Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

Monthly Progress Report
September 2006

TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Released: October 2006

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URS Hatch Mott MacDonald
Bay Area Management Consultants
An Association of URS Corporation and Hatch Mott MacDonald

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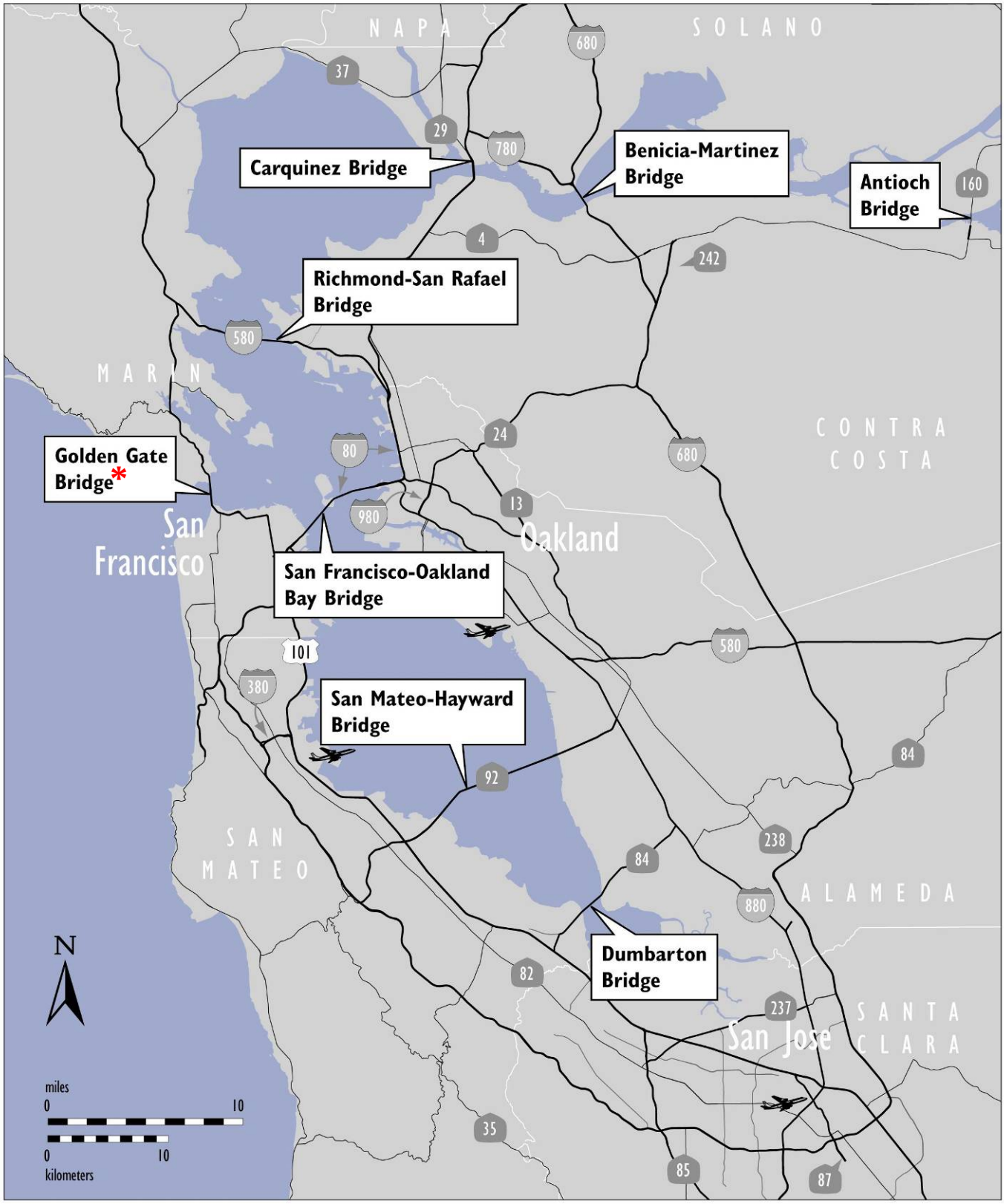
Toll Bridges of the San Francisco Bay Area



** Under the Jurisdiction of the Golden Gate Bridge, Highway and Transportation District*

INTRODUCTION

In July 2005, Assembly Bill 144, Hancock (AB 144) created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the state toll bridge seismic retrofit program projects. Comprised of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC), the TBPOC's project oversight and control processes include but are not limited to reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of $1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Eastbound Carquinez Bridge Seismic Retrofit	Complete
Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans (CT) will continue to report on their progress as an informational item. The RM1 program includes:

RM1 Projects	Open to Traffic Status
New Benicia-Martinez Bridge	Construction
1927 Carquinez Bridge Demolition	Construction
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Construction
Interstate 880/State Route 92 Interchange Reconstruction	Design
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

This report focuses on identifying critical project issues and monitoring project cost and schedule performance for the projects as measured against approved budgets and schedule milestones. This report is intended to fulfill Caltrans' requirement to provide monthly project progress reporting to the TBPOC under Section 30952.05 of the Streets and Highway Code.

EXECUTIVE SUMMARY

Toll Bridge Seismic Retrofit Program—Cost ($Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast*	At-Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		959.4	-	959.4	445.9	977.1	17.7	●
Capital Outlay Construction								
Skyway	Construction	1,293.0	-	1,293.0	1,053.9	1,293.0	-	●
SAS E2/T1 Foundations	Construction	313.5	-	313.5	160.5	313.5	-	●
SAS Superstructure	Construction	1,753.7	-	1,753.7	138.2	1,767.4	13.7	●
YBI Transition Structures	Design	299.3	-	299.3	-	318.5	19.2	●
Oakland Touchdown (OTD)		283.8	-	283.8	-	272.7	(11.1)	
* OTD Submarine Cable	Advertise				-	9.6	-	●
* OTD No. 1 (Westbound)	Design				-	196.7	-	●
* OTD No. 2 (Eastbound)	Design				-	62.0	-	●
* OTD Electrical Systems	Design				-	4.4	-	●
YBI South/South Detour	Design/ Const	131.9	-	131.9	34.5	133.7	1.8	●
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	●
Stormwater Treatment Measures	Construction	15.0	-	15.0	2.7	15.0	-	●
East Span Completed Projects		90.3	-	90.3	89.2	90.3	-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	38.8	72.4	-	●
Other Budgeted Capital		35.1	-	35.1	1.5	11.0	(24.1)	
Total SFOBB East Span Replacement Project		5,486.6	-	5,486.6	1,965.2	5,486.6	-	
SFOBB West Approach Replacement	Construction							●
Capital Outlay Support		120.0	-	120.0	81.9	120.0	-	
Capital Outlay Construction		309.0	-	309.0	203.0	309.0	-	
Total SFOBB West Approach Replacement		429.0	-	429.0	284.9	429.0	-	
Richmond-San Rafael Bridge Retrofit	Construction							●
Capital Outlay Support		134.0	-	134.0	125.5	127.0	(7.0)	
Capital Outlay Construction		780.0	-	780.0	663.8	698.0	(82.0)	
Total Richmond-San Rafael Bridge Retrofit		914.0	-	914.0	789.3	825.0	(89.0)	
Program Completed Projects	Complete							
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	698.0	705.6	-	
Total Program Completed Projects		925.4	-	925.4	917.4	925.4	-	
Miscellaneous Program Costs		30.0	-	30.0	24.8	30.0	-	
Program Contingency		900.0	-	900.0	-	989.0	89.0	
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	3,981.6	8,685.0	-	

● *Within Approved Current Schedule and Budget*

● *Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation*

● *Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming*

Note: Details may not sum to totals due to rounding effects.

** Cost forecasts are as of August 31, 2006. Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.*

Toll Bridge Seismic Retrofit Program—Schedule

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2006)	Project Complete Schedule Forecast (08/2006)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d= b + c	e	f = e – d	g	h
SFOBB East Span Replacement Project							
Skyway	Apr 07	8	Dec 07	Dec 07	-	●	A schedule extension due to hinge pipe beam fabrication, service platforms electrical appurtenances, polyester concrete, etc., has been approved by the TBPOC. See page 11.
SAS E2/T1 Foundations	Jun 08	(3)	Mar 08	Mar 08	-	●	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	●	Contract executed on May 3, 2006. See Note.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	●	In March 2006, the TBPOC approved the split of the YBI contract into three contracts. Schedules and estimates for the split contracts are being developed See page 22.
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	●	
• OTD Submarine Cable	n/a		Jul 07	Oct 07	3	●	Bids opened on September 19, 2006. See page 22.
• OTD Westbound	n/a		Jul 09	Oct 09	3	●	Advertise date postponed to provide additional time for utility coordination and contract formation.
• OTD Eastbound	n/a		Nov 14	Nov 14	-	●	See Note.
YBI South/South Detour	Jul 07	-	Jul 07	TBD	TBD	●	Schedule is being assessed. Forecast completion date is TBD. See page 19.
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	●	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Jun 07	(9)	●	Forecast based on actual award date and duration in contractor's A+B bid.
Open to Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	●	See Note.
Open to Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	●	See Note.
SFOBB West Approach Replacement	Aug 09	-	Aug 09	Aug 09	-	●	
Richmond-San Rafael Bridge							
• Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	●	Seismic retrofit completed July 29, 2005. Formal acceptance of contract October 28, 2005.
• Public Access Project	n/a	-	May 07	May 07	-	●	Project Complete Current Approved Schedule date changed to May 2007 as adopted by BATA in July 2006.

Note: Schedules for selected projects and the Open to Traffic dates were extended by 12 months from the AB144/SB66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract.

Regional Measure 1 Program—Cost ($Millions)

Project	Work Status	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast*	At-Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	I
New Benicia-Martinez Bridge Project	Construction							●
Capital Outlay Support		157.1	24.8	181.8	155.5	181.8	-	
Capital Outlay Construction		861.6	143.1	1,004.7	863.2	1,004.7	-	
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	12.2	20.3	-	
Project Reserve		20.8	35.3	56.2	-	56.2	-	
Total New Benicia-Martinez Bridge Project		1,059.9	203.1	1,263.0	1,030.9	1,263.0	-	
Carquinez Bridge Replacement Project	Construction							●
Capital Outlay Support		124.4	(1.1)	123.3	117.0	123.2	(0.1)	
Capital Outlay Construction		381.2	3.3	384.5	363.2	384.3	(0.2)	
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-	
Project Reserve		12.1	(2.2)	9.9	-	10.2	0.3	
Total Carquinez Bridge Replacement Project		528.2	-	528.2	490.1	528.2	-	
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Construction							●
Capital Outlay Support		8.0	(3.5)	4.5	2.1	4.5	-	
Capital Outlay Construction		16.9	3.6	20.5	1.9	20.5	-	
Project Reserve		0.1	(0.1)	-	-	-	-	
Total Richmond-San Rafael Bridge Deck Overlay Rehabilitation		25.0	-	25.0	4.0	25.0	-	
I-880/SR-92 Interchange Reconstruction	Design							●
Capital Outlay Support		28.8	-	28.8	29.5	51.7	22.9	
Capital Outlay Construction		94.8	-	94.8	-	122.5	27.7	
Capital Outlay Right-of-Way		9.9	-	9.9	8.0	12.4	2.5	
Project Reserve		0.3	-	0.3	-	9.7	9.4	
Total I-880/SR-92 Interchange Reconstruction		133.8	-	133.8	37.5	196.3	62.5	
Program Completed Projects	Complete							
Capital Outlay Support		54.0	(0.5)	53.5	54.0	55.4	1.9	
Capital Outlay Construction		307.5	(1.1)	306.5	291.7	296.8	(9.7)	
Capital Outlay Right-of-Way		1.7	-	1.7	0.5	0.8	(0.9)	
Project Reserve		2.5	1.6	4.1	-	1.8	(2.3)	
Total Program Completed Projects		365.7	-	365.7	346.2	354.8	(10.9)	
Total Regional Measure 1 Program		2,112.6	203.1	2,315.7	1,908.7	2,367.3	51.6	

● *Within Approved Current Schedule and Budget*

● *Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation*

● *Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming*

Note: Details may not sum to totals due to rounding effects.

** Cost forecasts are as of August 31, 2006. Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.*

Regional Measure 1 Program—Schedule

Project	BATA Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2006)	Project Complete Schedule Forecast (08/2006)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d= b + c	e	f = e - d	g	h
New Benicia-Martinez Bridge Project							
• New Benicia-Martinez Bridge	Dec 07	-	Dec 07	Dec 07	-	●	
• I-680/I-780 Interchange Replacement	Dec 07	-	Dec 07	Feb 08	2	●	Final electrical work to be completed after Bridge Open to Traffic. See page 41.
• Open to Traffic Date	Dec 07	-	Dec 07	Dec 07	-	●	
1927 Carquinez Bridge Demolition Project	Dec 07	-	Dec 07	Dec 07	-	●	
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Jan 07	-	Jan 07	Jan 07	-	●	
I-880/SR-92 Interchange Reconstruction	Nov 10	-	Nov 10	Jun 11	7	●	Delay in the procurement of right-of-way is impacting the cost/schedule for this project. See page 47.

Highlights of Project/Program Activities and TBPOC Actions for August 2006

Toll Bridge Seismic Retrofit Program

SFOBB East Span Seismic Replacement Project

- On August 29, 2006, on the Skyway contract, the westbound steel transition tub from the skyway to the self-anchored suspension span (SAS) was lifted into place without issue. Like the eastbound tub that was lifted into place last year, this tub will be supported with temporary towers until the SAS is ready. The tub lifts are among the heaviest lifts ever by Caltrans (see page 10).
- Oakland Touchdown Submarine Cable Relocation contract conducted a bid opening on September 19, 2006. Actions are being taken to address the impact of having received one bid that was over the Engineer's Estimate. (See pages 9 and 22).
- Work on the Stormwater Treatment Measures contract has been delayed due to nesting birds, differing site conditions, and discovery of unsuitable materials. (See page 21).

SFOBB West Approach Replacement Project

- Demolition of Frames 7U (South), 8U (South), and a portion of 6U was completed in one extended weekend closure during Labor Day Weekend without issues and ahead of schedule. Traffic impacts were as expected over the weekend and well mitigated with an extensive public outreach program. This one-weekend operation greatly reduced impacts to the traveling public and mitigated project schedule delays. (See page 25).

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Operation

- Caltrans has completed the first concrete closure pour on the New Benicia-Martinez Bridge that will link the individual piers together into a frame. The last full cast-in-place concrete segment pour is scheduled for October, followed by additional closure pours. Work on the hinges is proceeding (See page 38).

Richmond-San Rafael Bridge Deck Overlay Project

- Resurfacing work is moving quickly on the lower deck of the bridge. Grinding operations revealed that the existing mortar thickness on the bridge is deeper than expected and additional grinding and polyester concrete quantities will be required. Phase III work for this project will commence on October 2, 2006, which will temporarily close the center lane of the bridge (See page 44).

Interstate 880 / State Route 92 Interchange Reconstruction Project

- Bids recently received on the I-238 Widening Project are necessitating a review and possible revision of the Capital Outlay estimate for this project. (See page 47).

