursuant to MAP-21, and any regulations promulgated thereunder, eligible project sponsors wishing to receive federal or state funds for a regionally-significant project shall submit an application first with the appropriate MPO, or RTPA, as applicable, for review and inclusion in the federal Transportation Improvement Program (TIP); and

WHEREAS, MTC is the MPO and RTPA for the nine counties of the San Francisco Bay region; and

WHEREAS, MTC has adopted a Regional Project Funding Delivery Policy (MTC Resolution No. 3606, revised) that sets out procedures governing the application and use of REGIONAL DISCRETIONARY FUNDING; and

WHEREAS, APPLICANT is an eligible sponsor for REGIONAL DISCRETIONARY FUNDING; and

WHEREAS, as part of the application for REGIONAL DISCRETIONARY FUNDING, MTC requires a

resolution adopted by the responsible implementing agency stating the following:

- the commitment of any required matching funds; and
- that the sponsor understands that the REGIONAL DISCRETIONARY FUNDING is fixed at the programmed amount, and therefore any cost increase cannot be expected to be funded with additional REGIONAL DISCRETIONARY FUNDING; and
- that the PROJECT will comply with the procedures, delivery milestones and funding deadlines specified in the Regional Project Funding Delivery Policy (MTC Resolution No. 3606, revised); and
- the assurance of the sponsor to complete the PROJECT as described in the application, subject to environmental clearance, and if approved, as included in MTC's federal Transportation Improvement Program (TIP); and
- that the PROJECT will have adequate staffing resources to deliver and complete the PROJECT within the schedule submitted with the project application; and
- that the PROJECT will comply with all project-specific requirements as set forth in the PROGRAM; and
- that APPLICANT has assigned, and will maintain a single point of contact for all FHWA- and CTC-funded transportation projects to coordinate within the agency and with the respective Congestion Management Agency (CMA), MTC, Caltrans. FHWA, and CTC on all communications, inquires or issues that may arise during the federal programming and delivery process for all FHWA- and CTC-funded transportation and transit projects implemented by APPLICANT; and
- in the case of a transit project, the PROJECT will comply with MTC Resolution No. 3866, revised, which sets forth the requirements of MTC's Transit Coordination Implementation Plan to more efficiently deliver transit projects in the region; and
- in the case of a highway project, the PROJECT will comply with MTC Resolution No. 4104, which sets forth MTC's Traffic Operations System (TOS) Policy to install and activate TOS elements on new major freeway projects; and
- in the case of an RTIP project, state law requires PROJECT be included in a local congestion management plan, or be consistent with the capital improvement program adopted pursuant to MTC's funding agreement with the countywide transportation agency; and

WHEREAS, that APPLICANT is authorized to submit an application for REGIONAL DISCRETIONARY FUNDING for the PROJECT; and

WHEREAS, there is no legal impediment to APPLICANT making applications for the funds; and

WHEREAS, there is no pending or threatened litigation that might in any way adversely affect the proposed PROJECT, or the ability of APPLICANT to deliver such PROJECT; and

WHEREAS, APPLICANT authorizes its Executive Director, General Manager, or designee to execute and file an application with MTC for REGIONAL DISCRETIONARY FUNDING for the PROJECT as referenced in this resolution; and

WHEREAS, MTC requires that a copy of this resolution be transmitted to the MTC in conjunction with the filing of the application.

NOW, THEREFORE, BE IT RESOLVED that the APPLICANT is authorized to execute and file an application for funding for the PROJECT for REGIONAL DISCRETIONARY FUNDING under MAP-21 or continued funding; and be it further

RESOLVED that APPLICANT will provide any required matching funds; and be it further

RESOLVED that APPLICANT understands that the REGIONAL DISCRETIONARY FUNDING for the project is fixed at the MTC approved programmed amount, and that any cost increases must be funded by the APPLICANT from other funds, and that APPLICANT does not expect any cost increases to be funded with additional REGIONAL DISCRETIONARY FUNDING; and be it further

RESOLVED that APPLICANT understands the funding deadlines associated with these funds and will

comply with the provisions and requirements of the Regional Project Funding Delivery Policy (MTC Resolution No. 3606, revised) and APPLICANT has, and will retain the expertise, knowledge and resources necessary to deliver federally-funded transportation and transit projects, and has assigned, and will maintain a single point of contact for all FHWA- and CTC-funded transportation projects to coordinate within the agency and with the respective Congestion Management Agency (CMA), MTC, Caltrans. FHWA, and CTC on all communications, inquires or issues that may arise during the federal programming and delivery process for all FHWA- and CTC-funded transportation and transit projects implemented by APPLICANT; and be it further

RESOLVED that PROJECT will be implemented as described in the complete application and in this resolution, subject to environmental clearance, and, if approved, for the amount approved by MTC and programmed in the federal TIP**;** and be it further

RESOLVED that APPLICANT has reviewed the PROJECT and has adequate staffing resources to deliver and complete the PROJECT within the schedule submitted with the project application; and be it further

RESOLVED that PROJECT will comply with the requirements as set forth in MTC programming guidelines and project selection procedures for the PROGRAM; and be it further

RESOLVED that, in the case of a transit project, APPLICANT agrees to comply with the requirements of MTC's Transit Coordination Implementation Plan as set forth in MTC Resolution No. 3866, revised; and be it further

RESOLVED that, in the case of a highway project, APPLICANT agrees to comply with the requirements of MTC's Traffic Operations System (TOS) Policy as set forth in MTC Resolution No. 4104; and be it further

RESOLVED that, in the case of an RTIP project, PROJECT is included in a local congestion management plan, or is consistent with the capital improvement program adopted pursuant to MTC's funding agreement with the countywide transportation agency; and be it further

RESOLVED that APPLICANT is an eligible sponsor of REGIONAL DISCRETIONARY FUNDING funded projects; and be it further

RESOLVED that APPLICANT is authorized to submit an application for REGIONAL DISCRETIONARY FUNDING for the PROJECT; and be it further

RESOLVED that there is no legal impediment to APPLICANT making applications for the funds; and be it further

RESOLVED that there is no pending or threatened litigation that might in any way adversely affect the proposed PROJECT, or the ability of APPLICANT to deliver such PROJECT; and be it further

RESOLVED that APPLICANT authorizes its Executive Director, General Manager, or designee to execute and file an application with MTC for REGIONAL DISCRETIONARY FUNDING for the PROJECT as referenced in this resolution; and be it further

RESOLVED that a copy of this resolution will be transmitted to the MTC in conjunction with the filing of the application; and be it further

RESOLVED that the MTC is requested to support the application for the PROJECT described in the resolution and to include the PROJECT, if approved, in MTC's federal TIP**.**

RTIP Project Application

Part 2: Project Study Report (PSR), or equivalent

The required format of a PSR or PSR equivalent varies by project type. The following table categorizes PSR and PSR equivalent requirements by project type. Additional guidance on how to prepare these documents is available on the Internet at the addresses indicated below, or from MTC.

Project Study Report (PSR) Requirements
PSR and Equivalents by Project Type

Project Type	Type of Document Required *	Where to get more information
State Highway	Full PSR or PD/ENV Only	*http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm*
Local Roadway a. rehabilitation	PSR for local rehabilitation	*http://www.dot.ca.gov/hq/LocalPrograms/public.htm* then look in "13. Project Study Report (Local Rehabilitation)"
b. capacity increasing or other project	PSR equivalent – project specific study with detailed scope and cost estimate	In most cases completing the Preliminary Environmental Study and Field Review forms in the Local Assistance Procedures Manual should be sufficient. These forms can be found at: Preliminary Environmental-- *http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm* then look in chapter 6 pg 6-31. Field Review -- *http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm* then look in chapter 7 pg 7-13.
Transit	State of California Uniform Transit Application	*http://www.dot.ca.gov/hq/MassTrans/Docs-Pdfs/state-uta-app-091906.pdf*
Traffic Congestion Relief (TCR) Program projects (Specific phase)	TCR program application for the phases of work included in the TCR application	For a Traffic Congestion Relief (TCR) Program project, a TCR program application is considered a PSR equivalent for the phases of work included in the TCR application *http://www.dot.ca.gov/hq/transprog/ocip.htm*
Other	PSR equivalent with detailed scope and cost estimate	To be determined on a case by case basis

* In some instances a Major Investment Study (MIS) prepared under federal guidance may serve as a PSR equivalent where information provided is adequate for programming purposes.

RTIP Project Application

Part 3: Project Programming Request (PPR) Form

Applicants are required to submit a Project Programming Request (PPR) form in order to be considered for funding from the 2014 RTIP.

The PPR for new projects can be downloaded from the following location:
http://www.dot.ca.gov/hq/transprog/ocip/pprs/PPR%20-%20New%20Projects%20-%207-8-13_FY%2014-15%20thru%2018-19.xls

The PPRs for existing projects can be downloaded from the following location:
http://www.dot.ca.gov/hq/transprog/ocip/2014stip.htm

Part 4: Performance Measures Worksheet

Applicants submitting nominations for projects with total project costs exceeding $50 million, have over $15 million in STIP funds programmed, or using over 50% of a county share (for the county share period) are required to submit a Performance Measure Worksheet.

The Worksheet template is available at the following location:
http://www.catc.ca.gov/programs/stip.htm

Select the "2014 STIP Guidelines" document. The template begins on page 43 of the guidelines, under "Appendix B: Performance Indicators, Measures, and Definitions".

Part 5: Complete Streets Checklist

Applicants are required to include the Complete Streets (Routine Accommodations) Checklist with the application submittal to MTC for projects that will have an impact on bicycles or pedestrians. The Checklist is available from the Congestion Management Agencies and at the MTC website at http://www.mtc.ca.gov/planning/bicyclespedestrians/routine_accommodations.htm.

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

STIP AMENDMENTS AND EXTENSIONS RULES AND PROCEDURES

MTC RESOLUTION NO. 4118

2014
Regional Transportation Improvement Program

STIP Amendments / Extensions
Rules and Procedures

September 25, 2013

MTC Resolution No. 4118
Attachment 2

Metropolitan Transportation Commission
Programming and Allocations Section
http://www.mtc.ca.gov/funding.htm

RTIP
Regional Transportation Improvement Program

STIP Amendments / Extensions
Rules and Procedures
Table of Contents

Regional Transportation Improvement Program (RTIP)
STIP Amendments / Extensions Rules and Procedures

What is the STIP?
The State Transportation Improvement Program (STIP) is the State's spending program for state and federal funding. The STIP is comprised of the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP). The program is updated every two years and currently covers a five-year period. STIP funded projects, like all other state and federally funded projects, must be listed in the TIP in order for the sponsor to access the funding. This biennial STIP process is outlined in the attached "STIP Process".

Seventy-five percent (75%) of the funding in the STIP flows to regions by formula through their RTIPs. Regions throughout the state are charged with developing an expenditure plan for the funds. Eligible project types include improvements to state highways, local roads, public transit, intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, soundwall projects, intermodal facilities, and safety.

The remaining 25% of the funding flows to the ITIP, which is a statewide competitive program. This funding is directed to projects that improve interregional transportation. Eligible project types include intercity passenger rail, mass transit guideways, grade separation, and state highways.

When are Amendments and Extensions Allowed?

STIP Amendments
An amendment may change the cost, scope or schedule of a STIP project and its components. For instance, if the final cost estimate for a project is higher (or lower) than the amount programmed, a STIP amendment may be requested to increase or (decrease) the amount programmed. Or, as a project progresses through project development, it may be time to add the next component or phase. Likewise, if the project schedule is delayed significantly, an amendment may be warranted to request a change in program year of the funding in order to prevent a funding lapse. STIP amendments may also be requested to delete project funding or to add a new project into the STIP.

Important Tip*:* Once a state fiscal year (July 1 – June 30) has begun, the CTC will not allow STIP amendments to delete or change the funding programmed in that fiscal year. Instead, the project sponsor may request a one-time extension as described below.

One-time Extension Requests
SB 45 established deadlines for allocation, contract award, expenditure and reimbursement of funds for all projects programmed in the STIP. The CTC may, upon request, grant a one-time extension to each of these deadlines for up to 20 months. However, the CTC will only grant

an extension if it finds that an unforeseen and extraordinary circumstance beyond the control of the responsible agency has occurred that justifies the extension. Furthermore, the extension will not exceed the period of delay directly attributable to the extraordinary circumstance. Generally, the CTC does not grant extensions longer than 12 months. Additionally, project sponsors must be present at the CTC meeting where action is taken on any extension request, to answer questions the CTC staff or commissioners may have.

Roles and Responsibilities

The STIP Amendment and Extensions process requires review and approval by various agencies to ensure the action requested is appropriate, and consistent with state statutes, CTC guidance, Caltrans procedures and regional policies. Projects must be included in a county Congestion Management Program (CMP) or county Capital Improvement Program (CIP), and must be consistent with the Regional Transportation Plan (RTP) to be programmed in the RTIP. Therefore, any additions or changes that may impact the priorities established within these documents must be reviewed and approved by the appropriate agency. Furthermore, improperly programmed funds or missed deadlines could result in funding being permanently lost to the region.

Project sponsors are responsible for reviewing and understanding the procedures, guidance and regulations affecting projects programmed in the STIP. Project sponsors must also assign a Single Point of Contact – an individual responsible for submitting documentation for STIP amendments and extensions that must have read and understood these policies and procedures, particularly the CTC STIP Guidelines available on the internet at http://www.dot.ca.gov/hq/transprog/ocip.htm and the MTC RTIP Policies and Application Procedures posted on the internet at: http://www.mtc.ca.gov/funding/. Project sponsors are ultimately responsible for ensuring the required documentation is provided to Caltrans by the deadlines established by Caltrans for all allocations, extensions, and additional supplemental funds requests.

The Congestion Management Agencies/Transportation Authorities are responsible for ensuring the packages submitted by the project sponsors are complete, and the proposed changes are consistent with the Regional Transportation Plan (RTP), and Congestion Management Plans (CMPs) or Capital Improvement Program (CIP). The CMAs/TAs check to ensure the proposed changes meet MTC, CTC and other state or federal guidance and regulations. As mentioned in the Guiding Principles of the 2014 RTIP Policies and Procedures, the CMA must consider equitable distribution of projects in accordance with Title VI. Following CMA/TA concurrence of the request, the complete package is forwarded to MTC.

The Metropolitan Transportation Commission (MTC), as the Regional Transportation Planning Agency (RTPA) for the nine counties of the San Francisco Bay Area, provides concurrence for the STIP requests and formally submits all STIP Amendments to Caltrans for approval by the CTC. MTC also verifies compliance with established state and regional policies. Although MTC provides concurrence on extensions, additional supplemental funds requests and some allocation requests, it is the responsibility of the project sponsor, not MTC,

to ensure the required documentation is submitted to Caltrans by the established deadlines for these action requests.

The California Department of Transportation (Caltrans) processes the requests and makes recommendations to the California Transportation Commission (CTC) in accordance with Department procedures and CTC policies and guidelines.

The California Transportation Commission (CTC) approves or rejects the requests based on state statutes and its own established guidance and procedures.

Requesting STIP Amendments and Extensions

As described below, the procedures for processing STIP amendments and extensions vary depending on whether the project is sponsored by Caltrans or a local agency, and whether it has already received STIP funding.

Step 1: Project Sponsor Requests STIP Amendment or Extension

For currently programmed Caltrans projects:

- Caltrans and the appropriate CMA identify and discuss the issue(s) that may require an amendment or extension and notify MTC Programming and Allocations (P&A) Section staff that a change to the current STIP may be necessary and is being considered.
- Caltrans and CMA agree on proposed change(s).
- Where necessary, CMA staff requests policy board approval of proposed change.
- Once approved by the CMA, CMA notifies Caltrans in writing of the county's concurrence, with a copy sent to MTC P&A.
- Caltrans requests MTC concurrence for the STIP Amendment/Extension by transmitting the following to MTC P&A:
  - Letter requesting the STIP Amendment or Extension with explanation and justification of the need for the action with the following attachments:

For a STIP Amendment:

- Copy of CMA's letter of concurrence
- Revised RTIP Application Form – http://www.mtc.ca.gov/funding/
- TIP Amendment Form - http://www.mtc.ca.gov/funding/
- A construction 'STIP History' for each amendment that would delay the year of construction. The 'STIP History' outlines the project's construction history as programmed in the STIP with particular attention to any previous delays and reason for the previous and current delay. It must note the original inclusion of the project construction component in the STIP and each prior project construction STIP amendment delay including for each, the amendment date, the dollar amount programmed for construction, and the scheduled year of construction delay. It must also include a statement on the financial impact of the construction delay on the project, and an estimated

funding source for the additional funds necessary to complete the project under the delayed schedule. (A STIP History is only required for amendments to delay the year of construction.)

For an Extension:

- Copy of CMA's letter of concurrence
- A construction 'STIP History' for each extension that would delay construction as described above for a STIP Amendment.

For currently programmed local projects:

- Sponsor and the appropriate CMA identify and discuss the issue(s) that may require an amendment or extension and notify Caltrans and MTC Programming and Allocations Section staff that a change to the current STIP may be necessary and is being considered.
- Sponsor and CMA agree on proposed change(s).
- Sponsor requests CMA concurrence for the STIP Amendment/Extension by submitting the following to the CMA:
  - Letter requesting the STIP Amendment or Extension with explanation and justification of the need for the action with the following attachments:

For a STIP Amendment:

- Revised RTIP Application Form - http://www.mtc.ca.gov/funding/
- TIP Amendment Form - http://www.mtc.ca.gov/funding/
- A construction 'STIP History' for each amendment that would delay the year of construction. The 'STIP History' outlines the project's construction history as programmed in the STIP with particular attention to any previous delays and reason for previous and current delay. It must note the original inclusion of the project construction component in the STIP and each prior project construction STIP amendment delay including for each, the amendment date, the dollar amount programmed for construction, and the scheduled year of construction delay. It must also include a statement on the financial impact of the construction delay on the project, and an estimated funding source for the additional funds necessary to complete the project under the delayed schedule. (A STIP History is only required for amendments to delay the year of construction.)
- Any other documentation required by the CMA or Caltrans

For an Extension:

- Copy of completed Request for Time Extension form (Exhibit 23-B, located on the internet at: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapg-forms/g23forms-2013-05-08.docx).
- A construction 'STIP History' for each extension that would delay construction, as described above for a STIP Amendment.

- A listing showing the status of all SB 45 and regional project delivery policy (MTC Resolution 3606) deadlines for all of the project sponsors' allocated STIP projects, and all active projects funded through the Federal Highway Administration (FHWA), including but not limited to Surface Transportation Program (STP), Congestion Mitigation Air Quality Improvement (CMAQ), and Transportation Alternatives Program (TAP) projects. This is to ensure project sponsors are aware of the other deadlines facing other projects, and so that sponsors will work to meet those deadlines. A template is available online at: http://www.mtc.ca.gov/funding/delivery/Template_FHWA_Funded_Projects_Status.xlsx.
- Any other documentation required by the CMA or Caltrans

- Where necessary, CMA staff requests policy board approval of proposed request.
- Sponsor submits Caltrans' "Request for Time Extension" form and any other required documentation to Caltrans.
- CMA requests MTC concurrence for the STIP Amendment/Extension by transmitting a letter to MTC P&A requesting the STIP Amendment or Extension with explanation and justification of the need for the action along with the documentation submitted by the project sponsor. A copy of the request is also sent to Caltrans.
- Sponsor must be present at the CTC meeting where action is being taken on the extension request to justify the reasons for the extension. Failure to be present may result in the CTC denying the extension request, and risk losing the programmed funds permanently due to missed deadlines. In limited instances, a project sponsor may request that their CMA be available in place of the project sponsor. The CMA and MTC must concur with this request via email.

Important Tip*:* For STIP Extensions, the CTC will only grant an extension if it finds that an unforeseen and extraordinary circumstance beyond the control of the responsible agency has occurred that justifies the extension. Furthermore, the extension will not exceed the period of delay directly attributable to the extraordinary circumstance, up to a maximum of 20 months (although the Commission generally does not grant any extension longer than 12 months). It is therefore absolutely necessary that the letter and supporting documentation clearly explains and justifies the extension request. Failure to provide adequate justification and not being present at the CTC meeting will most likely result in an extension not being approved.

For all new projects:

- Sponsor and the appropriate CMA identify and discuss the issue(s) that may require a new project to be added to the STIP and notify Caltrans and MTC Programming and Allocations (P&A) Section staff an amendment to the current STIP may be necessary and is being considered.
- Sponsor and CMA agree on proposed addition.
- Sponsor requests CMA concurrence for the STIP Amendment by submitting the following to the CMA:

- Letter requesting the STIP Amendment with explanation and justification of the need for the project to be added to the STIP.
- TIP Amendment form - http://www.mtc.ca.gov/funding/
- RTIP Application form including: - http://www.mtc.ca.gov/funding/
  - Resolution of local support
  - Project Programming Request (PPR) forms (with maps)
  - Local agency certification of assurances
  - Project Study Report (PSR), or equivalent.
  - Copy of State-Only Funding Request Exception Form (Only if requesting state-only funding and project is not on pre-approved state-only eligible funding list. Original request is to be submitted directly to Caltrans HQ Budgets for processing and approval prior to MTC submittal of the request to Caltrans/CTC).

- CMA staff obtains policy board approval of proposed addition.
- CMA requests MTC concurrence for the new project by transmitting a letter to MTC P&A requesting the STIP Amendment with an explanation and justification of the need for the project along with a copy of the CMA Resolution approving the project, and the documentation listed above provided by the project sponsor.

Step 2: MTC Review and Concurrence

- Once a complete request has been received, MTC P&A staff will place the request on the MTC Programming and Allocations Committee (PAC) meeting agenda for concurrence of major changes, or prepare a letter of concurrence for the Executive Director's signature for minor changes.
- Following approval by PAC and/or the Executive Director, MTC will sign Caltrans' Request for Time Extension form and send it with a Letter of Concurrence to Caltrans District 4 with a copy to the appropriate CMA. (District 4 will ensure that the request is copied to the appropriate contacts at Caltrans Headquarters and CTC.) MTC may concur with minor changes on Caltrans-sponsored projects administratively via email.

Major versus minor changes

- All major changes, including any requests to program a new project, will be presented to MTC's Programming and Allocations Committee (PAC) to determine MTC's concurrence. Major changes include:
  - request to program a new project (or delete a project)
  - schedule delay that affects air quality conformity analysis
  - project advance with reimbursement or replacement project per AB 3090
  - request to use Grant Anticipation Revenue Vehicle (GARVEE) financing
- For minor changes, MTC staff may write a letter of concurrence for the Executive Director's signature. Minor changes include:

- Extension requests for allocation, award, expenditure and reimbursement/project completion deadlines
- schedule changes, except where change implies major cost or delivery ramifications
- changes in implementing agency or project sponsor
- changes to project budget that are less than 20% of the total project cost or less than $1 million.
- redirection of funds from one project component to another (e.g. from project engineering into environmental)
- changes considered routine and not impacting project delivery

* Amendments or extensions based on new federal or state requirements may need to go to MTC's PAC

Additional/Supplemental Funds

On occasion it may be necessary to provide additional 'Supplemental' funding to a project as a result of cost increases or revised cost estimates. There are several different processes to follow depending on where the project is within its delivery schedule. The various methods to add STIP funding to a project are as follow:

Biennial STIP Cycle: If additional funding is identified years before the actual allocation, the project sponsor may request the funding through the biennial STIP adoption process. This process is outlined in MTC's RTIP Policies and Application Procedures, and is the preferred method of requesting additional/supplemental funds.

STIP Amendment: If additional funding is identified prior to the allocation of funds, but is required prior to the next biennial STIP adoption, a STIP amendment adding the funds to the project may be requested as outlined in the STIP Amendment procedures above. However, in most cases the additional funds could be added at the time of allocation, thus foregoing the STIP amendment process.

Additional Funds at Time of Allocation: Often the simplest way to add supplemental funds is at the time of allocation. The process is the same as the procedures outlined above for a time extension, except that instead of a "Request for Time Extension" form, a "Request for STIP Funding Allocation" form is used (Exhibit 23-O, located on the internet at: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapg-forms/g23forms-2013-05-08.docx). In all supplemental funding requests, the additional funding must be approved by the CTC.

