



# San Francisco Bay Area Toll Bridge Seismic Retrofit Program

2017 Second Quarter  
Project Progress and Financial Update



Toll Bridge Program Oversight Committee  
Department of Transportation  
Office of the Director  
1120 N Street  
P.O. Box 942873  
Sacramento, CA 94273-0001

August 21, 2017

Mr. Daniel Alvarez  
Secretary of the Senate  
State Capitol, Room 3044  
Sacramento, CA 95814

Mr. E. Dotson Wilson  
Chief Clerk of the Assembly  
State Capitol, Room 3196  
Sacramento, CA 95814

Dear Messrs. Alvarez and Wilson:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the 2017 Second Quarter Project Progress and Financial Update, for the San Francisco Bay Area Toll Bridge Seismic Retrofit and Regional Measure 1 Programs (TBSRP and RM1), prepared pursuant to California Streets and Highways Code Section 30952.

The TBPOC was established by Assembly Bill 144 in 2005 to oversee the delivery of the TBSRP and consists of the Executive Director of the Bay Area Toll Authority (BATA), the Director of the California Department of Transportation (Caltrans), and the Executive Director of the California Transportation Commission (CTC). With the opening of the new east span of the San Francisco-Oakland Bay Bridge to traffic on September 2, 2013, all seven state-owned toll bridges in the Bay Area have now achieved seismic safety, either via retrofit, or replacement of existing structures.

Caltrans is proceeding with a number of contracts to remove the old east span of the SFOBB and complete remaining work on Yerba Buena Island (YBI). A new temporary vista point constructed in cooperation with the San Francisco County Transportation Authority and other stakeholders was opened to the public on Yerba Buena Island on May 2, 2017. The marine foundation demolition contractor is in the process of preparing the remaining marine foundations for future implosion.

In 2016, Caltrans obtained environmental approvals to remove marine foundations E6 to E18 by implosion and had planned implosions over the next two years. However, removal of the superstructure trusses has advanced faster than expected, and provides Caltrans and their marine demolition contractor the opportunity to complete all implosions by the end of this calendar year. At the end of July 2017, Caltrans obtained the revised environmental approvals to implode the remaining piers this year. This year Caltrans is combining multiple pier implosions on demolition dates, saving a year of work and over \$10 million with a six-weekend implosion schedule from September 2 through November 11, 2017. The Pier E3 Demonstration project received FHWA's 2017 Environmental Excellence in Transportation Award.

The legislature established the TBSRP to seismically retrofit seven state-owned long span toll bridges and provided an \$8.685 billion budget to accomplish the work. In 2010, the legislature added two additional long span bridges (Antioch & Dumbarton) to the TBSRP and augmented the program's budget by \$750 million, thus creating a nine bridge TBSRP with a \$9.435 billion budget. Based upon successful completion of the Antioch and Dumbarton Bridge seismic retrofits with substantial savings, and projected TBSRP risks for demolition of the old east span, the TBPOC reduced the TBPOC approved program budget by \$483 million, bringing the current TBPOC approved budget to \$8.952 billion.

On program risks, each contract has a contingency allowance within its budget. The sum of these contingency allowances is compared to the total of capital outlay, capital outlay support and program-wide risks. Any excess of the risks over the contingency allowances represents a potential draw on the program contingency. The program contingency is currently \$28.3 million in accordance with the TBPOC approved budget. As of the end of the second quarter of 2017, the 50 percent probable draw on program contingency is \$100.5 million. The potential draw ranges from \$25 million to \$175 million. Per the latest (June 2017) forecast, the \$8.952 billion TBPOC approved budget may be insufficient to cover the cost of identified risks and it is possible that BATA will need to allocate toll funds from its reserves to pay for the remaining TBSRP work. Should Caltrans successfully implode the remaining marine foundations this year, the TBPOC expects forecasted risks and costs to be reduced significantly.

The TBPOC is committed to providing the Legislature and the CTC with comprehensive and timely reporting on the TBSRP. If there are any questions, or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,



MALCOLM DOUGHERTY  
TBPOC Chair  
Director  
California Department of  
Transportation



STEVE HEMINGER  
Executive Director  
Bay Area Toll Authority



SUSAN BRANSEN  
Executive Director  
California Transportation Commission



Toll Bridge Program Oversight Committee  
Department of Transportation  
Office of the Director  
1120 N Street  
P.O. Box 942873  
Sacramento, CA 94273-0001

August 21, 2017

Mr. Bob Alvarado, Chair  
California Transportation Commission  
1120 N Street, Room 2221  
Sacramento, CA 95814

Ms. Fran Inman, Vice-Chair  
California Transportation Commission  
1120 N Street, Room 2221  
Sacramento, CA 95814

Dear Mr. Alvarado and Ms. Inman:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the 2017 Second Quarter Project Progress and Financial Update, for the San Francisco Bay Area Toll Bridge Seismic Retrofit and Regional Measure 1 Programs (TBSRP and RM1), prepared pursuant to California Streets and Highways Code Section 30952.

The TBPOC was established by Assembly Bill 144 in 2005 to oversee the delivery of the TBSRP and consists of the Executive Director of the Bay Area Toll Authority (BATA), the Director of the California Department of Transportation (Caltrans), and the Executive Director of the California Transportation Commission (CTC). With the opening of the new east span of the San Francisco-Oakland Bay Bridge to traffic on September 2, 2013, all seven state-owned toll bridges in the Bay Area have now achieved seismic safety, either via retrofit, or replacement of existing structures.

Caltrans is proceeding with a number of contracts to remove the old east span of the SFOBB and complete remaining work on Yerba Buena Island (YBI). A new temporary vista point constructed in cooperation with the San Francisco County Transportation Authority and other stakeholders was opened to the public on Yerba Buena Island on May 2, 2017. The marine foundation demolition contractor is in the process of preparing the remaining marine foundations for future implosion.

In 2016, Caltrans obtained environmental approvals to remove marine foundations E6 to E18 by implosion and had planned implosions over the next two years. However, removal of the superstructure trusses has advanced faster than expected, and provides Caltrans and their marine demolition contractor the opportunity to complete all implosions by the end of this calendar year. At the end of July 2017, Caltrans obtained the revised environmental approvals to implode the remaining piers this year. This year Caltrans is combining multiple pier implosions on demolition dates, saving a year of work and over \$10 million with a six-weekend implosion schedule from September 2 through November 11, 2017. The Pier E3 Demonstration project received FHWA's 2017 Environmental Excellence in Transportation Award.

The legislature established the TBSRP to seismically retrofit seven state-owned long span toll bridges and provided an \$8.685 billion budget to accomplish the work. In 2010, the legislature added two additional long span bridges (Antioch & Dumbarton) to the TBSRP and augmented the program's budget by \$750 million, thus creating a nine bridge TBSRP with a \$9.435 billion budget. Based upon successful completion of the Antioch and Dumbarton Bridge seismic retrofits with substantial savings, and projected TBSRP risks for demolition of the old east span, the TBPOC reduced the TBPOC approved program budget by \$483 million, bringing the current TBPOC approved budget to \$8.952 billion.

On program risks, each contract has a contingency allowance within its budget. The sum of these contingency allowances is compared to the total of capital outlay, capital outlay support and program-wide risks. Any excess of the risks over the contingency allowances represents a potential draw on the program contingency. The program contingency is currently \$28.3 million in accordance with the TBPOC approved budget. As of the end of the second quarter of 2017, the 50 percent probable draw on program contingency is \$100.5 million. The potential draw ranges from \$25 million to \$175 million. Per the latest (June 2017) forecast, the \$8.952 billion TBPOC approved budget may be insufficient to cover the cost of identified risks and it is possible that BATA will need to allocate toll funds from its reserves to pay for the remaining TBSRP work. Should Caltrans successfully implode the remaining marine foundations this year, the TBPOC expects forecasted risks and costs to be reduced significantly.