PROJECT / CONTRACT REPORTS

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

- Skyway Contract
- Self-Anchored Suspension (SAS) Superstructure Contract
- Self-Anchored Suspension (SAS) E2/T1 Foundations Contract
- Yerba Buena Island (YBI) South/South Detour Contract
- Other Major Contracts
- Other Contracts and Related Project Work

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

Richmond-San Rafael Bridge Seismic Retrofit Project

Other Completed Seismic Retrofit Projects

Toll Bridge Seismic Retrofit Program

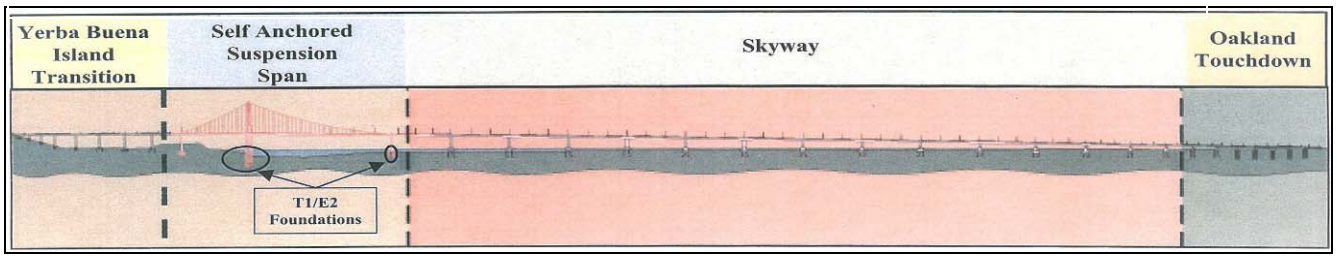
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

Project Description: The East Span will be seismically retrofitted through the complete replacement of the existing span. The remaining effort for this project consists of the following contracts: Skyway—construction of two parallel concrete structures, each approximately 1.3 miles in length; Self-Anchored Suspension (SAS) Foundation—construction of SAS marine foundations; SAS Superstructure—construction of a self-anchored 385-meter main span superstructure incorporating a 160-meter fabricated structural steel tower with a main cable and inclined suspenders that will support steel orthotropic decks; Yerba Buena Island (YBI) South/South Detour—design and construction of a temporary double-deck bypass structure that will detour traffic to the existing SFOBB while completing the westerly permanent tie-in structure of the new East Span at Yerba Buena Island; YBI Structures—construction of a new structure connecting the western end of the self-anchored suspension to the Yerba Buena Island viaduct, which will be retrofitted; Oakland Touchdown—at the Oakland end of the East Span, construction of two parallel, cast-in-place post-tensioned concrete viaducts, which join the skyway to the at-grade Oakland approach fill; and Existing Bridge Demolition—demolition of the existing 1936 SFOBB East Span structure after the construction and placement of traffic onto the new East Span.

SFOBB East Span Replacement Cost Summary ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	959.4	-	959.4	445.9	977.1	17.7
Capital Outlay				-	-	-
Skyway	1,293.0	-	1,293.0	1,053.9	1,293.0	-
SAS Superstructure	1,753.7	-	1,753.7	138.2	1,767.4	13.7
SAS E2/T1 Foundations	313.5	-	313.5	160.5	313.5	-
YBI Structures	299.3	-	299.3	-	318.5	19.2
Oakland Touchdown (OTD)	283.8	-	283.8	-	272.7	(11.1)
* OTD Submarine Cable				-	9.6	
* OTD No. 1 (Westbound)				-	196.7	
* OTD No. 2 (Eastbound)				-	62.0	
* OTD Electrical Systems				-	4.4	
YBI South/South Detour	131.9	-	131.9	34.5	133.7	1.8
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	-	15.0	2.7	15.0	-
East Span Completed Projects	90.3	-	90.3	89.2	90.3	-
Right-of-Way and Environmental	72.4	-	72.4	38.8	72.4	-
Other Budgeted Capital	35.1	-	35.1	1.5	11.0	(24.1)
TOTAL	5,486.6	-	5,486.6	1,965.2	5,486.6	-

Note: Details may not sum to totals due to rounding effects.



SFOBB East Span Replacement Project

SFOBB East Span Replacement Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI South / South Detour*	July 2007	-	July 2007	TBD	TBD
Stormwater Treatment Measures	March 2008	-	March 2008	June 2007	(9)
SAS E2/T1 Foundations	June 2008	(3)	March 2008	March 2008	-
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-
Oakland Touchdown (OTD)	November 2013	12	November 2014	November 2014	-
* OTD Submarine Cable	n/a		July 2007	October 2007	3
* OTD No. 1 (Westbound)	n/a		July 2009	October 2009	3
* OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	November 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-

** Contract schedules being further assessed due to changes in SAS schedule.*

Project Status: Construction is currently ongoing on the Skyway, YBI South/South Detour, SAS E2/T1 Foundations and Stormwater Treatment Measures contracts. Contracts in design include the Oakland Touchdown (OTD) Westbound, OTD Eastbound, and the YBI Transition Structure Contract, and Existing Bridge Demolition contract. The OTD contracts have been split and design of each contract is proceeding per its schedule requirements. The OTD Submarine Cable Contract was advertised for bids on July 31, 2006 and bids were opened on September 19, 2006. The TBPOC has authorized the split of the YBI Transition Structures (YBITS) contract into three separate contracts, and, in May 2006, approved a plan to continue with the current alignment for the YBITS, and the current plan for a double-decked eastbound and westbound South/South Detour (SSD). Design work on the Existing Bridge Demolition contract has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time.

SAS contract addenda extended the SAS contract by a total of 12 months but also provided for an early completion incentive. There has been a like impact to the Westbound and Eastbound Open to Traffic dates, and the completion of the OTD, YBI Transition Structure, and the Existing Bridge Demolition contracts. The East Span corridor cost and schedule forecast does not assume achievement of the early completion incentive that was also part of Addendum #7; however, schedule planning of the future construction contracts continues assuming that the SAS early completion is achieved to ensure that they will not impact bridge opening in that event.

Project Issues: All projects now have a Risk Response Team and a Risk Register incorporating quantitative risk analyses. A preliminary risk register has also been developed for Capital Outlay Support (COS) costs, as has a program-level risk register that captures risks common to all projects; the development of a quantitative COS risk analysis is in progress. The Risk Response Teams have focused attention on developing and executing risk response actions for their most significant risks. Many of the actions have been effective, as evidenced by a reduction of risk impacts on the Skyway and E2/T1 contracts from the previous quarter. The effort to develop and execute risk response actions to mitigate the cost and schedule impacts posed by risk issues will continue to be a high priority.

Recent TBPOC Actions: See the following contract detail pages for specific TBPOC actions on East Span contracts.

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

SKYWAY CONTRACT

Contract Description: The Skyway contract constructs two parallel pre-cast concrete approach spans from Oakland to the self-anchored suspension span near Yerba Buena Island.

Skyway Cost Summary ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - Skyway						
Capital Outlay Support	197.0	-	197.0	145.9	197.0	-
Capital Outlay Construction	1,293.0	-	1,293.0	1,053.9	1,293.0	-
TOTAL	1,490.0	-	1,490.0	1,199.8	1,490.0	-

Note: Details may not sum to totals due to rounding effects.

Skyway Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
East Span - Skyway	April 2007	8	December 2007	December 2007	-

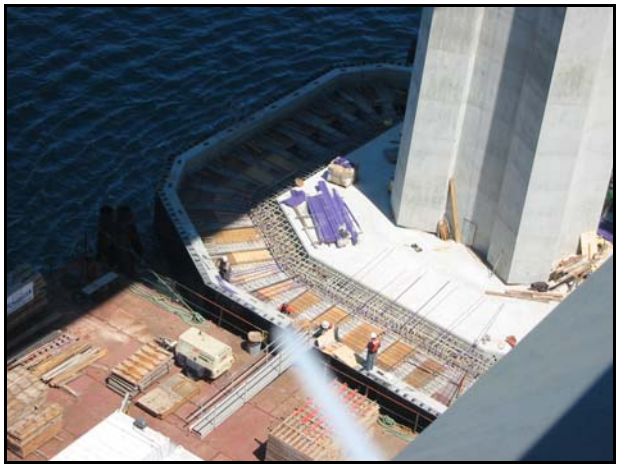
Contract Status: The Skyway contract is currently in construction and is 93% complete as of August 20, 2006. The foundation work is complete with the exception of installing fenders around six of the pier footings. Three fenders have been completed; the remaining fenders are scheduled to be completed by October 2006. The eastbound structure is 100% complete with the erection of all segments, while the westbound structure has erected 210 of the 226 segments (93%) with 16 segments remaining to be erected. A total of 436 segments (96%) have been installed to date. Erection activities are underway at Pier 3W and Pier 6W (refer to diagram on page 13). On August 29, 2006, the westbound steel transition tub from the skyway to the self anchored suspension span (SAS) was lifed into place without issue. Like the eastbound tub that was lifted into place last year, this tub will be supported with temporary towers until the SAS is ready. The tub lifts are among the heaviest lifts ever by Caltrans. Bike path cantilever beam installation is complete and the installation of the panel segments is currently 52% complete. The Stockton pre-cast yard has cast 100% (452) of the segments for this contract. The hinge pipe beams at hinge BW are scheduled for delivery in late November 2006.

Contract Issues:

Issue	Mitigating Action
KFM issued 15 NOPC's on behalf of USI for welding issues related to the fabrication of the Steel Orthotropic Box Girders (SOBG).	USI completed the fabrication of the SOBG. All NOPC's filed were recommended to be heard by the Dispute Review Board.
An eight-month schedule extension is forecast as a result of issues which affect the controlling operations, to include hinge pipe beam fabrication, service platforms, electrical appurtenances, polyester concrete overlay, modular joints and other tasks to be completed.	An overall settlement has been reached with the Contractor to resolve all the cost and schedule impacts posed by these issues. A time extension of 220 working days, extending the project completion date to December 2007 has been approved by the TBPOC. The change in schedule to the Skyway contract is not expected to delay the overall open-to-traffic date for the East Span Replacement project, nor is the cost associated with this settlement expected to impact the overall budget for the Skyway contract or the project.

Recent TBPOC Actions: In July 2006, the TBPOC approved a strategy for finalizing settlement with the Contractor on the various issues mentioned above. In August 2006, the TBPOC approved Contract Change Order (CCO) # 200, Skyway Contract: Overall Settlement of Outstanding Issues, in the amount of $94.4 million, and an associated change in the contract completion date from April 2007 to December 2007.

Contract Photographs



Construction of Pier Footing Fenders

Grinding of Eastbound Skyway Deck

Contract Photographs Cont'd.

Grinding of Eastbound Skyway Deck

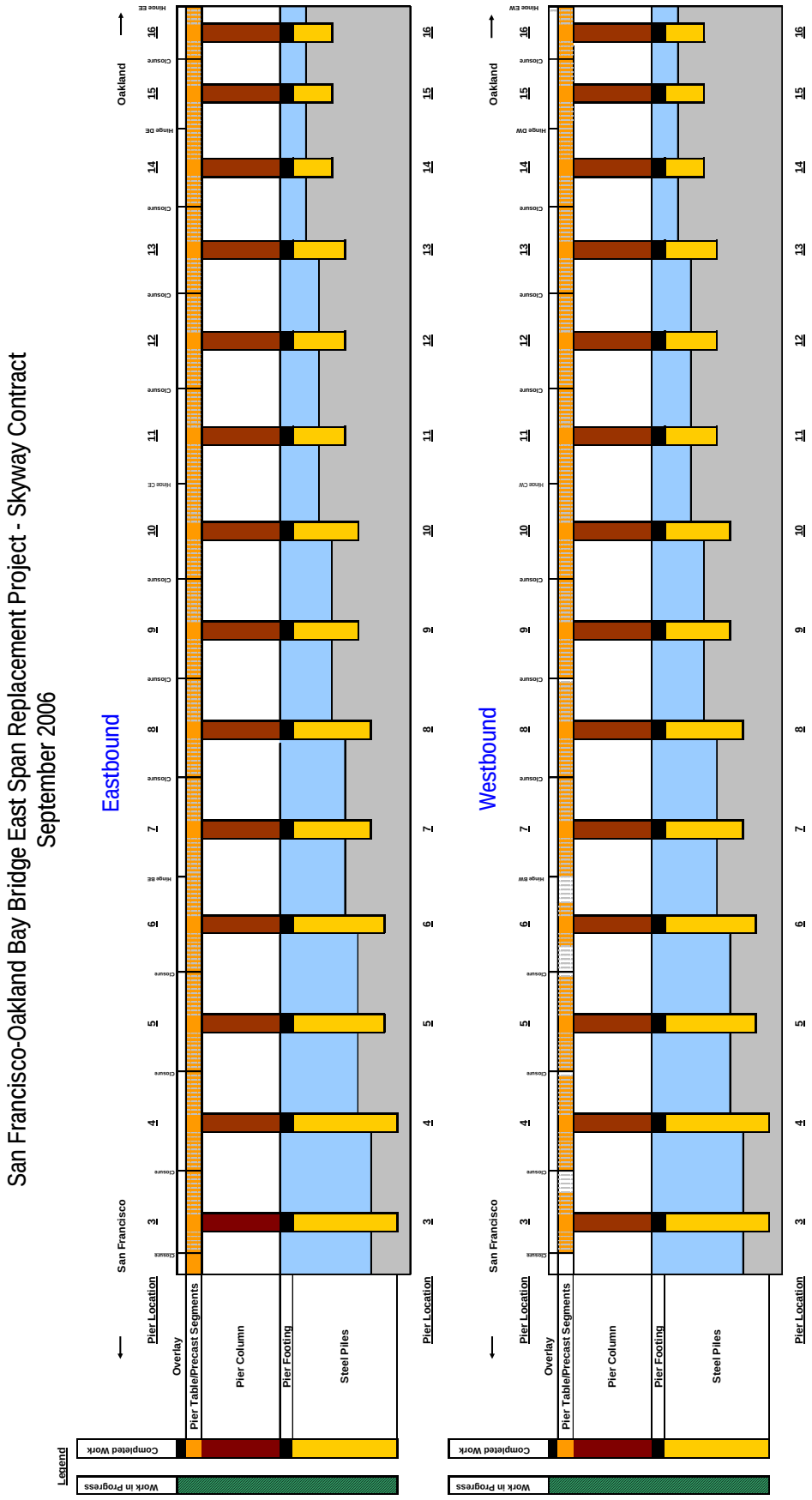
Lifting of Westbound Orthotropic Box Girder (OBG)

Lifting of Westbound OBG

Lifting of Westbound OBG

Lifting of Westbound OBG

Lifting of Westbound OBG


San Francisco-Oakland Bay Bridge East Span Replacement Project - Skyway Contract
September 2006
Eastbound
Westbound
San Francisco
Oakland
Pier Location
Overlay
Pier Table/Precast Segments
Pier Column
Pier Footing
Steel Piles
Closure
Hinge BE
Hinge CE
Hinge DE
Hinge EE
Hinge BW
Hinge CW
Hinge DW
Hinge EW
Legend
Completed Work
Work in Progress

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE CONTRACT

Contract Description: The Self-Anchored Suspension (SAS) Superstructure contract constructs a signature tower span between the skyway and the Yerba Buena Island transition structure. Work on the SAS bridge has been split between three contracts—the SAS Superstructure (under construction), the SAS E2/T1 Foundation (under construction), and the SAS W2 Foundation (completed).

SAS Superstructure Cost Summary ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	B	c	d = b + c	e	f	g = f - d
East Span - SAS Superstructure						
Capital Outlay Support	214.6	-	214.6	23.3	214.6	-
Capital Outlay Construction	1,753.7	-	1,753.7	138.2	1,767.4	13.7
TOTAL	1,968.3	-	1,968.3	161.5	1,982.0	13.7

Note: Details may not sum to totals due to rounding effects.

SAS Superstructure Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
East Span - SAS Superstructure	March 2012	12	March 2013	March 2013	-

Contract Status: The contract is 10% complete as of August 20, 2006. The Contractor, American Bridge Fluor Enterprises, Inc., a Joint Venture (ABF), has begun occupying the field office and working drawing campus on Pier 7. Development of various administrative submittals, including the baseline schedule, is continuing. Submittal of working drawings has begun. The Contractor is finalizing agreements with manufacturers, fabricators, suppliers and subcontractors, and signed a steel fabrication subcontract with Zhenhua Port Machinery Company (ZPMC), of Shanghai, China, on July 18, 2006.

The forecast $13.7 million increase in construction costs on the SAS contract from the approved budget reflects actions taken to encourage additional bidders for the contract.