Additional Funds After Allocation: It may be necessary to seek additional funds after an allocation, either to award the project or due to unforeseen cost increases while the project is under construction. In either case, an analysis should be performed to determine whether re-engineering (sometimes called "value engineering") could achieve cost reductions to accommodate the increase. If additional funds are still necessary, a funding

source outside the STIP should be pursued prior to seeking additional STIP funding. If it is determined that additional STIP funds are needed, then the project sponsor should proceed as with the procedures outlined for "Additional Funds at Time of Allocation". It should be noted that once the funds are allocated, the project sponsor does not have the option to add the funds through a STIP amendment since the CTC does not allow amendments to change the programming for a given component after the funds have been allocated.

Allocation of Funds

Project sponsors request an allocation of funds directly to Caltrans, with Caltrans placing the request on the CTC Agenda for approval. The completed request package is due to Caltrans 60 days prior to the CTC meeting where the funds are anticipated to be allocated. In general MTC is not involved with the allocation process, however, under a few circumstances MTC concurrence is required as noted below:

Local Road Rehabilitation Projects: Allocation of funds for local road rehabilitation projects requires certification from MTC. Project sponsors should submit the "Pavement Management System Certification" form with the "Local Road Rehabilitation Project Certification" form attached (Exhibits 23-L and 23-K, both found on the internet at: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapg-forms/g23forms-2013-05-08.docx) directly to MTC for signature. MTC will then transmit the signed form to Caltrans District 4 – Local Programs. All other allocation request documentation should be sent directly to Caltrans District 4 – Local Programs.

Allocation of State-Only Funds: MTC concurs with all State-Only funds allocations that are listed in the STIP as State-Only. Projects without State-Only funding pre-approved by CTC must request a State-Only Funding Exception form (Exhibit 23-F, found on the internet at: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapg-forms/g23forms-2013-05-08.docx). MTC must concur with the exception request, and the form is submitted to Caltrans.

Funds Allocated Differently than Programmed: In some instances it may be necessary to allocate funds differently from what is programmed in the STIP. These situations generally still require MTC concurrence. Fortunately a STIP amendment may not be required, and the funding may be revised at the time of the allocation, thus avoiding the long STIP amendment process. However, A TIP amendment is still required, especially if federal funds are involved. Changes that are allowed at the time of allocation are noted below; however, project sponsors should consult with Caltrans District 4 Local Programs, the CMA and/or MTC to determine whether a change at the time of allocation is permissible before preparing the allocation request.

- Change in implementing agency
- Cost savings (allocation less than program amount)
- Redirection of funds among project components or phases within the project as long as total STIP funding has not increased or previously been allocated.

- Advancement of funding from future years (transit projects with funds to be transferred to FTA require a TIP amendment to advance funds)
- Change in funding type (a change to state-only funding requires approval from Caltrans with their "State-Only Funding Request Exception" form if the project type is not on the pre-approved state-only eligible funding list – see "Allocation of State-Only Funds" above).

STP/CMAQ Match Reserve: Project sponsors must work with the applicable CMA/TA to obtain programming approval for STP/CMAQ match made available in the STIP. The CMA develops a countywide list for the use of the reserved funds and submits the list to MTC, who in turns provides Caltrans with the region-wide Match Program. Any deviation from this program, whether in the funding amount, project sponsor, or funding year, requires the CMA to resubmit an updated plan for the county to MTC. Caltrans cannot allocate the matching funds if they are inconsistent with the approved STIP - STP/CMAQ Match Program.

Funds allocated as programmed in the STIP: The allocation of funds as they are programmed in the STIP and TIP do not involve MTC, other than as noted previously. Project sponsors work directly with Caltrans District 4 local programs in obtaining the allocation. STIP projects using federal funds will not receive federal authorizations to proceed without the project being properly listed in the TIP. Federal authorization to proceed (E-76) requests must be submitted to Caltrans at the same time as the STIP allocation package to avoid delays to authorization.

Important Tip*:* Although some minor changes in the allocation of funds may not require a full STIP amendment, most changes still require MTC concurrence, and possibly a TIP amendment and may even require a vote of the CTC rather than a simple Caltrans delegated allocation approval. Project sponsors are encouraged to consult with the CMA, and Caltrans District 4 prior to preparing any allocation request, to ensure sufficient time is allowed for processing the allocation request, particularly toward the end of the year when the Timely Use of Funds provisions of SB 45 are of critical concern.

Timeline for STIP Amendment/Extension Approval

Completed documentation requesting MTC concurrence must be received by MTC staff no later than the first day of the month prior to the month in which the request will be heard by the Programming and Allocations Committee (PAC). (For example, requests received by January 1 will be reviewed at the February PAC meeting). Subsequently, requests with completed documentation and MTC concurrence must be submitted to the Caltrans District Office 60 to 90 days prior to the CTC meeting where the item will be considered. Therefore, requests for concurrence need to be submitted to MTC generally 150 days prior to CTC action for STIP Amendments and 120 days prior to CTC action for extensions.

For example, a STIP amendment request to delay funding in the next fiscal year is due to MTC by January 1, so it may be approved at the February PAC Meeting, and then submitted to

Caltrans in time for the 60-day due date of March 2, so it may be noticed at the May 2 CTC meeting for action at the June 6 CTC meeting.

Important Tip*:* The CTC will not amend the STIP to delete or change the funding for any project component after the beginning of the fiscal year in which the funding is programmed. Therefore, all amendments to delay a project component must be approved by the CTC by the June meeting in the year prior to the programmed year of funding. To meet this deadline, amendments to delay delivery must be submitted to MTC no later than January 1 of the fiscal year prior to the fiscal year of the funding subject to delay.

A due date schedule is prepared each year for the submittal of STIP requests. This schedule is posted on the internet at: http://www.dot.ca.gov/hq/transprog/ctcliaison.htm

STIP Amendment Form/TIP Amendment Form

The forms necessary to initiate the STIP Amendment process may be downloaded from the MTC website at: http://www.mtc.ca.gov/funding/. TIP Amendments should be processed through the Fund Management System, also available at the website mentioned above.

Contacts for STIP Amendments/Extensions:

Name	Area	Phone	Email
Kenneth Kao	STIP	510.817.5768	kkao@mtc.ca.gov
Ross McKeown	STIP	510.817.5842	rmckeown@mtc.ca.gov
Sri Srinivasan	TIP Amendments	510.817.5793	ssrinivasan@mtc.ca.gov
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2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

PERFORMANCE MEASURES EVALUATION

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OVERVIEW OF 2014 STIP PERFORMANCE REPORT

Over the past decade, performance reporting and forecasting have become critical elements when developing long-range transportation plans and programming transportation funds. As the first State Transportation Improvement Program (STIP) cycle in the era of MAP-21 (the Moving Ahead for Progress Act in the 21st Century Act), this performance report responds to the significantly enhanced performance reporting requirements established by the California Transportation Commission (CTC). These statewide measures were guided not only by the performance emphasis of MAP-21 but also by the statewide performance indicator project initiated by the Strategic Growth Council (SGC). The Metropolitan Transportation Commission (MTC) has developed this document not only to report existing transportation conditions in the San Francisco Bay Area but also to demonstrate how the projects funded in the 2014 STIP would impact future conditions.

San Francisco Bay Area transportation projects funded under the 2014 STIP – totaling $140 million in programming – are an extremely small portion of the $292 billion in transportation investments envisioned in the region between 2013 and 2040. As such, most of the projects receiving STIP funding rely upon other funding sources to supplement STIP funds and proceed to construction. Even so, it is quite reasonable to expect that regional performance impacts from this subset of transportation investments will be quite minimal compared to baseline conditions.

The region's overall transportation investment strategy was developed as part of Plan Bay Area, the San Francisco Bay Area's first combined Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Adopted in July 2013, the Plan identified seven goals under which 10 performance targets were established, as shown on page 5 of this report. While there is some limited consistency between state goals and regional goals, MTC's STIP Performance Report reports on these measures separately due to crucial differences in goals and measures. As allowed under the STIP guidelines, MTC does not report performance results for statewide measures that are inconsistent with Plan Bay Area; these measures are highlighted on page 4.

In addition to evaluating baseline performance for each of the state and regional measures, MTC staff conducted a rigorous model-based evaluation of the package of transportation projects funded with 2014 STIP dollars. By incorporating new and continuing STIP-funded projects that increase system capacity, this evaluation allowed for a consistent analysis of how funded projects will affect year 2035 performance of the regional transportation system. While much of the funding for these capacity-increasing projects will come from sources other than the STIP, the analysis highlights how STIP funding supports a package of transportation investments that advance state and regional goals.

The report is broken into three sections in compliance with the STIP guidelines:

A. **State Performance Measures:** This section summarizes existing baseline performance for the performance measures identified by the CTC and highlights the data sources and methodologies used to conduct this analysis. Furthermore, it discusses the travel modeling approach leveraged to forecast the impacts of the STIP projects on regional system performance.

B. **Regional Performance Measures:** This section summarizes existing baseline performance for performance indicators directly related to the measures and goals established in Plan Bay Area; similar to Part A, it highlights the data sources and methodologies used to conduct the analysis. Using a similar modeling approach to Part A, it highlights the quantitative and qualitative impacts of the STIP projects on regional system performance.

C. **Project-Level Evaluations:** This section identifies which projects are subject to individual project performance reporting under the 2014 STIP guidelines developed by the CTC. For Bay Area projects required to submit performance-level forecast data, individual project sponsor submissions have been compiled and attached for CTC review.

CTC STIP State Performance Measures/Indicators		
Goal	**#**	**Measure**
Safety	**1**	Fatalities per VMT and per capita
	2	Fatal collisions per VMT and per capita
	3	Injury collisions per VMT and per capita
	4	Transit fatalities per PMT by mode
Mobility	**5**	Annual passenger-hours of delay**
	6	Average peak period travel time**
	7	Average non-peak period travel time**
Accessibility	**8**	Population share within ½ mile of rail or bus service
	9	Average travel time to jobs or school**
Reliability	**10**	Buffer time index by corridor**
	11	Daily VHD per capita by corridor**
	12	Daily congested VMT per capita by corridor**
	13	Transit on-time performance by mode
Productivity/ Throughput	**14**	Average peak period vehicle trips by corridor
	15	Average daily vehicle trips by corridor
	16	Daily VMT per capita
	17	Average peak period person trips by corridor
	18	Average daily person trips by corridor
	19	Share of 5+ axle trucks by corridor
	20	Average daily 5+ axle truck trips by corridor
	21	Transit passengers per VRH by mode
	22	Transit passengers per VRM by mode
	23	Intercity rail passenger-miles per train-mile
	24	Transit passengers per capita by mode
System Preservation	**25**	Distressed lane-miles
	26	Share of distressed lane-miles
	27	Share of lane-miles at given IRI levels
	28	Share of highway bridges in need of repair by number and by deck area
Environmental Impact	**29**	CO_2 emissions per capita
	30	Criteria pollutant emissions per capita
Return on Investment/ Lifecycle Cost	**31**	Rate of return

** = inconsistent with Plan Bay Area

Plan Bay Area Performance Measures/Targets		
Goal/Outcome	**#**	**Target**
Climate Protection	**1**	Reduce per-capita CO_2 emissions from cars and light-duty trucks by 15% *Statutory - Source: California Air Resources Board, as required by SB 375*
Adequate Housing	**2**	House 100% of the region's projected growth by income level (very-low, low, moderate, above-moderate) without displacing current low-income residents *Statutory - Source: ABAG, as required by SB 375*
Healthy & Safe Communities	**3**	Reduce premature deaths from exposure to particulate emissions: • Reduce premature deaths from exposure to fine particulates (PM2.5) by 10% • Reduce coarse particulate emissions (PM10) by 30% • Achieve greater reductions in highly impacted areas *Source: Adapted from federal and state air quality standards by BAAQMD*
	4	Reduce by 50% the number of injuries and fatalities from all collisions (including bike and pedestrian) *Source: Adapted from California State Highway Strategic Safety Plan*
	5	Increase the average daily time walking or biking per person for transportation by 70% (for an average of 15 minutes per person per day) *Source: Adapted from U.S. Surgeon General's guidelines*
Open Space and Agricultural Preservation	**6**	Direct all non-agricultural development within the urban footprint (existing urban development and urban boundary lines*) *Source: Adapted from SB 375*
Equitable Access	**7**	Decrease by 10% the share of low-income and lower-middle income residents' household income consumed by transportation and housing *Source: Adapted from Center for Housing Policy*
Economic Vitality	**8**	Increase gross regional product (GRP) by an average annual growth rate of approximately 2% *Source: Bay Area Business Community*
Transportation System Effectiveness	**9**	• Increase non-auto mode share by 10% • Decrease automobile vehicle miles traveled per capita by 10% *Source: Adapted from Caltrans Smart Mobility 2010*
	10	Maintain the transportation system in a state of good repair: • Increase local road pavement condition index (PCI) to 75 or better • Decrease distressed lane-miles of state highways to less than 10% of total lane-miles • Reduce share of transit assets past their useful life to 0% *Source: Regional and state plans*

* =Urban boundary lines include areas within urban growth boundaries/urban limit lines, urban service areas, and spheres of influence.

Identifying Regional Capacity-Increasing Projects		
STIP County	**Project Title**	**Regional Capacity Increase?**
Alameda	SR-84 East-West Connector in Fremont	**Yes**
Alameda	SR-84 Expressway in Livermore (Southern Segment 2)	**Yes**
Alameda	I-680 Freeway Performance Initiative (Phase 2)	No
Alameda	AC Bus Rapid Transit Project	**Yes**
Alameda	Daly City BART Station Intermodal Improvements	No
Alameda	Planning, programming, and monitoring (MTC)	No
Alameda	Planning, programming, and monitoring (ACTC)	No
Alameda	Bike/Ped Connectivity to East Span SFOBB	No
Alameda	Downtown Berkeley BART Plaza/Transit Area Improvements	No
Contra Costa	I-680 Freeway Performance Initiative (Phase 2)	No
Contra Costa	I-680/SR-4 Interchange - Widening of SR-4 (Phase 3)	**Yes**
Contra Costa	I-80/San Pablo Dam Rd. Interchange Reconstruction (Phase 1)	No
Contra Costa	I-80/San Pablo Dam Rd. Interchange Reconstruction (Phase 2)	No
Contra Costa	I-680 SB HOV Gap Closure (N. Main to Livorna)	**Yes**
Contra Costa	Kirker Pass Rd. NB Truck Climbing Lane	**Yes**
Contra Costa	I-80/Central Ave. Interchange (Phase 2)	No
Contra Costa	Walnut Creek BART TOD Intermodal Project	No
Contra Costa	East Contra Costa BART Extension (eBART)	**Yes**
Contra Costa	Planning, programming, and monitoring (MTC)	No
Contra Costa	Planning, programming, and monitoring (CCTA)	No
Contra Costa	Bike/Ped Connectivity to East Span SFOBB	No
Contra Costa	Detroit Ave. Bicycle and Pedestrian Improvements	No
Contra Costa	Concord BART Station Bicycle and Ped. Access Improvements	No
Marin	MSN San Rafael Irwin Creek/Brookdale	No
Marin	MSN Landscaping, Mitigation, and Soundwall	No
Marin	Planning, programming, and monitoring (TAM)	No
Marin	Planning, programming, and monitoring (MTC)	No
Marin	Miller Creek Rd. Class 2 Bike Lanes and Ped. Improvements	No
Marin	Bike/Ped Connectivity to East Span SFOBB	No
Marin	*Pending OBAG Projects*	No
Napa	SR-12 Jameson Canyon (Landscaping Segment 3)	No
Napa	Silverado Five-Way Intersection Improvements	No
Napa	Devlin Road and Vine Trail Extension	No

Identifying Regional Capacity-Increasing Projects		
STIP County	**Project Title**	**Regional Capacity Increase?**
Napa	Eucalyptus Drive Extension	No
Napa	California Ave Roundabouts	No
Napa	Petrified Forest Rd and SR-128 Intersection Improvements	No
Napa	Hopper Creek Pedestrian Path	No
Napa	Airport Blvd Rehabilitation	No
Napa	SR-29 and Grayson Ave Traffic Signal	No
Napa	Planning, programming, and monitoring (MTC)	No
Napa	Planning, programming, and monitoring (NCTPA)	No
Napa	Bike/Ped Connectivity to East Span SFOBB	No
San Francisco	Central Subway	**Yes**
San Francisco	Planning, programming, and monitoring (SFCTA)	No
San Francisco	Planning, programming, and monitoring (MTC)	No
San Francisco	Bike/Ped Connectivity to East Span SFOBB	No
San Francisco	Chinatown Broadway Complete Streets (Phase 4)	No
San Mateo	US-101 Willow Rd Interchange Reconstruction	No
San Mateo	SR-1 Calera Parkway Operational Improvements in Pacifica	**Yes**
San Mateo	Countywide ITS Project	No
San Mateo	SR-92 Improvements Phase 1: Oper. Improvements at 92/ECR	No
San Mateo	SR-92 Improvements Phase 2: 92/101 IC Improvements	No
San Mateo	Planning, programming, and monitoring (MTC)	No
San Mateo	Planning, programming, and monitoring (C/CAG)	No
San Mateo	Bike/Ped Connectivity to East Span SFOBB	No
San Mateo	*Pending OBAG Projects*	No
Santa Clara	*GARVEE Debt (I-880/SR-87)*	No
Santa Clara	I-680 Soundwall from Capitol to Mueller	No
Santa Clara	BART Extension from Berryessa to Santa Clara	**Yes**
Santa Clara	Park Ave. Multimodal Improvements	No
Santa Clara	Saint John St. Multimodal Improvements (Phase 1)	No
Santa Clara	Planning, programming, and monitoring (MTC)	No
Santa Clara	Planning, programming, and monitoring (VTA)	No
Santa Clara	Bike/Ped Connectivity to East Span SFOBB	No
Santa Clara	US-101/Adobe Creek Bicycle and Pedestrian Bridge	No
Santa Clara	The Alameda "Beautiful Way" Grand Boulevard (Phase 2)	No

Identifying Regional Capacity-Increasing Projects		
STIP County	**Project Title**	**Regional Capacity Increase?**
Solano	Jepson Parkway (Vanden Segment)	**Yes**
Solano	Jepson Parkway (Leisure Town Segment 1)	**Yes**
Solano	Jepson Parkway (Leisure Town Segment 2)	**Yes**
Solano	Planning, programming, and monitoring (MTC)	No
Solano	Planning, programming, and monitoring (STA)	No
Solano	Bike/Ped Connectivity to East Span SFOBB	No
Sonoma	US-101 HOV Lanes Landscaping	No
Sonoma	Planning, programming, and monitoring (MTC)	No
Sonoma	Planning, programming, and monitoring (SCTA)	No
Sonoma	Bike/Ped Connectivity to East Span SFOBB	No
Sonoma	Downtown Santa Rosa Streetscape	No
Sonoma	SMART Bicycle/Pedestrian Pathway	No

Note: *non-capacity-increasing projects are not expected to have regional impacts and are not captured in model runs; this analysis focuses on the major capital investments that increase capacity on roads or transit systems.*

PART A: STATE PERFORMANCE MEASURES

The CTC has requested that MPOs evaluate their 2014 STIP investments against a set of state performance measures – a process that was informed by the SGC state indicators project in 2012 and 2013. These 31 performance measures, along with numerous additional sub-measures, are meant to allow for a level of consistency between STIP monitoring efforts across the state. Clustered under goals of safety, mobility, accessibility, reliability, productivity/throughput, system preservation, environmental impact, and return on investment, the measures highlight some of the state's top transportation priorities when investing limited resources.

State Performance Measures: Overall Approach

To comply with the 2014 STIP requirements, MTC staff conducted the following process for each of the 31 state-identified performance measures:

1. **Confirm that the performance measure does not conflict with the adopted RTP/SCS.**
   The performance measure must align with the goals of Plan Bay Area – or at the very least, not conflict with its intent. For those performance measures that conflict with the adopted Plan, monitoring data was not collected and STIP investment impacts were not forecast.
   Note that seven state performance measures were identified as inconsistent with Plan Bay Area and are flagged in the table on page 4.

2. **Identify appropriate data source(s) for baseline performance monitoring.**
   Staff reviewed available data sources and sought to find appropriate monitoring reports or tools for each; if sufficient and high-quality data were not identified, staff identified challenges in procuring monitoring data requested by the state. Data sources needed to collect and aggregate real-world (i.e. not model-based), high-quality monitoring data. Furthermore, the data source needed to demonstrate a continuous cycle of updates on a regular basis (ideally annually) that will allow for consistent sources and methodologies to be used for future STIP performance reports over the coming decade.

3. **If needed, perform data analysis to calculate baseline using monitoring data source(s).**

4. **Request appropriate project modeling details from project sponsors.**
   In order to forecast the impacts of investments funded with 2014 STIP funds, staff required additional data from project sponsors – particularly with regards to specific capacity improvements – to incorporate the projects into Travel Model One (the region's activity-based travel demand model). This allows MTC to ensure that project impacts are being forecast in a consistent manner, rather than simply aggregating benefits forecast separately by sponsors.

5. **Run regional travel demand model for baseline 2035 and STIP program 2035 conditions.**

As the 2014 STIP guidelines requested an estimate of project impacts for a 20-year horizon, Travel Model One was run for year 2035 using baseline (no project) and 2014 STIP (project) conditions. The "project" run incorporates coding for all of the capacity-increasing projects funded in the 2014 STIP, even if the projects are only partially funded with STIP dollars. (The list of capacity-increasing projects can be found on page 6 of this report.) While these projects represent a subset of STIP-funded investments, capacity-increasing projects represent the highest-cost and most significant investments that will generate the greatest regional impacts.

6. **Calculate impacts of STIP investments by comparing the baseline and project runs.**
   By comparing baseline model run and 2014 STIP model run outputs for relevant performance measures, the quantified impacts of STIP-funded projects were calculated. Note that some performance measures cannot be directly forecast in the regional travel demand model; these modeling limitations are noted in the appropriate section below.

State Performance Measures: Baseline Performance

Before examining how the STIP investments will support the state performance measures and goals, it is important to establish a baseline for each measure based on real-world monitoring data. The following sections highlight key findings of this baseline analysis for the eight goals and 31 performance measures; this overview is followed by data tables which break down the performance measure results on a more detailed geographical level (when applicable or relevant).

Safety

Traffic fatalities for motorists, bicyclists, and pedestrians remain a relatively rare occurrence on Bay Area roadways with only one fatality per 167 million vehicle miles driven (6.0×10^{-9} fatalities per VMT) and approximately one in 20,000 odds of being killed on the region's roads in a given year (4.9×10^{-5} fatalities per capita). Significant differences exist between the various counties of the San Francisco Bay Area, however. On a per-VMT basis, San Francisco County experiences nearly twice as many fatalities as the regional average while Alameda County experiences nearly 25% fewer fatalities. When viewed from a per-capita perspective, San Francisco County performs better-than-average due to slower travel speeds and lower levels of driving, while counties such as Solano and San Mateo perform significantly worse than the regional average due to high levels of through traffic on their major freeway corridors. These trends are similar for the fatal collision metrics analyzed, due to the vast majority of fatality incidents only involving a single person.

Injury collisions are much more common on the area's roadways, resulting in occurrence rates nearly two orders of magnitude higher than those for fatal collisions. Per vehicle mile traveled, injury collisions occur approximately every 2.1 million miles (4.7×10^{-7} collisions per VMT), affecting 1 in every 260 Bay Area residents each year (3.8×10^{-3} collisions per capita). On both a per-VMT and per-capita basis, rural counties such as Napa and Sonoma experience injury collision rates at higher levels than suburban counties such as Contra Costa and San Mateo. San Francisco County ranks #1 and #2 for per-VMT and per-capita injury collision rates, respectively –

highlighting the need for additional investment to address high levels of injury collisions on San Francisco's busy urban streets.

Many of the region's transit systems also exhibit high levels of safety, with motor buses and heavy rail system exhibiting lower rates of fatalities per passenger-mile traveled than measured for automobiles; operations of cable car, ferry, and paratransit systems resulted in zero fatalities in year 2012. Several systems had somewhat higher rates of fatalities per PMT – namely, commuter rail (4.3×10^{-8} fatalities per PMT), light rail (1.6×10^{-8} fatalities per PMT), and trolley bus (1.0×10^{-8} fatalities per PMT). While light rail and trolley bus fatality rates are primarily due to those systems' geographic locations in dense urban areas operating at street level, commuter rail fatalities are the result of ongoing safety infrastructure challenges along the at-grade Caltrain line. With its numerous at-grade crossings and neighborhood access points through three of the region's core counties, fatalities are unfortunately a common occurrence, impacting system operations approximately every month.