The TBPOC is committed to providing the Legislature and the CTC with comprehensive and timely reporting on the TBSRP. If there are any questions, or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,



MALCOLM DOUGHERTY  
TBPOC Chair  
Director  
California Department of  
Transportation



STEVE HEMINGER  
Executive Director  
Bay Area Toll Authority



SUSAN BRANSEN  
Executive Director  
California Transportation Commission



**Program Management Team**

Andrew Fremier  
Bay Area Toll Authority  
**Metropolitan Transportation Commission**

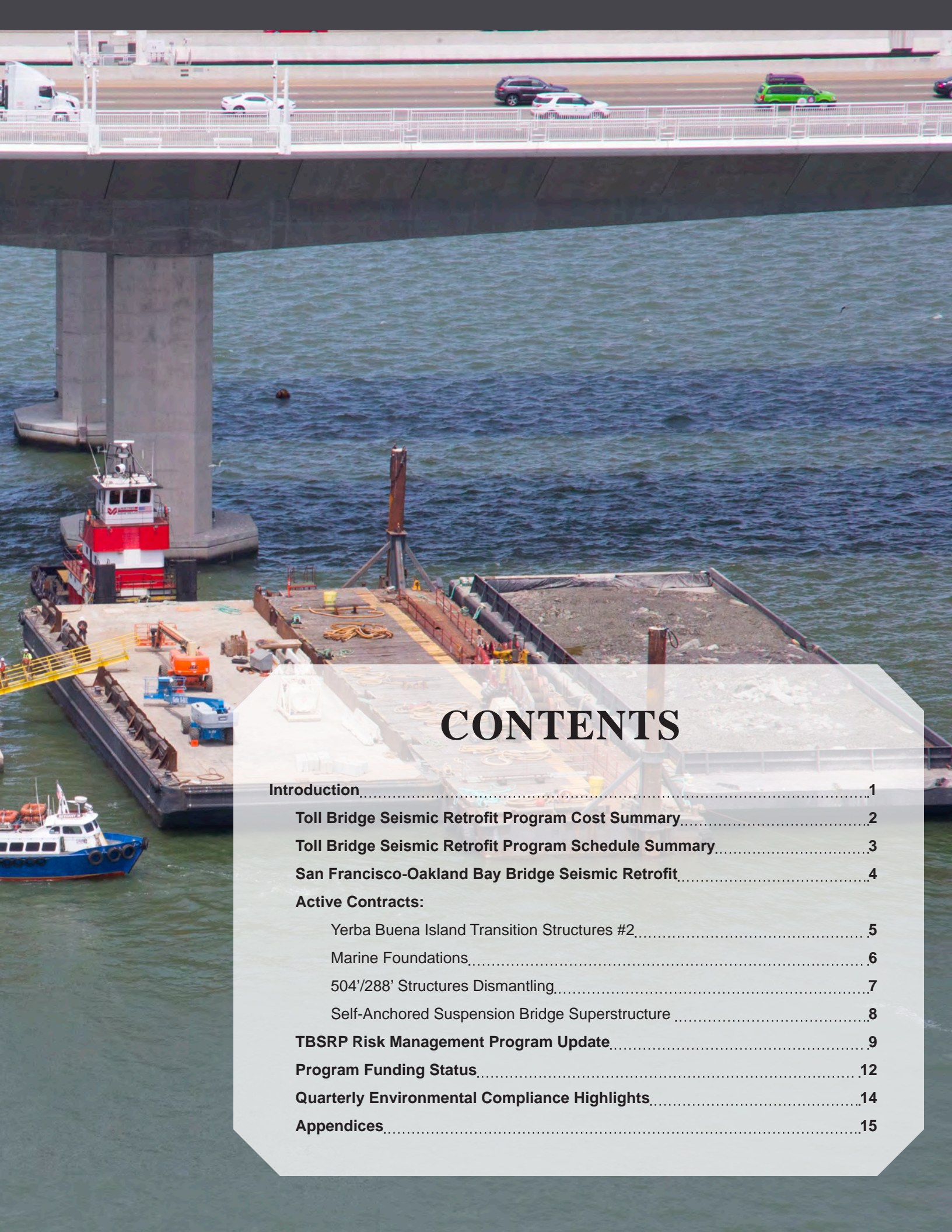
Stephen Maller  
**California Transportation Commission**

Dan McElhinney  
**Caltrans District 4 - Bay Area**

Brian Maroney  
**Caltrans, SFOBB Chief Engineer**

**Photo Credits:**

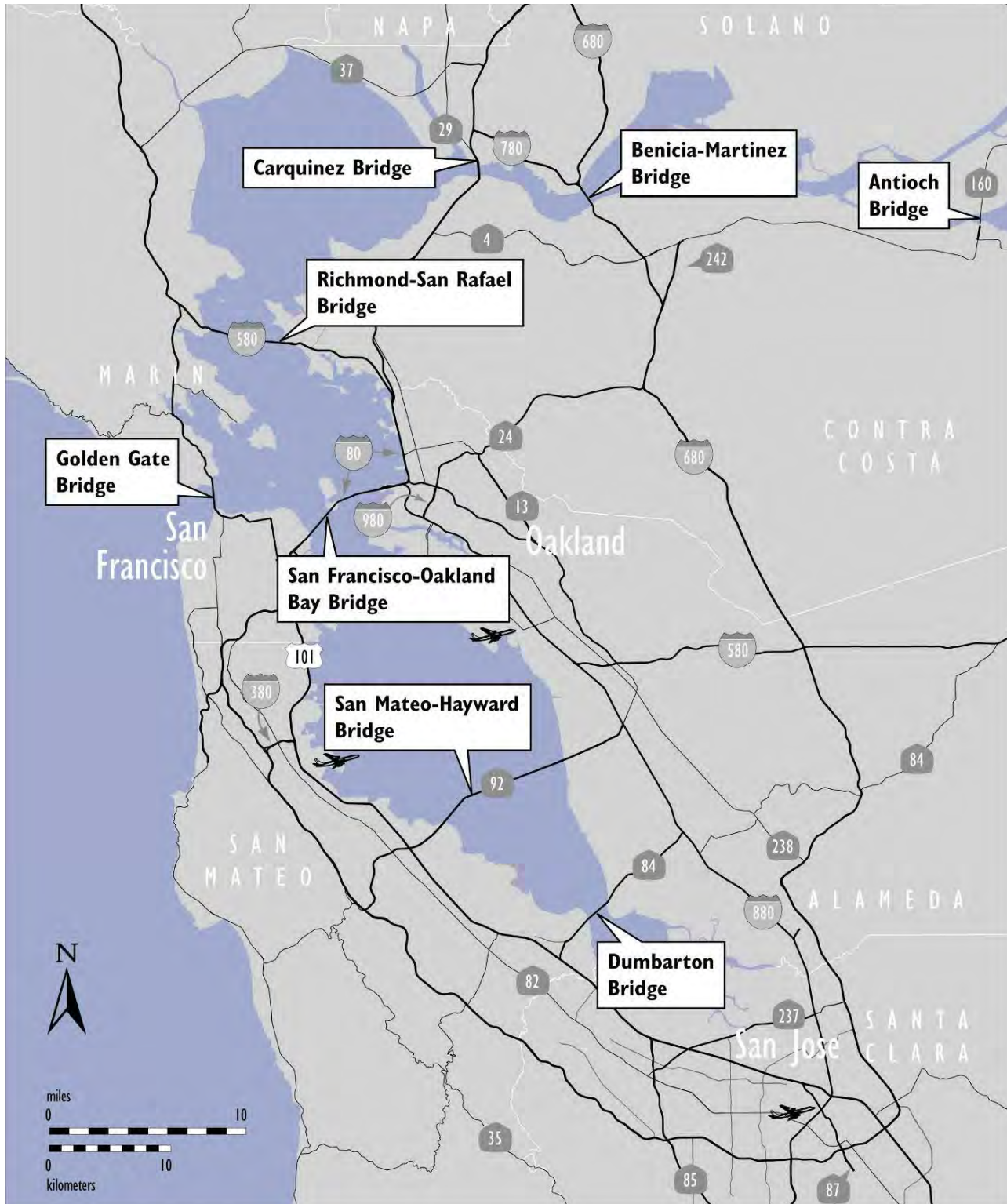
Caltrans: cover page, all other pages (unless otherwise noted)  
Sam Burbank: photos on pages 8 & 16