Contract Issues:

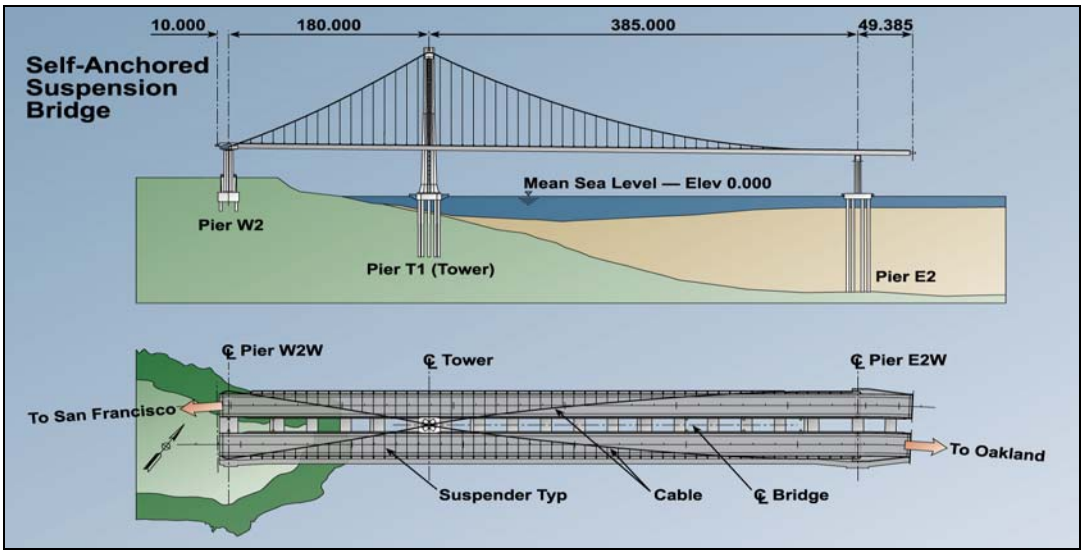
Issue	Mitigating Action
Caltrans' Toll Bridge Seismic Retrofit Program Manager and East Span Replacement Project Manager have visited the ZPMC steel fabrication facilities in China and have identified the need for additional resources to monitor that work.	Caltrans and BATA are working together to set up facilities and to organize resources that will ensure an effective Owner's presence in the steel fabrication shops.

Recent TBPOC Actions: None.

Contract Photographs

SAS Superstructure Artist Rendition

View of the Western End of the Skyway Contract that will connect with the Future SAS Contract.



Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

SELF-ANCHORED SUSPENSION (SAS) E2/T1 FOUNDATIONS CONTRACT

Contract Description: The Self-Anchored Suspension (SAS) E2/T1 Foundations contract constructs the main tower foundation at T1 and the adjacent east foundation at E2.

SAS E2/T1 Foundations Cost Summary ($ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
East Span - SAS E2 / T1 Foundations						
Capital Outlay Support	52.5	-	52.5	13.9	52.5	-
Capital Outlay Construction	313.5	-	313.5	160.5	313.5	-
TOTAL	366.0	-	366.0	174.4	366.0	-

Note: Details may not sum to totals due to rounding effects.

SAS E2/T1 Foundations Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
East Span - SAS E2 / T1 Foundations	June 2008	(3)	March 2008	March 2008	-

Contract Status: The contract is 46% complete as of August 20, 2006. The drilling operations for T1 piles are in progress. Pile driving for the E2 piles is also in progress with eight (out of 16) piles spliced and driven. Driving of pile bottoms for the remaining eight piles in the E2 eastbound side has been completed. Fabrication of the permanent steel casings for the CIDH piles at T1 is approximately 3% complete. Fabrication of steel pile top sections for CISS piles at E2 are 70% complete. Fabrication of the T1 footing box is approximately 30% complete. Fabrication of the steel footing frame for Pier E2 was completed and was delivered to Oakland on September 14, 2006.

Contract Issues:

Issue	Mitigating Action
KFM has indicated that the E2/T1 fabrication schedule is being delayed due to the negative affect of the fabrication delays of the hinge pipe beams on the Skyway Contract.	The State is being protected from further exposure to the cost and schedule risk of this issue through the parallel issuance of two CCO's; #200 on the Skyway contract, and CCO #44 on the E2/T1 contract, which provides that "No additional compensation will be provided for impacts resulting from fabrication work from the Skyway project." The latter CCO also provides that it represents a "no cost" change to the State.

Recent TBPOC Actions: None.

Project Photographs

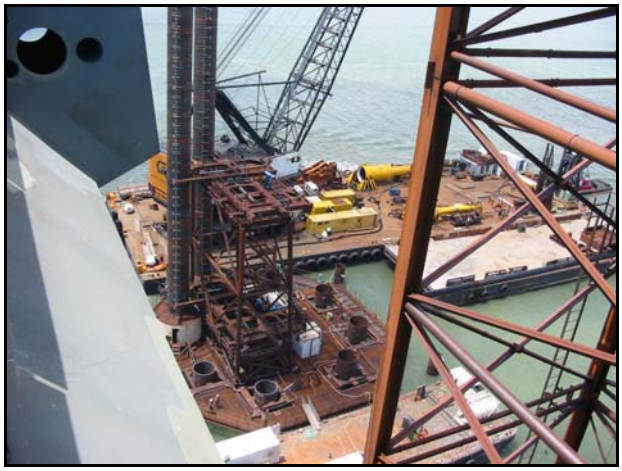
E2 Pile Driving Hammer

Pile Driving Operations at E2

Pile Driving Operations at E2

Pile Driving Operations at E2

Pile Driving Operations at E2



Top Half of Piles Welded to Bottom Half at E2

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

YERBA BUENA ISLAND (YBI) SOUTH/SOUTH DETOUR CONTRACT

Contract Description: The Yerba Buena Island (YBI) South/South Detour (SSD) Contract constructs a temporary detour from the YBI tunnel to the existing east span of the Bay Bridge. This detour maintains traffic on the existing bridge while the YBI Transition Structure Contract completes the tie-in from the SAS to the existing tunnel.

YBI South/South Detour Cost Summary ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
YBI South/South Detour						
Capital Outlay Support	29.5	-	29.5	16.4	29.5	-
Capital Outlay Construction	131.9	-	131.9	34.5	133.7	1.8
TOTAL	161.4	-	161.4	50.9	163.2	1.8

Note: Details may not sum to totals due to rounding effects.

YBI South/South Detour Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
YBI South / South Detour *	July 2007	-	July 2007	TBD	TBD

** Contract schedule under assessment. See Contract Issues below.*

Contract Status: The contract work is 38% complete as of August 20, 2006. The viaduct portion of the contract is performance based, whereby the Contractor is responsible for both the design and construction of viaduct structure. The West and East tie-in design work was taken over by Caltrans. The contractor will still construct the tie-ins. To minimize impacts to the traveling public due to the current SAS schedule, the tie-in work has been suspended. This schedule is being evaluated; see Contract Issues.

The suspension of the tie-in work has necessitated additional design enhancements to the viaduct segment to allow it to stand in place alone for a longer duration and to improve its seismic safety. The transfer of steel from the fabricator, Shanghai Grand Towers, Ltd. to Dongkuk S&C of South Korea has been completed. Shop drawings for the Viaduct structure are currently in progress. Concurrently, Dongkuk S&C is in the process of preparing the Welding Quality Control Plan for approval.

Contract Issues:

Issue	Mitigating Action
Delay to the SAS contract due to re-advertising and Addenda #5 and #7 to the SAS contract has impacts on the South/South Detour Contract.	The TBPOC approved a plan to continue with the currently programmed SSD structure (see Recent TBPOC Actions below). Various options concerning contract scope and schedule are being considered to efficiently complete this contract while integrating any future SAS schedule revisions. The amount of contract delay is subject to analysis by Caltrans and negotiation with the Contractor. The projected delay to the project is not expected to delay the overall open-to-traffic date for the East Span Replacement project, but is likely to have a significant impact to the SSD contract completion date.

Recent TBPOC Actions: In May 2006, the TBPOC approved a plan to continue with the currently programmed double-decked eastbound and westbound SSD, and authorized Caltrans to take over the design of the tie-in structures.

Contract Photographs

Aerial View of SSD

Aerial View of SSD

SSD Construction

SSD Slope Protection

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

OTHER MAJOR CONTRACTS

Contract Description: Caltrans is currently designing a number of other major construction contracts that will be necessary prior to opening the new east span, including the Oakland Touchdown and the YBI Transition Structure. Following opening of the new bridge, the existing bridge will be removed with the Bridge Demolition contract.

Other Major Contracts Cost Summary ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
A	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	238.8	-	238.8	37.4	256.5	17.7
Capital Outlay Construction						-
YBI Transition Structure	299.3	-	299.3	-	318.5	19.2
Oakland Touchdown	283.8	-	283.8	-	272.7	(11.1)
* OTD Submarine Cable				-	9.6	-
* OTD No. 1 (Westbound)				-	196.7	-
* OTD No. 2 (Eastbound)				-	62.0	-
* OTD Electrical Systems				-	4.4	-
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	-	15.0	2.7	15.0	-
Total Capital Outlay Construction	837.3	-	837.3	2.7	1,100.9	263.6
TOTAL	1,076.1	-	1,076.1	40.1	1,357.4	281.3

Note: Details may not sum to totals due to rounding effects.

Other Major Contracts Schedule Summary

Contract	AB 144/SB 66 Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)	% Design Comp.
YBI Transition Structure	November 2013	12	November 2014	November 2014	-	80
Oakland Touchdown	November 2013	12	November 2014	November 2014	-	TBD
* OTD Submarine Cable	n/a		July 2007	October 2007	3	100%
* OTD No. 1(Westbound)	n/a		July 2009	October 2009	3	TBD
* OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-	TBD
Existing Bridge Demolition	September 2014	12	September 2015	September 2015	-	10
Stormwater Treatment Measures	March 2008		March 2008	June 2007	(9)	N/A

Contract Status:

Stormwater Treatment Measures: Construction on this contract to implement best practices for stormwater runoff treatment at the toll plaza began in April 2006. The Contractor is Diablo Constructors. The current schedule forecast reflects the actual award date that was earlier than planned plus a reduced construction contract duration that was shown in the Contractor's bid. The contract is 20% complete as of August 20, 2006.

Initial construction included installing drainage systems and pump stations. Work has been delayed due to nesting birds, differing site conditions, and discovery of unsuitable materials. The contract is still forecast to complete nine months ahead of schedule; this improved schedule is due in part to work accomplished during the Labor Day weekend shut down of the SFOBB.

Contract Issues:

Issue	Mitigating Action
Only one bid was received on September 19, 2006 for the Oakland Touchdown Submarine Cable Relocation contract, and the bid amount was substantially over the Engineer's Estimate.	BATA and the City of San Francisco are in discussions concerning whether to re-advertise this contract, or to provide funding on the basis of the single bid received.

Contract Photographs

Valve Vault 1A

Valve Vault 1B

Bypass Str 1A

Bypass Str 1A

Oakland Touchdown: The TBPOC authorized Caltrans to split the Oakland Touchdown (OTD) into multiple contracts to accelerate work and to reduce the risk of any of this work impacting the critical path for the project. OTD Contract No. 1 would construct all the marine foundation work and westbound approach work earlier to keep the work off the project's critical path and is forecast to be complete in October 2009. Plans, Specifications, and Engineer's Estimate (PS&E) for OTD Contract No. 1 was completed on September 1, 2006. OTD Contract No. 2 would construct the remaining eastbound approach when westbound traffic is shifted onto the new SAS and is now scheduled to be complete in November 2014, which does not impact the eastbound open-to-traffic date. The OTD Submarine Cable Contract would replace the existing submarine electrical cable from Oakland to Treasure Island, and will be the first to be constructed to avoid possible construction conflicts. It was advertised for bids on July 31, 2006, and is forecast to be completed in October 2007. Bid opening for the OTD Submarine Cable, which was originally scheduled for September 12, 2006, occurred on September 19, 2006. One bid was received for that contract: See Contract Issues above. The OTD Electrical Systems Contract would incorporate most of the electrical elements from OTD as well as from other segments of the East Span into a single contract and is currently being scoped. As a result of extending the SAS contract duration by 12 months, the Oakland Touchdown completion date has been extended by 12 months. The forecast $11.1 million decrease in construction costs on the Oakland Touchdown series of contracts from the approved budget reflects the result of the split of the OTD contract into multiple contracts to accelerate work and to reduce schedule risks. However, the capital outlay support for the contract was increased by $19.2 million to cover the additional work to split the contract and to administer four separate contracts over a longer duration rather than the original single contract. This COS impact is estimated at $17.7 million, and includes engineering, support and administration costs. Currently, these adjustments can be funded from contingencies in Other Budgeted Capital.

YBI Transition Structure: This contract is currently being designed by Caltrans. In February 2006, TBPOC authorized the split of the YBI contract into three contracts to balance the time that traffic is placed on the South South Detour and overall corridor schedule risk, mitigate potential cost increases due to delays from other contracts, optimize the YBI contract durations and reduce cost risk for the SSD demolition by sequencing the contracts to allow SSD as-built plans to be incorporated into the YBITS contract documents. The first contract will construct the mainline YBI transition structures (YBITS) and all work required to place traffic onto the new bridge. The second contract will include demolition of the South South Detour (SSD), completion of the new eastbound on-ramp and YBI restoration activities. Caltrans is initiating the design effort to split these contract documents. A third contract will include the YBI landscaping scope. The contract schedule completion date has been extended by 12 months due to a 12-month delay to the Eastbound Open to Traffic date caused by the impact to the SAS contract completion due to SAS Addenda #5 and #7. The $19.2 million increase in construction costs on the YBITS contract from the approved budget reflects a higher estimate for electrical work and revised escalation costs due to the revised schedule.

Bridge Demolition: Design is 10% complete. Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension. The $17.2 million decrease in construction costs for the Existing Bridge Demolition contract is due to a re-evaluation of cost escalation rates for the contract.

Recent TBPOC Actions: In May 2006, the TBPOC approved a plan to continue with the current alignment for YBITS.

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

OTHER COMPLETED CONTRACTS AND RELATED WORK

Summary Description: Substantial work has already been performed on the SFOBB East Span Replacement project to facilitate construction of the mainline construction contracts.

Other Contracts and Related Work Cost Summary ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	E	f	g = f - d
Capital Outlay Support	227.0	-	227.0	209.0	227.0	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	38.8	72.4	-
Capital Outlay Construction						-
SAS W2 Foundations	26.4	-	26.4	25.8	26.4	-
YBI/SAS Archeology	1.1	-	1.1	1.1	1.1	-
YBI - USCG Road Relocation	3.0	-	3.0	2.8	3.0	-
YBI - Substation and Viaduct	11.6	-	11.6	11.3	11.6	-
Oakland Geofill	8.2	-	8.2	8.2	8.2	-
Pile Installation Demonstration Project	9.2	-	9.2	9.2	9.2	-
Existing East Span Retrofit	30.8	-	30.8	30.8	30.8	-
Total Capital Outlay Construction Completed	90.3	-	90.3	89.2	90.3	-
TOTAL	389.7	-	389.7	337.0	389.7	

Note: Details may not sum to totals due to rounding effects.

Other Contracts and Related Work Schedule Summary

Project	Actual Project Completion Date
Existing East Span Retrofit	March 1998
Interim Retrofit	July 2000
Pile Installation Demolition Project	December 2000
YBI / SAS Archaeology	January 2003
Oakland Geofill	April 2003
YBI – USCG Road Relocation	June 2004
SAS W2 Foundations	October 2004
YBI Substation and Viaduct	May 2005

Summary Status: Construction has been completed on the above listed contracts. Caltrans continues to work with various environmental agencies to conduct compliance inspections and monitor and mitigate any environmental impacts from the project.

Contract Issues: None.

Recent TBPOC Actions: None.

Toll Bridge Seismic Retrofit Program

San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

Project Description: The SFOBB West Approach Replacement Project will replace the entire west approach structure from the 5th Street to the west anchorage of the existing west spans of the SFOBB while maintaining existing traffic lanes for the weekday commute.

SFOBB West Approach Replacement Cost Summary ($Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
West Approach						
Capital Outlay Support	120.0	-	120.0	81.9	120.0	-
Capital Outlay Construction	309.0	-	309.0	203.0	309.0	-
TOTAL	429.0	-	429.0	284.9	429.0	-

Note: Details may not sum to totals due to rounding effects.