Mobility

Plan Bay Area's adopted goals focus on a sustainable transportation system and land use pattern, with a lesser focus on traditional transportation issues such as mobility. Instead of emphasizing reductions in auto travel times and highway congestion, the Plan seeks to provide viable alternatives to the region's congested roadways through new public transit and non-motorized facilities, a better aligned land use pattern, and expanded pricing strategies such as regional express lanes. Due to this difference in emphasis, the proposed mobility performance measures of travel time and delay are not appropriate to evaluate proposed 2014 STIP investments in the context of Plan Bay Area. As allowed under the 2014 STIP guidelines, MTC opts out of reporting for the mobility performance measures.

Accessibility

Decades of regional, state, and federal investments in Bay Area public transit services are evident when measuring the share of the population within ½ mile of existing bus and rail services. Nearly 86% of Bay Area residents live in close proximity to the public transit system – highlighting the region's prominence in providing the most robust transit services in the state. The region's most urban counties – San Francisco and Alameda – performed the best on this performance measure with 99% and 94% of the population living within walking distance of public transit, respectively. San Mateo and Santa Clara Counties also performed above average, while suburban Contra Costa County exhibited below-average performance – despite multiple BART lines in the county – due to limited local bus services in central and eastern parts of the county. North Bay counties, which are generally more rural in nature, performed the worst on this performance measure, although remarkably nearly three-quarters of residents in these counties can still walk to public transit. Solano County was a particular outlier, with the majority of its residents unable to easily access a nearby bus stop or rail station by foot.

The state recommended accessibility performance measure for average travel time does not align well with the adopted goals of Plan Bay Area, which instead focuses on sustainability issues as measured in Part B of this report. For additional information on this inconsistency and MTC's

decision to opt out of this performance measure, please refer the discussion in the mobility section above.

Reliability

Plan Bay Area's adopted goals focus on a sustainable transportation system and land use pattern, with a lesser focus on issues such as reliability. Instead of traditional performance measures for general-purpose lanes (such as the state proposed measures of VHD, congested VMT, and buffer time), MTC's investments towards reliability are focused on reliable alternative modes (such as dedicated-lane bus rapid transit and fixed-guideway rail) and reliable managed lane alternatives (such as carpool and toll lanes). Due to this different approach towards reliability in the context of prioritizing a sustainable transportation system, the proposed reliability performance measures of buffer time index, vehicle delay, and congested VMT are not appropriate to evaluate proposed 2014 STIP investments under Plan Bay Area. As allowed under the 2014 STIP guidelines, MTC opts out of reporting for these reliability performance measures.

Transit on-time performance, while not directly addressed in the performance measures or goals for Plan Bay Area, generally aligns with the intent of the Plan. However, due to the region's large number of transit operators failing to utilize a standard definition for on-time performance, MTC cannot report on this performance measure at this time due to the lack of consistent regional data.

Productivity/Throughput

The state performance measures for vehicle throughput are neither consistent nor inconsistent with Plan Bay Area; fundamentally, they are more similar to reporting measures rather than goals (that is, the region's goal is not specifically to reduce or increase traffic volumes on a specific roadway). That said, they can provide valuable information about the number and type of vehicles on a given road.

Along corridors where capacity investments are slated to be funded with 2014 STIP dollars, traffic volumes vary widely – from the sparsely used portion of State Route 84 in rural Alameda County (with only 18,600 daily vehicle trips) to the highly congested Interstate 680 in suburban Contra Costa County (with over 178,000 daily vehicle trips). None of the four corridors are major truck routes, with 5+ axle trucks accounting for only 2.6% of all daily traffic on the busiest corridor (Interstate 680). While MTC would prefer to highlight person-trips on all of these corridors (to reflect carpooling and transit usage) in line with the regional emphasis on moving people, data limitations make this impossible at this time. A regional or statewide vehicle occupancy data collection effort would be necessary to provide such valuable performance metrics.

Perhaps more enlightening than traffic volume data is per-capita vehicle miles traveled (VMT); the average person in the San Francisco Bay Area drives approximately 23 miles per day. While this is less than other metropolitan areas in the state – such as Los Angeles – significant differences exist across the 9-county region. The fewest miles driven occur in San Francisco, where the average driver only travels 10 miles each day; counties such as Solano and Marin in the North Bay perform significantly below average with 30 and 31 miles driven per day.

With regards to transit productivity, this is less directly addressed in the region's long-range plan than it is in MTC's Transit Sustainability Project, which sought to increase productivity on the region's dozens of transit operators. While this examination of productivity by mode does not directly examine those operator-level issues, it provides a good understanding of which modes are moving the most people.

Due to the heavy loading and short-haul distances of urban transit vehicles, systems that only exist in the dense core of San Francisco (trolley buses and cable cars) had the greatest number of passengers per vehicle revenue mile at 25 and 11 passengers per mile, respectively. Due to the long-haul nature of heavy rail and commuter rail systems, this mode had the lowest productivity per VRM at just under 2 passengers per mile.

Performance on a vehicle revenue hour basis avoids the distance bias exhibited in the vehicle revenue mile results. The region's ferry system performs the best with nearly 119 passengers per vehicle revenue hour, primarily due to the size of a ferry vehicle and the fact that ferries generally run during high-demand peak hours. Light rail and trolley bus systems also perform well due to their geographic service areas, especially in San Francisco. Paratransit performs exceptionally poorly for this performance measure as well as the one above, due to small vehicle sizes and the unique nature of the service.

Per-capita results highlight the transit services that are most popular with Bay Area residents. Motor bus is the most popular mode, with 30 annual passengers per capita, followed by heavy and commuter rail (primarily BART and Caltrain) with 17 annual passengers per capita. Other popular modes include trolley bus and light rail, both with 9 annual passengers per capita. The remaining modes – cable car, ferry, and paratransit – are used only by specific subsets of the population and are not utilized by the general population on a frequent basis.

While intercity rail productivity is certainly of interest to MTC, Amtrak staff were unable to provide productivity performance data for the sub-segment of each route traversing the 9-county San Francisco Bay Area. Due to the lack of consistent origin-destination data for all intercity rail routes, MTC is unable to report Amtrak performance on a passenger-mile basis as requested by CTC.

System Preservation

The infrastructure of the San Francisco Bay Area continue to visibly age, as local street, state highway, bridge, and transit asset conditions have failed to improve over the past decade. State highway condition continues to worsen, with just 29% of Bay Area state highway lane-miles being identified as "distressed" by Caltrans in 2011. Nearly of a quarter of all lane-miles have an International Roughness Index (IRI) of greater than 170, representing very poor pavement conditions, and 27% of all lane-miles are in good condition (IRI < 95).

In general, the region's bridges are in better condition than its pavement, with only 14% of bridges and 16% of bridge deck area being rated as structurally deficient in the National Bridge Inventory. This greater level of performance for bridge condition is partially a result of significant funding for seismic retrofitting on many of the region's most heavily-utilized bridges. On a county level, San Francisco's bridges are in the worst condition, with 29% of bridges and 41% of deck area rated as

structurally deficient. Most of the region's other counties performed relatively consistently, with San Mateo, Marin, and Solano counties having the lowest share of deficient bridges.

To address the significant needs related to system preservation, MTC has allocated nearly 90% of funding in Plan Bay Area to support preservation of existing facilities. Despite this very high level of funding for preservation, Plan Bay Area is expected only to slow infrastructure degradation, rather than improving the overall condition of Bay Area transportation infrastructure, over the coming years.

Environmental Impact

As regional air quality monitoring efforts focus on ambient concentrations rather than tailpipe emissions, it is not possible to provide baseline monitoring data for greenhouse gases or criteria pollutants. While baseline data can be calculated using travel models in concert with EMFAC (the state emissions inventory model), using such model data to establish a baseline would be inconsistent with the overall methodology established for this monitoring effort. Air quality impacts, however, can be forecast using these models; these impacts are discussed in further detail under the STIP Investment Impacts section below.

State Performance Measures – Safety
(1) Traffic Fatalities

PM ID	Performance Measure	Geography	Year	Baseline
CA-1a	**Fatalities per VMT**	**Region**	**2011**	**6.0×10^{-9}**
1	Fatalities per VMT	San Francisco	2011	1.1×10^{-8}
2	Fatalities per VMT	Napa	2011	7.4×10^{-9}
3	Fatalities per VMT	Sonoma	2011	7.3×10^{-9}
4	Fatalities per VMT	Solano	2011	6.7×10^{-9}
5	Fatalities per VMT	San Mateo	2011	6.7×10^{-9}
6	Fatalities per VMT	Contra Costa	2011	6.1×10^{-9}
7	Fatalities per VMT	Santa Clara	2011	6.1×10^{-9}
8	Fatalities per VMT	Alameda	2011	4.4×10^{-9}
9	Fatalities per VMT	Marin	2011	2.1×10^{-9}
CA-1b	**Fatalities per capita**	**Region**	**2011**	**4.9×10^{-5}**
1	Fatalities per capita	Solano	2011	7.4×10^{-5}
2	Fatalities per capita	San Mateo	2011	6.5×10^{-5}
3	Fatalities per capita	Sonoma	2011	6.0×10^{-5}
4	Fatalities per capita	Napa	2011	5.9×10^{-5}
5	Fatalities per capita	Santa Clara	2011	5.1×10^{-5}
6	Fatalities per capita	Contra Costa	2011	4.8×10^{-5}
7	Fatalities per capita	San Francisco	2011	4.1×10^{-5}
8	Fatalities per capita	Alameda	2011	3.9×10^{-5}
9	Fatalities per capita	Marin	2011	2.4×10^{-5}

Fatality Data Source: *2011 Statewide Integrated Traffic Records System (SWITRS); summarized using UC Berkeley SafeTREC's Transportation Injury Mapping System (TIMS); updated on an annual basis*
http://tims.berkeley.edu/tools/query

Vehicle Miles Traveled (VMT) Data Source: *2011 Caltrans Highway Performance Monitoring System (HPMS); procured from Table 6's county VMT breakdown; updated on an annual basis*
http://www.dot.ca.gov/hq/tsip/hpms/hpmslibrary/prd/2011prd/2011prd.pdf

Raw Population and Group Quarters Population Data Source: *2011 American Community Survey 1-Year Estimate (Table B01003: Total Population; Table B26001: Group Quarters Population); updated on an annual basis*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Group Quarters Population Adjustment Data Source: *2010 Census Summary File 1; updated on a decennial basis*

Adjusted Population Calculation Note: *Raw population data was adjusted according to the population approach detailed in the SGC statewide performance indicators report. By removing the institutional group quarters population (relying upon the share in the 2010 Census Summary File 1), per-capita metrics are appropriately capturing solely the mobile segment of the population.*

State Performance Measures – Safety (continued)
(2) Fatal Collisions

PM ID	Performance Measure	Geography	Year	Baseline
CA-2a	**Fatal collisions per VMT**	**Region**	**2011**	**5.8×10^{-9}**
1	Fatal collisions per VMT	San Francisco	2011	1.1×10^{-8}
2	Fatal collisions per VMT	Napa	2011	7.4×10^{-9}
3	Fatal collisions per VMT	Sonoma	2011	7.0×10^{-9}
4	Fatal collisions per VMT	San Mateo	2011	6.7×10^{-9}
5	Fatal collisions per VMT	Santa Clara	2011	6.0×10^{-9}
6	Fatal collisions per VMT	Solano	2011	6.0×10^{-9}
7	Fatal collisions per VMT	Contra Costa	2011	5.7×10^{-9}
8	Fatal collisions per VMT	Alameda	2011	4.3×10^{-9}
9	Fatal collisions per VMT	Marin	2011	2.1×10^{-9}
CA-2b	**Fatal collisions per capita**	**Region**	**2011**	**4.8×10^{-5}**
1	Fatal collisions per capita	Solano	2011	6.6×10^{-5}
2	Fatal collisions per capita	San Mateo	2011	6.5×10^{-5}
3	Fatal collisions per capita	Napa	2011	5.9×10^{-5}
4	Fatal collisions per capita	Sonoma	2011	5.8×10^{-5}
5	Fatal collisions per capita	Santa Clara	2011	5.1×10^{-5}
6	Fatal collisions per capita	Contra Costa	2011	4.4×10^{-5}
7	Fatal collisions per capita	San Francisco	2011	4.1×10^{-5}
8	Fatal collisions per capita	Alameda	2011	3.8×10^{-5}
9	Fatal collisions per capita	Marin	2011	2.4×10^{-5}

Fatality Collision Data Source: *2011 Statewide Integrated Traffic Records System (SWITRS); summarized using UC Berkeley SafeTREC's Transportation Injury Mapping System (TIMS); updated on an annual basis*
http://tims.berkeley.edu/tools/query

Vehicle Miles Traveled (VMT) Data Source: *2011 Caltrans Highway Performance Monitoring System (HPMS); procured from Table 6's county VMT breakdown; updated on an annual basis*
http://www.dot.ca.gov/hq/tsip/hpms/hpmslibrary/prd/2011prd/2011prd.pdf

Raw Population and Group Quarters Population Data Source: *2011 American Community Survey 1-Year Estimate (Table B01003: Total Population; Table B26001: Group Quarters Population); updated on an annual basis*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Group Quarters Population Adjustment Data Source: *2010 Census Summary File 1; updated on a decennial basis*

Adjusted Population Calculation Note: *Raw population data was adjusted according to the population approach detailed in the SGC statewide performance indicators report. By removing the institutional group quarters population (relying upon the share in the 2010 Census Summary File 1), per-capita metrics are appropriately capturing solely the mobile segment of the population.*

State Performance Measures – Safety (continued)
(3) Injury Collisions

PM ID	Performance Measure	Geography	Year	Baseline
CA-3a	**Injury collisions per VMT**	**Region**	**2011**	**4.7×10^{-7}**
1	Injury collisions per VMT	San Francisco	2011	1.2×10^{-6}
2	Injury collisions per VMT	Napa	2011	6.0×10^{-7}
3	Injury collisions per VMT	Sonoma	2011	5.2×10^{-7}
4	Injury collisions per VMT	Alameda	2011	4.7×10^{-7}
5	Injury collisions per VMT	Santa Clara	2011	4.5×10^{-7}
6	Injury collisions per VMT	Marin	2011	3.8×10^{-7}
7	Injury collisions per VMT	Contra Costa	2011	3.7×10^{-7}
8	Injury collisions per VMT	San Mateo	2011	3.7×10^{-7}
9	Injury collisions per VMT	Solano	2011	3.4×10^{-7}
CA-3b	**Injury collisions per capita**	**Region**	**2011**	**3.8×10^{-3}**
1	Injury collisions per capita	Napa	2011	4.8×10^{-3}
2	Injury collisions per capita	San Francisco	2011	4.5×10^{-3}
3	Injury collisions per capita	Marin	2011	4.3×10^{-3}
4	Injury collisions per capita	Sonoma	2011	4.3×10^{-3}
5	Injury collisions per capita	Alameda	2011	4.1×10^{-3}
6	Injury collisions per capita	Santa Clara	2011	3.8×10^{-3}
7	Injury collisions per capita	Solano	2011	3.7×10^{-3}
8	Injury collisions per capita	San Mateo	2011	3.6×10^{-3}
9	Injury collisions per capita	Contra Costa	2011	2.9×10^{-3}

Injury Collision Data Source: *2011 Statewide Integrated Traffic Records System (SWITRS); summarized using UC Berkeley SafeTREC's Transportation Injury Mapping System (TIMS); updated on an annual basis*
http://tims.berkeley.edu/tools/query

Vehicle Miles Traveled (VMT) Data Source: *2011 Caltrans Highway Performance Monitoring System (HPMS); procured from Table 6's county VMT breakdown; updated on an annual basis*
http://www.dot.ca.gov/hq/tsip/hpms/hpmslibrary/prd/2011prd/2011prd.pdf

Raw Population and Group Quarters Population Data Source: *2011 American Community Survey 1-Year Estimate (Table B01003: Total Population; Table B26001: Group Quarters Population); updated on an annual basis*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Group Quarters Population Adjustment Data Source: *2010 Census Summary File 1; updated on a decennial basis*

Adjusted Population Calculation Note: *Raw population data was adjusted according to the population approach detailed in the SGC statewide performance indicators report. By removing the institutional group quarters population (relying upon the share in the 2010 Census Summary File 1), per-capita metrics are appropriately capturing solely the mobile segment of the population.*

State Performance Measures – Safety (continued) (4) Transit Fatalities				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
CA-4a	**Motor bus fatalities per PMT**	**Region**	**2012**	**1.3×10^{-9}**
CA-4b	**Trolley bus fatalities per PMT**	**Region**	**2012**	**1.0×10^{-8}**
CA-4c	**Cable car fatalities per PMT**	**Region**	**2012**	**no fatalities**
CA-4d	**Light rail fatalities per PMT**	**Region**	**2012**	**1.6×10^{-8}**
CA-4e	**Heavy rail fatalities per PMT**	**Region**	**2012**	**4.5×10^{-9}**
CA-4f	**Commuter rail fatalities per PMT**	**Region**	**2012**	**4.3×10^{-8}**
CA-4g	**Ferry fatalities per PMT**	**Region**	**2012**	**no fatalities**
CA-4h	**Paratransit per PMT**	**Region**	**2012**	**no fatalities**

Transit Fatality Data Source: *2012 FTA National Transit Database (NTD) Safety & Security (S&S) Time Series Dataset; fatality data includes passenger, employees, and other individuals harmed in the course of transit operations; updated annually*
http://www.ntdprogram.gov/ntdprogram/pubs/MonthlyData/S&STimeSeries-June2013-10012013.xls

Passenger Miles Traveled (PMT) Data Source: *2012 FTA National Transit Database (NTD) Safety & Security (S&S) Time Series Dataset; updated annually*
http://www.ntdprogram.gov/ntdprogram/pubs/MonthlyData/S&STimeSeries-June2013-10012013.xls

Data Limitations Note: *PMT data shortcomings exist for a small subset of operators who did not appropriately submit PMT data to NTD (Marin Transit, San Francisco Bay Ferry, SolTrans, Union City Transit, Vacaville City Coach, and several paratransit services). As Caltrain is a commuter railroad that does not have to report to FTA NTD, data on fatalities and PMT were provided directly by Caltrain staff.*

State Performance Measures – Mobility (5) Delay, (6) Peak Travel Time, and (7) Non-Peak Travel Time				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
CA-5	**Annual passenger-hours of delay**	***inconsistent with adopted RTP/SCS***		
CA-6	**Average peak period travel time**	***inconsistent with adopted RTP/SCS***		
CA-7	**Average non-peak period travel time**	***inconsistent with adopted RTP/SCS***		

As the performance measures listed above were inconsistent with the region's adopted RTP/SCS, data collection and impact forecasting were not required under the 2014 STIP guidelines.

State Performance Measures – Accessibility
(8) Population near Frequent Public Transit and (9) Travel Time to Jobs/School

PM ID	Performance Measure	Geography	Year	Baseline
CA-8	**Population share within ½ mile of rail or bus service**	**Region**	**2011**	**85.6%**
1	Population share within ½ mile of rail or bus service	San Francisco	2011	99.1%
2	Population share within ½ mile of rail or bus service	Alameda	2011	94.1%
3	Population share within ½ mile of rail or bus service	San Mateo	2011	90.4%
4	Population share within ½ mile of rail or bus service	Santa Clara	2011	88.8%
5	Population share within ½ mile of rail or bus service	Contra Costa	2011	80.6%
6	Population share within ½ mile of rail or bus service	Sonoma	2011	73.0%
7	Population share within ½ mile of rail or bus service	Napa	2011	72.1%
8	Population share within ½ mile of rail or bus service	Marin	2011	71.1%
9	Population share within ½ mile of rail or bus service	Solano	2011	47.2%
CA-9	**Average travel time to jobs or school**	***inconsistent with adopted RTP/SCS***		

Population Data Source: *2011 American Community Survey (5-Year Estimate) census block shapefiles; updated annually*

Transit Service Levels Data Source: *MTC Regional Transit Database; updated frequently by 511/GIS teams*

Analysis Approach Note: *GIS analysis was conducted by overlaying the transit routes and stations on top of the census block population data. Half-mile buffers were constructed from all rail stations and bus lines; note that all services, not just those qualifying for SB 375 Transit Priority Project eligible area (TPP) designation (15-minute frequency), as the STIP guidelines did not specify a frequency filter. For those blocks in which only part of the block was within the ½ mile buffer, a proportional allocation method was utilized to determine the share of persons in the transit service area.*

As performance measure CA-9 listed above was inconsistent with the region's adopted RTP/SCS, data collection and impact forecasting were not required under the 2014 STIP guidelines.

State Performance Measures – Reliability
(10) Buffer Time, (11) VHD/capita, (12) Congested VMT/capita, and (13) Transit OTP

PM ID	Performance Measure	Geography	Year	Baseline
CA-10	**Buffer time index**	***inconsistent with adopted RTP/SCS***		
CA-11	**Daily VHD per capita**	***inconsistent with adopted RTP/SCS***		
CA-12	**Daily congested VMT per capita**	***inconsistent with adopted RTP/SCS***		
CA-13	**Transit on-time performance**	***consistent data unavailable***		

As performance measures CA-10, CA-11, and CA-12 listed above were inconsistent with the region's adopted RTP/SCS, data collection and impact forecasting were not required under the 2014 STIP guidelines.

For performance measure CA-13 (transit on-time performance), it was not possible to aggregate agency results to demonstrate regional performance due to Bay Area transit operators using inconsistent definitions of what it means to be "on time". Further efforts with transit operators will be required to report this measure in the future.

State Performance Measures – Productivity/Throughput (14) Peak Period Vehicle Trips and (15) Daily Vehicle Trips				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
CA-14a	**Average peak period vehicle trips**	**ALA-84**	**2011**	**1,550**
CA-14b	**Average peak period vehicle trips**	**CC-4**	**2011**	**6,330**
CA-14c	**Average peak period vehicle trips**	**CC-680**	**2011**	**13,800**
CA-14d	**Average peak period vehicle trips**	**SM-1**	**2011**	**3,900**
CA-15a	**Average daily vehicle trips**	**ALA-84**	**2011**	**18,600**
CA-15b	**Average daily vehicle trips**	**CC-4**	**2011**	**79,000**
CA-15c	**Average daily vehicle trips**	**CC-680**	**2011**	**178,000**
CA-15d	**Average daily vehicle trips**	**SM-1**	**2011**	**46,500**

Average Peak Period Vehicle Trips Source: *2011 Caltrans Traffic Volumes Report; reported as average peak hour bidirectional traffic volume (single hour either on weekday or weekend); updated annually; 2011 report used for consistency with truck volumes (which are produced one year later)*
http://traffic-counts.dot.ca.gov/2011TrafficVolumes.pdf

Average Daily Vehicle Trips Source: *2011 Caltrans Traffic Volumes Report; reported as average annual daily bidirectional traffic volumes (AADT); updated annually; 2011 report used for consistency with truck volumes (which are produced one year later)*
http://traffic-counts.dot.ca.gov/2011TrafficVolumes.pdf

Analysis Approach Note: *Locations for these performance measures were selected to highlight locations where capacity-increasing investments are proposed in the 2014 STIP on existing state highway corridors. Major capacity-increasing projects included in the 2014 STIP are as follows:*

- ***SR-84 Expressway in Livermore (Southern Segment 2)***
- *SR-84 East-West Connector in Fremont [facility does not yet exist; exempt]*
- *AC Bus Rapid Transit Project [transit project on arterials; exempt]*
- ***I-680/SR-4 Interchange - Widening of SR-4 (Phase 3)***
- ***I-680 HOV SB Gap Closure***
- *Kirker Pass Road NB Truck Climbing Lane [arterial widening; exempt]*
- *Central Subway [transit project in dedicated ROW; exempt]*
- ***SR-1 Calera Parkway Operational Improvements in Pacifica***
- *BART Extension from Berryessa to Santa Clara [transit project in dedicated ROW; exempt]*
- *Jepson Parkway [arterial widening; exempt]*

Exact locations for each count are listed below:

- *ALA-84: State Route 84 in Livermore (Alameda County) between Vineyard Avenue and Alden Lane*
- *CC-4: State Route 4 in Concord (Contra Costa County) between Interstate 680 and Solano Way*
- *CC-680: Interstate 680 in Walnut Creek (Contra Costa County) between South Main Street and Olympic Boulevard*
- *SM-1: State Route 1 in Pacifica (San Mateo County) between Rockaway Beach Avenue and Reina del Mar Avenue*

State Performance Measures – Productivity/Throughput (continued)
(16) VMT/capita

PM ID	Performance Measure	Geography	Year	Baseline
CA-16	**Daily VMT per capita**	**Region**	**2011**	**22.6**
1	Daily VMT per capita	San Francisco	2011	10.4
2	Daily VMT per capita	Contra Costa	2011	21.5
3	Daily VMT per capita	Napa	2011	21.8
4	Daily VMT per capita	Sonoma	2011	22.6
5	Daily VMT per capita	Santa Clara	2011	22.9
6	Daily VMT per capita	Alameda	2011	24.0
7	Daily VMT per capita	San Mateo	2011	26.7
8	Daily VMT per capita	Solano	2011	30.2
9	Daily VMT per capita	Marin	2011	31.1

Vehicle Miles Traveled (VMT) Data Source: *2011 Caltrans Highway Performance Monitoring System (HPMS); procured from Table 6's county VMT breakdown; updated on an annual basis*
http://www.dot.ca.gov/hq/tsip/hpms/hpmslibrary/prd/2011prd/2011prd.pdf

Raw Population and Group Quarters Population Data Source: *2011 American Community Survey 1-Year Estimate (Table B01003: Total Population; Table B26001: Group Quarters Population); updated on an annual basis*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Group Quarters Population Adjustment Data Source: *2010 Census Summary File 1; updated on a decennial basis*

Adjusted Population Calculation Note: *Raw population data was adjusted according to the population approach detailed in the SGC statewide performance indicators report. By removing the institutional group quarters population (relying upon the share in the 2010 Census Summary File 1), per-capita metrics are appropriately capturing solely the mobile segment of the population.*

State Performance Measures – Productivity/Throughput (continued)
(17) Peak Period Person Trips and (18) Daily Person Trips

PM ID	Performance Measure	Geography	Year	Baseline
CA-17a	Average peak period person trips	ALA-84	*reliable data unavailable*	
CA-17b	Average peak period person trips	CC-4	*reliable data unavailable*	
CA-17c	Average peak period person trips	CC-680	*reliable data unavailable*	
CA-17d	Average peak period person trips	SM-1	*reliable data unavailable*	
CA-18a	Average daily person trips	ALA-84	*reliable data unavailable*	
CA-18b	Average daily person trips	CC-4	*reliable data unavailable*	
CA-18c	Average daily person trips	CC-680	*reliable data unavailable*	
CA-18d	Average daily person trips	SM-1	*reliable data unavailable*	

For performance measures CA-17a through CA-18d, without observed data on vehicle occupancies, it is not possible to report person-trips in a corridor. A wide range of vehicles (carpools, buses, vanpools, etc.) operates on these state highway system, yet comprehensive sources of vehicle occupancy data are not produced by Caltrans or MTC. While person-trips is a superior metric to vehicle-trips, it exhibits serious data monitoring challenges (e.g. plentiful loop detectors easily sense vehicles, while infrared sensors have struggled to achieve accurate person counts).