# CONTENTS

<b>Introduction</b> .....	<b>1</b>
<b>Toll Bridge Seismic Retrofit Program Cost Summary</b> .....	<b>2</b>
<b>Toll Bridge Seismic Retrofit Program Schedule Summary</b> .....	<b>3</b>
<b>San Francisco-Oakland Bay Bridge Seismic Retrofit</b> .....	<b>4</b>
<b>Active Contracts:</b>	
Yerba Buena Island Transition Structures #2.....	<b>5</b>
Marine Foundations.....	<b>6</b>
504'/288' Structures Dismantling.....	<b>7</b>
Self-Anchored Suspension Bridge Superstructure .....	<b>8</b>
<b>TBSRP Risk Management Program Update</b> .....	<b>9</b>
<b>Program Funding Status</b> .....	<b>12</b>
<b>Quarterly Environmental Compliance Highlights</b> .....	<b>14</b>
<b>Appendices</b> .....	<b>15</b>

## San Francisco Bay Area Toll Bridges



\* The Golden Gate Bridge is owned and operated by the Golden Gate Bridge, Highway and Transportation District.



## San Francisco Bay Area Toll Bridges

In July 2005, Assembly Bill (AB) 144 (Hancock) created the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the new Benicia-Martinez Bridge and State Toll Bridge Seismic Retrofit Program (TBSRP) projects. The TBPOC consists of the Director of the California Department of Transportation (Caltrans), the Executive Director of the Bay Area Toll Authority (BATA) 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, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the TBPOC), and keeping the Legislature and others apprised of current project progress and status. In January 2010, Assembly Bill (AB) 1175 (Torlakson) amended the TBSRP to include the Antioch and Dumbarton Bridges seismic retrofit projects. The current TBSRP is as follows:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
Dumbarton Bridge Seismic Retrofit	Complete
Antioch Bridge Seismic Retrofit	Complete
San Francisco-Oakland Bay Bridge East Span Replacement	Complete*
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
1958 Carquinez Bridge Seismic Retrofit	Complete
1962 Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

\* The seismic safety opening of the bridge occurred in September 2013. Remaining work on the project is the removal of the old bridge structure.

## Toll Bridge Seismic Retrofit Program Cost Summary (Millions)

	Contract Status	AB 144/ SB 66/ AB 1175 Budget	TBPOC Approved Changes	Current TBPOC Approved Budget (June 2017)	Cost to Date (June 2017)	Current Cost Forecast (June 2017)	Cost Variance	Cost Status
		a	b	c = a + b	d	e	f = e - c	
<b>SFOBB East Span Seismic Replacement</b>								
Capital Outlay Construction								
Skyway	Completed	1,293.0	(55.8)	1,237.2	1,235.6	1,236.1	(1.1)	●
SAS Tower Anchor Rod Grouting	Construction			12.0	7.0	9.3	(2.7)	●
SAS Marine Foundations	Completed	313.5	(38.7)	274.8	274.8	274.8	-	●
SAS Superstructure	Completed	1,753.7	281.1	2,034.8	1,973.3	2,036.8	2.0	●
YBI Detour	Completed	131.9	341.4	473.3	473.4	473.4	0.1	●
YBI Transition Structures (YBITS)		299.3	13.6	312.9	299.6	319.3	6.4	
YBITS 1	Completed			203.7	203.2	203.8	0.1	●
YBITS 2	Construction			105.9	96.4	115.5	9.6	●
YBITS Landscaping	Design			3.3	-	-	(3.3)	●
Oakland Touchdown (OTD)		283.8	46.8	330.6	326.5	326.5	(4.1)	
OTD 1	Completed			205.3	202.8	202.8	(2.5)	●
OTD 2	Completed			72.6	71.2	71.2	(1.4)	●
Detour	Completed			47.0	46.7	46.7	(0.3)	●
OTD Electrical Systems	Design			-	-	-	-	●
Submerged Electric Cable	Completed			5.7	5.7	5.7	-	●
Existing Bridge Dismantling		239.2	82.3	321.5	209.8	372.5	51.0	●
Cantilever Section	Completed			69.0	68.5	69.0	-	●
504/288 Sections	Construction			103.5	72.2	82.2	(21.3)	●
Marine Foundations				149.0	69.2	221.4	72.4	●
Pier-3 Demonstration Project	Completed			17.5	16.8	16.8	(0.7)	●
Remaining Marine Foundations	Construction			131.5	52.3	204.5	73.0	●
Stormwater Treatment Measures	Completed	15.0	3.3	18.3	16.9	16.9	(1.4)	●
Other Completed Projects	Completed	90.4	(0.5)	89.9	90.0	90.0	0.1	●
Capital Outlay Support		959.3	376.6	1,335.9	1,320.9	1,383.4	47.5	●
Right-of-Way and Envir. Mitigation		72.4	-	72.4	60.9	70.0	(2.4)	●
Other Budgeted Capital		35.1	(32.8)	2.3	0.7	0.7	(1.6)	●
<b>Total SFOBB East Span Replacement</b>		<b>5,486.6</b>	<b>1,029.3</b>	<b>6,515.9</b>	<b>6,289.4</b>	<b>6,609.7</b>	<b>93.8</b>	<b>●</b>
<b>Antioch Bridge Seismic Retrofit</b>								
Capital Outlay Construction and Mitigation	Completed	-	24.1	24.1	24.1	24.2	0.1	●
Capital Outlay Support		-	47.0	47.0	47.0	47.0	-	●
<b>Total Antioch Bridge Seismic Retrofit</b>		<b>267.0</b>	<b>71.1</b>	<b>71.1</b>	<b>71.1</b>	<b>71.2</b>	<b>0.1</b>	<b>●</b>
<b>Dumbarton Bridge Seismic Retrofit</b>								
Capital Outlay Construction and Mitigation	Completed	-	46.0	46.0	47.4	47.5	1.5	●
Capital Outlay Support		-	66.4	66.4	64.4	64.8	(1.6)	●
<b>Total Dumbarton Bridge Seismic Retrofit</b>		<b>483.0</b>	<b>112.4</b>	<b>112.4</b>	<b>111.8</b>	<b>112.3</b>	<b>(0.1)</b>	<b>●</b>
<b>Program Completed Projects</b>	<b>Completed</b>	<b>2,268.4</b>	<b>(74.1)</b>	<b>2,194.3</b>	<b>2,168.9</b>	<b>2,174.1</b>	<b>(20.2)</b>	
<b>Miscellaneous Program Costs</b>		<b>30.0</b>	<b>-</b>	<b>30.0</b>	<b>25.5</b>	<b>25.5</b>	<b>(4.5)</b>	●
<b>Net Programmatic Risks</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>31.4</b>	<b>31.4</b>	●
<b>Program Contingency*</b>		<b>900.0</b>	<b>(871.7)</b>	<b>28.3</b>	<b>-</b>	<b>-</b>	<b>(28.3)</b>	●
<b>Total Toll Bridge Seismic Retrofit Program*</b>		<b>9,435.0</b>	<b>(483.0)</b>	<b>8,952.0</b>	<b>8,666.8</b>	<b>9,024.2</b>	<b>72.2</b>	<b>●</b>

\*AB144/SB66 established a funding level of \$8.685 Billion in July 2005 for TBSRP, AB1175 added the retrofitting of the Antioch and Dumbarton Bridges in January 2010, providing another \$750 million in funding, bringing Total Toll Seismic Retrofit Program funding to \$9.435 Billion. Since 2010, \$483 million has been removed from the program, bringing the current TBPOC Approved Budget to \$8.952 Billion. The \$483 million removed consisted of:

Antioch Savings (4/12/10) \$137 million - Dumbarton Savings (9/02/10) \$216 million - Program Contingency Redirection (11/05/13) \$130 million, the current TBPOC approved Program Budget is \$8,952 million.