SFOBB West Approach Replacement Schedule Summary

Project	AB 144/SB 66 Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
West Approach	August 2009	-	August 2009	August 2009	-

Project Status: Construction is 71% complete as of August 20, 2006. Seismic retrofit construction is continuing throughout the project. Major ongoing work during August included the restart of work on the next phase of piles for the interim and permanent eastbound I-80 mainline structures, the 5th Street and Harrison Street ramps, the 4th Street retrofit work, and falsework erection and reconstruction for Frame 8U (North). On August 31, 2006, the upper deck was re-striped into a new lane configuration, which will be in place until the final stage of the project, when the permanent configuration will be done.

The demolition of Frames 7U (South), 8U (South) and a portion of 6U, occurred from just before midnight on Friday, September 1, 2006, to just before 5:00 a.m. on Tuesday, September 5, 2006. The lower deck of the San Francisco Oakland Bay Bridge was closed to accommodate the demolition of the upper deck. Demolition operations commenced without issues and were actually completed about 35 minutes ahead of schedule. Caltrans monitored dust levels during demolition, and they were within the legal health standards set by the state. BART maintained 24-hour service for the benefit of the public, and BATA funded additional ferry service. Buses operated by Amtrak, San Francisco Muni, AC transit, wedding groups, etc., were also allowed every hour through the demolition to keep the mass transit links available throughout the weekend. The intent of this extended weekend closure was to reduce travel impacts to the public, as well as to compress the demolition time from the originally planned nine weekends to a single long weekend. Doing this also mitigated 130 days of project delay.

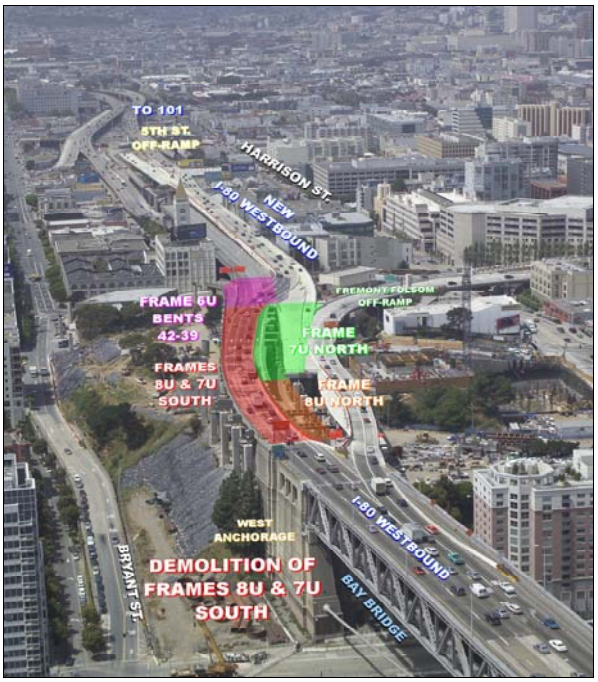
This extended weekend closure allowed for various other construction operations besides those on the West Approach Project. Approximately 300 pieces of equipment and 400 workers were mobilized from across the U.S. and were deployed across the Bay Bridge corridor; work was performed on five miles of the bridge, from 7th street in San Francisco, to the Oakland Toll Plaza.

Project Issues:

Issue	Mitigating Action
Ensuring the demolition of Frames 7U(S), 8U(S) and a portion of 6U during Labor Day Weekend 2006, in a way that optimized schedule and minimized impact to traffic.	The demolition work plan and traffic management / closure plans was accepted by the TBPOC. A CCO was executed with the Contractor and approved by the TBPOC during their August 24, 2006 meeting. This demolition work was ahead of schedule, and the public was fully informed of it through an extensive outreach program.

Recent TBPOC Actions: In August 2006, the TBPOC approved the CCO for the demolition of Frames 7U (South), 8U (South), and portion of 6U, which occurred during Labor Day weekend 2006.

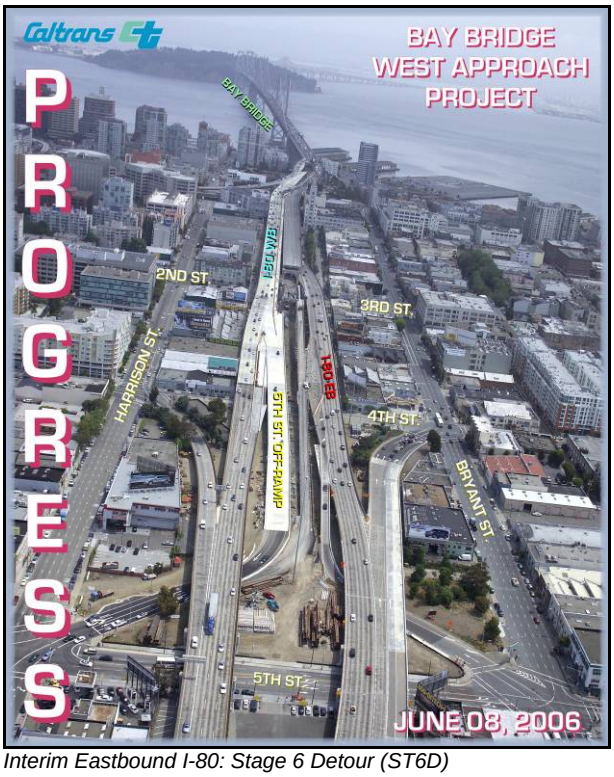
Project Photographs



Traffic Switch for Labor Day Weekend Closure of 8U & 7U (South) Demolition Project

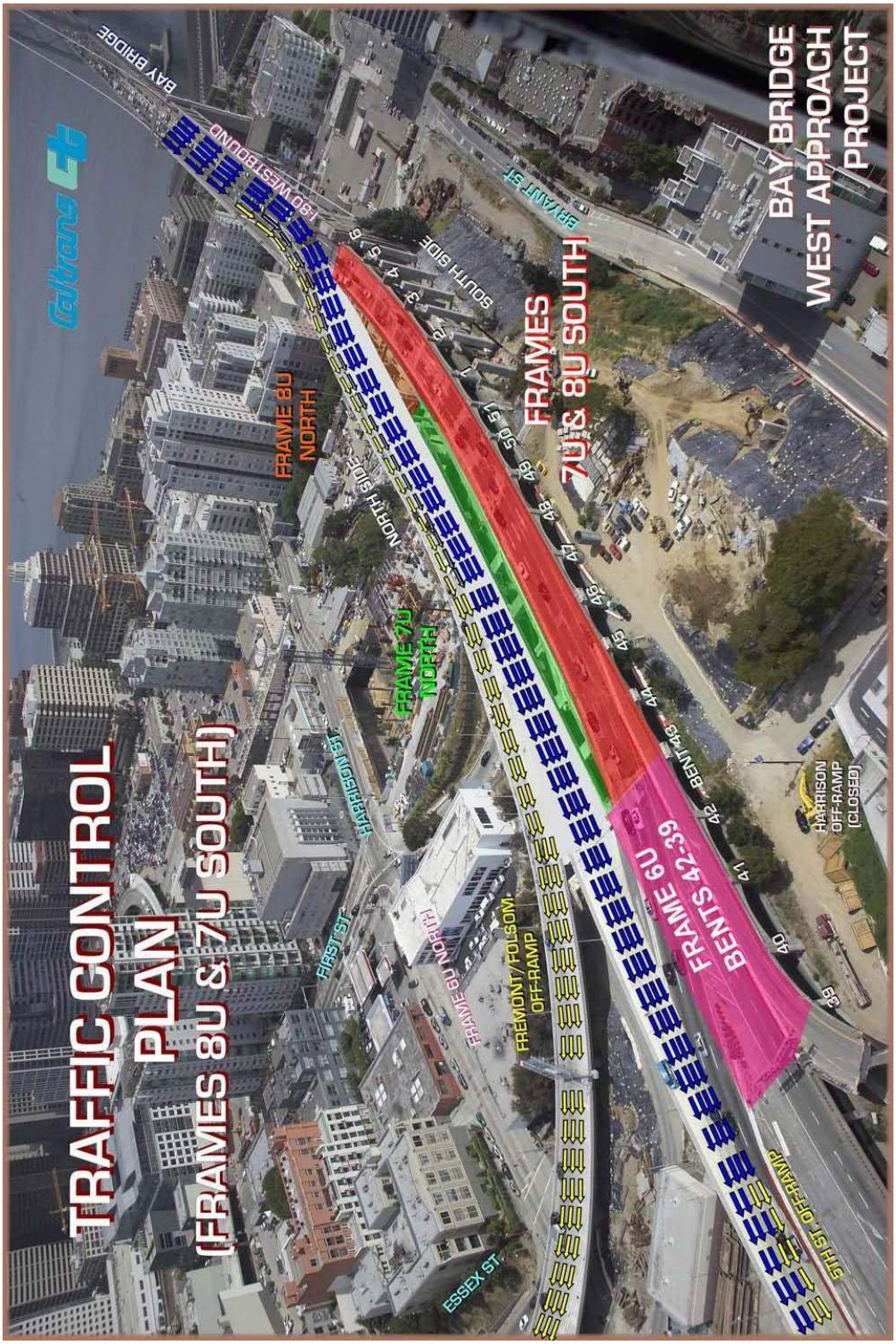
Overview Picture of West Approach Project

Overview Picture of West Approach Project



Interim Eastbound I-80: Stage 6 Detour (ST6D)

West Approach Labor Day Weekend Demolition Aerial View



West Approach Post-Labor Day Traffic Alignment

Toll Bridge Seismic Retrofit Program

Richmond-San Rafael Bridge (RSRB) Seismic Retrofit Project

Project Description: The Richmond-San Rafael (RSR) Bridge Seismic Retrofit Project strengthened the existing bridge to withstand the effects of a large seismic event. As part of the retrofit work, Caltrans performed work to strengthen the bridge foundations, replace the existing west trestle, the main channel fenders, and the joint rehabilitation of the bridge deck. (The RM1 work is reported in the RM1 section of the report).

RSRB Seismic Retrofit Cost Summary ($Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
RSRB Seismic Retrofit						
Capital Outlay Support	134.0	-	134.0	125.5	127.0	(7.0)
Capital Outlay Construction	780.0	-	780.0	663.8	698.0	(82.0)
TOTAL	914.0	-	914.0	789.3	825.0	(89.0)

Note: Details may not sum to totals due to rounding effects.

** The seismic retrofit contract included work to rehabilitate the bridge deck joints. Although the deck joint work was funded from RM1 toll funds, the work is also eligible for Toll Bridge Seismic Retrofit Program funding. In July 2005, BATA rescinded $16.9 million in RM1 funds for the deck joint work to make additional RM1 funds available for the New Benicia-Martinez Bridge Project. An equivalent amount of seismic funds will be used on the deck joint work, which is included in the budget above.*

RSRB Seismic Retrofit Schedule Summary

Project	AB 144/SB 66 Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
RSRB Seismic Retrofit	August 2005	-	August 2005	October 2005	2
RSRB Public Access Project	NA	-	May 2007	May 2007	-

Project Status: The construction contract was completed and accepted on October 28, 2005. Caltrans is expecting at least $89 million in savings from the AB 144 / SB 66 budget. The Project Complete Current Approved Schedule was revised to May 2007 as adopted by BATA July 2006.

Caltrans has submitted the project plans and specifications for a public access lot on the Marin side of the bridge to comply with a Bay Conservation and Development Commission (BCDC) permit condition (see the exhibit on page 29. All permits from other public agencies including the U.S. Army Corps of Engineers have been secured. A Letter of Concurrence has been received from the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service. However, permitting delays have impacted the Public Access lot completion date. Caltrans will be utilizing the A+B bid specification in order to optimize the project completion date. BATA has approved the Public Access Project technical documents. At its July 26, 2006 meeting, the BATA commission provided funding. This project was Ready to List on August 31, 2006.

Contract Issues: None.

Recent TBPOC Actions: None.

Richmond–San Rafael Bridge Seismic Retrofit
Existing rock slope protection to remain
Remove existing loose concrete
Install new rock slope protection
Picnic Table
Trash Receptacle
SAN FRANCISCO BAY
Parking
Install new rock slope protection
(reduced elevation at ESA)
Pedestrian Bridge
Environmentally Sensitive Area (ESA)
Bench (Typ)
Install new rock slope protection
Pedestrian Pathway
Existing rock slope
protection to remain
40m
11m
18m
Existing right of way
Existing
Bus Stop
Sidewalk
FRANCISCO BLVD
Rte 580 NB
Rte 580 SB
LEGEND
Landscape
Rock slope protection
Revised Exhibit A
Public Access Area
BCDC Mitigation – Permit No. 1-97, Amendment No. 3
April 6, 2006
0
20
40 Feet
SCALE
Caltrans
CTHQ06 | DISTRICT 4 | A/V, MULTIMEDIA GRAPHICS SERVICES | 1040006

Toll Bridge Seismic Retrofit Program

Other Completed Seismic Retrofit Projects

Summary Description: Caltrans has already completed the seismic retrofits of the West Spans of the SFOBB, the existing 1958 Carquinez Bridge, the existing Benicia-Martinez Bridge, the San Mateo-Hayward Bridge, and two former toll bridges in southern California.

Other Completed Seismic Retrofit Projects Cost Summary ($Millions)

Project	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	F	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	301.0	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
TOTAL	925.4	-	925.4	917.4	925.4	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined.

Other Completed Seismic Retrofit Projects Schedule Summary

Project	Actual Project Completion Date
Vincent Thomas Bridge Retrofit	May 2000
San Mateo-Hayward Bridge Retrofit	June 2000
Carquinez Bridge Retrofit	January 2002
San Diego-Coronado Bridge Retrofit	June 2002
Benicia-Martinez Bridge Retrofit	August 2002
SFOBB West Span Seismic Retrofit	June 2004

Summary Status: Construction has been completed on the above listed projects. The Estimate at Completion amounts shown above include allowances for minor project closeout costs.

Contract Issues: None.

Recent TBPOC Actions: None.

Toll Bridge Seismic Retrofit Program

Other Toll Bridges

Dumbarton and Antioch Bridges

The original design of the Dumbarton and Antioch Bridges were based on design criteria developed after the 1971 San Fernando Earthquake. In the early 1990's, Caltrans determined that these two structures had the seismic resistant features required by the post 1971 codes and were not likely to be vulnerable during a major seismic event. Since that time, Caltrans has pursued an aggressive seismic research program, and based on the results of this program, significantly revised its seismic design practice in the late 1990's. Consistent with recommendations by the Caltrans Seismic Advisory Board, Caltrans regularly reassesses the seismic hazard and performance of its bridges. Due to the tremendous changes in seismic design practice that have occurred since the design of the Dumbarton and Antioch bridges, a comprehensive assessment of the potential need and scope for seismic retrofit based on current knowledge is prudent.

Previous Reports

A number of limited studies have been made of these bridges in the past. However, none of the studies have fully assessed the seismic performance of the structures under current standards.

Vulnerability Studies

In late 2004, Caltrans initiated vulnerability studies on the Dumbarton and Antioch bridges. The purpose of these studies was to determine if the bridges would meet current seismic performance standards. The studies were essentially completed in May 2005. They were not a complete global analysis, but rather an investigation of selected bents modeled as independent structures. The analysis was limited in scope and based on as-built plans and currently available geotechnical information. The superstructure response was not analyzed.

The Dumbarton and Antioch Bridges have many seismic resistant features, and the results of the vulnerability studies indicate that the bridges should perform well in a moderate seismic event. However, during a major seismic event, some potential vulnerabilities (summarized below) become apparent.

- Foundation response generally governs performance. The piles may plunge axially and potentially cause permanent footing rotations.
- Potentially large foundation displacements and rotations may result in deformations that can't be easily repaired.
- The bent cap, pile cap, pile and superstructure are not capacity protected by the ductile columns and, as a result, these elements may be damaged in a major event, especially if the foundation is retrofitted.

Given the limitations of the studies, there was insufficient evidence to conclusively determine the performance of the bridges during a maximum credible earthquake (MCE). While the Dumbarton and Antioch bridges may meet performance standards, a more comprehensive technical study is necessary to understand the performance of these structures during an MCE event. A study of this level is necessary to accurately determine the structures' response and to develop any necessary retrofit strategies. A comprehensive geotechnical study using the latest analysis techniques is likely necessary in order to perform this level of analysis.