State Performance Measures – Productivity/Throughput (continued) (19) Truck Share and (20) Truck Trips				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
CA-19a	Share of 5+ axle trucks	ALA-84	2011	*data unavailable*
CA-19b	Share of 5+ axle trucks	CC-4	2011	1.5%
CA-19c	Share of 5+ axle trucks	CC-680	2011	2.6%
CA-19d	Share of 5+ axle trucks	SM-1	2011	0.3%
CA-20a	Average daily 5+ axle truck trips	ALA-84	2011	*data unavailable*
CA-20b	Average daily 5+ axle truck trips	CC-4	2011	1,180
CA-20c	Average daily 5+ axle truck trips	CC-680	2011	3,910
CA-20d	Average daily 5+ axle truck trips	SM-1	2011	140

Average Daily Vehicle Trips Source: *2011 Caltrans Truck Traffic Volumes Report; reported as average annual daily bidirectional traffic volumes (AADT); updated annually*
http://traffic-counts.dot.ca.gov/truck2011final.pdf

Average Daily 5+ Axle Truck Trips Source: *2011 Caltrans Truck Traffic Volumes Report; total truck trips multiplied by the share of trucks measured to be 5 axles or greater; reported as average annual daily bidirectional truck traffic volumes (AADT); updated annually*
http://traffic-counts.dot.ca.gov/truck2011final.pdf

Analysis Approach Note: *Locations for these performance measures were selected to highlight locations where capacity-increasing investments are proposed in the 2014 STIP on existing state highway corridors. Major capacity-increasing projects included in the 2014 STIP are as follows:*

- ***SR-84 Expressway in Livermore (Southern Segment 2)***
- *SR-84 East-West Connector in Fremont [facility does not yet exist; exempt]*
- *AC Bus Rapid Transit Project [transit project on arterials; exempt]*
- ***I-680/SR-4 Interchange - Widening of SR-4 (Phase 3)***
- ***I-680 HOV SB Gap Closure***
- *Kirker Pass Road NB Truck Climbing Lane [arterial widening; exempt]*
- *Central Subway [transit project in dedicated ROW; exempt]*
- ***SR-1 Calera Parkway Operational Improvements in Pacifica***
- *BART Extension from Berryessa to Santa Clara [transit project in dedicated ROW; exempt]*
- *Jepson Parkway [arterial widening; exempt]*

Locations were designed to be as proximate as possible to the overall traffic count locations used for performance measures CA-14 and CA-15; however, truck counts are available in many fewer locations and therefore the closest available data point to the project location has been identified.

- *ALA-84: no data available east of Interstate 680 from Caltrans (low traffic volume facility)*
- *CC-4: State Route 4 in Concord (Contra Costa County) east of Interstate 680 interchange*
- *CC-680: Interstate 680 in Walnut Creek (Contra Costa County) south of State Route 24 interchange*
- *SM-1: State Route 1 in Pacifica (San Mateo County) at Sharp Park Road*

State Performance Measures – Productivity/Throughput (continued) (21) Passengers/VRM, (22) Passengers/VRH, and (23) Passengers/intercity train-mile				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
CA-21a	**Motor bus passengers/VRM**	**Region**	**FY11**	**3.0**
CA-21b	**Trolley bus passengers/VRM**	**Region**	**FY11**	**11.1**
CA-21c	**Cable car passengers/VRM**	**Region**	**FY11**	**24.5**
CA-21d	**Light rail passengers/VRM**	**Region**	**FY11**	**6.9**
CA-21e	**Heavy/commuter rail pass./VRM**	**Region**	**FY11**	**1.8**
CA-21f	**Ferry passengers/VRM**	**Region**	**FY11**	**6.9**
CA-21g	**Paratransit passengers/VRM**	**Region**	**FY11**	**0.2**
CA-22a	**Motor bus passengers/VRH**	**Region**	**FY11**	**34.3**
CA-22b	**Trolley bus passengers/VRH**	**Region**	**FY11**	**72.2**
CA-22c	**Cable car passengers/VRH**	**Region**	**FY11**	**48.2**
CA-22d	**Light rail passengers/VRH**	**Region**	**FY11**	**74.9**
CA-22e	**Heavy/commuter rail pass./VRH**	**Region**	**FY11**	**63.0**
CA-22f	**Ferry passengers/VRH**	**Region**	**FY11**	**118.9**
CA-22g	**Paratransit passengers/VRH**	**Region**	**FY11**	**2.4**
CA-23	**Intercity rail passenger-miles per train-mile**	***consistent data unavailable***		

Transit Passenger Data Source: *MTC Statistical Summary of Transit Operators/National Transit Database (2011 data – published June 2013); updated on an annual basis*
http://www.mtc.ca.gov/library/statsum/StatSumm_2012.pdf

Transit Vehicle Revenue Mile (VRM) Data Source: *MTC Statistical Summary of Transit Operators/National Transit Database (2011 data – published June 2013); updated on an annual basis*
http://www.mtc.ca.gov/library/statsum/StatSumm_2012.pdf

Transit Vehicle Revenue Hour (VRH) Data Source: *MTC Statistical Summary of Transit Operators/National Transit Database (2011 data – published June 2013); updated on an annual basis*
http://www.mtc.ca.gov/library/statsum/StatSumm_2012.pdf

For performance measure CA-23 (intercity rail productivity), Amtrak does not track productivity within specific metropolitan areas, instead focusing on productivity by route. Because each route spans multiple regions and multiple states, it is not possible to state that these results reflect those routes' productivity within the 9-county San Francisco Bay Area. Furthermore, Amtrak was unable to provide origin-destination tables needed to calculate productivity of lines within the 9-county Bay Area. Due to these data limitations, intercity rail productivity measure results could not be calculated. Additional data reporting by Amtrak will be required to report this metric in an accurate manner.

State Performance Measures – Productivity/Throughput (continued)
(24) Passengers/capita

PM ID	Performance Measure	Geography	Year	Baseline
CA-24a	Motor bus passengers/capita	Region	FY11	30.0
CA-24b	Trolley bus passengers/capita	Region	FY11	9.2
CA-24c	Cable car passengers/capita	Region	FY11	1.0
CA-24d	Light rail passengers/capita	Region	FY11	8.5
CA-24e	Heavy/commuter rail pass./capita	Region	FY11	17.3
CA-24f	Ferry passengers/capita	Region	FY11	0.5
CA-24g	Paratransit passengers/capita	Region	FY11	0.6

Transit Passenger Data Source: *MTC Statistical Summary of Transit Operators/National Transit Database (2011 data – published June 2013); updated on an annual basis*
http://www.mtc.ca.gov/library/statsum/StatSumm_2012.pdf

Raw Population and Group Quarters Population Data Source: *2011 American Community Survey 1-Year Estimate (Table B01003: Total Population; Table B26001: Group Quarters Population); updated on an annual basis*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Group Quarters Population Adjustment Data Source: *2010 Census Summary File 1; updated on a decennial basis*

Adjusted Population Calculation Note: *Raw population data was adjusted according to the population approach detailed in the SGC statewide performance indicators report. By removing the institutional group quarters population (relying upon the share in the 2010 Census Summary File 1), per-capita metrics are appropriately capturing solely the mobile segment of the population.*

State Performance Measures – System Preservation
(25) Distressed Lane-Miles and (26) Share of Distressed Lane-Miles

PM ID	Performance Measure	Geography	Year	Baseline
CA-25	Distressed lane-miles	Region	2011	1,710
CA-26	Share of distressed lane-miles	Region	2011	29%

Distressed Lane-Miles Data Source: *2011 Caltrans State of the Pavement Report; extracted from District 4 (Bay Area) results in Appendices 2 & 3; only incorporates data from State Highway System (SHS); updated on an annual basis*
http://www.dot.ca.gov/hq/maint/Pavement/Pavement_Program/PDF/2011_SOP.pdf

State Performance Measures – System Preservation (27) IRI Shares and (28) Deficient Bridges				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
CA-27a	**Share of lane-miles with IRI 1-94**	**Region**	**2011**	**27%**
CA-27b	**Share of lane-miles with IRI 95-170**	**Region**	**2011**	**49%**
CA-27c	**Share of lane-miles with IRI >170**	**Region**	**2011**	**24%**
CA-28a	**Share of highway bridges in need of repair**	**Region**	**2012**	**14%**
1	Share of highway bridges in need of repair	San Francisco	2012	29%
2	Share of highway bridges in need of repair	Napa	2012	17%
3	Share of highway bridges in need of repair	Santa Clara	2012	17%
4	Share of highway bridges in need of repair	Contra Costa	2012	16%
5	Share of highway bridges in need of repair	Sonoma	2012	15%
6	Share of highway bridges in need of repair	Alameda	2012	12%
7	Share of highway bridges in need of repair	San Mateo	2012	12%
8	Share of highway bridges in need of repair	Marin	2012	11%
9	Share of highway bridges in need of repair	Solano	2012	10%
CA-28b	**Share of highway bridge deck area in need of repair**	**Region**	**2012**	**16%**
1	Share of highway bridge deck area in need of repair	San Francisco	2012	41%
2	Share of highway bridge deck area in need of repair	Santa Clara	2012	15%
3	Share of highway bridge deck area in need of repair	Sonoma	2012	14%
4	Share of highway bridge deck area in need of repair	Napa	2012	14%
5	Share of highway bridge deck area in need of repair	Alameda	2012	13%
6	Share of highway bridge deck area in need of repair	Solano	2012	12%
7	Share of highway bridge deck area in need of repair	Marin	2012	12%
8	Share of highway bridge deck area in need of repair	Contra Costa	2012	11%
9	Share of highway bridge deck area in need of repair	San Mateo	2012	8%

International Roughness Index (IRI) Shares Data Source: *2011 Caltrans State of the Pavement Report; extracted from District 4 (Bay Area) results in Appendix 4; only incorporates data from State Highway System (SHS); updated on an annual basis*
http://www.dot.ca.gov/hq/maint/Pavement/Pavement_Program/PDF/2011_SOP.pdf

Bridge Condition Data Source: *2012 FHWA National Bridge Inventory; incorporates data from federal & non-federal bridges; updated on an annual basis*
http://www.fhwa.dot.gov/bridge/britab.cfm

Bridge Deck Condition Data Source: *2012 FHWA National Bridge Inventory; incorporates data from federal & non-federal bridges; updated on an annual basis*
http://www.fhwa.dot.gov/bridge/britab.cfm

Bridge Analysis Note: *Only structurally deficient (SD) bridges were included in the shares of bridges in need of repair. Functionally obsolete (FO) bridges are not included as they are considered in a state of good repair.*

State Performance Measures – Environmental Impact
(29) GHG/capita and (30) Criteria Pollutants/capita

PM ID	Performance Measure	Geography	Year	Baseline
CA-29	Metric tons of CO_2 emissions per capita	*regional monitoring data unavailable*		
CA-30a	Tons of CO emissions per capita	*regional monitoring data unavailable*		
CA-30b	Tons of lead emissions per capita	*regional monitoring data unavailable*		
CA-30c	Tons of NO_x emissions per capita	*regional monitoring data unavailable*		
CA-30d	Tons of O_3 emissions per capita	*regional monitoring data unavailable*		
CA-30e	Tons of $PM_{2.5}$ emissions per capita	*regional monitoring data unavailable*		
CA-30f	Tons of PM_{10} emissions per capita	*regional monitoring data unavailable*		
CA-30g	Tons of SO_2 emissions per capita	*regional monitoring data unavailable*		

For performance measures CA-29 through CA-30g, it is not possible to directly monitor emissions or determine their origin (mobile or non-mobile source). Instead, air quality monitoring for the region is typically expressed in terms of concentrations in the region's air, which is continually tracked by BAAQMD. While "inventories" of emissions are developed as part of the EMFAC air quality model, these are not directly monitored and are not consistent with the policy of establishing baseline performance using real-world data.

State Performance Measures – Return on Investment/Lifecycle Cost
(32) Rate of Return

PM ID	Performance Measure	Geography	Year	Baseline
CA-31	Rate of return	*impossible to calculate for baseline*		

For performance measure CA-31 (rate of return), it is not possible to calculate this metric for baseline conditions; this performance measure is only appropriate for measuring the benefits and costs of a given investment package.

State Performance Measures: STIP Investment Impacts

Safety

Transportation projects funded with 2014 STIP dollars are expected to support state and regional goals by reducing collisions on Bay Area roads. MTC's Travel Model One forecasts a one fewer annual traffic fatality in year 2035 as a result of these investments, which is equivalent to a reduction in the fatalities per VMT rate by 2.1×10^{-11} and a reduction in the fatalities per capita rate by 1.5×10^{-7}. Similar reductions are forecast for fatal collisions per VMT (-2.0×10^{-11}) and fatal collisions per capita (-1.4×10^{-7}). With regards to injury collisions, MTC's Travel Model One forecasts 93 fewer annual traffic injuries as a result of these investments, primarily as a result of reduced VMT. This lower level of traffic injuries is equivalent to a reduction in the injury collision per VMT rate by 1.1×10^{-9} and a reduction in the injury collision per capita rate by -8.0×10^{-6}.

Forecasting transit fatalities is a challenging task – one not easily addressed by a regional travel demand model. Transit safety has a greater relationship to day-to-day operational conditions – operator training, a culture of safety, and low-cost investments to improve the safety of city streets and transit right-of-way. Although certain STIP investments may support greater levels of transit safety in the region, it was not possible to forecast these types of operational impacts for year 2035.

Mobility

As discussed earlier in this section, the state recommended mobility performance measures are not align well with the adopted goals of Plan Bay Area. As such, MTC opts out of reporting the impact of STIP investments for these specific measures.

Accessibility

While the projects funded with 2014 STIP dollars are expected to improve regional accessibility, they are not anticipated to increase the share of population living proximate to rail or bus service. Because the Bay Area's transit system is already quite robust, the new transit investments are primarily focused on increasing capacity and reducing travel times on key corridors. The two BART extensions are designed to replace existing express bus services in high-growth corridors, while the Central Subway and East Bay BRT projects will replace or enhance some of the region's most crowded bus services.

As discussed earlier in this section, the state recommended travel time accessibility performance measure does not align well with the adopted goals of Plan Bay Area. As such, MTC opts out of reporting the impact of STIP investments for this specific accessibility measure.

Reliability

As discussed earlier in this section, a subset of the state recommended reliability performance measures do not align well with the adopted goals of Plan Bay Area. As such, MTC opts out of reporting the impact of STIP investments for these specific measures.

In relation to the transit on-time performance measure, it is not possible to quantify on-time performance using MTC's regional activity-based travel model. While investments in regional transit systems are expected to improve service for riders, it is difficult to forecast operational success (or failure) for year 2035. Ongoing intelligent operations of such transit systems will be required to ensure on-time performance benchmarks are met.

Productivity/Throughput

The construction of expanded highway facilities is expected to result in trip diversion and induced demand on all four expansion corridors – SR-84, SR-4, I-680, and SR-1 – with all four corridors forecasted to experience at least 1,000 more vehicle trips each day in 2035. For most of the corridors, a relatively similar increase in person-trips is also anticipated as a result of low average vehicle occupancies on those corridors; an exception is I-680 in Walnut Creek where the HOV gap closure project is anticipated to result in significant growth in carpooling, leading to over 11,000 new person-trips each day in 2035. Because of inconsistencies in the definition of "peak period" between Caltrans highway count data and Travel Model One, it was not possible to forecast peak impacts for the identified highway facilities.

Similar to the slight improvements in air quality and collisions discussed above, regional daily VMT per capita is expected to decrease by 0.05 vehicle miles per day in year 2035 as a result of the 2014 STIP-funded projects. While some of the highway expansion projects increase total regional VMT, the significant investments in BART, Muni, and AC Transit help to encourage additional transit use in key locations across the region.

With regards to transit productivity measures such as passengers per VRM or VRH, mixed impacts are expected as a result of the transit investments funded in the 2014 STIP. While the investments are forecast to increase annual motor bus boardings by 1.8 million, light rail boardings by 2.6 million, and heavy rail boardings by 11.2 million, the productivity impacts range from slight reductions to slight increases, with many modes experiencing negligible impacts. The greatest benefits are expected for light rail and heavy rail productivity when measured on a per-VRH or per-capita basis as a result of significant investments for these specific transit modes.

System Preservation

Without detailed data from project sponsors on existing road and bridge conditions – and the potential improvements to those distressed facilities – it is not possible to forecast how these investments will affect regional system preservation metrics. While the construction of new facilities will improve pavement quality and asset condition, they will result in increased system preservation burdens for the region going forward.

Environmental Impact

Projects funded with 2014 STIP dollars are forecast to have generally positive impacts for regional air quality, reducing CO_2 emissions by 0.005 annual metric tons per capita and $PM_{2.5}$ emissions by 6.3×10^{-7} annual tons per capita in year 2035. While these reductions are quite small on a regional basis, they demonstrate that the package of projects funded with STIP dollars moves in the right direction in relation to critical sustainability goals on the state and regional levels.

Return on Investment/Lifecycle Cost

Leveraging MTC's open-source COBRA benefit-cost analysis tool, staff calculated the benefit-cost ratio of transportation projects using Travel Model One outputs. This approach is superior to the Cal-B/C tool as it simply requires project definitions and then relies on the regional travel model to forecast benefits to all travelers in the region using a consistent land use pattern. This avoids challenges associated with combining different sponsors' stated benefits, as each sponsor may use a different model with very different assumptions about regional growth patterns and transportation modal preferences. The quantified benefits from the model are then monetized using standardized values developed as part of a best practices literature review from Plan Bay Area's benefit-cost analysis, allowing for the calculation of a benefit-cost ratio for the package of projects funded with 2014 STIP dollars.

The combined benefit-cost ratio of the STIP investments was 1.3, meaning that the benefits of the investments exceed the costs by approximately 30%. The monetized STIP investment benefits are primarily the result of travel time savings (42%) and travel cost savings (44%), with remaining benefits from air quality & safety improvements, enhanced public health, and noise reduction (14% combined). Using the cost-effectiveness scale developed for Plan Bay Area, the package of STIP-funded investments would be rated as medium-low for cost-effectiveness.

Legend for State Performance Measure Investment Impact Tables	
	investments support goal
	investments have negligible impact
	investments adversely impact goal
	investment impact cannot be forecast

State Performance Measures – STIP Investment Impact on Safety
(1) Traffic Fatalities, (2) Fatal Collisions, (3) Injury Collisions, and (4) Transit Fatalities

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-1a	Fatalities per VMT	6.0×10^{-9}	-2.1×10^{-11}
CA-1b	Fatalities per capita	4.9×10^{-5}	-1.5×10^{-7}
CA-2a	Fatal collisions per VMT	5.8×10^{-9}	-2.0×10^{-11}
CA-2b	Fatal collisions per capita	4.8×10^{-5}	-1.4×10^{-7}
CA-3a	Injury collisions per VMT	4.7×10^{-7}	-1.1×10^{-9}
CA-3b	Injury collisions per capita	3.8×10^{-3}	-8.0×10^{-6}
CA-4a	Motor bus fatalities per PMT	1.3×10^{-9}	cannot be forecast
CA-4b	Trolley bus fatalities per PMT	1.0×10^{-8}	cannot be forecast
CA-4c	Cable car fatalities per PMT	no fatalities	cannot be forecast
CA-4d	Light rail fatalities per PMT	1.6×10^{-8}	cannot be forecast
CA-4e	Heavy rail fatalities per PMT	4.5×10^{-9}	cannot be forecast
CA-4f	Commuter rail fatalities per PMT	4.3×10^{-8}	cannot be forecast
CA-4g	Ferry fatalities per PMT	no fatalities	cannot be forecast
CA-4h	Paratransit fatalities per PMT	no fatalities	cannot be forecast

Fatality and Injury Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
VMT Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Population Forecast Source: *ABAG Projections/Plan Bay Area*

State Performance Measures – STIP Investment Impact on Mobility
(5) Delay, (6) Peak Travel Time, and (7) Non-Peak Travel Time

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-5	Annual passenger-hours of delay	inconsistent with adopted RTP/SCS	
CA-6	Average peak period travel time	inconsistent with adopted RTP/SCS	
CA-7	Average non-peak period travel time	inconsistent with adopted RTP/SCS	

As the performance measures listed above were inconsistent with the region's adopted RTP/SCS, data collection and impact forecasting were not required under the 2014 STIP guidelines.

State Performance Measures – STIP Investment Impact on Accessibility
(8) Population near Frequent Public Transit and (9) Travel Time to Jobs/School

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-8	Population share within ½ mile of rail or bus service	85.6%	negligible impact
CA-9	Average travel time to jobs or schools	inconsistent with adopted RTP/SCS	

As performance measure CA-9 listed above was inconsistent with the region's adopted RTP/SCS, data collection and impact forecasting were not required under the 2014 STIP guidelines.

State Performance Measures – STIP Investment Impact on Reliability
(10) Buffer Time, (11) VHD/capita, (12) Congested VMT/capita, and (13) Transit OTP

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-10	Buffer time index	inconsistent with adopted RTP/SCS	
CA-11	Daily VHD per capita	inconsistent with adopted RTP/SCS	
CA-12	Daily congested VMT per capita	inconsistent with adopted RTP/SCS	
CA-13	Transit on-time performance	data unavailable	cannot be forecast

As performance measures CA-10, CA-11, and CA-12 listed above were inconsistent with the region's adopted RTP/SCS, data collection and impact forecasting were not required under the 2014 STIP guidelines.