\*\* (Due to the rounding of numbers, the totals above are show within \$0.1).

## Toll Bridge Seismic Retrofit Program Schedule Summary

	AB 144/SB 66 Project Completion Schedule Baseline (July 2005)	TBPOC Approved Changes (Months)	Current TBPOC Approved Completion Schedule (June 2017)	Current Completion Forecast (June 2017)	Schedule Variance (Months)	Schedule Status
	g	h	i=g+h	j	k=j-i	l
<b>SFOBB East Span Seismic Replacement</b>						
<b>Contract Completion</b>						
Skyway	Apr 2007	8	Dec 2007	Dec 2007	-	●
SAS Marine Foundations	Jun 2008	(5)	Jan 2008	Jan 2008	-	●
SAS Superstructure	Mar 2012	42	Sep 2015	Sep 2015	-	●
YBI Detour	Jul 2007	39	Oct 2010	Oct 2010	-	●
YBI Transition Structures (YBITS)	Nov 2013	36			-	
YBITS 1			Feb 2014	Feb 2014	-	●
YBITS 2			Jun 2017	Nov 2017	(5)	●
Oakland Touchdown	Nov 2013	10				
OTD 1			Jun 2010	Jun 2010	-	●
OTD 2			Sep 2015	Sep 2015	-	●
Submerged Electric Cable			Jan 2008	Jan 2008	-	●
Existing Bridge Dismantling	Sep 2014	51	Dec 2018	Dec 2017	-	●
Cantilever Section <sup>(2)</sup>			Jul 2015	Jul 2015	-	●
504/288 Sections			Mar 2018	Jun 2017*	9	●
Marine Foundations						
E3 Foundation Removal Demo Project			Jan 2016	Jan 2016	-	●
E4 - E18 Foundation Removal			Dec 2018	Dec 2017	12	●
Stormwater Treatment Measures			Mar 2008	Mar 2008	-	●
<b>SFOBB East Span Bridge Opening and Other Milestones</b>						
Westbound Seismic Safety Open	Sep 2011	24	Sep 2013	Sep 2013	-	●
Eastbound Seismic Safety Open	Sep 2012	12	Sep 2013	Sep 2013	-	●
Bike/Ped Path to YBI Landing			Dec 2015	Oct 2016	-	●
Eastbound On-Ramp			Jun 2016	Jun 2016		●

\* Substantial completion date

- Within approved schedule and budget
- Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated
- Known project impacts with forthcoming changes to approved schedules and budgets

# San Francisco-Oakland Bay Bridge East Span Replacement Project

## Seismic Retrofit

Rather than a seismic retrofit, the two-mile long east span of the San Francisco-Oakland Bay Bridge has been completely rebuilt. The new east span consists of several different sections, yet appears as a single streamlined span. The eastbound and westbound lanes of the east span no longer include upper and lower decks. The lanes are side-by-side, providing motorists with expansive views of the bay. These views are also enjoyed by bicyclists and pedestrians, thanks to a new bicycle/pedestrian path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span features the world's longest Self-Anchored Suspension (SAS) bridge that connects to an elegant roadway supported by piers (Skyway), which gradually slopes down toward the Oakland shoreline (Oakland Touchdown).



## San Francisco-Oakland Bay Bridge East Span Replacement Project

### Yerba Buena Island Transition Structures (YBITS)

#### YBITS 2 - Eastbound On-Ramp and Cantilever Dismantling Contract

Approved Capital Outlay Budget: \$105.9 M

Contractor: CEC & Silverado, JV

Status: 92% Complete as of June 2017

The YBITS 2 contract involves dismantling the detour viaduct, constructing a new eastbound on-ramp to the bridge, completing the bicycle/pedestrian path to Yerba Buena Island, and dismantling of the cantilever.

The contract was awarded to California Engineering Contractors Inc./Silverado Contractors Inc., Joint Venture on November 28, 2012. Initial startup activities and submittals began in March 2013, with actual dismantling starting after the seismic safety opening on Labor Day weekend 2013.

**Status:** Cantilever removal was completed in July 2015. The eastbound on-ramp was opened June 2, 2016. The pedestrian/bicycle path opened October 2016. Work on YBI Slope Embankment on Yerba Buena Island is ongoing.

YBI Transition Structures and Self Anchored Suspension Bridge Superstructure, looking west.



# San Francisco-Oakland Bay Bridge East Span Replacement Project

## Former East Span Bridge Dismantling

### Marine Foundations Removal

Approved Capital Outlay Budget:

\$17.5 M for Pier E3

\$131.5 M for Piers E4 - E18

Contractor: Kiewit/Manson

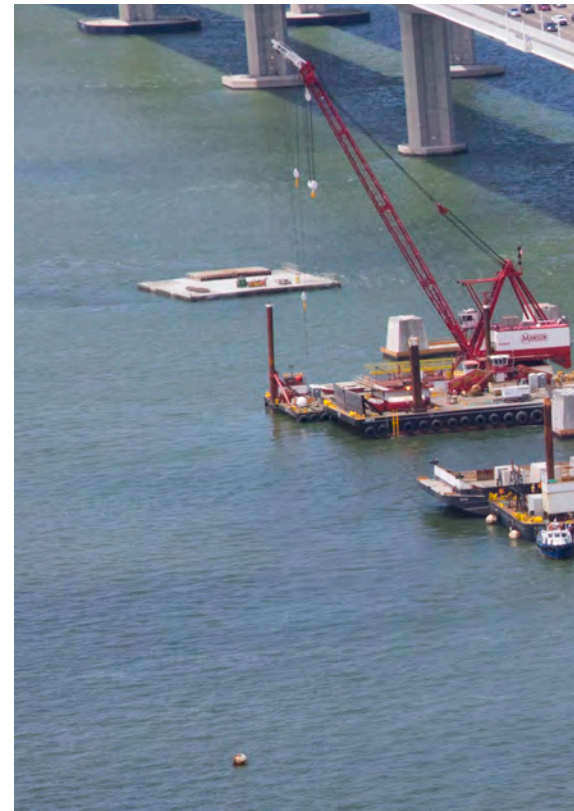
The original east span of the San Francisco-Oakland Bay Bridge was supported by 21 in-water bridge piers, Piers E2 through E22, along with land based piers at Yerba Buena Island and Oakland. Part of this project is the demolition of Pier E3, which is located 1,535 feet east of Yerba Buena Island and on the east side of a 50-foot deep navigation channel.

The original authorization covered the dismantling of the piers via mechanical means such as saw cutting, flame cutting, mechanical splitting or pulverizing, and hydro-cutting, but did not cover the use of controlled implosion.

Caltrans proposed to remove Pier E3 as a pilot/demonstration project for the effective use of controlled charges to remove the marine foundations of the original SFOBB. Dismantling of Pier E3 used controlled charges and was completed in four phases: 1) mechanical dismantling of pier cap and fender system, 2) drilling of bore holes into caisson and buttress walls and installing a blast attenuation system (BAS), 3) installing charges, activating the BAS and imploding the pier, and 4) management and removal of remaining dismantling pier debris. The pier was removed to -51 feet.