Sensitivity Analysis

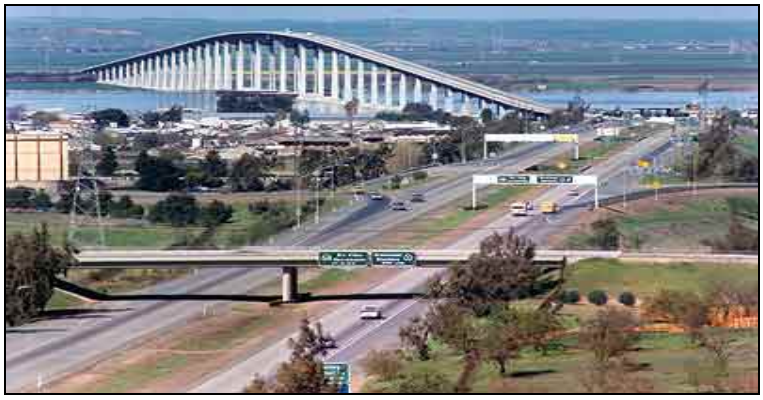
As a follow-up to the Vulnerability Study, a sensitivity analysis was completed on a single representative bent used in the Vulnerability Study (Bent 23 of the Dumbarton Bridge). The goal of the analysis is to determine the structural response associated with uncertainties in the geotechnical data. An envelope of soil conditions (best-case and worst case scenarios) was used in the analysis. The results of the Sensitivity Analysis will be used to determine the scope and value of conducting further geotechnical studies.

The preliminary results from the sensitivity analysis indicate that the seismic response of the bridge is largely dependant on the soil conditions and that a comprehensive geotechnical investigation is essential for understanding the bridge's performance during a major seismic event. A work plan was developed to assess the extent of geotechnical work needed for a complete seismic analysis and to assess the required performance levels for each structure. Caltrans has completed the value analysis to scope the geotechnical investigation which will be required to complete the strategy. The final report was issued on July 24, 2006.

Cost and Schedule

A preliminary cost estimate, schedule, and an initial risk analysis have been developed to complete a comprehensive seismic analysis for each bridge. The preliminary estimate and schedule were developed as a baseline assuming a complete geotechnical and geophysical investigation is required at each bridge.

At its June 14, 2006 meeting, the Bay Area Toll Authority (BATA) approved the $17.8 million that is necessary to proceed with this comprehensive seismic analysis. The BATA Oversight Committee selected Earth Mechanics as the Consultant for the Phase 1 Geotechnical Investigation, at their September 13, 2006 meeting.



Antioch Bridge

Dumbarton Bridge

PROJECT / CONTRACT REPORTS

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

- New Benicia-Martinez Bridge Contract
- Other Contracts and Related Project Activities

New Carquinez Bridge Project

Richmond-San Rafael Bridge Deck Overlay Project

Interstate 880 / State Route 92 Interchange Reconstruction

Other Completed Regional Measure 1 Projects

- San Mateo–Hayward Bridge Widening Project
- Richmond Parkway Project
- Bayfront Expressway Widening Project
- Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

Project Description: The new Benicia-Martinez Bridge project constructs a new parallel bridge just east of the existing bridge. The project will include reconstructed interchanges to the north and south of the bridges and a new toll plaza and administration building in Martinez.

New Benicia-Martinez Bridge Project Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	157.1	24.8	181.8	155.5	181.8	-
Right-of-Way and Others	20.4	(0.1)	20.3	12.2	20.3	-
Capital Outlay						-
New Bridge	672.0	107.3	779.3	693.5	779.3	-
I-680/I-780 Interchange Replacement	76.3	16.1	92.4	78.4	92.4	-
I-680/Marina Vista Interchange Reconstruction	51.5	8.1	59.6	54.6	59.6	-
New Toll Plaza	24.3	2.0	26.3	21.6	26.3	-
Existing Bridge & Interchange Modifications	17.2	10.9	28.1	-	28.1	-
Other	20.3	(1.3)	19.0	15.1	19.0	-
Project Reserve	20.8	35.3	56.2	-	56.2	0.0
TOTAL	1,059.9	203.1	1,263.0	1,030.9	1,263.0	0.0

Note: Details may not sum to totals due to rounding effects.

** The budget and estimate at completion includes approximately $33 million in non-toll bridge funds (Proposition 192 and SHOPP).*

New Benicia-Martinez Bridge Project Schedule Summary

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
I-680/Marina Vista Interchange Reconstruction	March 2006	1	April 2006	April 2006	-
New Toll Plaza	June 2006	-	June 2006	October 2006	4
New Benicia-Martinez Bridge	December 2007	-	December 2007	December 2007	-
I-680/I-780 Interchange Replacement	December 2007	-	December 2007	February 2008	2
Open to Traffic	December 2007	-	December 2007	December 2007	-
Existing Bridge & Interchange Modifications	December 2009	-	December 2009	December 2009	-

**See page 40 for an explanation of change in schedule forecast.*

Project Status: All major construction projects necessary to open the bridge are currently in construction. Numerous foundation and superstructure issues have significantly delayed the new bridge contract. See the following contract detail pages for more information. Note that the remaining expenditures required on the "Right-of-Way and Others" category represents environmental permitting and mitigation. On December 21, 2005, BATA approved a budget increase resulting in a revised total of $1,263.0 million.

Project Issues

Issue	Mitigating Action
To open the bridge, Caltrans will have to coordinate opening and close-out activities among the different contractors that will be active on the project. These activities, including structural bridge and electrical tie-ins, have been complicated by the delays to the new bridge. As identified in Caltrans Risk Management Plan, these delays also may further escalate support and material costs on the project.	Based on the Caltrans Risk Management Plan, BATA has budgeted a program contingency to fund these potential increases. Caltrans also is completing a comprehensive schedule of all activities necessary to open the new bridge to traffic. As necessary, Caltrans will be negotiating with their contractors to resolve any final opening and close-out activities to open the bridge.

Recent TBPOC Actions: See the following contract detail pages for more information.

Project Photographs

Toll Plaza Canopy & the Courtyard Canopy

Toll Plaza Canopy Ceiling System

Operations Building & Courtyard looking west

Toll Plaza Administration Building

Project Photographs Cont'd.

New Benicia Bridge Alignment Looking North

KPC Concrete Batch Plant for the New Bridge Contract

Pier 13 Segment Construction

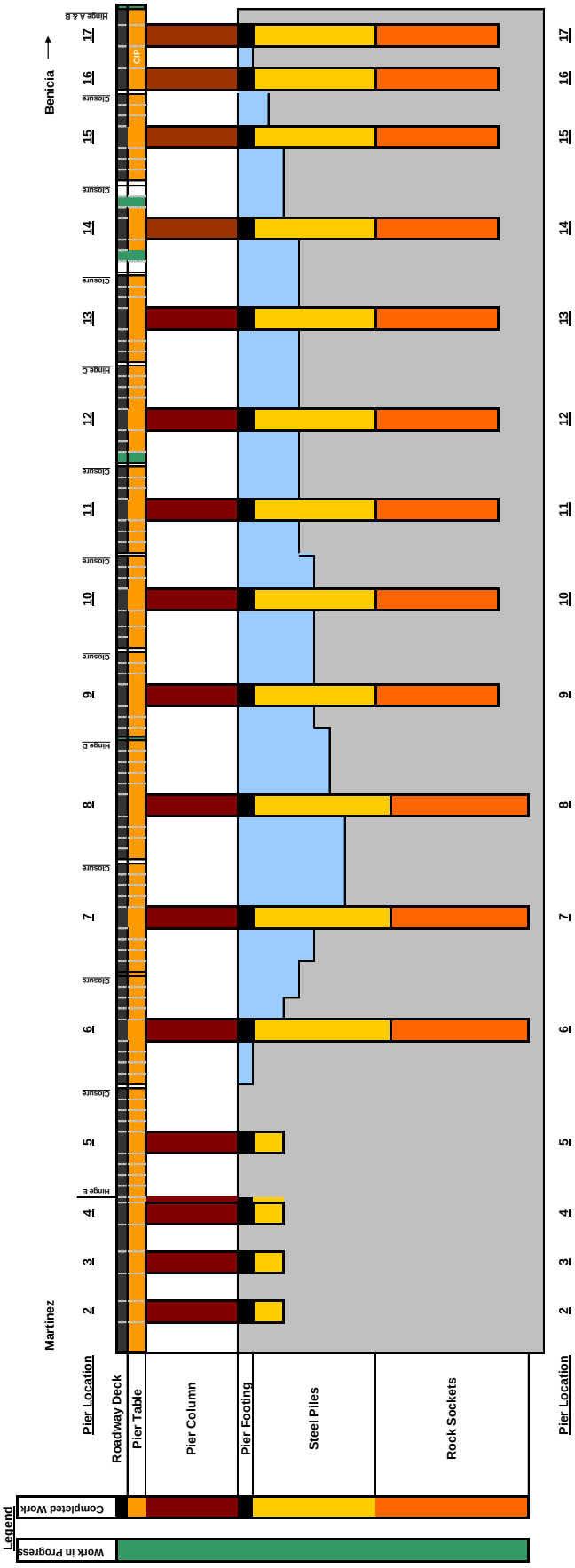
Connector Between Bridge 212 and 214

Pier 14 Segment Construction

Bridge 214 Below and Bridge 212 Overhead

New Benicia-Martinez Bridge Progress Diagram

September 2006



Notes:

1. Abutment 1 and Piers 2 through 5 are on land and have 66 piles. All piles, footings, columns and pier tables are complete. The superstructure is complete from Abutment 1 to Pier 4.
2. Piers 6 through 17 are located in the water and have 8 to 9 piles and rock sockets each - a total of 99. All 99 piles have been driven to their required depth and all 99 rock sockets have been installed.
3. Piers 6 through 17 have two-part footings. Piers 6, 16 and 17 have a cast-on-location tower section and a cast-in-place (CIP upper section, which are lowered onto the piles. All three footings are complete. Piers 7 through 15 have a precast lower section that is set on the piles and a cast-in-place (CIP) upper section. All nine precast footings have been set and all CIP footings are complete.
4. All Stage 2 footings have been poured and stressed.
5. All pier tables are complete as of the end of May 2006.
6. Piers 4 through 15 have 344 cast-in-place cantilevered superstructure segments. Three-Hundred and Twenty-Six (326) segments (95%) have been cast to-date (38 at Pier 5, 38 at Pier 6, 38 at Pier 7, 40 at Pier 8, 29 including diaphram A at Pier 9, 30 at Pier 10, 30 at pier 11, 31 at pier 12, 24 at pier 13, 5 at pier 14, and 24 at pier 15). The cantilever segments are complete for the following piers: 5, 6, 7, 8, 9, 10, 11, 13, and 15. Only 18 segments remain to be poured at piers 12 and 14. Hinge E ans been poured and Hinge D is currently in progress. Span 6 closure has been poured.
7. The cast-in-place on falseworks superstructure south of Pier 4 is substantially complete, except for the bridge deck repair work, which are still to be done. The structure north of Pier 15 is substantially complete, including the lower hinge seats at Hinges A and B.

Regional Measure 1 Program

New Benicia-Martinez Bridge Project

NEW BENICIA-MARTINEZ BRIDGE CONTRACT

Contract Description: The new bridge contract constructs a new cast-in-place segmentally constructed reinforced concrete bridge just east of the existing bridge. The new bridge will carry five lanes of eastbound I-680 traffic towards Benicia.

New Benicia-Martinez Bridge Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
New Benicia-Martinez Bridge						
Capital Outlay Support	84.9	7.7	92.6	78.0	92.6	-
Capital Outlay Construction	672.0	107.3	779.3	693.5	779.3	-
TOTAL	756.9	115.0	871.9	771.5	871.9	-

Note: Details may not sum to totals due to rounding effects.

New Benicia-Martinez Bridge Schedule Summary

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
New Benicia-Martinez Bridge	December 2007	-	December 2007	December 2007	-

Contract Status: The contract is 85 % complete based on the current revised schedule. All substructure and column work has been completed. Superstructure work is continuing throughout the project. For the cast-in-place portion of the bridge over the straits (Frames 2 and 3), all 11 of the pier tables have been completed, and segment construction either have been in progress or have been completed on all 11 piers. Segment construction has been completed at Piers 5, 6, 7, 8, 9, 10, 11, 13 and 15 and is on-going at Piers 12 and 14 using the reusable form travelers. Through the end of August 2006, 326 of 344 (95%) segments have been completed. In order to maintain concrete temperature within the specified limits, the Contractor continues the installation of cooling tube in the segments and the use of nitrogen cooling. Hinge E, connecting Frames 4 and 3 between Piers 4 and 5 has been completed. Hinge D, connecting Frames 2 and 3 between Piers 8 and 9, is currently in progress. Caltrans has completed the first concrete closure pour on the New Benicia-Martinez Bridge that will link the individual piers together into a frame. The last full cast-in-place concrete segment pour is scheduled for October, followed by additional closure pours.

For the cast-on-falsework structures (Frames 1 and 4), work on Frame 4 on the south side of the straits is complete. Polyester concrete patches will be needed on the bridge deck around Pier 3, due to poor quality of surface concrete after grinding. A repair plan submittal for the polyester concrete patches has been reviewed but not approved until additional information and testing can be performed. On Frame 1, the structure is complete and has been stressed. Falsework removal for Span 16 and upper hinge work continued. Work that will connect the New Bridge span to the I-680/I-780 Interchange will commence in the near future. Other on-going project work includes interior and exterior finish work at cantilever 6, 7, 8 and 12. The first closure pour at Span 6 was completed on August 31, 2006.

Contract Issues: None

Recent TBPOC Actions: None

Contract Photographs

I-680/I-780 Interchange Structural Connection to the New Bridge

Bridge 214 Looking East

Frame 1, Piers 15 & 14 Segment Construction

New Bridge Span as seen from the I-680/I-780 Interchange

Regional Measure 1 Program

New Benicia-Martinez Bridge Project Summary

OTHER CONTRACTS AND RELATED PROJECT ACTIVITIES

Contract Description: Contracts related to the new Benicia-Martinez Bridge project involve the construction of a new toll plaza south of the new bridge in Contra Costa County with 17 toll booths, including two high-occupancy vehicle (HOV) bypass lanes, and the reconstruction of the I-680/Marina Vista Road and I-680/I-780 interchanges.

Other Contracts and Related Activities Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	72.2	17.0	89.2	77.5	89.2	-
Right-of-Way and Environmental Mitigation	20.4	(0.1)	20.3	12.2	20.3	-
Capital Outlay Construction						-
I-680/I-780 Interchange Replacement	76.3	16.1	92.4	78.4	92.4	-
I-680/Marina Vista Interchange Reconstruction	51.5	8.1	59.6	54.6	59.6	-
New Toll Plaza	24.3	2.0	26.3	21.6	26.3	-
Existing Bridge & Interchange Modifications	17.2	10.9	28.1	-	28.1	-
Others	20.3	(1.3)	19.0	15.1	19.0	-
Total Capital Outlay Construction	189.6	35.8	225.4	169.7	225.4	-
TOTAL	282.2	52.7	334.9	259.4	334.9	-

Note: Details may not sum to totals due to rounding effects.

Other Contracts and Related Activities Schedule Summary

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
I-680/Marina Vista Interchange Reconstruction	March 2006	1	April 2006	April 2006	-
New Toll Plaza	June 2006	-	June 2006	October 2006	4
I-680/I-780 Interchange Replacement	December 2007	-	December 2007	February 2008	2
Existing Bridge & Interchange Modifications	December 2009	-	December 2009	December 2009	-

Contract Status:

Toll Plaza and Administration Building: The contract is 93% complete based on contractor payment. The Contractor is continuing work throughout the toll plaza area, including aluminum composite panel installation at the fascia and soffit locations above toll booths No. 1 thru No. 3, and installation of electrical components (i.e. strobes and horns at the tunnel; ATCAS console at toll booth No. 5; and antenna hardware). At the Operations Building, the Contractor continued wire termination work for the security system consoles located at the Duty Room and the Electrical Room. The installation of the gravel layer of the roof system at the Operations Building and the Courtyard has commenced. In the Courtyard, the Contractor continued with the polymer overlay for the sidewalks and installed fiber optic cables for the CCTV cameras on the roof and at the Courtyard canopy soffit areas. Plant Establishment work continued. A number of notices of potential claim that have been filed by the Contractor remain to be resolved. Contract completion is forecast for October 2006. This will have no impact on the bridge Open-to-Traffic date.