State Performance Measures – STIP Investment Impact on Productivity/Throughput
(14) Peak Period Vehicle Trips

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-14a	Average peak period vehicle trips (ALA-84)	1,550	cannot be forecast
CA-14b	Average peak period vehicle trips (CC-4)	6,330	cannot be forecast
CA-14c	Average peak period vehicle trips (CC-680)	13,800	cannot be forecast
CA-14d	Average peak period vehicle trips (SM-1)	3,900	cannot be forecast

Peak-Hour Trips Forecasting Note: *Because the baseline data reflect peak hour volumes, and MTC's Travel Model One outputs AM and PM 4-hour weekday peak period volumes, it is not possible to provide an "apples to apples" comparison.*

State Performance Measures – STIP Investment Impact on Productivity/Throughput (cont'd)
(15) Daily Vehicle Trips, (16) VMT/capita, (17) Peak Period Person Trips & (18) Daily Person Trips

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-15a	Average daily vehicle trips (ALA-84)	18,600	+1,100
CA-15b	Average daily vehicle trips (CC-4)	79,000	+4,200
CA-15c	Average daily vehicle trips (CC-680)	178,000	+1,100
CA-15d	Average daily vehicle trips (SM-1)	46,500	+1,300
CA-16	Daily VMT per capita	22.6	-0.05
CA-17a	Average peak period person trips (ALA-84)	data unavailable	cannot be forecast
CA-17b	Average peak period person trips (CC-4)	data unavailable	cannot be forecast
CA-17c	Average peak period person trips (CC-680)	data unavailable	cannot be forecast
CA-17d	Average peak period person trips (SM-1)	data unavailable	cannot be forecast
CA-18a	Average daily person trips (ALA-84)	data unavailable	+1,200
CA-18b	Average daily person trips (CC-4)	data unavailable	+3,700
CA-18c	Average daily person trips (CC-680)	data unavailable	+11,300
CA-18d	Average daily person trips (SM-1)	data unavailable	+1,700

Daily Vehicle Trips & Person Trips Forecast Source: *Travel Model One*
VMT Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Population Forecast Source: *ABAG Projections/Plan Bay Area*

Peak-Hour Trips Forecasting Note: *Because the baseline data reflect peak hour volumes, and MTC's Travel Model One outputs AM and PM 4-hour weekday peak period volumes, it is not possible to provide an "apples to apples" comparison.*

State Performance Measures – STIP Investment Impact on Productivity/Throughput (cont'd)
(19) Truck Share and (20) Truck Trips

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-19a	Share of 5+ axle trucks (ALA-84)	data unavailable	+0.02%
CA-19b	Share of 5+ axle trucks (CC-4)	1.5%	0.00%
CA-19c	Share of 5+ axle trucks (CC-680)	2.6%	0.00%
CA-19d	Share of 5+ axle trucks (SM-1)	0.3%	0.00%
CA-20a	Average daily 5+ axle truck trips (ALA-84)	data unavailable	+20
CA-20b	Average daily 5+ axle truck trips (CC-4)	1,180	+20
CA-20c	Average daily 5+ axle truck trips (CC-680)	3,910	+10
CA-20d	Average daily 5+ axle truck trips (SM-1)	140	negligible impact

Daily Truck Trips Forecast Source: *Travel Model One*

State Performance Measures – STIP Investment Impact on Productivity/Throughput (cont'd) (21) Passengers/VRM, (22) Passengers/VRH, (23) Passengers/TM, and (24) Passengers/capita			
PM ID	**Performance Measure**	**Baseline (Observed)**	**2014 STIP Impact (2035 Model)**
CA-21a	Motor bus passengers/VRM	3.0	0.0
CA-21b	Trolley bus passengers/VRM	11.1	+0.1
CA-21c	Cable car passengers/VRM	24.5	-0.3
CA-21d	Light rail passengers/VRM	6.9	0.0
CA-21e	Heavy/commuter rail pass./VRM	1.8	0.0
CA-21f	Ferry passengers/VRM	6.9	0.0
CA-21g	Paratransit passengers/VRM	0.2	negligible impact
CA-22a	Motor bus passengers/VRH	34.3	+0.1
CA-22b	Trolley bus passengers/VRH	72.2	+0.4
CA-22c	Cable car passengers/VRH	48.2	-0.6
CA-22d	Light rail passengers/VRH	74.9	+1.2
CA-22e	Heavy/commuter rail pass./VRH	63.0	+1.8
CA-22f	Ferry passengers/VRH	118.9	-0.7
CA-22g	Paratransit passengers/VRH	2.4	negligible impact
CA-23	Intercity rail passenger-miles per train-mile	data unavailable	negligible impact
CA-24a	Motor bus passengers/capita	30.0	+0.2
CA-24b	Trolley bus passengers/capita	9.2	0.0
CA-24c	Cable car passengers/capita	1.0	0.0
CA-24d	Light rail passengers/capita	8.5	+0.3
CA-24e	Heavy/commuter rail pass./capita	17.3	+1.3
CA-24f	Ferry passengers/capita	0.5	0.0
CA-24g	Paratransit passengers/capita	0.6	negligible impact

Transit Passengers Forecast Source: *Travel Model One/QuickBoards*
Vehicle Revenue Mile Forecast Source: *Travel Model One*
Vehicle Revenue Hour Forecast Source: *Travel Model One*
Population Forecast Source: *ABAG Projections/Plan Bay Area*

Paratransit Passengers Forecasting Note: *MTC's Travel Model One does not simulate paratransit trips, as they represent a very small fraction of overall regional trip-making. However, given that none of the investments directly fund paratransit services, the STIP investments' impact on paratransit would likely be negligible.*

Intercity Rail Passenger-Miles Forecasting Note: *MTC's Travel Model One does not simulate long-distance trains such as the Coast Starlight or California Zephyr, similar to how air travel is not simulated in the regional travel model. However, given that none of the investments directly fund intercity rail services, the STIP investments' impact on intercity rail productivity would likely be negligible.*

State Performance Measures – STIP Investment Impact on System Preservation
(25/26) Distressed Lane-Miles, (27) IRI Shares, and (28) Deficient Bridges

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-25	Distressed lane-miles	1,710	cannot be forecast
CA-26	Share of distressed lane-miles	29%	cannot be forecast
CA-27a	Share of lane-miles with IRI 1-94	27%	cannot be forecast
CA-27b	Share of lane-miles with IRI 95-170	49%	cannot be forecast
CA-27c	Share of lane-miles with IRI >170	24%	cannot be forecast
CA-28a	Share of highway bridges in need of repair	14%	cannot be forecast
CA-28b	Share of highway bridge deck area in need of repair	16%	cannot be forecast

State Performance Measures – STIP Investment Impact on Environmental Impact
(29) GHG/capita and (30) Criteria Pollutants/capita

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-29	Metric tons of CO_2 emissions per capita	data unavailable	-0.005
CA-30a	Tons of CO emissions per capita	data unavailable	**
CA-30b	Tons of lead emissions per capita	data unavailable	**
CA-30c	Tons of NO_x emissions per capita	data unavailable	-2.0×10^{-7}
CA-30d	Tons of O_3 emissions per capita	data unavailable	**
CA-30e	Tons of $PM_{2.5}$ emissions per capita	data unavailable	-6.3×10^{-7}
CA-30f	Tons of PM_{10} emissions per capita	data unavailable	**
CA-30g	Tons of SO_2 emissions per capita	data unavailable	$+6.2 \times 10^{-10}$

Greenhouse Gas Emissions Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Criteria Pollutant Emissions Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Population Forecast Source: *ABAG Projections/Plan Bay Area*

Particulate Matter Forecasting Note: *particulate matter reductions do not include entrained road dust due to its less definitive impacts on public health.*

*** = Due to time and staffing limitations, it was not possible to conduct full EMFAC model runs for each of the model scenarios; as such, MTC staff had to rely upon the COBRA air quality impact data which focuses on a narrower selection of key pollutants. Therefore, a handful of emission impacts could not be forecasted for projects funded using 2014 STIP dollars; future STIP performance assessments could incorporate these full EMFAC runs to provide significantly more detail on air quality impacts, including breakdowns by vehicle class.*

State Performance Measures – STIP Investment Impact on Return on Investment
(31) Rate of Return

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
CA-32	Rate of return	not measurable	B/C of 1.3

Benefit-Cost Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*

Benefit-Cost Analysis Note: *Annualized costs for year 2035 were used to calculate the benefit-cost ratio; costs reflected the combined cost of projects (rather than the STIP funding amount) as the analysis reports the total benefits of implementing the projects.*

PART B – REGIONAL PERFORMANCE MEASURES

Plan Bay Area, MTC's most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), was developed through a performance-based planning process that emphasized evaluation of scenarios and projects against a set of ten performance measures, each linked to a numeric target. As the goals and measures included in Plan Bay Area differ substantially from the state performance measures, MTC has opted to participate in the optional Part B element of the STIP performance reporting process. This section will address how the STIP investments support the regional performance objectives by examining baseline conditions and evaluating the impact of the investments included in the 2014 STIP.

Regional Performance Measures: Overall Approach

For each of the regional performance indicators, MTC staff conducted the following process to identify baseline data and to calculate the impact of the investments funded with 2014 STIP dollars:

1. **Identify an appropriate monitoring measure.**
   The performance measures for Plan Bay Area were established for scenario planning purposes and emphasized measures that could be forecast using Travel Model One or UrbanSim (the regional land use model). However, these measures do not exactly correlate with available monitoring data, thus slight changes were necessary to establish a baseline using monitoring data. For each measure, MTC staff worked to identify a corresponding monitoring measure that addresses the primary goal and concept of the associated planning measure; each monitoring measure needed to have a data source that is regularly updated and captures conditions on the ground (rather than in a model). When appropriate monitoring data could not be found, the monitoring measure was aligned to maximize staff's ability to report STIP investment impact instead. The table shown on the following page highlights the correspondence between planning and monitoring measures for Plan Bay Area – as used to evaluate the 2014 STIP investments.

2. **Identify appropriate data source(s) for baseline performance monitoring.**
   Staff reviewed available data sources and sought to find appropriate monitoring reports or tools for each; if sufficient and high-quality data were not identified, staff identified challenges in procuring monitoring data requested by the state. Data sources needed to collect and aggregate real-world (i.e. not model-based), high-quality monitoring data. Furthermore, the data source needed to demonstrate a continuous cycle of updates on a regular basis (ideally annually) that will allow for consistent sources and methodologies to be used for future STIP performance reports over the coming decade.

3. **If needed, perform data analysis to calculate baseline using monitoring data source(s).**

Converting Plan Bay Area Performance Targets to Monitoring Indicators			
Target ID	**Planning Measure**	**PM ID**	**Monitoring Measure**
1	Per-capita CO_2 emissions from cars & light trucks	**PBA-1**	Per-capita CO_2 emissions from vehicles
2	Share of projected growth placed in housing	**PBA-2a** **PBA-2b**	Housing units constructed
3a	Premature deaths from fine particulate emissions	**PBA-3a**	Fine particulate emissions from vehicles
3b	Coarse particulate emissions	**PBA-3b**	Coarse particulate emissions from vehicles
3c	CARE community particulate emissions	**PBA-3c**	Share of vehicle particulate emissions in CARE communities
4	Injuries and fatalities from collisions	**PBA-4a** **PBA-4b**	Injuries and fatalities from collisions
5	Average time spent walking and biking for transportation	**PBA-5**	Share of adults that are physically active
6	Share of new development within urban footprint	**PBA-6**	Acres converted to urbanized land
7	Share of lower-income households' income consumed by transportation & housing	**PBA-7**	Share of households living in affordable neighborhoods
8	Gross regional product	**PBA-8**	Gross regional product
9a	VMT per capita	**PBA-9a**	VMT per capita
9b	Non-auto mode share	**PBA-9b**	Non-auto commute mode share
10a	Pavement condition index	**PBA-10a**	Pavement condition index
10b	Share of distressed lane-miles	**PBA-10b**	Share of distressed lane-miles
10c	Share of transit assets past useful life	**PBA-10c**	Share of transit assets past useful life

4. **Request appropriate project modeling details from project sponsors.**
   In order to forecast the impacts of investments funded with 2014 STIP funds, staff required additional data from project sponsors – specifically with regards to specific capacity improvements – to incorporate the projects into Travel Model One (the region's activity-based travel demand model). This allows MTC to ensure that project impacts are being forecast in a consistent manner, rather than simply aggregating benefits forecast separately by sponsors.

5. **Run regional travel demand model for baseline 2035 and STIP program 2035 conditions.**
   As the 2014 STIP guidelines requested an estimate of project impacts for a 20-year horizon, Travel Model One was run for year 2035 using baseline (no project) and 2014 STIP (project)

conditions. The "project" run incorporates coding for all of the capacity-increasing projects funded in the 2014 STIP, even if the projects are only partially funded with STIP dollars. (The list of capacity-increasing projects can be found on page 6 of this report.) While these projects represent a subset of STIP-funded investments, capacity-increasing projects represent the highest-cost and most significant investments that will generate the greatest regional impacts.

6. **Calculate impacts of STIP investments by comparing the baseline and project runs; alternatively, assess qualitative impacts for non-model-based performance measures.**
   By comparing baseline model run and 2014 STIP model run outputs for relevant performance measures, the quantified impacts of STIP-funded projects were calculated. Note that some performance measures cannot be directly forecast in the regional travel demand model; for these measures, MTC staff evaluated the project impact qualitatively to highlight potential benefits and potential adverse impacts of the projects included in the 2014 STIP.

Regional Performance Measures: Baseline Performance

Similar to the state performance measures, MTC staff first evaluated existing conditions to establish baseline performance results before examining the impact of STIP-funded projects in affecting each of those measures. The following sections highlight key findings of this baseline analysis for the seven goals and 10 performance measures; this overview is followed by data tables which break down the performance measure results on a more detailed level.

Climate Protection

Climate change is a critical issue for the San Francisco Bay Area – its effects will be felt on not just globally but also on a local level, with shoreline development and transportation infrastructure at risk of sea level rise. While baseline monitoring data on tailpipe GHG emissions is not available for the region, significant emission inventory information has supported the development of GHG forecasts for future years. The integrated land use pattern and transportation investment package in Plan Bay Area will allow the region to surpass its per-capita greenhouse gas reduction target of 15% by year 2035.

Adequate Housing

The San Francisco Bay Area is known for its high cost of living, in particular due to the lack of housing production for all income levels; Plan Bay Area established housing production as a performance measure to ensure that the Plan provided sufficient housing for expected population growth per the requirements of Senate Bill 375. Over the past two years, the Bay Area has produced nearly 17,700 housing units and housing production appears to be accelerating. It is important to note that these figures do not differentiate between housing and affordable housing, an issue which is more directly addressed under Equitable Access on the following page.

While Santa Clara, Contra Costa, and Alameda counties produced significant numbers of units in both 2011 and 2012, San Francisco development became particularly significant in 2012 as housing

production quadrupled. North Bay counties, as well as suburban San Mateo County, continue to produce limited numbers of housing units as growth focuses in the urban core of the San Francisco Bay Area.

Healthy & Safe Communities

Particulate matter has been demonstrated to lead to significant health impacts near major emission sources, including many of the region's major highways. While direct PM emissions from vehicles are difficult to monitor, the Bay Area Air Quality Management District operates PM sensors in key "hotspots" across the region to detect concentrations of particulates in the air. Due to the monitoring emphasis on ambient concentrations instead of tailpipe emissions, baseline data cannot be provided for the particulate matter performance measures. However, BAAQMD concentration sensors have shown a continuous improvement in particulate emissions over the past decade due to improved vehicle technologies and greater air quality regulations.

As discussed in Part A, injuries from collisions continue to be the primary safety threat on the region's roads with over 36,000 Bay Area residents injured each year. 355 residents are killed each year on the region's road network at a rate of almost one person each day. While Santa Clara and Alameda counties experience the most fatalities and injuries from collisions, this is primarily due to their large population size; a more appropriate analysis on a per-VMT and per-capita basis is provided in Part A.

Physical activity was also recognized as an important co-benefit from walking and bicycling in Plan Bay Area. As of 2009, 29% of Bay Area adults were engaged in at least 30 minutes of physical activity five day of the week. Development of non-motorized transportation facilities contributes to the significant share of residents who are staying active and reducing their future healthcare costs.

Open Space & Agricultural Preservation

While the region continues to focus on infill development as the primary strategy for accommodating millions of future residents, greenfield development remains a component of residential and commercial development in the region. In 2008 – the latest year for which regional data is available – 5,500 acres were converted to urbanized land, including some agricultural lands. 43% of the region's greenfield development occurred in just one county – Contra Costa – due to continued suburban and exurban development along the State Highway 4 corridor. In contrast to Contra Costa, San Mateo and Marin Counties experienced minimal greenfield development in the mid-2000s due to their strict protection of existing open space.

Equitable Access

As discussed earlier, the San Francisco Bay Area is an expensive place to live, especially when considering the combined cost of housing and transportation. Given the region's strong emphasis on social equity, Plan Bay Area considered how various land use patterns and transportation investments might affect the region's affordability. As of 2011, only 41% of households lived in affordable neighborhoods, defined by the Center for Neighborhood Technology as locations where a household earning a median income spends no more than 45% of total income on housing and transportation. Housing affordability remains a vexing challenge for the region moving forward.

Economic Vitality

The gross regional product in 2012 – totaling $577 billion – signifies the strength of the San Francisco Bay Area in creating jobs and generating economic output. Much of that growth is occurring in the San Francisco-Oakland-Hayward MSA, which generated $360 billion in output, as well as the San Jose-Sunnyvale-Santa Clara MSA, which generated $174 billion in output. These results highlight the robust economic recovery the region has experienced, particularly in the urban centers of San Francisco, Oakland, and Silicon Valley.

Transportation System Effectiveness

Miles driven by Bay Area residents vary widely across the region as a result of land use patterns and transportation options. Many of the Bay Area's core counties – Santa Clara, Alameda, San Mateo, and Marin – often have long auto commutes to suburban job centers in neighboring counties, resulting in below-average performance in these locations. Several outlying counties, including Contra Costa, Napa, and Sonoma counties, feature moderate-size job centers within their own counties and thus have shorter auto commutes. While the regional average VMT per capita was approximately 23 miles in 2011, San Francisco's robust multimodal options led to its residents only driving 10 miles per day, in contrast to nearby Marin where residents drive 31 vehicles miles daily.

Non-auto mode share also varies widely across counties; in 2012, 18% of commute trips were made by public transit, walking, or bicycling. Both San Francisco (53%) and Alameda (22%) counties performed above average – thanks to the heavy-rail BART system, robust local bus services, and non-motorized facilities on arterials and local streets. Several North Bay counties, including Solano, Napa, and Sonoma, performed more poorly on this measure; Santa Clara County, one of the region's core urban counties also struggled to attract individuals out of their cars, only achieving a 9% non-auto mode share.

State of good repair remains a top priority for the region, given aging assets across modal categories. Local pavement condition remains in fair condition, scoring a pavement condition index rating of 66 in 2012; PCI has remained relatively steady over the past few years despite increasing emphasis on preserving streets and roads. State highways continue to decline in pavement quality, with over a quarter of all lane-miles in the Bay Area rated as distressed by Caltrans. Finally, nearly 13% of all transit assets as of 2012 were past their FTA-specified useful life, resulting in a significant backlog of transit maintenance and replacement. The rapidly aging set of transit vehicles and infrastructure continues a trend of growing backlogs in a funding-constrained environment.

Regional Performance Measures – Climate Protection (1) GHG/capita				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
PBA-1	**Per-capita metric tons of CO_2 emissions from vehicles**	***regional monitoring data unavailable***		

For performance measure PBA-1, it is not possible to directly monitor GHG emissions or determine their origin (mobile or non-mobile source). Instead, air quality monitoring for the region is typically expressed in terms of concentrations in the region's air, which is continually tracked by BAAQMD. While "inventories" of emissions are developed as part of the EMFAC air quality model, these are not directly monitored and are not consistent with the policy of establishing baseline performance using real-world data. Furthermore, GHG inventories developed by the Air District have not been updated on a consistent basis, making them difficult to use in ongoing monitoring/reporting.

Regional Performance Measures – Adequate Housing (2) Housing Production				
PM ID	**Performance Measure**	**Geography**	**Year**	**Baseline**
PBA-2a	**Housing units constructed**	**Region**	**2011**	**8,544**
1	Housing units constructed	Santa Clara	2011	3,605
2	Housing units constructed	Contra Costa	2011	1,436
3	Housing units constructed	Alameda	2011	1,322
4	Housing units constructed	San Mateo	2011	720
5	Housing units constructed	Sonoma	2011	525
6	Housing units constructed	Solano	2011	420
7	Housing units constructed	San Francisco	2011	299
8	Housing units constructed	Marin	2011	110
9	Housing units constructed	Napa	2011	107
PBA-2b	**Housing units constructed**	**Region**	**2012**	**9,144**
1	Housing units constructed	Santa Clara	2012	2,698
2	Housing units constructed	Alameda	2012	2,425
3	Housing units constructed	San Francisco	2012	1,279
4	Housing units constructed	Contra Costa	2012	1,229
5	Housing units constructed	Sonoma	2012	502
6	Housing units constructed	Solano	2012	499
7	Housing units constructed	San Mateo	2012	319
8	Housing units constructed	Marin	2012	106
9	Housing units constructed	Napa	2012	87

Housing Production Data Source: *2011 and 2012 California Department of Finance (DOF) E-5 County Housing Estimates; data extracted from Table 1 (total housing unit production); updated on an annual basis*
http://www.dof.ca.gov/Research/demographic/reports/estimates/e-5/2011-20/view.php

Regional Performance Measures – Healthy & Safe Communities
(3) Particulate Matter and (4) Traffic Fatalities/Injuries

PM ID	Performance Measure	Geography	Year	Baseline
PBA-3a	**Tons of fine particulate emissions from vehicles**	***regional monitoring data unavailable***		
PBA-3b	**Tons of coarse particulate emissions from vehicles**	***regional monitoring data unavailable***		
PBA-3c	**Share of vehicle particulate emissions in CARE communities**	***regional monitoring data unavailable***		
PBA-4a	**Annual traffic fatalities**	**Region**	**2011**	**355**
1	Annual traffic fatalities	Santa Clara	2011	92
2	Annual traffic fatalities	Alameda	2011	59
3	Annual traffic fatalities	Contra Costa	2011	51
4	Annual traffic fatalities	San Mateo	2011	47
5	Annual traffic fatalities	San Francisco	2011	33
6	Annual traffic fatalities	Solano	2011	30
7	Annual traffic fatalities	Sonoma	2011	29
8	Annual traffic fatalities	Napa	2011	8
9	Annual traffic fatalities	Marin	2011	6
PBA-4b	**Annual traffic injuries**	**Region**	**2011**	**36,651**
1	Annual traffic injuries	Santa Clara	2011	8,997
2	Annual traffic injuries	Alameda	2011	8,206
3	Annual traffic injuries	San Francisco	2011	4,663
4	Annual traffic injuries	Contra Costa	2011	4,105
5	Annual traffic injuries	San Mateo	2011	3,376
6	Annual traffic injuries	Sonoma	2011	2,811
7	Annual traffic injuries	Solano	2011	2,233
8	Annual traffic injuries	Marin	2011	1,375
9	Annual traffic injuries	Napa	2011	885

For performance measure PBA-3a through PBA-3c, it is not possible to directly monitor PM emissions or determine their origin (mobile or non-mobile source). Instead, air quality monitoring for the region is typically expressed in terms of concentrations in the region's air, which is continually tracked by BAAQMD; PM monitoring is traditionally focused on "hotspots" of high concentration. While "inventories" of emissions are developed as part of the EMFAC air quality model, these are not directly monitored and are not consistent with the policy of establishing baseline performance using real-world data.