Mechanical dismantling would have required the installation of a cofferdam around Pier E3, which would have required 394 piles of various types. Pile driving alone would take approximately four years, while the four phases of the demonstration project would occur within six months. Using this method is a significant cost risk to the program.

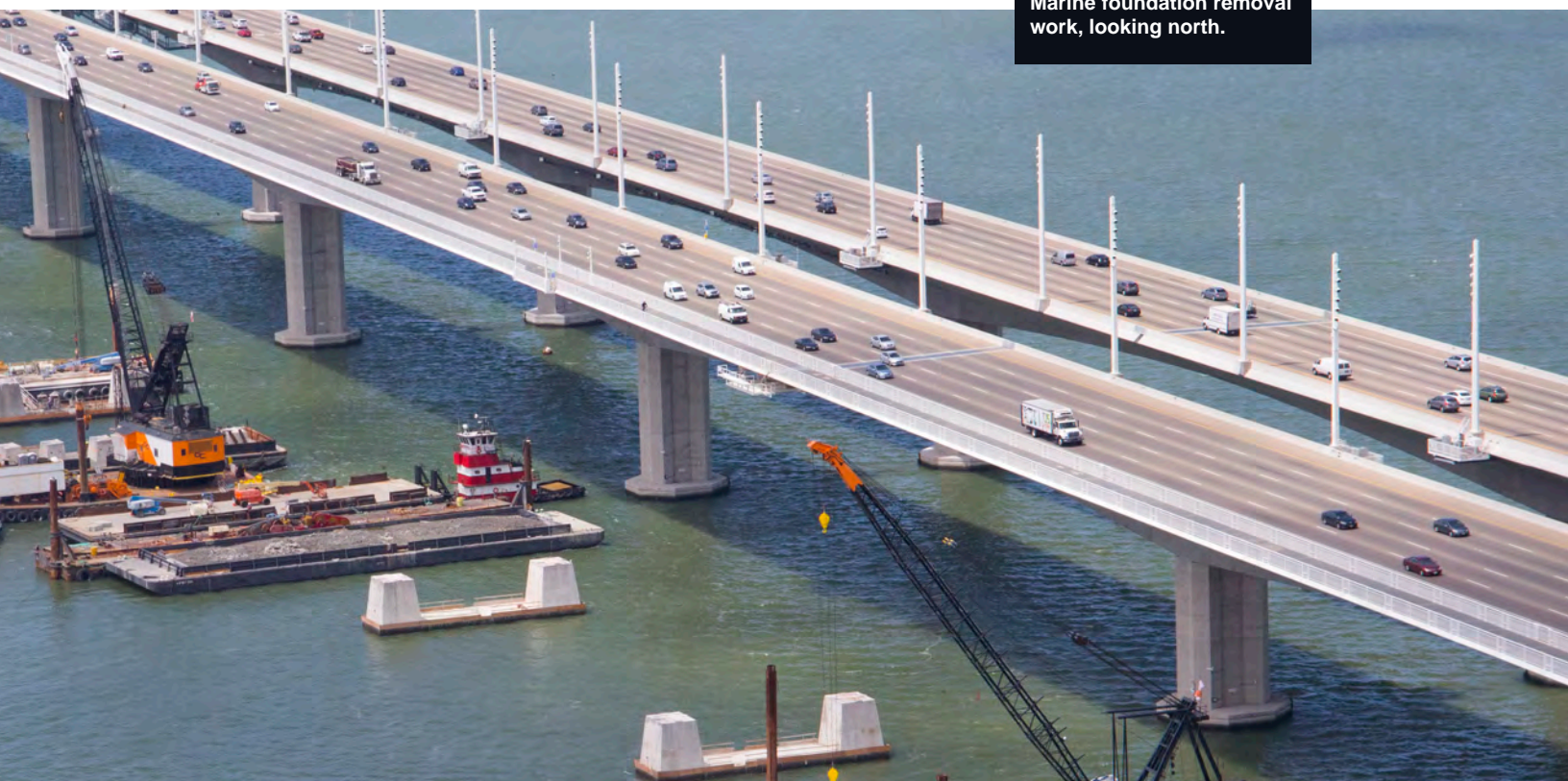
The marine foundation removal is a CMGC (Construction Manager / General Contractor) contract and the selected CMGC contractor is a Kiewit Manson team (KM).



### Piers E4 - E18:

The contract was awarded to the KM team in April 2016. Marine foundations E5 and E4 were demolished by implosion in October 2016. Caltrans obtained environmental permits to remove marine foundations E4 through E18 by implosion. The removal of the superstructure trusses has advanced faster than expected, and provides Caltrans and their marine demolition contractor the opportunity to complete all implosions by the end of this year. Caltrans is currently seeking environmental approvals to implode all piers this year, and in parallel, is seeking permits from resource agencies for a "retain in place" for Foundations E2, and E19 through E22.





Marine foundation removal work, looking north.

## 504'/288' Superstructure Dismantling

Approved Capital Outlay Budget: \$103.5 M

Contractor: CEC & Silverado JV

Status: 99% Complete as of June 2017

The contractor sequenced the bridge removal operations into seven phases of dismantling. These phases begin with the upper deck and initial truss removal operations, through the removal of the 504' and 288' steel truss spans, to the removal of the supporting steel columns.

**Status:** The upper deck of the old span was removed to lighten the bridge. The first 504' main truss (out of five) was lowered down to barges in February 2016, and the last 504' section was lowered in August 2016. The first out of fourteen 288' sections was lowered in November 2016 and the last section was lowered in March 2017. The project reached substantial completed as of June 2017.

## San Francisco-Oakland Bay Bridge East Span Replacement Project

### Self-Anchored Suspension Bridge Superstructure Contract

Approved Capital Outlay Budget: \$2.05 B

Contractor: American Bridge/Fluor Enterprises, JV

Status: 100% Completed

The self-anchored suspension span (SAS) of the bridge is not just another suspension bridge. Rising 525 feet above mean sea level and embedded in bedrock, the single-tower SAS span is designed to withstand a massive earthquake. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. While there appears to be two main cables on the SAS, it is actually a single continuous cable. This single cable is anchored within the eastern end of the roadway, carried over the tower and then wrapped around the two side-by-side decks at the western end.

The single-steel tower is made up of four separate legs connected by shear link beams, which function much like a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs.



Self Anchored Suspension Bridge Superstructure, looking east.

**Status:** The TBPOC authorized Caltrans to close out the Self-Anchored Suspension (SAS) span contract with the joint venture of American Bridge/Fluor (ABF). The contract is to be closed out under the terms and conditions consistent with the findings of the July 2013 TBPOC meeting investigative report that found three parties – the contractor, designer, and Caltrans – responsible for the failure of the high-strength rods on the east pier (E2) of the SAS, and the \$24 million cost of the “saddle retrofit” repair. The contract was accepted in September 2015 and is currently under the Public Works Arbitration Program, where the contractor’s claim will be reviewed.

In May 2016, the Toll Bridge Program Oversight Committee (TBPOC) approved the re-grouting of the tower anchor rods based on recommendations from Caltrans and the peer review group. A contract for \$8.5 million was expeditiously awarded to the apparent low bidder on October 10, 2016. All re-grouting work was completed as of June 2017.



## Risk Management Program Update

### POTENTIAL DRAW ON PROGRAM RESERVE (PROGRAM CONTINGENCY)

Caltrans continues to implement comprehensive risk management on all TBSRP projects in accordance with AB 144. Cost Risk response efforts continue to focus on mitigating the estimated cost and schedule impacts of identified risks. The “bottom line” of cost risk analysis is whether the Program Contingency remains adequate to cover all identified risks.