Consistent with BATA's Fastrak strategic plan, plans are progressing for the implementation of open road tolling at the toll plaza, which will involve the demolition of several toll booths.

I-680/I-780 Interchange: The contract is approximately 94% complete based on the current revised schedule. To-date, all of the bridge structures are substantially complete, except for barrier rails and installation of joint seal assemblies at NB-680/WB-780 connectors. The Contractor continues to remove the falsework over the Railroad. Bay Cities continued to work on the proposed detour road (CCO # 126), which will be used at the north end of the new bridge, prior to the new bridge traffic opening. Final electrical work for the new Benicia-Martinez Bridge and the interchange will not be completed until after the December 2007 open-to-traffic date.

I-680/Marina Vista Interchange: The contract is 100% complete as of April 28, 2006, and has been accepted by Caltrans. The Contractor received the Proposed Final Estimate (PFE) on August 14, 2006 for review and acceptance. On September 13, 2006, the contractor submitted a number of exceptions to it. Caltrans will resolve some of those through a semi-final estimate to be issued within 30 days. Those exceptions that cannot be resolved will be taken into arbitration.

Wetland Mitigation: The contract is 100% complete. The Contract Completion Acceptance (CCA) was submitted to Caltrans Headquarters for their approval on March 3, 2006. The Proposed Final Estimate (PFE) has been reviewed and accepted by the Contractor.

Contract Issues

Issue	Mitigating Action
As noted in the project's risk management plan, the Span 17 interface between the new bridge Contractor and the I-680/I-780 interchange Contractor may impact project cost and schedule.	The I-680/I-780 Contractor is expected to complete the span between the new bridge and the interchange in September 2006.

Recent TBPOC Actions: None.

Regional Measure 1 Program

New Carquinez Bridge Project

Project Description: The new Carquinez Bridge project involves constructing a new suspension bridge west of the existing bridges with four westbound lanes and a bicycle/pedestrian lane and demolishing the existing 1927 bridge.

New Carquinez Bridge Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	124.4	(1.1)	123.3	117.0	123.2	(0.1)
Capital Outlay Construction						
Replacement Bridge	253.3	4.0	257.3	256.9	257.3	-
South Interchange Reconstruction	73.9	-	73.9	71.9	73.9	-
Existing 1927 Bridge Demolition	35.2	-	35.2	19.1	35.2	-
Other	29.3	(0.7)	28.6	25.2	28.4	(0.2)
Project Reserve	12.1	(2.2)	9.9	-	10.2	0.3
TOTAL	528.2	-	528.2	490.1	528.2	(0.0)

Note: Details may not sum to totals due to rounding effects.

New Carquinez Bridge Schedule Summary

Contract	BATA Contract Completion Baseline (07/2005)	Approved Changes (Months)	Contract Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
New Carquinez Bridge	November 2003*	-	November 2003*	November 2003*	-
1927 Carquinez Bridge Demolition	December 2007	-	December 2007	December 2007	-
Landscaping	August 2011	-	August 2011	August 2011	-

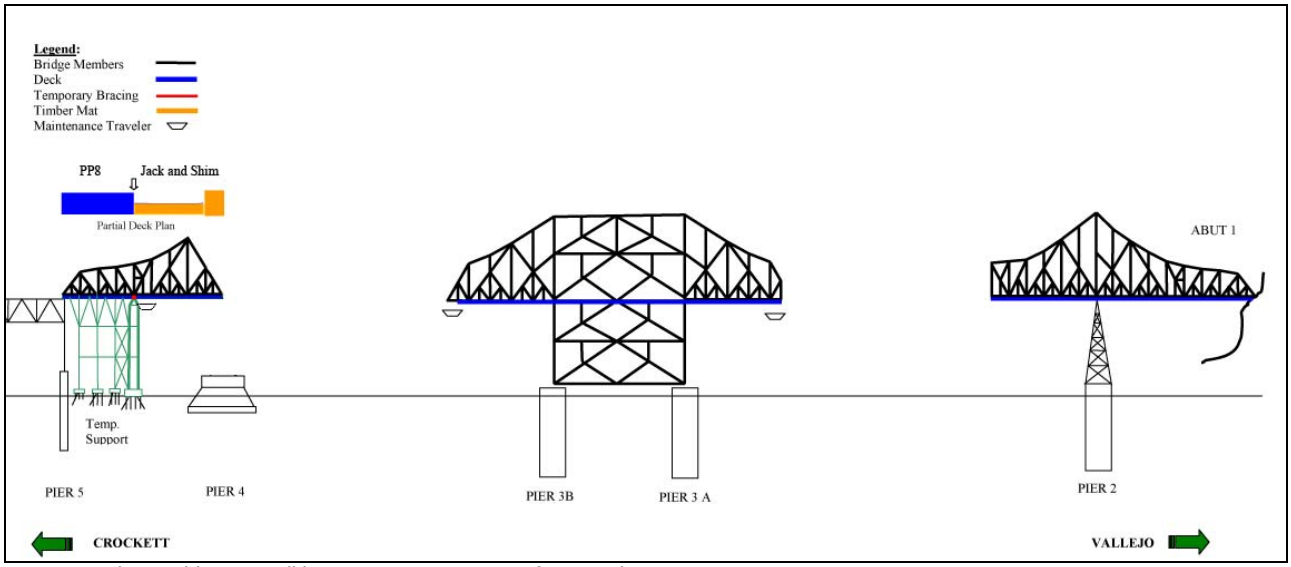
** The date shown is for the opening of the bridge to traffic.*

Project Status: The new replacement bridge and all its approaches have been completed and opened to traffic. The demolition contract to remove the 1927 bridge is approximately 48% complete based on schedule. However, based on payment, this contract is 67% complete in that the greatest pay items involved the 1958 bridge approach slab replacement, which has been completed. To-date, Units 2, 3 and 7 of the 1927 bridge have been lowered and shipped from the project site. Meanwhile, demolition work continued on Units 4, 6 and 1. The forecast completion date of December 2007, as shown in last month's report, includes 67 days of executed contract extensions due to work suspension brought about by safety concerns with the unanticipated buckling of eye bars, a delay in the installation of temporary falsework for Unit 1, and 15 days of weather related delays. Tower 4, which is supporting Units 1 and 2, is currently being removed.

Project Issues:

Issue	Mitigating Action
Contractor has not yet formally stated, in the form of a Time Impact Analysis (TIA), the schedule impact of the 3-month work suspension related to the unanticipated buckling of eye bars during the demolition of Units 3 and 7.	Caltrans will continue to communicate to the Contractor the need to submit the TIA. Caltrans will then evaluate it to establish a basis for negotiations. The resulting CCO should have no impact to the contract or overall project budget.

Project Photographs



1927 Carquinez Bridge Demolition Progress Status as of September 15, 2006

Carquinez Bridge Demolition

Carquinez Bridge Demolition

Regional Measure 1 Program

Richmond-San Rafael Bridge (RSRB) Deck Overlay Project

Project Description: Rehabilitate the existing concrete deck on the bridge, damaged due to traffic and exposure to a marine environment.

RSRB Deck Overlay Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	b	c	d = b + c	e	f	g = f - d
RSR Deck Overlay						
Capital Outlay Support	8.0	(3.5)	4.5	2.1	4.5	-
Capital Outlay Construction	16.9	3.6	20.5	1.9	20.5	-
Project Reserve	0.1	(0.1)	-	-	-	-
TOTAL	25.0	-	25.0	4.0	25.0	-

Note: Details may not sum to totals due to rounding effects.

RSRB Deck Overlay Schedule Summary

Project	BATA Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	January 2007	-	January 2007	January 2007	-

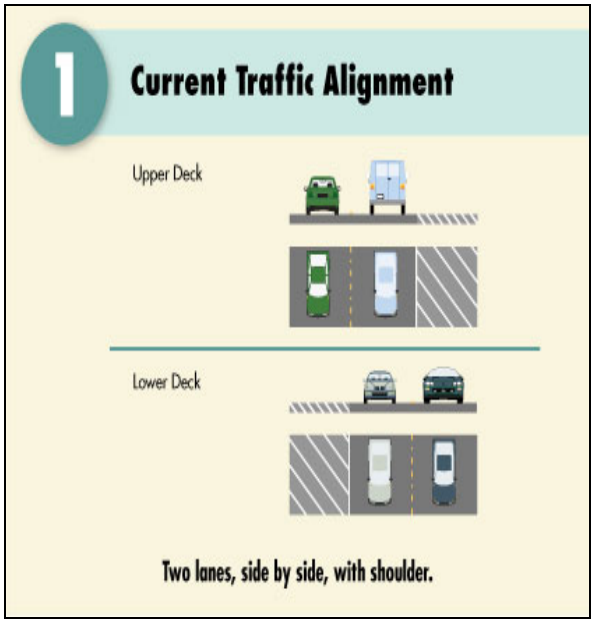
Project Status: Construction work started on August 2, 2006. The right shoulder on the lower deck has been ground and approximately ¾ of its length has been paved with polyester concrete. After completion of the shoulder pavement at the lower deck, Phase 1 work will start as shown on page 45. The traffic switch to lanes #2 and #3 on the lower deck is anticipated for the second week of September 2006. The next phase of work is the grinding and repair of unsound concrete, followed by an overlay on the existing shoulder area on the upper deck and the existing lane #1 on the lower deck. Phase III will commence on October 2, 2006 which will temporarily close the center lane of the bridge.

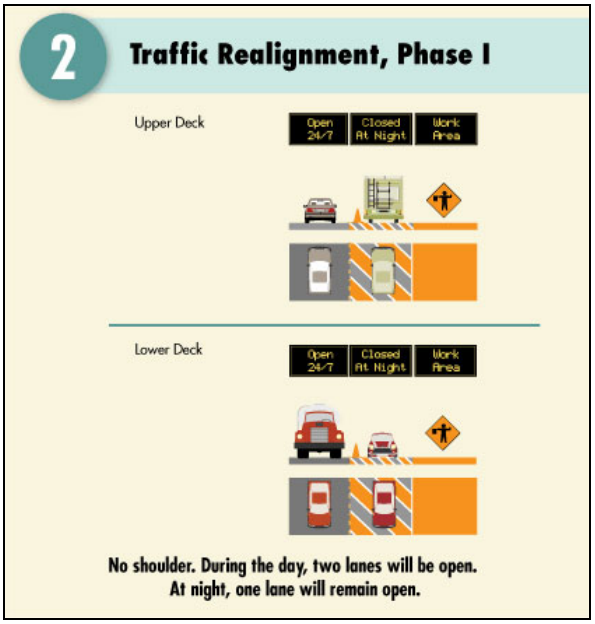
Project Issues:

Issue	Mitigating Action
During grinding operations it was discovered that the existing mortar thickness is more that ½-inch deep, which requires additional grinding and additional polyester concrete quantities.	Caltrans is in the process of requesting additional funds, which are available in the project budget, and is developing a CCO to address this change.

Project Photographs

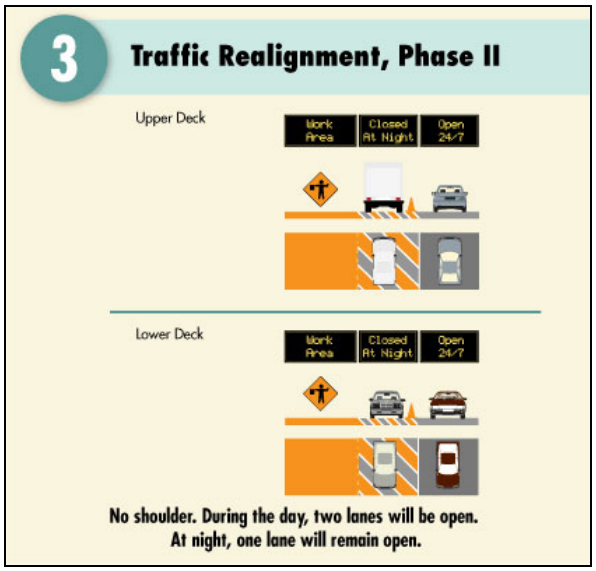
RSR Concrete Deck Overlay

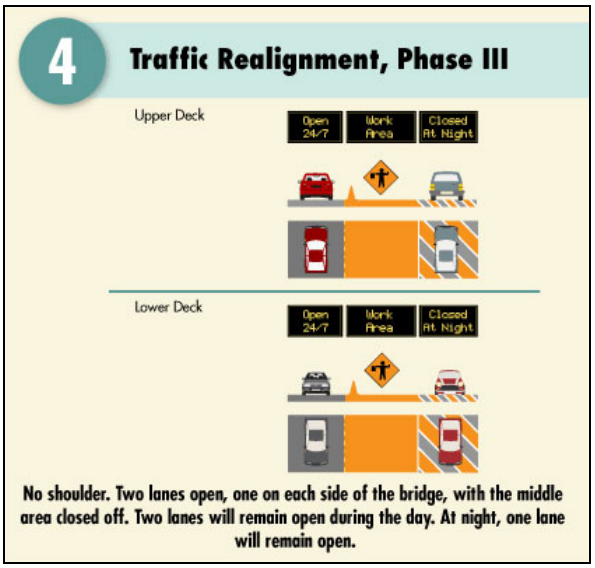


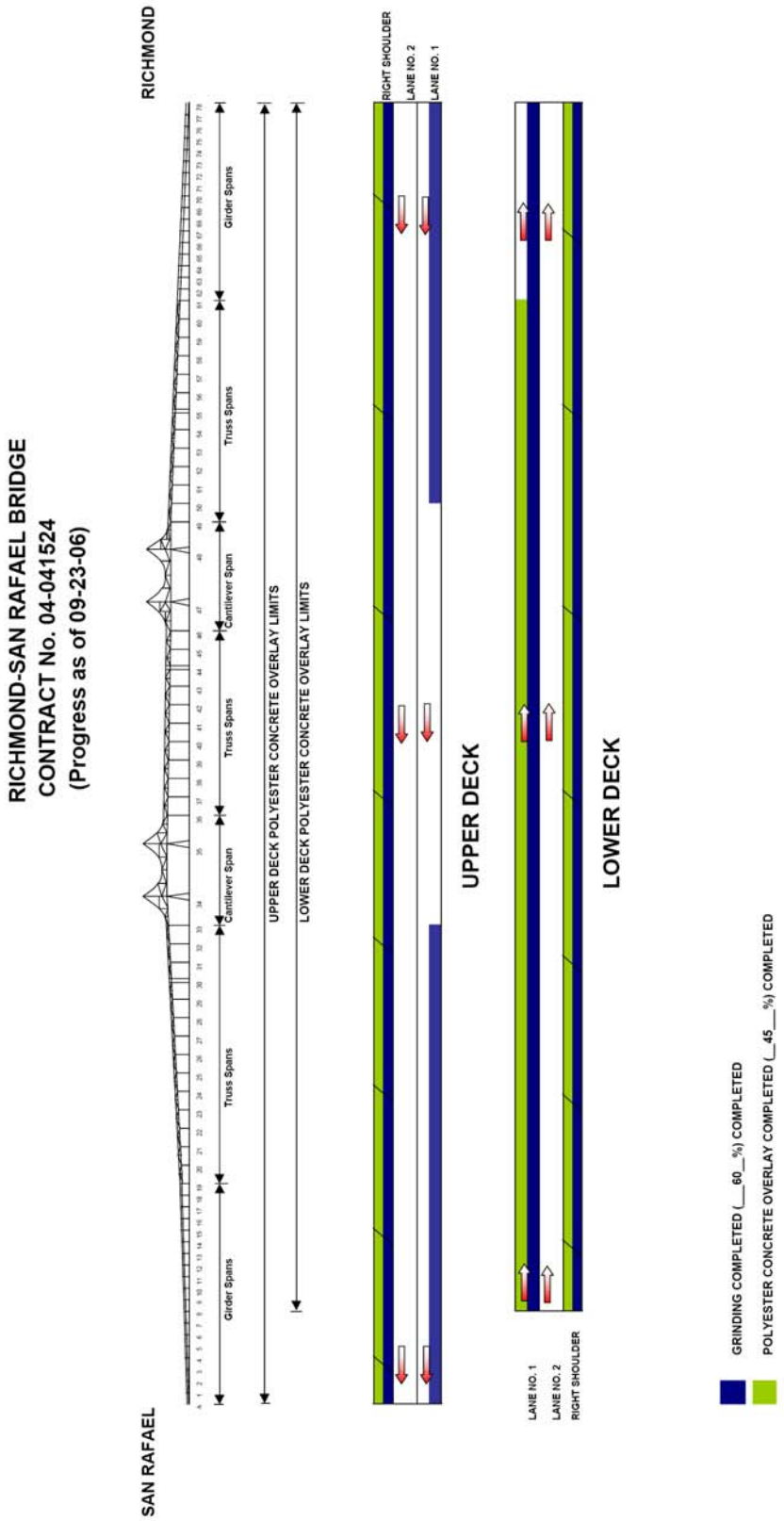


Richmond San Rafael Deck Overlay Project

Phasing of Work






RICHMOND-SAN RAFAEL BRIDGE
CONTRACT No. 04-041524
(Progress as of 09-23-06)
RICHMOND
SAN RAFAEL
Girder Spans
Truss Spans
Cantilever Span
Cantilever Span
Truss Spans
Truss Spans
Girder Spans
UPPER DECK POLYESTER CONCRETE OVERLAY LIMITS
LOWER DECK POLYESTER CONCRETE OVERLAY LIMITS
RIGHT SHOULDER
LANE NO. 2
LANE NO. 1
UPPER DECK
LANE NO. 1
LANE NO. 2
RIGHT SHOULDER
LOWER DECK
GRINDING COMPLETED (___60__%) COMPLETED
POLYESTER CONCRETE OVERLAY COMPLETED (__45___%) COMPLETED

Regional Measure 1 Program

Interstate 880/State Route 92 Interchange Reconstruction Project

Project Description: Modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations.