Fatality Data Source: *2011 Statewide Integrated Traffic Records System (SWITRS); summarized using UC Berkeley SafeTREC's Transportation Injury Mapping System (TIMS); updated on an annual basis*
http://tims.berkeley.edu/tools/query

Injury Data Source: *2011 Statewide Integrated Traffic Records System (SWITRS); summarized using UC Berkeley SafeTREC's Transportation Injury Mapping System (TIMS); updated on an annual basis*
http://tims.berkeley.edu/tools/query

Regional Performance Measures – Healthy & Safe Communities (continued)
(5) Physical Activity

PM ID	Performance Measure	Geography	Year	Baseline
PBA-5	**Share of adults that are physically active**	**Region**	**2009**	**29%**

Physical Activity Data Source: *UCLA California Health Interview Survey (CHIS) physical activity dataset; physical activity defined as 30 minutes per day/5 days per week; includes walking and biking for transportation; latest survey with detailed physical activity questions from 2009 – physical activity data collected every 4 years*
http://tims.berkeley.edu/tools/query

Regional Performance Measures – Open Space & Agricultural Preservation
(6) Greenfield Development

PM ID	Performance Measure	Geography	Year	Baseline
PBA-6	**Acres converted to urbanized land**	**Region**	**2008**	**5,500**
1	Acres converted to urbanized land	Contra Costa	2008	2,371
2	Acres converted to urbanized land	Alameda	2008	644
3	Acres converted to urbanized land	Santa Clara	2008	640
4	Acres converted to urbanized land	Solano	2008	529
5	Acres converted to urbanized land	Napa	2008	512
6	Acres converted to urbanized land	Sonoma	2008	511
7	Acres converted to urbanized land	San Mateo	2008	181
8	Acres converted to urbanized land	Marin	2008	112
9	Acres converted to urbanized land	San Francisco	2008	0

Urbanized Land Conversion Data Source: *2008 California Department of Conservation's Farmland Mapping and Monitoring Program (FMPP); acreage reflects urbanization trends between 2006 and 2008; data extracted from Table C-1 (Sources of Urban Land); data typically updated on a biannual basis*
http://www.consrv.ca.gov/DLRP/fmmp/product_page.asp

Urbanized Land Conversion Analysis Note: *San Francisco County was not included in the FMPP dataset as it has been fully urbanized for decades; thus, the urban conversion was assumed to be zero.*

Regional Performance Measures – Equitable Access
(7) H+T Affordability

PM ID	Performance Measure	Geography	Year	Baseline
PBA-7	**Share of households living in affordable neighborhoods**	**Region**	**2011**	**40.7%**

Housing + Transportation (H+T) Affordability Data Source: *2011 Center for Neighborhood Technology (CNT) Affordability Index for metropolitan areas; typical family assumed to earn 80% of average regional median income; "affordable neighborhood" defined as a location where H+T expenditures are no greater than 45% of household income; data updated on a biannual basis*
http://htaindex.cnt.org/map/

Regional Performance Measures – Economic Vitality
(8) Gross Regional Product

PM ID	Performance Measure	Geography	Year	Baseline
PBA-8	**Gross regional product**	**Region**	**2012**	**$577 billion**
1	Gross regional product	San Francisco-Oakland-Hayward MSA	2012	$360 billion
2	Gross regional product	San Jose-Sunnyvale-Santa Clara MSA	2012	$174 billion
3	Gross regional product	Santa Rosa MSA	2012	$20 billion
4	Gross regional product	Vallejo-Fairfield MSA	2012	$15 billion
5	Gross regional product	Napa MSA	2012	$7 billion

Gross Regional Product (GRP) Data Source: *2012 Bureau of Economic Analysis (BEA) Metropolitan Statistical Area (MSA) Summary; approximate GRP calculated by summing five constituent regional MSAs (San Francisco-Oakland-Hayward MSA; San Jose-Sunnyvale-Santa Clara MSA; Santa Rosa MSA; Vallejo-Fairfield MSA; Napa MSA); updated annually*
http://www.bea.gov/regional/index.htm

GRP Analysis Note: *San Jose-Sunnyvale-Santa Clara MSA includes rural San Benito County to the south; due to the county's small population and limited economic output, this discrepancy with the 9-county San Francisco Bay Area did not result in an adjustment to the regional GRP. All other MSAs align exactly with MTC's Bay Area jurisdiction.*

Regional Performance Measures – Transportation System Effectiveness
(9) VMT per capita and Non-Auto Mode Share

PM ID	Performance Measure	Geography	Year	Baseline
PBA-9a	**Daily VMT per capita**	**Region**	**2011**	**22.6**
1	Daily VMT per capita	San Francisco	2011	10.4
2	Daily VMT per capita	Contra Costa	2011	21.5
3	Daily VMT per capita	Napa	2011	21.8
4	Daily VMT per capita	Sonoma	2011	22.6
5	Daily VMT per capita	Santa Clara	2011	22.9
6	Daily VMT per capita	Alameda	2011	24.0
7	Daily VMT per capita	San Mateo	2011	26.7
8	Daily VMT per capita	Solano	2011	30.2
9	Daily VMT per capita	Marin	2011	31.1
PBA-9b	**Non-auto commute mode share**	**Region**	**2012**	**18%**
1	Non-auto commute mode share	San Francisco	2012	53%
2	Non-auto commute mode share	Alameda	2012	22%
3	Non-auto commute mode share	Marin	2012	16%
4	Non-auto commute mode share	San Mateo	2012	15%
5	Non-auto commute mode share	Contra Costa	2012	14%
6	Non-auto commute mode share	Santa Clara	2012	9%
7	Non-auto commute mode share	Sonoma	2012	8%
8	Non-auto commute mode share	Napa	2012	7%
9	Non-auto commute mode share	Solano	2012	6%

Vehicle Miles Traveled (VMT) Data Source: *2011 Caltrans Highway Performance Monitoring System (HPMS); procured from Table 6's county VMT breakdown; updated on an annual basis*
http://www.dot.ca.gov/hq/tsip/hpms/hpmslibrary/prd/2011prd/2011prd.pdf

Raw Population and Group Quarters Population Data Source: *2011 American Community Survey 1-Year Estimate (Table B01003: Total Population; Table B26001: Group Quarters Population); updated on an annual basis*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Group Quarters Population Adjustment Data Source: *2010 Census Summary File 1; updated on a decennial basis*

Non-Auto Commute Mode Share Data Source: *2012 American Community Survey (1-Year Estimate); county-level data aggregated to regional level; Table S0801: Commuting Characteristics by Sex; non-auto modes include transit, walk, bike, and other (as defined by the U.S. Census Bureau)*
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Adjusted Population Calculation Note: *Raw population data was adjusted according to the population approach detailed in the SGC statewide performance indicators report. By removing the institutional group quarters population (relying upon the share in the 2010 Census Summary File 1), per-capita metrics are appropriately capturing solely the mobile segment of the population.*

Regional Performance Measures – Transportation System Effectiveness (continued)
(10) Asset Conditions for Local Streets, State Highways, and Transit Assets

PM ID	Performance Measure	Geography	Year	Baseline
PBA-10a	Pavement condition index for local streets and roads	Region	2012	66
PBA-10b	Share of distressed state highway lane-miles	Region	2011	28.7%
PBA-10c	Share of transit assets past useful life	Region	2012	12.8%

Pavement Condition Index (PCI) Data Source: *2012 MTC Pavement Condition Report; all lane-miles of local streets & roads are weighted equally to calculate regional index; updated on an annual basis*
http://www.mtc.ca.gov/news/press_releases/rel624.htm

Distressed Lane-Miles Data Source: *2011 Caltrans State of the Pavement Report; extracted from District 4 (Bay Area) results in Appendices 2 & 3; only incorporates data from State Highway System (SHS); updated on an annual basis*
http://www.dot.ca.gov/hq/maint/Pavement/Pavement_Program/PDF/2011_SOP.pdf

Transit Asset Condition Data Source: *2012 MTC Regional Transit Inventory; assets are weighted based on replacement value; updated on an biannual basis*

Regional Performance Measures: STIP Investment Impacts

Climate Protection

Progress towards meeting the Climate Protection goal is measured by examining the emissions levels of greenhouse gas from vehicles – with an objective of supporting Senate Bill 375's aim to reduce emissions to curb the impacts of climate change.

The projects funded in the 2014 STIP are forecasted to have a net positive effect in terms of reducing carbon dioxide emissions from mobile sources, resulting in 0.005 fewer metric tons of annual per-capita emissions. While this impact is relatively small on a regional basis, it does highlight that the package of projects funded with STIP dollars support state and regional goals to reduce emissions; these reductions are primarily a result of the Bay Area STIP funding going towards several major transit expansion projects (e.g. BART to San Jose, Central Subway) that are expected to reduce overall levels of driving.

Adequate Housing

Progress towards meeting the Adequate Housing goal is measured by growth in housing production in the region. Increasing housing opportunities for all income levels would be expected to reduce the impacts associated with the region's housing affordability crisis and high cost of living.

The investments included in the 2014 STIP are expected to have a negligible impact on overall regional housing production. However, the set of projects funded with 2014 STIP dollars may have slight impacts on the distribution of the region's housing production. For example, STIP funding provides a small share of total dollars for the Central Subway project, which may stimulate additional residential growth in the South of Market neighborhood of San Francisco. Similarly, freeway improvements on Interstate 680 and State Highway 84 will support additional residential growth in outlying communities. While it is unlikely that a net increase in regional housing production will occur as a result of STIP dollars, the funding will help to support housing production in the vicinity of the funded transportation projects.

Healthy & Safe Communities

Progress towards meeting the Healthy & Safe Communities goal is measured by regional emissions of particulate matter, fatalities and injuries on the region's roads, and overall physical activity. All of these measures are directly connected to adverse health outcomes (including loss of life) that can be mitigated through cleaner fuels & vehicles, less driving, safer street design, and more active transportation.

The investments funded with 2014 STIP dollars are expected to support all three of these goals. 5.5 tons of particulate matter emissions are expected to be eliminated in year 2035 as a result of these investments, while at the same time the reduced VMT resulting from the STIP investments will save one life per year. In terms of physical activity, the greater utilization of public transit will support more active transportation and grow the share of physically active adults by 0.1%.

Open Space & Agricultural Preservation

Progress towards meeting the Open Space & Agricultural Preservation goal is measured by examining urbanization of existing rural, agricultural, and natural resource lands. Minimizing the size of the region's urbanized area is expected to reduce environmental impacts associated with growth, support a focused growth strategy, and encourage use of alternative modes of transportation.

Unfortunately, a significant number of the projects funded in the region's 2014 STIP have the potential to encourage growth at the region's periphery, putting pressure on rural and agricultural lands to convert to urban or suburban uses. These highway or arterial expansion projects support low-density land uses, enabling their development by reducing travel times and easing traffic congestion. While it is not possible to quantify these impacts without running the regional land use development model (UrbanSim), this potential for urbanization should be recognized as a weakness in the 2014 STIP investment package.

Equitable Access

Progress towards meeting the Equitable Access goal is measured by the affordability of housing and transportation in the region. High costs for both housing and transportation have made the region a difficult place for low-income and lower-middle-income families to make ends meet. By encouraging land use patterns and investing in transportation solutions to drive down the combined H+T burden, the region would become a more equitable place for all households.

While this issue cannot be examined directly through the travel model, it can be examined qualitatively. As noted under Adequate Housing above, the 2014 STIP investments may results in marginal changes in housing location choices (and subsequently transportation choices). While some of these changes may result in more households living in affordable areas, and vice versa, the net effect is likely to be marginal as none of the investments directly targets the region's affordability challenges.

Economic Vitality

Progress towards meeting the Economic Vitality goal is measured by the gross regional product – effectively, the total economic output of the region. Increased output would be expected to result in greater economic success and opportunities for Bay Area residents and companies.

While each of the transportation projects would be expected to generate short-term jobs and economic activity, these impacts would be expected to be negligible when compared to the total output of the region today. While the projects may increase accessibility and result in the easier movement for people and goods, any long-term effects from this short list of projects would again likely be negligible.

Transportation System Effectiveness

Progress towards meeting the Transportation System Effectiveness goal is measured by usage of non-auto modes, per-capita levels of driving, and overall infrastructure conditions. While the Bay

Area's robust transit system has resulted in significant trip-making by transit, walking, and bicycling, the majority of residents continue to drive – often long distances – on a daily basis. Plan Bay Area emphasizes providing alternatives to the auto, while at the same time encouraging a focused land use pattern to reduce driving distances for those residents who continue to choose to drive. Another challenge for the region is its aging infrastructure; as one of the first regions in California to develop, many roads, rails, and transit vehicles are rapidly approaching (or have already surpassed) their useful lives. This has resulted in the vast majority of funding prioritized to "Fix It First", rather than expanding existing systems.

The transportation projects funded with 2014 STIP dollars have a net positive effect in reducing vehicle miles traveled per capita. In 2035, the projects funded lead to 0.05 fewer daily miles driven per Bay Area resident (compared to a 2035 baseline scenario). While some of the highway expansion projects increase total regional VMT, the significant investments in BART, Muni, and AC Transit help to encourage additional transit use in key locations across the region, mitigating those effects.

While the commute mode share measure used for baseline purposes cannot be compared "apples to apples" with travel model output, it is possible to examine overall trip-making using Travel Model One. The set of projects funded with STIP dollars would slightly increase non-auto mode share by 0.2%, primarily through the construction of new transit investments that shift travelers from automobiles to high-capacity transit vehicles.

Negligible benefits are expected for the region's infrastructure condition measures; while all of the investments would be expected to improve pavement and transit asset conditions, the scale of these improvements is quite small compared to the overall existing system. Further discussion of system preservation impacts of the STIP investment package can be found in Part A.

Legend for Regional Performance Measure Investment Impact Tables	
	investments support goal
	investments have negligible impact
	investments adversely impact goal
	investment impact cannot be forecast

Regional Performance Measures – STIP Investment Impact on Climate Protection
(1) GHG/capita

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-1	Per-capita metric tons of CO_2 emissions from vehicles	data unavailable	-0.005

Carbon Dioxide Emissions Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Population Forecast Source: *ABAG Projections/Plan Bay Area*

Regional Performance Measures – STIP Investment Impact on Adequate Housing
(2) Housing Production

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-2a	Housing units constructed (2011)	8,544	negligible impact
PBA-2b	Housing units constructed (2012)	9,144	

Regional Performance Measures – STIP Investment Impact on Healthy & Safe Communities
(3) Particulate Matter, (4) Traffic Fatalities/Injuries, and (5) Physical Activity

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-3a	Tons of fine particulate emissions from vehicles	data unavailable	-5.5
PBA-3b	Tons of coarse particulate emissions from vehicles	data unavailable	**
PBA-3c	Share of vehicle particulate emissions in CARE communities	data unavailable	**
PBA-4a	Annual traffic fatalities	355	-1
PBA-4b	Annual traffic injuries	36,651	-93
PBA-5	Share of adults that are physically active	28.5%	+0.14%

*** = Due to time and staffing limitations, it was not possible to conduct full EMFAC model runs for each of the model scenarios; as such, MTC staff had to rely upon the COBRA air quality impact data which focuses on a narrower selection of key pollutants. Therefore, a handful of emission impacts could not be forecasted for projects funded using 2014 STIP dollars; future STIP performance assessments could incorporate these full EMFAC runs to provide significantly more detail on air quality impacts, including breakdowns by vehicle class. Given the $PM_{2.5}$ results, however, it is expected that the STIP investments will support improved emissions for both performance measures PBA-3b and PBA-3c.*

Particulate Matter Emissions Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Fatality and Injury Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Physical Activity Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*

Regional Performance Measures – STIP Investment Impact on Open Space & Ag. Preservation
(6) Greenfield Development

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-6	Acres converted to urbanized land	5,500	potential for adverse impacts

Regional Performance Measures – STIP Investment Impact on Equitable Access
(7) H+T Affordability

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-7	Share of households living in affordable neighborhoods	40.7%	negligible impact

Regional Performance Measures – STIP Investment Impact on Economic Vitality
(8) Gross Regional Product

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-8	Gross regional product	$577 billion	negligible impact

Regional Performance Measures – STIP Investment Impact on Transport. Sys. Effectiveness
(9) VMT per capita/Non-Auto Mode Share and (10) Asset Conditions

PM ID	Performance Measure	Baseline (Observed)	2014 STIP Impact (2035 Model)
PBA-9a	Daily VMT per capita	22.6	-0.05
PBA-9b	Non-auto commute mode share	18%	data unavailable
	Non-auto mode share	data unavailable	+0.2%
PBA-10a	Pavement condition index for local streets and roads	66	negligible impact
PBA-10b	Share of distressed state highway lane-miles	28.7%	negligible impact
PBA-10c	Share of transit assets past useful life	12.8%	negligible impact

Non-Auto Mode Share Forecasting Note: *While regional monitoring data on non-auto mode share can only be provided for commute trips by the U.S. Census Bureau, the Plan Bay Area performance measure is focused on encouraging modal shift for all daily trips. Because the activity-based travel model is tour-based and because it relies on different carpooling definition than the U.S. Census, it cannot be used for consistent comparisons of commute mode shares. Overall trip mode share is provided separately as a proxy for this measure, in order to highlight the direction and relative magnitude of the STIP-funded investments towards this regional goal.*

VMT Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*
Population Forecast Source: *ABAG Projections/Plan Bay Area*
Total Mode Share Forecast Source: *Travel Model One/COBRA (MTC Benefit-Cost Tool)*

PART C: PROJECT-LEVEL EVALUATIONS

Per the 2014 STIP guidelines, projects for which construction is proposed are required to complete a project-level evaluation if any of the following conditions are true:

a. the total amount of existing and proposed STIP for the project is $15 million or greater
b. the total project cost is $50 million or greater
c. the proposed STIP programming exceeds 50% of a county's target for new programming (as identified in the fund estimate)

Furthermore, existing STIP projects are required to complete a project-level evaluation if either of the following conditions is true:

a. the total amount of existing and proposed STIP for the project is $15 million or greater and CEQA was completed after the region adopted its 2012 STIP
b. the total project cost is $50 million or greater and CEQA was completed after the region adopted its 2012 STIP

Beginning on the following page, a list of projects funded in the 2014 STIP is included, highlighting which (if any) of the above conditions each project meets. While most projects are exempt from the individual project reporting requirements, four projects meet the thresholds identified in the CTC guidelines:

- Central Subway (SFCTA)
- US-101 Willow Road Interchange Reconstruction (SMCTA)
- SR-92 Improvements Phase 2: 92/101 Interchange Improvements (SMCTA)
- BART Extension from Berryessa to Santa Clara (SCVTA)

In the San Francisco Bay Area, MTC allows project sponsors to self-assess their individual STIP investments if they meet any of the CTC evaluation thresholds. Thus, it is important to note that the combined impact of the STIP investments (as forecast by MTC) may not align exactly with the combined impacts of the individual projects (as forecast by a subset of project sponsors). The four project sponsors' individual evaluations are attached to this document following the complete list of all STIP-funded projects.

Identifying Projects Subject to Individual Evaluation				
STIP County	**Project Title**	**Subject to Condition A (STIP Funding)**	**Subject to Condition B (Project Cost)**	**Subject to Condition C (STIP Target)**
Alameda	SR-84 East-West Connector in Fremont	No	No	No
Alameda	SR-84 Expressway in Livermore (Southern Segment 2)	No	No	No
Alameda	I-680 Freeway Performance Initiative (Phase 2)	No	No	No
Alameda	AC Bus Rapid Transit Project	No	No	No
Alameda	Daly City BART Station Intermodal Improvements	No	No	No
Alameda	Planning, programming, and monitoring (MTC)	No	No	No
Alameda	Planning, programming, and monitoring (ACTC)	No	No	No
Alameda	Bike/Ped Connectivity to East Span SFOBB	No	No	No
Alameda	Downtown Berkeley BART Plaza/Transit Area Improvements	No	No	No
Contra Costa	I-680 Freeway Performance Initiative (Phase 2)	No	No	No
Contra Costa	I-680/SR-4 Interchange - Widening of SR-4 (Phase 3)	No	No	No
Contra Costa	I-80/San Pablo Dam Rd. Interchange Reconstruction (Phase 1)	No	No	No
Contra Costa	I-80/San Pablo Dam Rd. Interchange Reconstruction (Phase 2)	No	No	No
Contra Costa	I-680 SB HOV Gap Closure (N. Main to Livorna)	No	No	No
Contra Costa	Kirker Pass Rd. NB Truck Climbing Lane	No	No	No
Contra Costa	I-80/Central Ave. Interchange (Phase 2)	No	No	No
Contra Costa	Walnut Creek BART TOD Intermodal Project	No	No	No
Contra Costa	East Contra Costa BART Extension (eBART)	No	No	No
Contra Costa	Planning, programming, and monitoring (MTC)	No	No	No
Contra Costa	Planning, programming, and monitoring (CCTA)	No	No	No
Contra Costa	Bike/Ped Connectivity to East Span SFOBB	No	No	No

Identifying Projects Subject to Individual Evaluation				
STIP County	**Project Title**	**Subject to Condition A (STIP Funding)**	**Subject to Condition B (Project Cost)**	**Subject to Condition C (STIP Target)**
Contra Costa	Detroit Ave. Bicycle and Pedestrian Improvements	No	No	No
Contra Costa	Concord BART Station Bicycle and Ped. Access Improvements	No	No	No
Marin	MSN San Rafael Irwin Creek/Brookdale	No	No	No
Marin	MSN Landscaping, Mitigation, and Soundwall	No	No	No
Marin	Planning, programming, and monitoring (TAM)	No	No	No
Marin	Planning, programming, and monitoring (MTC)	No	No	No
Marin	Miller Creek Rd. Class 2 Bike Lanes and Ped. Improvements	No	No	No
Marin	Bike/Ped Connectivity to East Span SFOBB	No	No	No
Marin	*Pending OBAG Projects*	No	No	No
Napa	SR-12 Jameson Canyon (Landscaping Segment 3)	No	No	No
Napa	Silverado Five-Way Intersection Improvements	No	No	No
Napa	Devlin Road and Vine Trail Extension	No	No	No
Napa	Eucalyptus Drive Extension	No	No	No
Napa	California Ave Roundabouts	No	No	No
Napa	Petrified Forest Rd and SR-128 Intersection Improvements	No	No	No
Napa	Hopper Creek Pedestrian Path	No	No	No
Napa	Airport Blvd Rehabilitation	No	No	No
Napa	SR-29 and Grayson Ave Traffic Signal	No	No	No
Napa	Planning, programming, and monitoring (MTC)	No	No	No
Napa	Planning, programming, and monitoring (NCTPA)	No	No	No
Napa	Bike/Ped Connectivity to East Span SFOBB	No	No	No

Identifying Projects Subject to Individual Evaluation				
STIP County	**Project Title**	**Subject to Condition A (STIP Funding)**	**Subject to Condition B (Project Cost)**	**Subject to Condition C (STIP Target)**
San Francisco	Central Subway	No	**Yes**	**Yes**
San Francisco	Planning, programming, and monitoring (SFCTA)	No	No	No
San Francisco	Planning, programming, and monitoring (MTC)	No	No	No
San Francisco	Bike/Ped Connectivity to East Span SFOBB	No	No	No
San Francisco	Chinatown Broadway Complete Streets (Phase 4)	No	No	No
San Mateo	US-101 Willow Rd Interchange Reconstruction	**Yes**	No	**Yes**
San Mateo	SR-1 Calera Parkway Operational Improvements in Pacifica	No	No	No
San Mateo	Countywide ITS Project	No	No	No
San Mateo	SR-92 Improvements Phase 1: Oper. Improvements at 92/ECR	No	No	No
San Mateo	SR-92 Improvements Phase 2: 92/101 IC Improvements	**Yes**	No	**Yes**
San Mateo	Planning, programming, and monitoring (MTC)	No	No	No
San Mateo	Planning, programming, and monitoring (C/CAG)	No	No	No
San Mateo	Bike/Ped Connectivity to East Span SFOBB	No	No	No
San Mateo	*Pending OBAG Projects*	No	No	No
Santa Clara	*GARVEE Debt (I-880/SR-87)*	No	No	No
Santa Clara	I-680 Soundwall from Capitol to Mueller	No	No	No
Santa Clara	BART Extension from Berryessa to Santa Clara	No	**Yes**	No
Santa Clara	Park Ave. Multimodal Improvements	No	No	No
Santa Clara	Saint John St. Multimodal Improvements (Phase 1)	No	No	No
Santa Clara	Planning, programming, and monitoring (MTC)	No	No	No
Santa Clara	Planning, programming, and monitoring (VTA)	No	No	No

Identifying Projects Subject to Individual Evaluation				
STIP County	**Project Title**	**Subject to Condition A (STIP Funding)**	**Subject to Condition B (Project Cost)**	**Subject to Condition C (STIP Target)**
Santa Clara	Bike/Ped Connectivity to East Span SFOBB	No	No	No
Santa Clara	US-101/Adobe Creek Bicycle and Pedestrian Bridge	No	No	No
Santa Clara	The Alameda "Beautiful Way" Grand Boulevard (Phase 2)	No	No	No
Solano	Jepson Parkway (Vanden Segment)	No	No	No
Solano	Jepson Parkway (Leisure Town Segment 1)	No	No	No
Solano	Jepson Parkway (Leisure Town Segment 2)	No	No	No
Solano	Planning, programming, and monitoring (MTC)	No	No	No
Solano	Planning, programming, and monitoring (STA)	No	No	No
Solano	Bike/Ped Connectivity to East Span SFOBB	No	No	No
Sonoma	US-101 HOV Lanes Landscaping	No	No	No
Sonoma	Planning, programming, and monitoring (MTC)	No	No	No
Sonoma	Planning, programming, and monitoring (SCTA)	No	No	No
Sonoma	Bike/Ped Connectivity to East Span SFOBB	No	No	No
Sonoma	Downtown Santa Rosa Streetscape	No	No	No
Sonoma	SMART Bicycle/Pedestrian Pathway	No	No	No

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

PROJECT-LEVEL PERFORMANCE EVALUATION

SAN FRANCISCO COUNTY
CENTRAL SUBWAY

For additional information, contact:
Matthew Brill
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Performance Indicators and Measures

Indicator	Relation to STIP Sec 19 Performance Criteria	Performance Measures			Current System Performance (Baseline)	Projected Impact of Projects
		Mode	Level*	Measures		
Safety	2	Roadway	Region	Fatalities per Vehicle Miles Traveled (VMT) and per capita	n/a	
	2			Fatal Collisions per VMT and per capita	n/a	
	2			Injury Collisions per VMT and per capita	n/a	
	2	Transit	Mode	Fatalities / Passenger Miles	n/a	
Mobility	1	Roadway	Region	Passenger Hours of Delay / Year	n/a	
	1			Average Peak Period Travel Time	n/a	
	1			Average Non-Peak Period Travel Time	n/a	
Accessibility	4 (also 1,3,6,7)	Transit	Region	population within 1/2 mile of a rail station or bus route.	n/a	
		All	Region	Average travel time to jobs or school.	n/a	
Reliability	1	Roadway	Corridor	Travel Time Variability (buffer index)	n/a	
	1	Roadway	Corridor	Daily vehicle hours of delay per capita	n/a	
	1	Roadway	Corridor	Daily congested highway VMT per capita	n/a	
	5	Transit	Mode	Percentage of vehicles that arrive at their scheduled destination no more than 5 minutes late.	70%	85%
Productivity (Throughput)	7	Roadway - Vehicles	Corridor	Average Peak Period Vehicle Trips	n/a	
	7			Average Daily Vehicle Trips (ADT)	n/a	
	6,7,8			Daily VMT per capita	n/a	
	7	Roadway - People	Corridor	Average Peak Period Vehicle Trips Multiplied by the Occupancy Rate	n/a	
	7			Average Daily Vehicle Trips Multiplied by the Occupancy Rate	n/a	
	7	Trucks	Corridor	Percentage of ADT that are (5+ axle) Trucks	n/a	
	7			Average Daily Vehicle Trips that are (5+ axle) Trucks	n/a	
	7	Transit	Mode	Passengers per Vehicle Revenue Hour	68	84
	7			Passengers per Vehicle Revenue Mile	8	11
	7			Passenger Mile per Train Mile (Intercity Rail)	n/a	n/a
	7			Boardings per capita	n/a	n/a
System Preservation	3	Roadway	Region	Total number of Distressed Lane Miles	n/a	
	3			Percentage of Distressed Lane Miles	n/a	
	3			Percentage of Roadway at Given IRI Levels	n/a	
	3			Percentage of highway bridges in need of repair (by number of bridges and by deck area)	n/a	
Environmental Impact	6	All	Region	Carbon dioxide emissions per capita	n/a	
				Criteria pollutant emissions per capita	n/a	
Return on Investment/ Lifecycle Cost	1-7	All	Corridor	Percentage rate of return	n/a	

*Level:

Corridor - Routes or route segments that are identified by regions and Caltrans as being significant to the transportation system.