Each contract has a contingency allowance within its budget. The sum of these contingency allowances is compared to the total of capital outlay, capital outlay support and program-wide risks. Any excess of the risks over the contingency allowances represents a potential draw on the program contingency. The program contingency, as of the second quarter 2017, is currently \$28.3 million in accordance with the TBPOC approved budget. As of the end of the second quarter of 2017, the 50 percent probable draw on program contingency is \$100.5 million. The potential draw ranges from about \$25 million to \$175 million (refer to Figure 1). The \$100.5

million probable draw on program contingency gives a forecast deficit of \$72.2 million at program completion to the current approved program budget. This represents an \$8.9 million improvement in the program’s bottom line since last quarter. The bottom line trend has been improving for the last six quarters, with the forecast deficit decreasing by \$71 million (50%) since in peaked at \$143.2 million in the third quarter of 2015.

Since 2010, the TBPOC has approved the removal of \$483 million from the TBSRP budget (consisting of Antioch Savings (4/12/10) \$137 million, Dumbarton Savings (9/02/10) \$216 million and Program Contingency Redirection (11/05/13) \$130 million), bringing the current approved program budget to \$8.952 billion. The program contingency is currently insufficient to cover the cost of identified risks and it is likely that BATA will need to allocate additional toll funds from its reserves to pay for the remainder of the work.

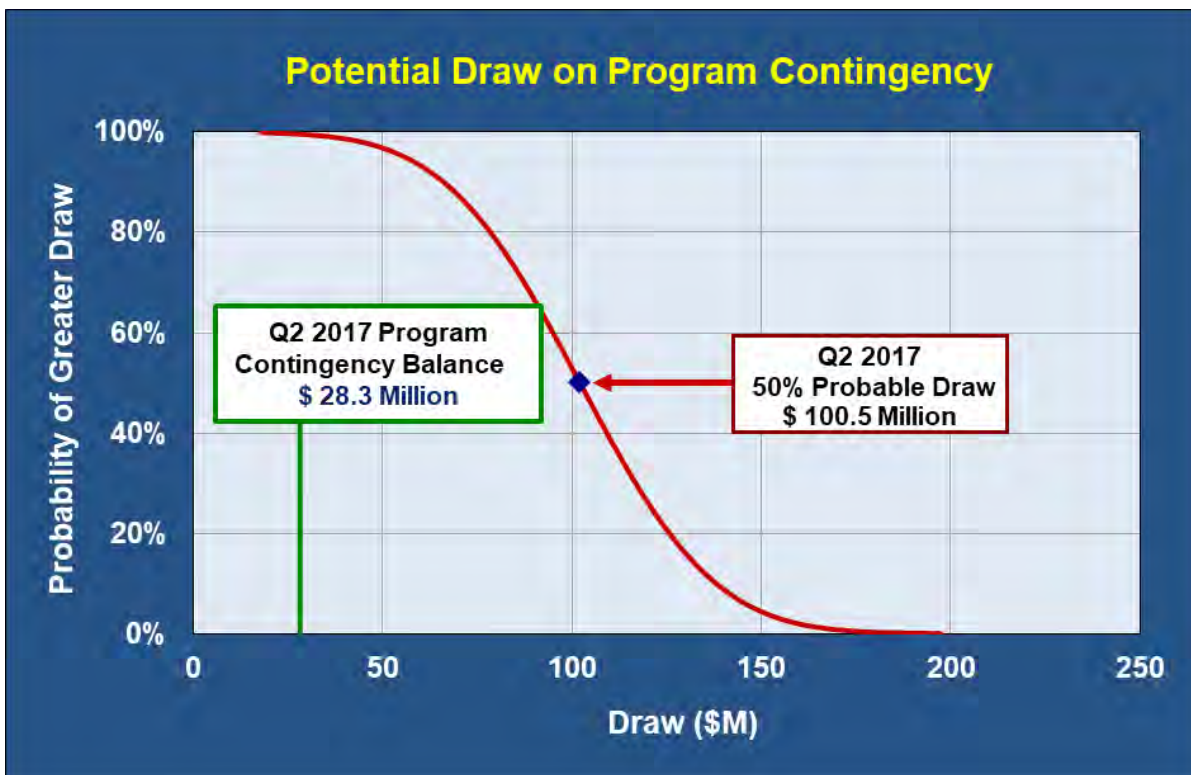


Figure 1 – Potential Draw on Program Contingency<sup>1</sup>

1. Proposed architectural enhancements and project improvements are excluded unless approved by the TBPOC.

## RISK MANAGEMENT DEVELOPMENTS

### SFOBB East Span COS Budget

**Budget to Completion:** The second quarter 2017 COS forecast to completion is \$1,383.4 million, which results in a cost variance of \$47.5 million to the current budget. This is a \$1.3 million improvement in the forecast over the last quarter and a \$21.5 million improvement over the fourth quarter 2015 forecast, when the COS forecast peaked at \$1,404.8 million. The current approved budget of \$1,335.9 million for SFOBB East Span COS will fund the program COS through the end of the September 2017.

### Expenditures vs. Budget for 2016/17 Fiscal Year:

On September 8, 2016, the TBPOC approved a total COS budget of \$23 million for the 2016/17 fiscal year, an additional \$1 million COS budget for advancement of the Marine Foundation removal work was approved by the TBPOC on February 7, 2017, bringing the final COS budget for 16/17 fiscal year to \$24 million. Total expenditures for 2016/17 are estimated at \$18 million, well within the approved budget.

### Self-Anchored Suspension Span Contract

**Contract Close Out:** The SAS contract was accepted on September 24, 2015. The estimate after acceptance included several deductions as credit for issues that Caltrans determined were the responsibility of the contractor. The proposed final estimate was forwarded to the contractor on November 5, 2015 and since the total amount paid exceeded the amount due by \$8.5 million, the contractor owed a payment to Caltrans for that amount. The contractor submitted his exceptions to the proposed final estimate on November 6, 2015. The contractor documented twelve outstanding disputes totaling \$49.2 million in claims and filed for arbitration on May 23, 2016. The claims are now subject to the Public Works Contract Arbitration Program and could take many quarters to reach a conclusion.

### SAS Tower Anchor Rod Grouting Contract

**Completion of Repair Work:** The scope of work for the repair of the Tower Anchor Rod Grouting was approved by the TBPOC on May 12, 2016. The TBPOC authorized \$12 million in Capital funds and \$3 million in COS costs to inspect and administer that contract. Caltrans procured the contract with a low bid Director's Order which helps expedite the work, yet achieves the best price possible. A contract for \$8.5 million was expeditiously awarded to the apparent low bidder on October 10, 2016. As of June 30, 2017 the project has successfully water-jetted, retensioned and re-grouted 100% of the rods, the contractor is now removing his marine access and replacing utilities that were removed to facilitate the work.

### Yerba Buena Island Transition Structure #2 Contract

**Unstable Slopes:** During the winter of 2015/16, the YBITS #2 contractor began constructing some of the YBITS #2 slope work and encountered two significant slope failures. The work on these slopes was affected by the late winter and the slope failures. The project had identified several risks to the construction of the project's slope stabilization (e.g. unstable slopes, extra SWPPP required, differing site conditions) that could potentially increase the costs of this work.

The implementation of the new Southgate Road Realignment alternative has significantly reduced this risk by deleting the large retaining wall work from this contract and transferring it to the SF Ramps project.

Because of recent storm drain improvements made on YBI, the project team has been successful in preventing water from outside the Goat Slope getting to the slope this past winter season, and thus avoided the likelihood of slope stability issues this year.