Interstate 880/State Route 92 Interchange Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	B	c	d = b + c	e	f	g = f - d
I-880/SR-92 Interchange Improvement						
Capital Outlay Support	28.8	-	28.8	29.5	55.4	26.6
Capital Outlay Construction	94.8	-	94.8	-	138.7	43.9
Capital Outlay Right-of-Way	9.9	-	9.9	8.0	12.5	2.6
Project Reserve	0.3	-	0.3	-	10.2	9.9
TOTAL	133.8	-	133.8	37.5	216.8	83.0

Note: Details may not sum to totals due to rounding effects. $9.6 million in ACTA funds included under Capital Outlay Construction. $3.7 million included in Capital Outlay Construction for separate landscape contract.

Interstate 880/State Route 92 Interchange Schedule Summary

Project	BATA Project Completion Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (08/2006)	Contract Complete Schedule Forecast (08/2006)	Schedule Variance (Months)
I-880/SR-92 Interchange Reconstruction	November 2010	-	November 2010	June 2011	7

Project Status: The 100% PS&E package was sent to Caltrans Headquarters Office Engineer on May 3, 2006. PS&E is expected to be reviewed and approved by Caltrans Headquarters Office Engineer in mid-September 2006. Additional PG&E utility easements have been identified for the relocation of the six utility poles near Lindenwood Way. Work to relocate the utilities to an underground alignment is proceeding at Lindenwood Way. Caltrans continues to be in close contact with the utility companies to resolve any conflicts. Right-of-way acquisition is in progress. With the addition of the new easements, the right of way parcel count is now at 93 parcels. Of these, right-of-way from 73 parcels is under the State's control. The Water Quality permit was issued to Caltrans on August 31, 2006. A work plan was accepted by the Water Board for Caltrans to utilize wetland credits in Foster City as mitigation to the wetland impact. The contract is scheduled to be advertised by February 2007 and start construction in June 2007, assuming Right-of-Way Certification occurs by the end of December 2006. However, Caltrans is considering advancing contract advertisement through at-risk advertisement. The total cost forecast for the project has increased from $196.3 million to $216.8 million, primarily due to a higher construction capital estimate that was revised to incorporate bid prices received on the I-238 Widening Project. The forecast also assumes that right-of-way activities will be completed to allow the contract to advertise by the end of this year a four -year construction duration. The forecast also includes nearly $10.2 million for a project reserve.

Project Issues:

Issue	Mitigating Action
The forecast schedule included an aggressive schedule for right-of-way acquisition that provided for 18 months to clear numerous parcels in the project area. Additional time will be required to negotiate with parcel owners and the railroad complete property acquisition.	Delays in right-of-way acquisitions are impacting the advertisement and construction of the project. BATA and Caltrans are reviewing methods to accelerate the right-of-way procurement and begin the project. Also, the construction contract will be advertised with an A+B specification, which could reduce the construction duration and partially recover the project schedule.
Bids received on the I-238 Widening contract indicates that the construction estimate may be higher than previously estimated.	Caltrans and BATA will perform a further in-depth review of the estimated costs of major contract items.

Regional Measure 1 Program

Other Completed Regional Measure 1 (RM1) Projects

Summary Description: Other completed Regional Measure 1 projects are the following: (a) Widen the San Mateo-Hayward Bridge along its low-trestle section and its eastern approach, (b) Widen the Bayfront Expressway (SR 84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange, (c) Construct an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole, and (d) Modify the U.S. 101/University Avenue interchange, (e) Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project.

Other Completed RM1 Projects Cost Summary ($Millions)

Contract	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	Variance
a	B	c	d = b + c	e	f	g = f - d
San Mateo-Hayward Bridge Widening Project	217.8	-	217.8	208.6	211.9	(5.9)
Bayfront Expressway Widening Project	36.1	-	36.1	33.1	36.1	-
Richmond Parkway Project	5.9	-	5.9	3.9	5.9	-
U.S. 101/University Interchange	3.8	-	3.8	3.7	3.8	-
RSR Trestle, Fender, and Joint Rehabilitation	102.1	-	102.1	96.9	97.1	(5.0)
TOTAL	365.7	-	365.7	346.2	354.8	(10.9)

Schedule Summary

Project	Actual Project Completion Date
Richmond Parkway Project	May 2001
San Mateo-Hayward Bridge Widening Project	February 2003
Bayfront Expressway Widening Project	January 2004
U.S. 101/University Interchange	April 2004
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation	August 2005

Project Status: Construction has been completed on the above listed contracts.

Project Issues: None.

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APPENDICES

A Toll Bridge Seismic Retrofit Program:
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail

B Toll Bridge Seismic Retrofit Program Cost Detail

C Toll Bridge Seismic Retrofit Program Summary Schedule

D Regional Measure 1 Program Cost Detail

E Regional Measure 1 Program Summary Schedule

** Cost forecasts shown herein are as of June 30, 2006. Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.*

Appendix A: Toll Bridge Seismic Retrofit Program ($Millions)

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h =g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - Skyway	**01202X**						
Capital Outlay Support		197.0	-	197.0	145.9	197.0	-
Capital Outlay Construction		1,293.0	-	1,293.0	1,053.9	1,293.0	-
Total		1,490.0	-	1,490.0	1,199.8	1,490.0	-
East Span - SAS Superstructure	**0120FX**						
Capital Outlay Support		214.6	-	214.6	23.3	214.6	-
Capital Outlay Construction		1,753.7	-	1,753.7	138.2	1,767.4	13.7
Total		1,968.3	-	1,968.3	161.5	1,982.0	13.7
East Span - SAS E2/T1 Foundations	**0120EX**						-
Capital Outlay Support		52.5	-	52.5	13.9	52.5	-
Capital Outlay Construction		313.5	-	313.5	160.5	313.5	-
Total		366.0	-	366.0	174.4	366.0	-
SAS W2 Foundations	**0120CX**						
Capital Outlay Support		10.0	-	10.0	9.2	10.0	-
Capital Outlay Construction		26.4	-	26.4	25.8	26.4	-
Total		36.4	-	36.4	35.0	36.4	-
YBI Transition Structures	**0120PX**						
Capital Outlay Support		78.7	-	78.7	10.2	78.7	-
Capital Outlay Construction		299.3	-	299.3	-	318.5	19.2
Total		378.0	-	378.0	10.2	397.2	19.2
Oakland Touchdown (see notes below)	**01204X**						
Capital Outlay Support		74.4	-	74.4	21.8	92.1	17.7
Capital Outlay Construction		283.8	-	283.8	-	272.7	(11.1)
Total		358.2	-	358.2	21.8	364.8	6.6
*** OTD Submarine Cable**	**0120K4**						
Capital Outlay Support					0.2	3.0	
Capital Outlay Construction					-	9.6	
Total					0.2	12.6	
*** OTD No. 1 (Westbound)**	**0120L4**						
Capital Outlay Support					1.7	49.9	
Capital Outlay Construction					-	196.7	
Total					1.7	246.6	
*** OTD No. 2 (Eastbound)**	**0120M4**						
Capital Outlay Support					0.2	15.8	
Capital Outlay Construction					-	62.0	
Total					0.2	77.8	
*** OTD Electrical Systems**	**0120N4**						
Capital Outlay Support					-	1.4	
Capital Outlay Construction					-	4.4	
Total					-	5.8	

Notes: **Oakland Touchdown Cost-to-Date and Cost Forecast includes prior-to-split Capital Outlay Support Costs.**

Note: Details may not sum to totals due to rounding effects.

Appendix A: Toll Bridge Seismic Retrofit Program ($Millions)

San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail (Cont'd.)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h =g - e
YBI South/South Detour	**0120RX**						
Capital Outlay Support		29.5	-	29.5	16.4	29.5	-
Capital Outlay Construction		131.9	-	131.9	34.5	133.7	1.8
Total		161.4	-	161.4	50.9	163.2	1.8
Existing Bridge Demolition	**01209X**						
Capital Outlay Support		79.7	-	79.7	0.2	79.7	-
Capital Outlay Construction		239.2	-	239.2	-	222.0	(17.2)
Total		318.9	-	318.9	0.2	301.7	(17.2)
YBI/SAS Archeology	**01207X**						
Capital Outlay Support		1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction		1.1	-	1.1	1.1	1.1	-
Total		2.2	-	2.2	2.2	2.2	-
YBI - USCG Road Relocation	**0120QX**						
Capital Outlay Support		3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction		3.0	-	3.0	2.8	3.0	-
Total		6.0	-	6.0	5.5	6.0	-
YBI - Substation and Viaduct	**0120GX**						
Capital Outlay Support		6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction		11.6	-	11.6	11.3	11.6	-
Total		18.1	-	18.1	17.7	18.1	-
Oakland Geofill	**01205X**						-
Capital Outlay Support		2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction		8.2	-	8.2	8.2	8.2	-
Total		10.7	-	10.7	10.7	10.7	-
Pile Installation Demonstration Project	**01208X**						
Capital Outlay Support		1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction		9.2	-	9.2	9.2	9.2	-
Total		11.0	-	11.0	11.0	11.0	-
Stormwater Treatment Measures	**0120JX**						
Capital Outlay Support		6.0	-	6.0	5.2	6.0	-
Capital Outlay Construction		15.0	-	15.0	2.7	15.0	-
Total		21.0	-	21.0	7.9	21.0	-
Right-of-Way and Environmental Mitigation	**0120X9**						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay & Right-of-Way		72.4	-	72.4	38.8	72.4	-
Total		72.4	-	72.4	38.8	72.4	-
	04343X & 04300X						
Sunk Cost - Existing East Span Retrofit							
Capital Outlay Support		39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction		30.8	-	30.8	30.8	30.8	-
Total		70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support							
Environmental Phase		97.7	-	97.7	97.7	97.7	-
Pre-Split Project Expenditures		44.9	-	44.9	44.9	44.9	-
Non-project Specific Costs		20.0	-	20.0	3.2	20.0	-
Total		162.6	-	162.6	145.8	162.6	-
Subtotal Capital Outlay Support		959.4	-	959.4	445.9	977.1	17.7
Subtotal Capital Outlay Construction		4,492.1	-	4,492.1	1,517.8	4,498.5	6.4
Other Budgeted Capital		35.1	-	35.1	1.5	11.0	(24.1)
Total SFOBB East Span Replacement Project		**5,486.6**	**-**	**5,486.6**	**1,965.2**	**5,486.6**	**-**

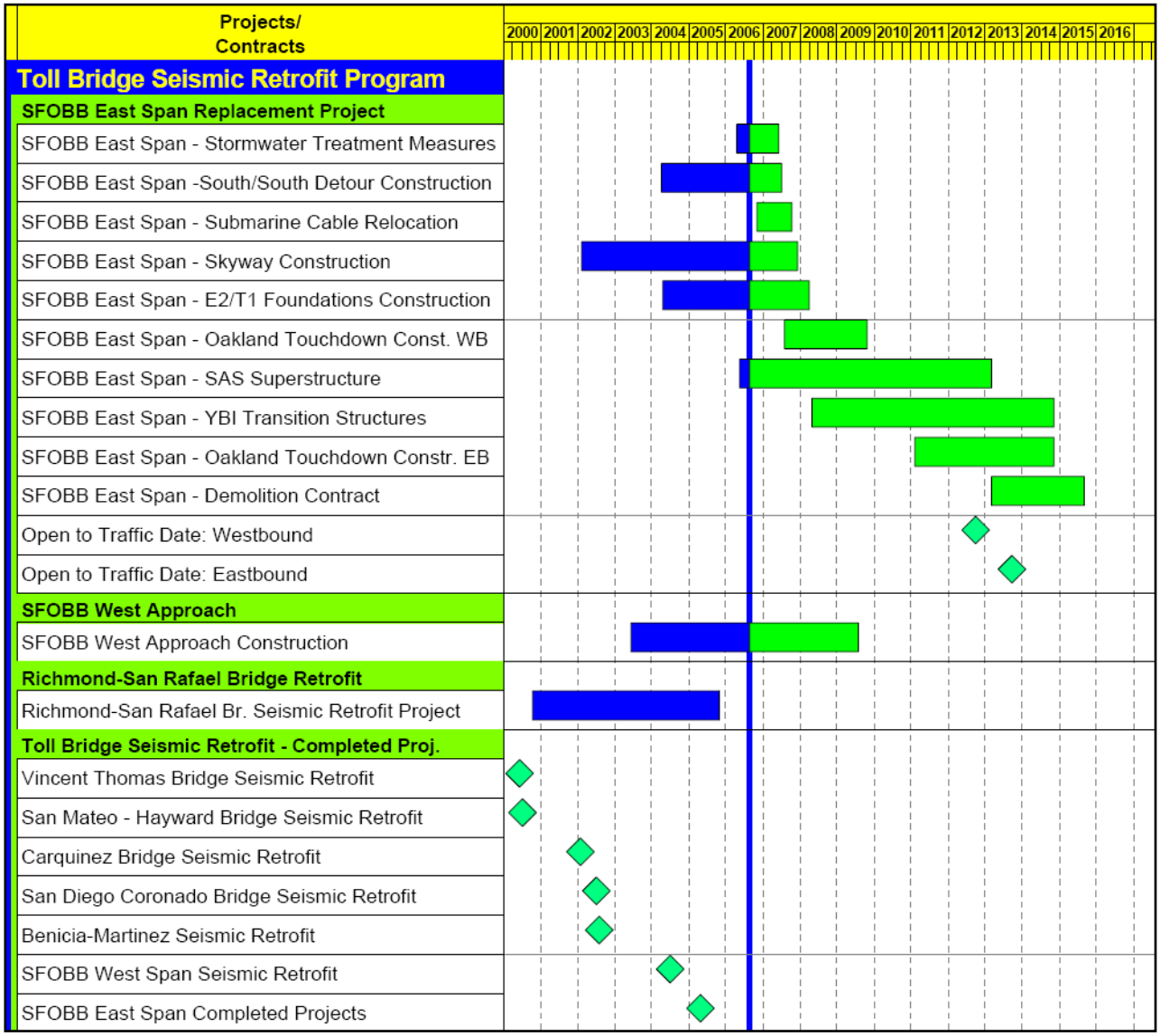
Note: Details may not sum to totals due to rounding effects.

Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail ($Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.4	-	959.4	445.8	977.1	17.7
Capital Outlay Construction	4,492.1	-	4,492.1	1,517.9	4,498.5	6.4
Other Budgeted Capital	35.1	-	35.1	1.5	11.0	(24.1)
Total	5,486.6	-	5,486.6	1,965.2	5,486.6	-
SFOBB West Approach Replacement						
Capital Outlay Support	120.0	-	120.0	81.9	120.0	-
Capital Outlay Construction	309.0	-	309.0	203.0	309.0	-
Total	429.0	-	429.0	284.9	429.0	-
SFOBB West Span Retrofit						-
Capital Outlay Support	75.0	-	75.0	74.8	75.0	-
Capital Outlay Construction	232.9	-	232.9	226.2	232.9	-
Total	307.9	-	307.9	301.0	307.9	-
Richmond-San Rafael Bridge Retrofit						
Capital Outlay Support	134.0	-	134.0	125.5	127.0	(7.0)
Capital Outlay Construction	780.0	-	780.0	663.8	698.0	(82.0)
Total	914.0	-	914.0	789.3	825.0	(89.0)
Benicia-Martinez Bridge Retrofit						-
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	-	28.7	28.8	28.7	-
Capital Outlay Construction	85.5	-	85.5	85.4	85.5	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Bridge Retrofit						-
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	-	135.4	135.3	135.4	-
Total	163.5	-	163.5	163.4	163.5	-
Vincent Thomas Bridge Retrofit (Los Angeles)						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	-	42.1	42.0	42.1	-
Total	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit						
Capital Outlay Support	33.5	-	33.5	33.2	33.5	-
Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
Total	103.5	-	103.5	102.6	103.5	-
Subtotal Capital Outlay Support	1,433.2	-	1,433.2	872.6	1,443.9	10.7
Subtotal Capital Outlay	6,286.7	-	6,286.7	3,082.7	6,211.1	(75.6)
Subtotal Other Budgeted Capital	35.1	-	35.1	1.5	11.0	(24.1)
Miscellaneous Program Costs	30.0	-	30.0	24.8	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	-	7,785.0	3,981.6	7,696.0	(89.0)
Program Contingency	900.0	-	900.0	-	989.0	89.0
Total Toll Bridge Seismic Retrofit Program	**8,685.0**	**-**	**8,685.0**	**3,981.6**	**8,685.0**	**-**

Note: Details may not sum to totals due to rounding effects.

Appendix C: Toll Bridge Seismic Retrofit Program Summary Schedule



Appendix D: Regional Measure 1 Program Cost Detail ($Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h =g - e
New Benicia-Martinez Bridge Project							
New Bridge	**00603_**						
Capital Outlay Support		84.9	7.7	92.6	78.0	92.6	-
Capital Outlay Construction				-			-
BATA Funding		661.9	107.3	769.2	679.6	769.2	-
Non-BATA Funding		10.1	-	10.1	13.9	10.1	-
Subtotal		672.0	107.3	779.3	693.5	779.3	-
Total		756.9	115.0	871.9	771.5	871.9	-
I-680/I-780 Interchange Reconstruction	**00606_**						
Capital Outlay Support							
BATA Funding		24.9	4.0	28.9	27.4	28.9	-
Non-BATA Funding		1.4	5.1	6.5	5.5	6.5	-
Subtotal		26.3	9.1	35.4	32.9	35.4	-
Capital Outlay Construction							
BATA Funding		54.7	16.1	70.8	63.0	70.8	-
Non-BATA Funding		21.6	-	21.6	15.4	21.6	-
Subtotal		76.3	16.1	92.4	78.4	92.4	-
Total		102.6	25.2	127.8	111.3	127.8	-
I-680/Marina Vista Interchange Reconstruction	**00605_**						
Capital Outlay Support		18.3	1.2	19.5	19.5	19.5	-
Capital Outlay Construction		51.5	8.1	59.6	54.6	59.6	-
Total		69.8	9.3	79.1	74.1	79.1	-
New Toll Plaza and Administration Building	**00604_**						
Capital Outlay Support		11.9	3.3	15.2	14.5	15.2	-
Capital Outlay Construction		24.3	2.0	26.3	21.6	26.3	-
Total		36.2	5.3	41.5	36.1	41.5	-
Existing Bridge & Interchange Modifications	**0060A_**						
Capital Outlay Support		4.3	5.7	10.0	4.3	10.0	-
Capital Outlay Construction		17.2	10.9	28.1	-	28.1	-
Total		21.5	16.6	38.1	4.3	38.1	-
Other Contracts	**See note below**						
Capital Outlay Support		11.4	(2.3)	9.1	6.3	9.1	-
Capital Outlay Construction		20.3	(1.3)	19.0	15.1	19.0	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	12.2	20.3	-
Total		52.1	(3.7)	48.4	33.6	48.4	-
Subtotal BATA Capital Outlay Support		155.7	19.7	175.3	150.0	175.3	-
Subtotal BATA Capital Outlay Construction		829.9	143.1	973.0	833.9	973.0	-
Subtotal Capital Outlay Right-of-Way		20.4	(0.1)	20.3	12.2	20.3	-
Subtotal Non-BATA Capital Outlay Support		1.4	5.1	6.5	5.5	6.5	-
Subtotal Non-BATA Capital Outlay Construction		31.7	-	31.7	29.3	31.7	-
Project Reserves		20.8	35.3	56.2	-	56.2	-
Total New Benicia-Martinez Bridge Project		**1,059.9**	**203.1**	**1,263.0**	**1,030.9**	**1,263.0**	**-**

Notes: **Includes EA's 00601_, 00608_, 00609_, 0060A_, 0060C_, 0060E_, 0060F_, 0060G_, and 0060H_ and all Project Right-of-Way**

Note: Details may not sum to totals due to rounding effects.

Appendix D: Regional Measure 1 Program Cost Detail ($Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h =g - e
Carquinez Bridge Replacement Project							
New Bridge	**01301_**						
Capital Outlay Support		60.5	(0.3)	60.2	60.1	60.2	-
Capital Outlay Construction		253.3	4.0	257.3	256.9	257.3	-
Total		313.8	3.7	317.5	317.0	317.5	-
Crockett Interchange Reconstruction	**01305_**						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	-	73.9	71.9	73.9	-
Total		105.9	(0.1)	105.8	103.8	105.8	-
Existing 1927 Bridge Demolition	**01309_**						
Capital Outlay Support		16.1	-	16.1	10.3	16.0	(0.1)
Capital Outlay Construction		35.2	-	35.2	19.1	35.2	-
Total		51.3	-	51.3	29.4	51.2	(0.1)
Other Contracts	**See note below**						
Capital Outlay Support		15.8	(0.7)	15.1	14.7	15.1	-
Capital Outlay Construction		18.8	(0.7)	18.1	15.3	17.9	(0.2)
Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-
Total		45.1	(1.4)	43.7	39.9	43.5	(0.2)
Subtotal BATA Capital Outlay Support		124.4	(1.1)	123.3	117.0	123.2	(0.1)
Subtotal BATA Capital Outlay Construction		381.2	3.3	384.5	363.2	384.3	(0.2)
Subtotal Capital Outlay Right-of-Way		10.5	-	10.5	9.9	10.5	-
Project Reserves		12.1	(2.2)	9.9	-	10.2	0.3
Total Carquinez Bridge Replacement Project		**528.2**	**-**	**528.2**	**490.1**	**528.2**	**-**

Notes: **Other Contracts includes EA's 01302_, 01303_, 01304_, 01306_, 01307_, 01308_, 0130A_, 0130C_, 0130D_ , 0130F_, 0130G_, 0130H_, 0130J_, 00453_, 00493_, 04700_, 00607_, 2A270_, and 29920_ and all Project Right-of-Way**

Note: Details may not sum to totals due to rounding effects.

Appendix D: Regional Measure 1 Program Cost Detail ($Millions) (Cont'd.)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (08/2006)	Cost To Date (08/2006)	Cost Forecast (08/2006)	At-Completion Variance
a	b	c	d	e = c + d	f	g	h =g - e
Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation	**See note [1] below**						
Capital Outlay Support							
BATA Funding		2.2	-	2.2	1.4	2.2	-
Non-BATA Funding		8.6	-	8.6	10.4	10.4	1.8
Subtotal		10.8	-	10.8	11.8	12.6	1.8
Capital Outlay Construction							
BATA Funding		40.2	-	40.2	33.5	33.4	(6.8)
Non-BATA Funding		51.1	-	51.1	51.6	51.1	-
Subtotal		91.3	-	91.3	85.1	84.5	(6.8)
Project Reserves		-	-	-	-	-	-
Total		102.1	-	102.1	96.9	97.1	(5.0)
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	**0415U_**						
Capital Outlay Support							
BATA Funding		4.0	0.5	4.5	2.1	4.5	-
Non-BATA Funding		4.0	(4.0)	-	-	-	-
Subtotal		8.0	(3.5)	4.5	2.1	4.5	-
Capital Outlay Construction		16.9	3.6	20.5	1.9	20.5	-
Project Reserves		0.1	(0.1)	-	-	-	-
Total		25.0	-	25.0	4.0	25.0	-
Richmond Parkway Project (RM 1 Share Only)	**Non-Caltrans**						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		5.9	-	5.9	3.9	5.9	-
Total		5.9	-	5.9	3.9	5.9	-
San Mateo-Hayward Bridge Widening	**See note [2] below**						
Capital Outlay Support		34.6	(0.2)	34.4	34.1	34.4	-
Capital Outlay Construction		180.2	(1.1)	179.1	174.0	176.2	(2.9)
Capital Outlay Right-of-Way		1.5	-	1.5	0.5	0.6	(0.9)
Project Reserves		1.5	1.3	2.8	-	0.7	(2.1)
Total		217.8	-	217.8	208.6	211.9	(5.9)
I-880/SR-92 Interchange Reconstruction	**EA's 23317_, 01601_, and 01602_**						
Capital Outlay Support		28.8	-	28.8	29.5	51.7	22.9
Capital Outlay Construction							
BATA Funding		85.2	-	85.2	-	112.9	27.7
Non-BATA Funding		9.6	-	9.6	-	9.6	-
Subtotal		94.8	-	94.8	-	122.5	27.7
Capital Outlay Right-of-Way		9.9	-	9.9	8.0	12.4	2.5
Project Reserves		0.3	-	0.3	-	9.7	9.4
Total		133.8	-	133.8	37.5	196.3	62.5
Bayfront Expressway Widening	**EA's 00487_, 01511_, and 01512_**						
Capital Outlay Support		8.6	(0.3)	8.3	8.1	8.3	-
Capital Outlay Construction		26.5	-	26.5	24.8	26.5	-
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		0.8	0.3	1.1	-	1.1	-
Total		36.1	-	36.1	33.1	36.1	-
US 101/University Avenue Interchange Modification	**Non-Caltrans**						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		3.8	-	3.8	3.7	3.8	-
Total		3.8	-	3.8	3.7	3.8	-
Subtotal BATA Capital Outlay Support		358.3	18.6	376.8	342.2	399.6	22.8
Subtotal BATA Capital Outlay Construction		1,569.8	148.9	1,718.7	1,438.9	1,736.5	17.8
Subtotal Capital Outlay Right-of-Way		42.5	(0.1)	42.4	30.8	44.0	1.6
Subtotal Non-BATA Capital Outlay Support		14.0	1.1	15.1	15.9	16.9	1.8
Subtotal Non-BATA Capital Outlay Construction		92.4	-	92.4	80.9	92.4	-
Project Reserves		35.6	34.6	70.3	-	77.9	7.6
Total RM1 Program		**2,112.6**	**203.1**	**2,315.7**	**1,908.7**	**2,367.3**	**51.6**

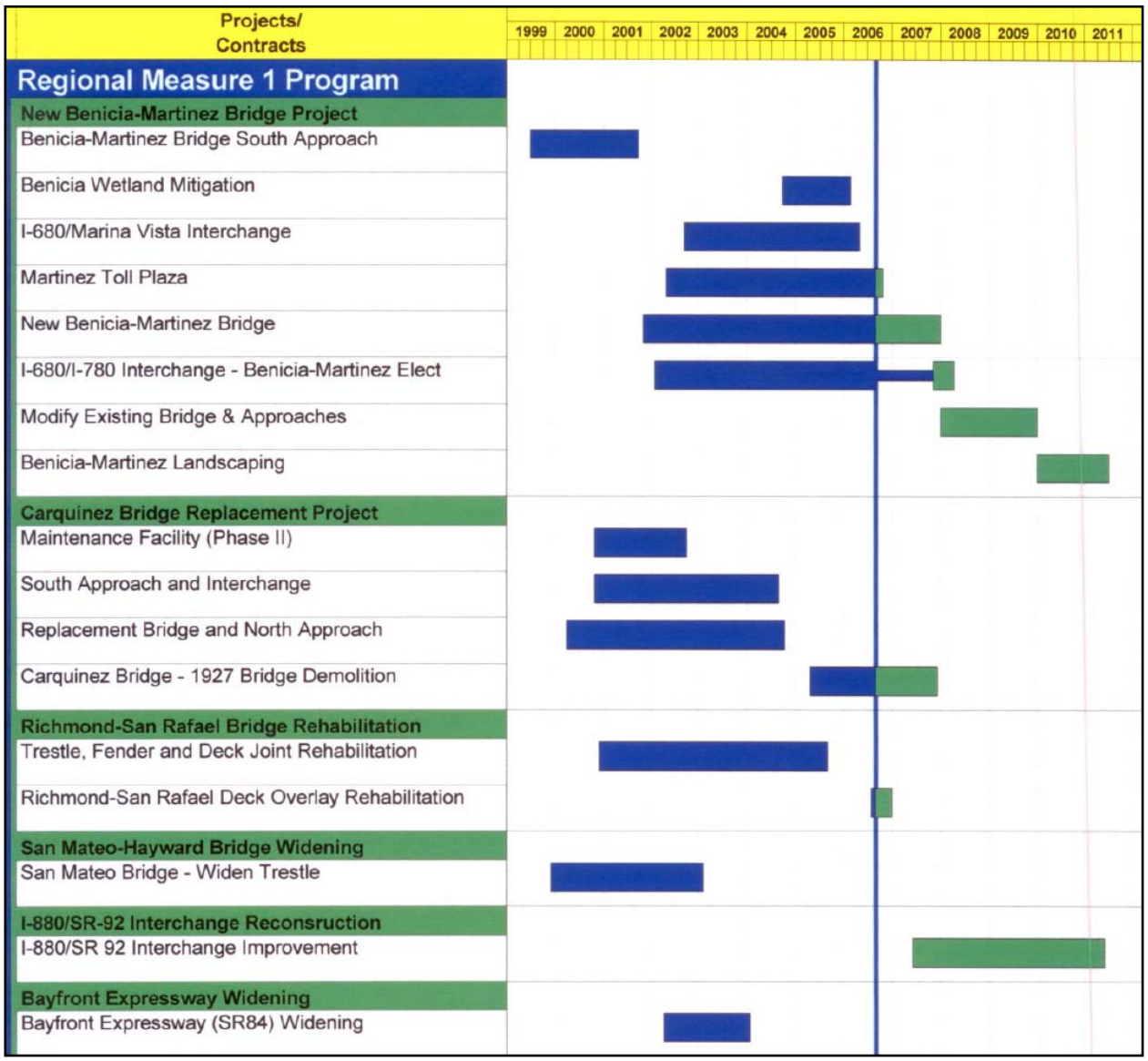
Notes:

[1] Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U_ and 04157_

[2] San Mateo-Hayward Bridge Widening Includes EA's 00305_, 04501_, 04502_, 04503_, 04504_, 04505_, 04506_, 04507_, 04508_, 04509_, 27740_, 27790_, 04860_

Note: Details may not sum to totals due to rounding effects.

Appendix E: Regional Measure 1 Program Summary Schedule



Appendix F: Glossary of Terms

AB144/SB 66 BUDGET: the planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: the planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: for cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

CURRENT APPROVED BUDGET: the sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: the actual expenditures incurred by the program, project, or contract as of the month and year shown.

COST FORECAST: the current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): the mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: the planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: the planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: the sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: the current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): the mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

The following information is provided in accordance with California Government code Section 7550:

This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is $1,574,873.

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