Region - Region or county commission that is responsible for RTIP submittal.

Mode - One of the following transit types (light rail, heavy rail, commuter rail, trolley bus, and all forms of bus transit).

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

PROJECT-LEVEL PERFORMANCE EVALUATION

SAN MATEO COUNTY
US-101 WILLOW ROAD INTERCHANGE RECONSTRUCTION

For additional information, contact:
Jean Higaki
San Mateo City/County Association of Governments (SM C/CAG)
(650) 599-1462
jhigaki@smcgov.org

Performance Indicators and Measures

SM-101-1.6/2.2

Information based on 3-year period from 4/1/08 to 3/31/11.

MVMT = Million Vehicle Miles Traveled

N/A = Not Available

Indicator	Relation to STIP Sec 19 Performance Criteria	Performance Measures: Mode	Level*	Measures	Current System Performance (Baseline)	Projected Impact of Projects
Safety	2	Roadway	Region	Fatalities per Vehicle Miles Traveled (VMT) and per capita	.004/MVMT	N/A
	2			Fatal Collisions per VMT and per capita	.004/MVMT	N/A
	2			Injury Collisions per VMT and per capita	.240/MVMT	N/A
	2	Transit	Mode	Fatalities / Passenger Miles	N/A	N/A
Mobility	1	Roadway	Region	Passenger Hours of Delay / Year		
	1			Average Peak Period Travel Time AM/PM (Min)	8.5/5.8	5.8/5.7
	1			Average Non-Peak Period Travel Time	* ND	
Accessibility	4 (also 1,3,6,7)	Transit	Region	Percentage of population within 1/4 1/2 mile of a rail station or bus route.		
		All	Region	Average travel time to jobs or school.		
Reliability	1	Roadway	Corridor	Travel Time Variability (buffer index)	ND	
	1	Roadway	Corridor	Daily vehicle hours of delay per capita VHD	6,632	3,648
	1	Roadway	Corridor	Daily congested highway VMT per capita	1,057,524	1,087,748
	5	Transit	Mode	Percentage of vehicles that arrive at their scheduled destination no more than 5 minutes late.	N/A	
Productivity (Throughput)	7	Roadway - Vehicles	Corridor	Average Peak Period Vehicle Trips	25,500	34,179
	7			Average Daily Vehicle Trips (ADT)	110,996	152,578
	6,7,8			Daily VMT per capita	1,057,524	1,087,748
	7	Roadway - People	Corridor	Average Peak Period Vehicle Trips Multiplied by the Occupancy Rate (1-3)(APV trips)	33,150	44,433
	7			Average Daily Vehicle Trips Multiplied by the Occupancy Rate	144,293	198,351
	7	Trucks	Corridor	Percentage of ADT that are (5+ axle) Trucks		
	7			Average Daily Vehicle Trips that are (5+ axle) Trucks		
	7	Transit	Mode	Passengers per Vehicle Revenue Hour		
	7			Passengers per Vehicle Revenue Mile	5.9	
	7			Passenger Mile per Train Mile (Intercity Rail)	0.27	
	7			Boardings per capita	NA	
System Preservation	3	Roadway	Region	Total number of Distressed Lane Miles		**
	3			Percentage of Distressed Lane Miles		
	3			Percentage of Roadway at Given IRI Levels		
	3			Percentage of highway bridges in need of repair (by number of bridges and by deck area)		
Environmental Impact	6	All	Region	Carbon dioxide emissions per capita	>	>
				Criteria pollutant emissions per capita		
Return on Investment/ Lifecycle Cost	1-7	All	Corridor	Percentage rate of return		

Not applicable

See attached sheet

*Level:
Corridor - Routes or route segments that are identified by regions and Caltrans as being significant to the transportation system.
Region - Region or county commission that is responsible for RTIP submittal.
Mode - One of the following transit types (light rail, heavy rail, commuter rail, trolley bus, and all forms of bus transit).

* ND: No Data
** Interchange and main line will be overlaid with new pavement.

We looked at the STIP guidance; as far as region-wide air quality is concerned it does not look like the information they are asking for are just numbers, but a description of the air conformity process.

Carbon dioxide emissions per capita

Current System Performance (Baseline):

There are currently no approved Carbon Dioxide (CO2) vehicle emissions budgets for the Bay Area.

Projected impact of Projects:

No region-wide Carbon Dioxide emissions budgets exist, so it is not possible to determine the project's region-wide impacts over baseline, however the project is an operational improvement, without a capacity increase, so it is not expected to cause a region-wide increase in CO2 emissions.

Criteria pollutants emissions per capita

Current System Performance (Baseline):

The baseline is the meeting of the conformity tests for the current TIP and RTP. The most currently approved TIP and RTP are the 2013 TIP and the Plan Bay Area. The conformity analysis (July, 2013) for the 2013 TIP and Plan Bay Area shows that the TIP and RTP meet the motor vehicle emissions budgets for Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), and Carbon Monoxide (CO). In addition, conformity with the 24-hour PM2.5 standard was demonstrated by meeting the no-greater-than-baseline-year test.

Projected impact of Projects:

Inclusion of the project in a conforming TIP and RTP, the 2013 TIP and the Plan Bay Area, demonstrates that the project will not have significant region-wide impacts.

District: 4

PROJECT: 101/ Willow Road Interchange

EA:
PPNO:

1A PROJECT DATA

Type of Project	Remember to run model for both roads	
Select project type from list	Intersection	
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)	2	
Length of Construction Period	2	years
One- or Two-Way Data	2	enter 1 or 2
	Current	
Length of Peak Period(s) (up to 24 hrs)	4	hours

1B HIGHWAY DESIGN AND TRAFFIC DATA

Highway Design		No Build	Build
Roadway Type (Fwy, Exp, Conv Hwy)		F	F
Number of General Traffic Lanes		8	8
Number of HOV/HOT Lanes		2	2
HOV Restriction (2 or 3)		2	
Exclusive ROW for Buses (y/n)		N	
Highway Free-Flow Speed		55	70
Ramp Design Speed (if aux. lane/off-ramp proj.)		25	35
Length (in miles)	Highway Segment	0.6	0.6
	Impacted Length	0.6	0.6

Average Daily Traffic			
	Current	211,122	
		No Build	Build
	Base (Year 1)	220,157	220,157
	Forecast (Year 20)	305,989	305,989
Average Hourly HOV/HOT Lane Traffic		22,000	22,000
Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)			100%
Percent Traffic in Weave			0.0%
Percent Trucks (include RVs, if applicable)		9%	9%
Truck Speed		55	

On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

Queue Formation (if queuing or grade crossing project)	Year 1	Year 20
Arrival Rate (in vehicles per hour)	0	0
Departure Rate (in vehicles per hour)	0	0

Pavement Condition (if pavement project)		No Build	Build
IRI (inches/mile)	Base (Year 1)		
	Forecast (Year 20)		

Average Vehicle Occupancy (AVO)		No Build	Build
General Traffic	Non-Peak	1.30	1.30
	Peak	1.15	1.15
High Occupancy Vehicle (if HOV/HOT lanes)		2.15	2.15

1C HIGHWAY ACCIDENT DATA

Actual 3-Year Accident Data (from Table B)	Count (No.)	Rate
Total Accidents (Tot)	512	2.21
Fatal Accidents (Fat)	2	0.009
Injury Accidents (Inj)	120	0.52
Property Damage Only (PDO) Accidents	390	1.69

Statewide Basic Average Accident Rate	No Build	Build
Rate Group	F	F
Accident Rate (per million vehicle-miles)	0.004	0.004
Percent Fatal Accidents (Pct Fat)	0.4%	0.3%
Percent Injury Accidents (Pct Inj)	27.6%	15.0%

1D RAIL AND TRANSIT DATA

Annual Person-Trips		No Build	Build
	Base (Year 1)		
	Forecast (Year 20)		
Percent Trips during Peak Period		34%	
Percent New Trips from Parallel Highway			100%

Annual Vehicle-Miles		No Build	Build
	Base (Year 1)		
	Forecast (Year 20)		
Average Vehicles/Train (if rail project)			

Reduction in Transit Accidents	
Percent Reduction (if safety project)	

Average Transit Travel Time		No Build	Build
In-Vehicle	Non-Peak (in minutes)		0.0
	Peak (in minutes)		0.0
Out-of-Vehicle	Non-Peak (in minutes)	0.0	0.0
	Peak (in minutes)	0.0	0.0

Highway Grade Crossing	Current	Year 1	Year 20
Annual Number of Trains		0	
Avg. Gate Down Time (in min.)		0.0	

Transit Agency Costs (if TMS project)	No Build	Build
Annual Capital Expenditure		$0
Annual Ops. and Maintenance Expenditure		$0

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

Enter all project costs (in today's dollars) in columns 1 to 7. Costs during construction should be entered in the first eight rows. Project costs (including maintenance and operating costs) should be net of costs without project.

1E

PROJECT COSTS (enter costs in thousands of dollars)

Col. no.	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Year	DIRECT PROJECT COSTS					Mitigation	Transit Agency Cost Savings	TOTAL COSTS (in dollars)	
	INITIAL COSTS			SUBSEQUENT COSTS					
	Project Support	R / W	Construction	Maint./ Op.	Rehab.			Constant Dollars	Present Value
Construction Period									
1			$23,000					$23,000,000	$23,000,000
2			23,000					23,000,000	22,115,385
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
Project Open									
1								$0	$0
2								0	0
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
9								0	0
10								0	0
11								0	0
12								0	0
13								0	0
14								0	0
15								0	0
16								0	0
17								0	0
18								0	0
19								0	0
20								0	0
Total	$0	$0	$46,000	$0	$0	$0	$0	$46,000,000	$45,115,385

Present Value = Future Value (in Constant Dollars) / (1 + Real Discount Rate) ^ Year

District: 4

PROJECT: 101/ Willow Road Interchange

EA:
PPNO:

3

INVESTMENT ANALYSIS

SUMMARY RESULTS

Life-Cycle Costs (mil. $)	$45.1
Life-Cycle Benefits (mil. $)	$41.1
Net Present Value (mil. $)	-$4.1
Benefit / Cost Ratio:	0.9
Rate of Return on Investment:	3.1%
Payback Period:	15 years

ITEMIZED BENEFITS (mil. $)	Average Annual	Total Over 20 Years
Travel Time Savings	$1.3	$26.6
Veh. Op. Cost Savings	-$0.7	-$13.2
Accident Cost Savings	$1.5	$29.2
Emission Cost Savings	-$0.1	-$1.5
TOTAL BENEFITS	$2.1	$41.1
Person-Hours of Time Saved	168,747	3,374,936
CO_2 Emissions Saved (tons)	-3,440	-68,809
CO_2 Emissions Saved (mil. $)	-$0.1	-$1.3

Should benefit-cost results include:

1) Induced Travel? (y/n)	Y	Default = Y
2) Vehicle Operating Costs? (y/n)	Y	Default = Y
3) Accident Costs? (y/n)	Y	Default = Y
4) Vehicle Emissions? (y/n) includes value for CO_2e	Y	Default = Y

District: 4

PROJECT: 101/ Willow Road Interchange

EA:

PPNO:

1A PROJECT DATA

Type of Project	Remember to run model for both roads	
Select project type from list	Intersection	
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)	2	
Length of Construction Period	2	years
One- or Two-Way Data	2	enter 1 or 2
	Current	
Length of Peak Period(s) (up to 24 hrs)	4	hours

1B HIGHWAY DESIGN AND TRAFFIC DATA

Highway Design		No Build	Build
Roadway Type (Fwy, Exp, Conv Hwy)		C	C
Number of General Traffic Lanes		3	4
Number of HOV/HOT Lanes		0	0
HOV Restriction (2 or 3)			
Exclusive ROW for Buses (y/n)		N	
Highway Free-Flow Speed		35	35
Ramp Design Speed (if aux. lane/off-ramp proj.)		35	35
Length (in miles)	Highway Segment	0.5	0.5
	Impacted Length	0.5	0.5

Average Daily Traffic			
	Current	50,711	
		No Build	Build
	Base (Year 1)	52,038	52,038
	Forecast (Year 20)	64,649	64,649
Average Hourly HOV/HOT Lane Traffic			0
Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)			100%
Percent Traffic in Weave			0.0%
Percent Trucks (include RVs, if applicable)		9%	9%
Truck Speed		35	

On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

Queue Formation (if queuing or grade crossing project)	Year 1	Year 20
Arrival Rate (in vehicles per hour)	0	0
Departure Rate (in vehicles per hour)	0	0

Pavement Condition (if pavement project)		No Build	Build
IRI (inches/mile)	Base (Year 1)		
	Forecast (Year 20)		

Average Vehicle Occupancy (AVO)		No Build	Build
General Traffic	Non-Peak	1.30	1.30
	Peak	1.15	1.15
High Occupancy Vehicle (if HOV/HOT lanes)		2.15	2.15

1C HIGHWAY ACCIDENT DATA

Actual 3-Year Accident Data (from Table B)	Count (No.)	Rate
Total Accidents (Tot)	22	0.40
Fatal Accidents (Fat)	0	0.000
Injury Accidents (Inj)	11	0.20
Property Damage Only (PDO) Accidents	11	0.20

Statewide Basic Average Accident Rate	No Build	Build
Rate Group	C	C
Accident Rate (per million vehicle-miles)		
Percent Fatal Accidents (Pct Fat)	0.0%	0.0%
Percent Injury Accidents (Pct Inj)	50.0%	40.0%

1D RAIL AND TRANSIT DATA

Annual Person-Trips		No Build	Build
	Base (Year 1)		
	Forecast (Year 20)		
Percent Trips during Peak Period		34%	
Percent New Trips from Parallel Highway			100%

Annual Vehicle-Miles		No Build	Build
	Base (Year 1)		
	Forecast (Year 20)		
Average Vehicles/Train (if rail project)			

Reduction in Transit Accidents	
Percent Reduction (if safety project)	

Average Transit Travel Time		No Build	Build
In-Vehicle	Non-Peak (in minutes)		0.0
	Peak (in minutes)		0.0
Out-of-Vehicle	Non-Peak (in minutes)	0.0	0.0
	Peak (in minutes)	0.0	0.0

Highway Grade Crossing	Current	Year 1	Year 20
Annual Number of Trains		0	
Avg. Gate Down Time (in min.)		0.0	

Transit Agency Costs (if TMS project)	No Build	Build
Annual Capital Expenditure		$0
Annual Ops. and Maintenance Expenditure		$0

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

Enter all project costs (in today's dollars) in columns 1 to 7. Costs during construction should be entered in the first eight rows.
Project costs (including maintenance and operating costs) should be net of costs without project.

1E

PROJECT COSTS (enter costs in thousands of dollars)

Col. no.	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Year	DIRECT PROJECT COSTS					Mitigation	Transit Agency Cost Savings	TOTAL COSTS (in dollars)	
	INITIAL COSTS			SUBSEQUENT COSTS					
	Project Support	R / W	Construction	Maint./ Op.	Rehab.			Constant Dollars	Present Value
Construction Period									
1			$23,000					$23,000,000	$23,000,000
2			23,000					23,000,000	22,115,385
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
Project Open									
1								$0	$0
2								0	0
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
9								0	0
10								0	0
11								0	0
12								0	0
13								0	0
14								0	0
15								0	0
16								0	0
17								0	0
18								0	0
19								0	0
20								0	0
Total	$0	$0	$46,000	$0	$0	$0	$0	$46,000,000	$45,115,385

Present Value = Future Value (in Constant Dollars) / (1 + Real Discount Rate) ^ Year

District: 4

PROJECT: 101/ Willow Road Interchange

EA:
PPNO:

3

INVESTMENT ANALYSIS

SUMMARY RESULTS

Life-Cycle Costs (mil. $)	$45.1
Life-Cycle Benefits (mil. $)	$1,282.5
Net Present Value (mil. $)	$1,237.4
Benefit / Cost Ratio:	28.4
Rate of Return on Investment:	136.5%
Payback Period:	1 year

ITEMIZED BENEFITS (mil. $)	Average Annual	Total Over 20 Years
Travel Time Savings	$60.1	$1,201.2
Veh. Op. Cost Savings	$3.7	$73.1
Accident Cost Savings	$0.0	$0.0
Emission Cost Savings	$0.4	$8.1
TOTAL BENEFITS	$64.1	$1,282.5
Person-Hours of Time Saved	7,227,617	144,552,347
CO_2 Emissions Saved (tons)	17,844	356,886
CO_2 Emissions Saved (mil. $)	$0.3	$6.7

Should benefit-cost results include:

1) Induced Travel? (y/n) Y — Default = Y

2) Vehicle Operating Costs? (y/n) Y — Default = Y

3) Accident Costs? (y/n) Y — Default = Y

4) Vehicle Emissions? (y/n) Y — Default = Y
includes value for CO_2e

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

PROJECT-LEVEL PERFORMANCE EVALUATION

SAN MATEO COUNTY
SR-92 IMPROVEMENTS PHASE 2: 92/101 INTERCHANGE IMPROVEMENTS

For additional information, contact:
Jean Higaki
San Mateo City/County Association of Governments (SM C/CAG)
(650) 599-1462
jhigaki@smcgov.org

Performance Indicators and Measures

Indicator	Relation to STIP Sec 19 Performance Criteria	Performance Measures			Current System Performance (Baseline)	Projected Impact of Projects
		Mode	Level*	Measures		
Safety	2	Roadway	Region	Fatalities per Vehicle Miles Traveled (VMT) and per capita	0.0057 MVMT	(1)
	2			Fatal Collisions per VMT and per capita	0.0049 MVMT	(1)
	2			Injury Collisions per VMT and per capita	0.23 MVMT	(1)
	2	Transit	Mode	Fatalities / Passenger Miles	(2)	(2)
Mobility	1	Roadway	Region	Passenger Hours of Delay / Year	(2)	(2)
	1			Average Peak Period Travel Time	27.2 min	24.7 min
	1			Average Non-Peak Period Travel Time	17.2 min	17.2 min
Accessibility	4 (also 1,3,6,7)	Transit	Region	Percentage of population within 1/2 mile of a rail station or bus route.	(2)	(2)
		All	Region	Average travel time to jobs or school.	(2)	(2)
Reliability	1	Roadway	Corridor	Travel Time Variability (buffer index)	(2)	(2)
	1	Roadway	Corridor	Daily vehicle hours of delay per capita	(2)	(2)
	1	Roadway	Corridor	Daily congested highway VMT per capita	(2)	(2)
	5	Transit	Mode	Percentage of vehicles that arrive at their scheduled destination no more than 5 minutes late.	(2)	(2)
Productivity (Throughput)	7	Roadway - Vehicles	Corridor	Average Peak Period Vehicle Trips	17,412 Veh/Hr	18,500 Veh/Hr
	7			Average Daily Vehicle Trips (ADT)	247,375 Veh/Day	250,000 Veh/Day
	6,7,8			Daily VMT per capita	(2)	(2)
	7	Roadway - People	Corridor	Average Peak Period Vehicle Trips Multiplied by the Occupancy Rate	20,023 Veh/Hr	21,275 Veh/Hr
	7			Average Daily Vehicle Trips Multiplied by the Occupancy Rate	284,481 Veh/Day	325,000 Veh/Day
	7	Trucks	Corridor	Percentage of ADT that are (5+ axle) Trucks	1%	1%
	7			Average Daily Vehicle Trips that are (5+ axle) Trucks	2,474	3,250
	7	Transit	Mode	Passengers per Vehicle Revenue Hour	(2)	(2)
	7			Passengers per Vehicle Revenue Mile	(2)	(2)
	7			Passenger Mile per Train Mile (Intercity Rail)	(2)	(2)
	7			Boardings per capita	(2)	(2)
System Preservation	3	Roadway	Region	Total number of Distressed Lane Miles	(2)	(2)
	3			Percentage of Distressed Lane Miles	(2)	(2)
	3			Percentage of Roadway at Given IRI Levels	(2)	(2)
	3			Percentage of highway bridges in need of repair (by number of bridges and by deck area)	(2)	(2)
Environmental Impact	6	All	Region	Carbon dioxide emissions per capita	(2)	(2)
				Criteria pollutant emissions per capita	(2)	(2)
Return on Investment/ Lifecycle Cost	1-7	All	Corridor	Percentage rate of return		138.4%

*Level:

Corridor - Routes or route segments that are identified by regions and Caltrans as being significant to the transportation system.

Region - Region or county commission that is responsible for RTIP submittal.

Mode - One of the following transit types (light rail, heavy rail, commuter rail, trolley bus, and all forms of bus transit).