### 504'/288' Dismantling Contract

**Successful Completion of Work in the Field:** The successful removal of the last superstructure span almost one year ahead of schedule, gives the program the opportunity to remove all the E4 to E18 piers by implosion in 2017. This has allowed the program to achieve significant COS savings on the 504'/288' Dismantling Contract and also advance the Marine Foundation Removal E4 to E18 contract to completion in the first half of 2018.

### Marine Foundation Removal Contract (E4 to E18)

**Opportunity to Finish Work in the 2017 Implosion Season:** The early completion of the 504/288 contract gives the Marine Structures Dismantling contract the opportunity to deliver the contract a year early. Allowing the Marine Structure Dismantling contractor to begin mechanical dismantling by March 1, 2017 and allowing him implode multiple footings during the 2017 three-month window will help enable this opportunity to be realized in the coming quarters.

### Marine Foundation Removal Contract (E2, E19 to E22)

**Discussions with Environmental Agencies on the retention of the footings:** The Environmental team has had discussions with the Environmental Agencies on the feasibility of retaining the remaining marine foundations. Initial discussions indicate that the Army Corp of Engineers will require a new environmental impact assessment if the footings are to be left in place, a new environmental document could take several years to complete. Per the TBPOC's request, the project team has developed

an advanced planning study to show the possibilities of incorporating the old piers into a public access facility to the Bay. The goal is to develop a plan that results in net savings over the cost of removing all the piers, but it is likely that the cost of retaining piers E18 to E22 on the Oakland side will exceed the cost of removing the piers, while the cost of retaining the E2 will likely be less than removing that pier.

## RISK MANAGEMENT LOOK AHEAD

### SFOBB East Span COS Budget

**Budget Increase:** The current approved budget of \$1,335.9 million for SFOBB East Span COS will run out by the end of September 2017. In the third quarter of 2017, the BATA board will need to approve the TBPOC approved 2017/18 COS allocation and an increase in the overall SFOBB East Span COS budget by a commensurate amount. Additional budget adjustments from program contingency will be required for each fiscal year through program completion.

### Self-Anchored Suspension Span Contract

The contract close-out effort will continue. The support cost budget will continue to accrue until final close-out is achieved.

### Yerba Buena Island Transition Structure #2 Contract

**Completion of the Slope Work:** Contract and CCO #44 slope work represent the biggest risk to the project going forward, work will continue through the summer and into the fall of 2017, project plans to complete the contractual and added work by October 30th 2017.

### 504'/288' Dismantling Contract

**Close Out of the Project:** All work in the field was completed in the 2nd quarter 2017. The project team expects to expedite close out as no claims are outstanding on the project. The Proposed Final Estimate is expected to be completed in the 3rd quarter 2017.

### Marine Foundation Removal Contract (E4 to E18)

**Advancing All Implosions (E6 through E18) into 2017:** The demolition work to date has been completed well and offers opportunities for the remaining piers to be removed from the waters of the bay with environmental stewardship and efficiency. The original contract schedule had the implosions of Piers E6 through E11 during September 1, 2017 through November 30, 2017 and Piers E12 through E18 during September 1, 2018 through November 30, 2018. These dates were established based on the contracted date for the 504-288 contractor to deliver the last pier to the State in March 2018. With the 504-288

contractor having now delivered all the piers by April 2017, an opportunity has become available to complete the work imploding Piers E6 through E18 an entire year early. The project team will work with the Contractor, the environmental agencies and the TBPOC to avail of this opportunity that will significantly reduce COS and Capital risk costs going forward.

### Marine Foundation Removal Contract (E2, E19 to E22)

**Review Advanced Planning Study (APS):** The project team will present an advanced planning study to the TBPOC that shows the possibilities of incorporating the old piers into a public access facility to the Bay. The APS presents the scope, cost and schedule of a potential project(s) to retain up to five of the historic old bay bridge marine foundations in lieu of removing them. This plan will need to be reviewed and approved by the TBPOC prior to submitting to the environmental agencies for consideration.

## Program Funding Status

AB 144 established a funding level of \$8.685 billion for the TBSRP. As of January 1, 2010, seismic retrofitting of Antioch and Dumbarton Bridges became part of the Toll Bridge Seismic Retrofit Program with the passage of AB 1175, which provided another \$750 million bringing the total funding to \$9.435 billion. On April 9, 2010, the TBPOC approved a \$137 million reduction in the TBSRP program budget as a result of savings from the Antioch Bridge Retrofit. On September 2, 2010, the TBPOC approved a \$216 million reduction in the TBSRP program budget as a result of savings from the Dumbarton Bridge Retrofit. And finally, on November 5, 2013, the TBPOC approved a \$130 million reduction in the TBSRP program budget as a result of a reduction in the program contingency, bringing the current approved TBSRP budget to \$8.952 billion (see Appendix A-1). The program funding sources are shown in Table 1 - Program Budget.

<b>Table 1 - Program Budget as of March 31, 2017</b>	<b>Budgeted</b>	<b>Funding Available &amp; Contribution</b>
<b>Financing</b>		
Seismic Surcharge Revenue AB 1171	2,282.0	2,282.0
Seismic Surcharge Revenue AB 144	2,150.0	2,150.0
Seismic Surcharge Revenue AB 1175 <sup>(2)</sup>	750.0	750.0
BATA Consolidation	820.0	820.0
Subtotal - Financing	6,002.0	6,002.0
<b>Contributions</b>		
Proposition 192	790.0	789.0
San Diego Coronado Toll Bridge Revenue Fund	33.0	33.0
Vincent Thomas Bridge	15.0	6.9
State Highway Account <sup>(1)</sup>	745.0	745.0
Public Transportation Account <sup>(1)</sup>	130.0	130.0
ITIP/SHOPP/Federal Contingency <sup>(3)</sup>	448.0	448.0
Federal Highway Bridge Replacement and Rehabilitation (HBRR) <sup>(3)</sup>	642.0	642.0
SHA - East Span Dismantling	300.0	300.0
SHA - "Efficiency Savings"	130.0	130.0
Redirect Spillover	125.0	125.0
Motor Vehicle Account	75.0	75.0
Subtotal - Contribution	3,433.0	3,423.9
<b>Total Funding</b>	<b>9,435.0</b>	<b>9,425.9</b>
Encumbered to Date		8,831.6
Remaining Unallocated		594.3
<b>Expenditures :</b>		
Capital Outlay		6,783.4
State Operations		1,868.8
Antioch and Dumbarton Expenditures by BATA		14.6
	<b>Total Expenditures</b>	<b>8,666.9</b>
<b>Encumbrances :</b>		
Capital Outlay		164.6
State Operations		0.2
	<b>Total Encumbrances</b>	<b>164.7</b>
<b>Total Expenditures and Encumbrances</b>		<b>8,831.6</b>
<p><sup>(1)</sup> The Vincent Thomas Bridge state funds contribution was finalized in legislation and statutes to be \$6.9 million and no additional funds were identified. The program has identified an opportunity for an additional funding of \$14.8 million from Toll Bridge excess right of way sales, which will be credited to be program in the coming quarters.</p> <p><sup>(2)</sup> The California Transportation Commission adopted a new schedule and changed the PTA/SHA split on December 15, 2005.</p> <p><sup>(3)</sup> As of January 1, 2010, seismic retrofitting of Antioch and Dumbarton Bridges became part of the Toll Bridge Seismic Retrofit Program with the passage of AB 1175.</p> <p><sup>(3)</sup> The Skyway contract is the only contract in the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project with federal funds. The Federal Aid Project No. is 0801(090) for the amount of \$321,645,209.22. No other federal funds will be used on this project in the future.</p>		

## Summary of the Toll Bridge Oversight Committee (TBPOC) Expenses

Pursuant to Streets and Highways Code Section 30952.1 (d), expenses incurred by Caltrans, BATA, and the California Transportation Commission (CTC) for costs directly related to the duties associated with the TBPOC are to be reimbursed by toll revenues. Table 3 -Toll Bridge Program Oversight Committee Estimated Expenses: July 1, 2005, through June 30, 2017, for TBPOC functioning, support, and monthly and quarterly reporting.