(1) Cannot predict future collisions
(2) Unavailable - not able to obtain

District: 4

PROJECT: Auxiliary Lanes

EA:
PPNO: 668D

1A PROJECT DATA

Type of Project	Enter ramp design speed & on-ramp volume	
Select project type from list	Auxiliary Lane	
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)	2	
Length of Construction Period	1	years
One- or Two-Way Data	2	enter 1 or 2
	Current	
Length of Peak Period(s) (up to 24 hrs)	5	hours

1B HIGHWAY DESIGN AND TRAFFIC DATA

Highway Design		No Build	Build
Roadway Type (Fwy, Exp, Conv Hwy)		F	F
Number of General Traffic Lanes		8	9
Number of HOV/HOT Lanes		0	0
HOV Restriction (2 or 3)			
Exclusive ROW for Buses (y/n)		N	
Highway Free-Flow Speed		65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)		35	35
Length (in miles)	Highway Segment	4.8	4.8
	Impacted Length	1.4	1.4

Average Daily Traffic			
	Current	236,400	
		No Build	Build
	Base (Year 1)	238,344	238,344
	Forecast (Year 20)	275,271	275,271
Average Hourly HOV/HOT Lane Traffic			0
Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)			100%
Percent Traffic in Weave		50.0%	40.0%
Percent Trucks (include RVs, if applicable)		4%	4%
Truck Speed			

On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	1350	511
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

Queue Formation (if queuing or grade crossing project)	Year 1	Year 20
Arrival Rate (in vehicles per hour)	0	0
Departure Rate (in vehicles per hour)	0	0

Pavement Condition (if pavement project)		No Build	Build
IRI (inches/mile)	Base (Year 1)		
	Forecast (Year 20)		

Average Vehicle Occupancy (AVO)		No Build	Build
General Traffic	Non-Peak	1.30	1.30
	Peak	1.15	1.15
High Occupancy Vehicle (if HOV/HOT lanes)		2.15	2.15

1C HIGHWAY ACCIDENT DATA

Actual 3-Year Accident Data (from Table B)	Count (No.)	Rate
Total Accidents (Tot)	921	0.74
Fatal Accidents (Fat)	6	0.005
Injury Accidents (Inj)	282	0.23
Property Damage Only (PDO) Accidents	633	0.51

Statewide Basic Average Accident Rate	No Build	Build
Rate Group	H	H
Accident Rate (per million vehicle-miles)	1.04	1.04
Percent Fatal Accidents (Pct Fat)	0.4%	0.4%
Percent Injury Accidents (Pct Inj)	30.8%	30.8%

1D RAIL AND TRANSIT DATA

Annual Person-Trips		No Build	Build
	Base (Year 1)		
	Forecast (Year 20)		
Percent Trips during Peak Period		41%	
Percent New Trips from Parallel Highway			100%

Annual Vehicle-Miles		No Build	Build
	Base (Year 1)		
	Forecast (Year 20)		
Average Vehicles/Train (if rail project)			

Reduction in Transit Accidents	
Percent Reduction (if safety project)	

Average Transit Travel Time		No Build	Build
In-Vehicle	Non-Peak (in minutes)		0.0
	Peak (in minutes)		0.0
Out-of-Vehicle	Non-Peak (in minutes)	0.0	0.0
	Peak (in minutes)	0.0	0.0

Highway Grade Crossing	Current	Year 1	Year 20
Annual Number of Trains		0	
Avg. Gate Down Time (in min.)		0.0	

Transit Agency Costs (if TMS project)	No Build	Build
Annual Capital Expenditure		$0
Annual Ops. and Maintenance Expenditure		$0

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

Enter all project costs (in today's dollars) in columns 1 to 7. Costs during construction should be entered in the first eight rows. Project costs (including maintenance and operating costs) should be net of costs without project.

1E

PROJECT COSTS (enter costs in thousands of dollars)

Col. no.	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
Year	DIRECT PROJECT COSTS					Mitigation	Transit Agency Cost Savings	TOTAL COSTS (in dollars)	
	INITIAL COSTS			SUBSEQUENT COSTS				Constant Dollars	Present Value
	Project Support	R / W	Construction	Maint./ Op.	Rehab.				
Construction Period									
1	$5,628	$0	$18,211					$23,839,000	$23,839,000
2								0	0
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
Project Open									
1								$0	$0
2								0	0
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
9								0	0
10								0	0
11								0	0
12								0	0
13								0	0
14								0	0
15								0	0
16								0	0
17								0	0
18								0	0
19								0	0
20								0	0
Total	$5,628	$0	$18,211	$0	$0	$0	$0	$23,839,000	$23,839,000

Present Value = Future Value (in Constant Dollars) / (1 + Real Discount Rate) ^ Year

District: 4

PROJECT: Auxiliary Lanes

EA:
PPNO: 668D

3

INVESTMENT ANALYSIS

SUMMARY RESULTS

Life-Cycle Costs (mil. $)	$23.8
Life-Cycle Benefits (mil. $)	$683.4
Net Present Value (mil. $)	$659.6
Benefit / Cost Ratio:	28.7
Rate of Return on Investment:	124.2%
Payback Period:	1 year

ITEMIZED BENEFITS (mil. $)	Average Annual	Total Over 20 Years
Travel Time Savings	$28.6	$572.6
Veh. Op. Cost Savings	$5.0	$99.7
Accident Cost Savings	$0.0	$0.0
Emission Cost Savings	$0.6	$11.0
TOTAL BENEFITS	$34.2	$683.4
Person-Hours of Time Saved	3,394,313	67,886,251
CO_2 Emissions Saved (tons)	25,042	500,845
CO_2 Emissions Saved (mil. $)	$0.5	$9.2

Should benefit-cost results include:

1) Induced Travel? (y/n)	Y (Default = Y)
2) Vehicle Operating Costs? (y/n)	Y (Default = Y)
3) Accident Costs? (y/n)	Y (Default = Y)
4) Vehicle Emissions? (y/n) includes value for CO_2e	Y (Default = Y)

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

PROJECT-LEVEL PERFORMANCE EVALUATION

SANTA CLARA COUNTY
BART EXTENSION FROM BERRYESSA TO SANTA CLARA

For additional information, contact:
Marcella Rensi
Santa Clara Valley Transportation Authority (VTA)
(408) 321-5717
marcella.rensi@vta.org

Indicator	Performance Measure	Result	Data Source
Safety	Fatalities per Passenger Mile	@2 per million passenger miles	BART operations, average of FY 2012 amd 2013
Accessiblility	% of population w/in 1/2 mile of rail station	52,749	November 2011 VTA Model Run
Reliability	% of vehicles that arrive at their scheduled destination no more than 5 minutes late	91%	BART Systemwide, 10/29/13 - 11/4/13
Productivity (Throughput)	Passengers per Revenue Hour	Not Available	TBD
	Passengers per Vehicle Revenue Mile	Not Available	TBD
	Boardings per Capita (daily)	89.9%	November 2011 VTA Model Run
Environmental Impact	CO^2 reduced (tons per year)	12.015	Silicon Valley Rapid Transit Corridor Final EIS, Year 2030
	Criteria pollutant emmissions reduced (tons per year)	ROG: 11.0, NOX: 13.0, CO: 84.0, PM 2.5: 12.0, PM 10: 12.0	Silicon Valley Rapid Transit Corridor Final EIS, Year 2030
Return on Investment/Lifecycle Cost		Not Available	Cal B/C Model

2014 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

2014 RTIP ADOPTION

MTC RESOLUTION NO. 4128

Date: December 18, 2013
W.I.: 1515
Referred by: PAC

ABSTRACT
Resolution No. 4128

This resolution adopts the 2014 Regional Transportation Improvement Program (RTIP) for fiscal years 2014-15 through 2018-19, for the San Francisco Bay Area for submission to the California Transportation Commission (CTC).

Attachment A – 2014 RTIP project list

Attachment B – 2014 RTIP programming policies

Further discussion of this action is contained in the MTC Programming and Allocations Committee Summary Sheet dated December 11, 2013.

Date: December 18, 2013
W.I.: 1515
Referred by: PAC

RE: Adoption of 2014 Regional Transportation Improvement Program (RTIP)

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4128

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, MTC has adopted, pursuant to Government Code Sections 66508 and 65080, a Regional Transportation Plan (RTP); and

WHEREAS, MTC biennially adopts, pursuant to Government Code Section 65080, a Regional Transportation Improvement Program (RTIP) that is submitted, pursuant to Government Code Section 14527, to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans); and

WHEREAS, MTC has developed, in cooperation with Caltrans, operators of publicly owned mass transportation services, and local governments, a five-year program for the funding made available for highways, roadways and state-funded mass transit guideways and other transit capital improvement projects for inclusion in fiscal years 2014-15 through 2018-19 of the 2014 RTIP ("2014 RTIP"); and

WHEREAS, the 2014 RTIP has been developed consistent with the policies and procedures outlined in MTC Resolution No. 4118, and with the STIP Guidelines adopted by the CTC on August 6, 2013; and

WHEREAS, Attachment A sets forth the project list for the 2014 RTIP and Attachment B sets forth programming policies as a companion to the project list; and

WHEREAS, MTC's Programming and Allocations Committee recommends adoption of the funding for inclusion in fiscal years 2014-15 through 2018-19 of the 2014 RTIP; now, therefore, be it

RESOLVED, that MTC adopts the 2014 RTIP, attached hereto as Attachment A and Attachment B and incorporated herein as though set forth at length, and finds it consistent with the RTP; and, be it further

RESOLVED, that the Executive Director may make adjustments to Attachment 'A' in consultation with the respective Congestion Management Agency (CMA) or County Transportation Planning Agency, to respond to direction from the California Transportation Commission and/or the California Department of Transportation; and, be it further

RESOLVED, that MTC's adoption of the programs and projects in the 2014 RTIP is for planning purposes only, with each project still subject to MTC's project review and application approval pursuant to MTC Resolution Nos. 3115 and 3075; and, be it further

RESOLVED, that the Executive Director shall forward a copy of this resolution, and such other information as may be required to the CTC, Caltrans, and to such other agencies as may be appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

_____

Amy Rein Worth, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on December 18, 2013.

Date: December 18, 2013
W.I.: 1515
Referred by: PAC

Attachment A
Resolution No. 4128

2014 Regional Transportation Improvement Program (RTIP)

Project List

Attachment A

MTC 2014 Regional Transportation Improvement Program

December 18, 2013
(all numbers in thousands)

County	Agency	PPNO	Project	Total	2014 RTIP Funding by Fiscal Year					
					Prior	14-15	15-16	16-17	17-18	18-19
Proposed 2014 RTIP - New or Amended Funding in STIP										
Alameda	ACTC	2179	Planning, programming, and monitoring	**1,315**	0	0	0	0	750	565
Alameda	MTC	2100	Planning, programming, and monitoring	**275**	0	0	0	0	135	140
Alameda	ACTC	81D	SR-84 East-West Connector in Fremont	**12,000**	0	0	0	0	0	12,000
Alameda	Caltrans	81H	SR-84 Expressway in Livermore (Southern Segment 2)	**-37,030**	0	0	0	-37,030	0	0
Alameda	Caltrans	81H	SR-84 Expressway in Livermore (Southern Segment 2)	**47,030**	0	47,030	0	0	0	0
Regional	Caltrans	0521K	I-680 Freeway Performance Initiative, Phase 2	**2,000**	0	0	2,000	0	0	0
Alameda	AC Transit	new	AC Bus Rapid Transit (BRT) Project	**7,995**	0	0	7,995	0	0	0
San Mateo	BART	new	Daly City BART Station Intermodal Improvements	**200**	0	0	0	200	0	0
Alameda-TE	MTC	2100C	TE Reserve (MTC Share)	**-3,726**	0	0	-3,726	0	0	0
Alameda-OBAG	BART	new	Downtown Berkeley BART Plaza/Transit Area Improvements	**3,726**	0	3,726	0	0	0	0
Alameda-TE	ACTC	2100J	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $33,785	**33,785**	0	50,756	6,269	-36,830	885	12,705
Contra Costa	CCTA	2011O	Planning, programming, and monitoring	**909**	0	0	0	0	455	454
Contra Costa	MTC	2118	Planning, programming, and monitoring	**179**	0	0	0	0	88	91
Contra Costa	CCTA	0222E	I-680 SB HOV Gap Closure (N Main - Livorna)	**10,000**	0	0	-5,557	15,557	0	0
Contra Costa	CCTA	0242J	I-80/San Pablo Dam Rd. Interchange Reconstruction, Ph. 1	**-15,000**	0	-7,000	-8,000	0	0	0
Contra Costa	CCTA	0242J	I-80/San Pablo Dam Rd. Interchange Reconstruction, Ph. 1	**15,000**	0	15,000	0	0	0	0
Contra Costa	CCTA	new	I-80/San Pablo Dam Rd. Interchange Reconstruction, Ph. 2	**9,200**	0	0	9,200	0	0	0
Regional	Caltrans	0521K	I-680 Freeway Performance Initiative, Phase 2	**-22,000**	0	0	-22,000	0	0	0
Contra Costa	CCTA	0298E	I-680/SR-4 Interchange, NB 680 to WB 4	**-1,310**	0	-1,310	0	0	0	0
Contra Costa	CCTA	new	I-680/SR-4 Interchange, Widening of SR-4 (Phase 3)	**36,610**	0	0	36,610	0	0	0
Contra Costa	CCTA	new	Kirker Pass Rd. NB Truck Climbing Lane	**2,650**	0	0	0	0	2,650	0
Contra Costa	CCTA	new	I-80/Central Ave. Interchange Ph. 2 (Local Rd Realignment)	**2,000**	0	0	0	0	2,000	0
Contra Costa-TE	MTC	2118F	TE Reserve (MTC Share)	**-2,384**	-1,192	-1,192	0	0	0	0
Contra Costa-OBAG	Concord		Detroit Ave. Bicycle and Pedestrian Improvements	**1,189**	0	1,189	0	0	0	0
Contra Costa-OBAG	Concord		Concord BART Station Bicycle and Ped. Access Improvements	**1,195**	0	188	1,007	0	0	0
Contra Costa-TE	CCTA	2118F	TE Reserve (County Share)	**-1,486**	0	0	0	-1,486	0	0
			Target = $26,752	**36,752**	-1,192	6,875	11,260	14,071	5,193	545
Marin	TAM	2127C	Planning, programming, and monitoring	**246**	0	0	0	40	206	0
Marin	MTC	2127	Planning, programming, and monitoring	**51**	0	0	0	0	25	26
Marin	Caltrans	0342L	MSN Landscape/Mitigation and Soundwall	**-3,900**	0	-3,900	0	0	0	0
Marin	Caltrans	0342L	MSN San Rafael Irwin Creek/Brookdale	**1,655**	37	1,618	0	0	0	0
Marin	Caltrans	0360L	MSN Novato Soundwall	**2,245**	0	2,245	0	0	0	0

MTC 2014 Regional Transportation Improvement Program

December 18, 2013
(all numbers in thousands)

					2014 RTIP Funding by Fiscal Year					
County	**Agency**	**PPNO**	**Project**	**Total**	**Prior**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**
Marin-TE	MTC	2127B	TE Reserve (MTC Share)	**-707**	-353	-354	0	0	0	0
Marin-OBAG			Pending 1 (Fairfax)	**300**	0	45	255	0	0	0
Marin-OBAG			Pending 2	**407**	0	0	407	0	0	0
Marin-TE	TAM	2127B	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $0	**297**	-316	-346	662	40	231	26
Napa	NCTPA	1003E	Planning, programming, and monitoring	**165**	0	0	0	0	165	0
Napa	MTC	2130	Planning, programming, and monitoring	**31**	0	0	0	0	15	16
Napa	American Cyn	2130K	Lena Dr and Stenson Dr, Rehabilitation	**-268**	0	0	-268	0	0	0
Napa	Napa County	2130L	Silverado Tr, Howell Mt, and Denaweal, Rehabilitation	**-1,595**	0	0	-1,595	0	0	0
Napa	Napa City	new	Silverado Five-Way Intersection Improvements	**1,153**	0	0	0	0	1,153	0
Napa	American Cyn	new	Devlin Rd and Vine Trail Extension	**1,962**	0	0	297	0	1,665	0
Napa	American Cyn	new	Eucalyptus Dr Extension	**1,154**	0	0	0	0	1,154	0
Napa (+OBAG)	Napa City	new	California Ave Roundabouts	**1,501**	0	431	1,070	0	0	0
Napa	Calistoga	new	Petrified Forest Rd and SR-128, Intersection Improvements	**580**	0	0	105	50	425	0
Napa	Yountville	new	Hopper Creek Pedestrian Path (Oak Cir - Mission)	**500**	0	25	0	75	400	0
Napa	Napa County	new	Airport Blvd Rehabilitation	**1,332**	0	0	0	57	1,275	0
Napa	St. Helena	new	SR-29 and Grayson Ave, Install traffic signal (State only funds)	**300**	0	300	0	0	0	0
Napa	NCTPA	new	STIP Reserve (not programmable: $705k)	**0**	0	0	0	0	0	0
Napa-TE	MTC	2130B	TE Reserve (MTC Share)	**-431**	-215	-216	0	0	0	0
Napa-TE	NCTPA	2130J	TE Reserve (County Share)	**-267**	0	0	-267	0	0	0
			Target = $6,822	**6,117**	-215	540	-658	182	6,252	16
San Francisco	SFCTA	2007	Planning, programming, and monitoring	**667**	0	0	0	0	667	0
San Francisco	MTC	2131	Planning, programming, and monitoring	**140**	0	0	0	0	69	71
San Francisco	SFMTA	new	Central Subway	**12,498**	0	0	0	12,498	0	0
San Francisco-TE	SFCTA	2007S	TE Reserve (MTC Share)	**-1,910**	-955	-955	0	0	0	0
San Francisco-OBA	SFDPW		Chinatown Broadway Complete Streets, Phase 4	**1,910**	0	1,910	0	0	0	0
San Francisco-TE	MTC	2007S	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $13,305	**13,305**	-955	955	0	12,498	736	71
San Mateo	SM C/CAG	2140A	Planning, programming, and monitoring	**676**	0	0	0	0	338	338
San Mateo	MTC	2140	Planning, programming, and monitoring	**145**	0	0	0	0	71	74
San Mateo	SM CTA	690A	US-101 Willow Rd Interchange Reconstruction	**-20,471**	0	0	0	-20,471	0	0
San Mateo	SM CTA	690A	US-101 Willow Rd Interchange Reconstruction	**20,471**	0	0	0	3,072	17,399	0
San Mateo	Pacifica	632C	SR-1 Calera Parkway Operational Imps. in Pacifica	**-6,900**	0	-6,900	0	0	0	0
San Mateo	Pacifica	632C	SR-1 Calera Parkway Operational Imps. in Pacifica	**6,900**	0	0	6,900	0	0	0
San Mateo	SM C/CAG	668D	SR-92 Improvements Phase 2: Env Study for 92/101 IC Imprs	**-2,411**	0	0	-2,411	0	0	0
San Mateo	SM C/CAG	668D	SR-92 Improvements Phase 2: 92/101 IC Improvements	**23,839**	0	0	0	2,411	3,217	18,211
San Mateo	SM C/CAG	2140E	Countywide ITS Improvements	**-4,298**	0	-800	-3,498	0	0	0

Date: December 18, 2013
Attachment A
MTC Resolution No. 4128
Referred by: PAC

MTC 2014 Regional Transportation Improvement Program

December 18, 2013
(all numbers in thousands)

					2014 RTIP Funding by Fiscal Year					
County	**Agency**	**PPNO**	**Project**	**Total**	**Prior**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**
San Mateo	SM C/CAG	2140E	Countywide ITS Improvements	**4,298**	0	0	800	3,498	0	0
San Mateo-TE	MTC	2140C	TE Reserve (MTC Share)	**-1,991**	-995	-996	0	0	0	0
San Mateo-OBAG			Pending	**1,991**	0	0	1,991	0	0	0
San Mateo-TE	SM C/CAG	2140L	TE Reserve (County Share)	**-1,964**	0	-1,964	0	0	0	0
			Target = $21,145	**20,285**	-995	-10,660	3,782	-11,490	21,025	18,623
Santa Clara	VTA	2255	Planning, programming, and monitoring	**1,567**	0	0	0	0	784	783
Santa Clara	MTC	2144	Planning, programming, and monitoring	**321**	0	0	0	0	158	163
Santa Clara	VTA	new	I-680 Soundwall from Capitol to Mueller	**4,456**	0	0	95	408	94	3,859
Santa Clara	VTA	new	BART Extension from Berryessa to Santa Clara	**14,672**	0	14,672	0	0	0	0
Santa Clara-TE	MTC	2255B	TE Reserve (MTC Share)	**-4,350**	0	0	-2,175	-2,175	0	0
Santa Clara-OBAG	Palo Alto		US-101/Adobe Creek Bicycle and Pedestrian Bridge	**3,000**	0	0	3,000	0	0	0
Santa Clara-OBAG	San Jose		The Alameda "Beautiful Way" Grand Boulevard Phase 2	**1,350**	0	1,350	0	0	0	0
Santa Clara-TE	VTA	2255	TE Reserve (County Share)	**-1,858**	0	0	-1,093	-765	0	0
			Target = $19,158	**19,158**	0	16,022	-173	-2,532	1,036	4,805
Solano	STA	2263	Planning, programming, and monitoring	**407**	0	0	0	0	203	204
Solano	MTC	2152	Planning, programming, and monitoring	**85**	0	0	0	0	42	43
Solano	STA	new	Jepson Parkway (Leisure Town from Marshall to Commerce)	**9,360**	0	0	0	9,360	0	0
Solano-TE	MTC	5152A	TE Reserve (MTC Share)	**0**	0	0	0	0	0	0
Solano-TE	STA	5152K	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $11,108	**9,852**	0	0	0	9,360	245	247
Sonoma	SCTA	0770E	Planning, programming, and monitoring	**504**	0	0	0	0	504	0
Sonoma	MTC	2156	Planning, programming, and monitoring	**102**	0	0	0	0	50	52
Sonoma	Caltrans	0360L	MSN Landscape/Mitigation and Soundwall	**-995**	0	-995	0	0	0	0
Sonoma	Caltrans	0789F	US-101 HOV Lanes Landscaping (Steele)	**-2,180**	0	-2,180	0	0	0	0
Sonoma	Caltrans	0789F	US-101 HOV Lanes Landscaping (Steele)	**3,277**	0	3,277	0	0	0	0
Sonoma-TE	MTC	5156A	TE Reserve (MTC Share)	**-1,396**	-698	-698	0	0	0	0
Sonoma-OBAG	Santa Rosa		Downtown Santa Rosa Streetscape	**353**	0	0	353	0	0	0
Sonoma-OBAG	SMART		SMART Bicycle/Pedestrian Pathway	**1,043**	0	1,043	0	0	0	0
Sonoma-TE	SCTA	5156I	TE Reserve (County Share)	**0**	0	0	0	0	0	0
			Target = $0	**708**	-698	447	353	0	554	52
MTC Region			**Regional Target = $132,075**	**140,259**	-4,371	64,589	21,495	-14,701	36,157	37,090
						60,218	81,713	67,012	103,169	140,259

J:\PROJECT\Funding\RTIP\14 RTIP\[RTIP_2014_Draft_2013-12-10 Dec PAC-Comm.xlsx]2014_List Note: Detail on project programming by year and phase will be submitted to CTC

Date: December 18, 2013
W.I.: 1515
Referred by: PAC

Attachment B
Resolution No. 4128
Page 1 of 1

2014 Regional Transportation Improvement Program (RTIP)

Programming Principles

1. MTC adopted the MAP-21 Cycle 1 STP/CMAQ Programming (MTC Resolution 3925, Revised), which provided $31 million in RTIP funds freed up by regional American Recovery and Reinvestment Act of 2009 (ARRA) funds (for the SR-24 Caldecott Tunnel Fourth Bore) to Freeway Performance Initiative projects. Of the $31 million, $24 million was programmed in the 2012 STIP, and $7 million will be programmed in the 2014 RTIP. The $7 million in remaining RTIP funds, now proposed for the Freeway Performance Initiative project (or Contra Costa Exchange project(s) for the full $31 million), shall be the highest regional priority for programming after Planning Programming and Monitoring (PPM) in the earliest year possible.

2. As adopted in MTC Resolution No. 4035, Revised (One Bay Area Grant (OBAG) STP/CMAQ Cycle 2 Programming), a total of $18 million of STIP Transportation Enhancement (TE) Reserve was available to the counties for programming as a part of OBAG. Since the federal Moving Ahead for Progress in the 21st Century (MAP-21) Act and the 2014 STIP eliminate TE funding, MTC's commitment of this $18 million in OBAG programming will come from regular STIP funds through the de-programming of MTC's share of STIP TE Reserve. These $18 million in projects shall be the second highest priority for programming after the FPI projects (or Contra Costa Exchange project(s)) described in bullet 1, above.