**Table 2—CTC Toll Bridge Seismic Retrofit Program Contributions Adopted December 2005  
Schedule of Contributions to the Toll Bridge Seismic Retrofit Program (\$ Millions)**

Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Actual)	2013-14 (Actual)	Total
AB 1171	SHA	290									290
	PTA	80	40								120
	Highway Bridge Replacement and Rehabilitation (HBRR)	100	100	100	42						342
	Contingency				1	99	100	100	148		448
AB 144	SHA*	2	8				53	50	17		130
	Motor Vehicle Account (MVA)	75									75
	Spillover		125								125
	SHA**									300	300
	<b>Total</b>	<b>547</b>	<b>273</b>	<b>100</b>	<b>43</b>	<b>99</b>	<b>153</b>	<b>150</b>	<b>165</b>	<b>300</b>	<b>1830</b>

\* Caltrans Efficiency Savings  
 \*\* SFOBB East Span Dismantling Cost. The last contribution of \$300 million from SHA was made in October 2013 as scheduled.  
 \*\*\* Actual as of June 2017

**Table 3—Toll Bridge Program Oversight Committee  
Estimated Expenses: July 1, 2005 through June 30, 2017 (\$ Millions)**

Agency/Program Activity	Expenses
<b>BATA</b>	<b>3.0</b>
<b>Caltrans</b>	<b>3.6</b>
<b>CTC</b>	<b>3.3</b>
<b>Reporting</b>	<b>5.9</b>
<b>Total Program</b>	<b>15.8</b>

## Quarterly Environmental Compliance Highlights

Overall environmental compliance for the San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Safety Project (SFOBB Project) has been a success during the second quarter of 2017. The tasks for the current quarter were focused on environmental permitting for early completion, compliance, and mitigation.

### Key Successes

Bird monitoring was conducted weekly in compliance with the project's Bird Monitoring Plans. The goal of this monitoring was to document potential impacts to birds from construction activities. Removal of the final steel trusses under the 504/288 contract meant a shift in focus from the trusses, to the tower legs and marine foundations.

There was a significant increase in nesting bird activity on both the tower foundations and contractor barges and equipment beginning in May and continuing through June. The environmental monitoring team was very effective in working collaboratively with the marine foundation contractor to remove nest starts, nests, and eggs from the construction area to avoid delays to the work. There was one incident in which a nest was inadvertently destroyed by the contractor, which was reported to the appropriate regulatory agencies. Improved communication and protocols between the contractor, contractor-supplied biologists, and environmental team have greatly improved the process for managing nesting birds and avoided any other incidents on site.

In compliance with the project's Bay Conservation and Development Commission (BCDC) permit, the project team presented the results of the implosions of Piers E4 and E5, as well as a general project update, at a BCDC commission hearing on June 1, 2017. The results were received with positive review from the commission members.

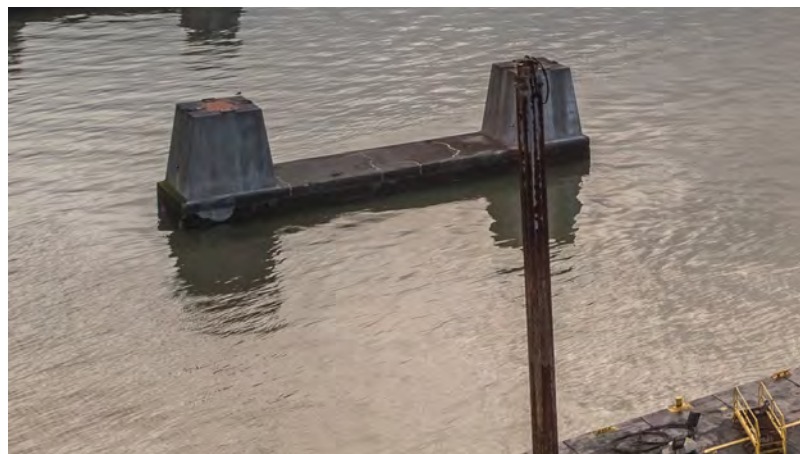
The environmental team worked with the overall project team to continue to obtain all approvals needed for the early completion of marine foundation removal contract.

The environmental team in particular continued to coordinate with the National Marine Fisheries Service (NMFS) to confirm that no reinitiation of consultation under Section 7 of the Endangered Species Act would be warranted.

The environmental team submitted the Incidental Harassment Authorization (IHA) application package for submittal to the NMFS Office of Protected Resources. This IHA will authorize limited take of marine mammals resulting from implosion activities in 2017. The team also submitted a request to the California Department of Fish and Wildlife (CDFW) amend the project Incidental Take Permit to allow for post-blast clean-up between December 15 and December 31.

The environmental team, at the request of BATA and the TBPOC, continued to support the analysis associated with retention of Piers E2 and Piers E19 to E23 of the SFOBB original east span during the 2nd quarter of 2017. Environmental attended meetings and continued an analysis of the design alternatives in support of the Advanced Planning Study for Piers E2 and E19 to E23.

The environmental team coordinated a meeting with Golden Gate Audubon Society and Sierra Club on May 19, 2017 to discuss opportunities to satisfy the SFOBB Project shorebird roosting habitat mitigation requirement through a funding transfer for improvements to existing shorebird habitat in Hayward Regional Shoreline. The proposal was met with some hesitation from these local stakeholders. The environmental team continues to explore opportunities to fulfill this mitigation requirement in the BCDC permit.



# APPENDICES

- A. TBSRP AB 144/SB 66/ AB 1175 Baseline Budget, Forecasts and Expenditures through June 30, 2017 (A-1 and A-2).....16
- B. TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through June 30, 2017.....20
- Glossary of Terms.....25



## Appendix A-1: TBSRP AB 144/SB 66/AB 1175 Baseline Budget, Forecasts and Expenditures Through June 30, 2017, by bridge including program contingency (\$ Millions)

Contract	AB 144/SB 66/AB 1175	Approved Changes	Current Approved Budget (6/2017)	Cost to Date (6/2017)	Cost Forecast (6/2017)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
<b>SFOBB East Span Replacement Project</b>						
Capital Outlay Support	959.3	376.6	1,335.9	1,320.9	1,383.4	47.5
Capital Outlay Construction	4,492.2	685.5	5,177.7	4,967.8	5,225.6	47.9
Other Budgeted Capital	35.1	(32.8)	2.3	0.7	0.7	(1.6)
<b>Total</b>	<b>5,486.6</b>	<b>1,029.3</b>	<b>6,515.9</b>	<b>6,289.4</b>	<b>6,609.7</b>	<b>93.8</b>
<b>SFOBB West Approach Replacement</b>						
Capital Outlay Support	120.0	(0.5)	119.5	119.4	119.5	-
Capital Outlay Construction	309.0	31.0	340.0	333.0	338.1	(1.9)
<b>Total</b>	<b>429.0</b>	<b>30.5</b>	<b>459.5</b>	<b>452.4</b>	<b>457.6</b>	<b>(1.9)</b>
<b>SFOBB West Span Retrofit</b>						
Capital Outlay Support	75.0	(0.2)	74.8	74.8	74.8	-
Capital Outlay Construction	232.9	(2.4)	230.5	230.5	230.5	-
<b>Total</b>	<b>307.9</b>	<b>(2.6)</b>	<b>305.3</b>	<b>305.3</b>	<b>305.3</b>	<b>-</b>
<b>Richmond-San Rafael Bridge Retrofit*</b>						
Capital Outlay Support	134.0	(7.0)	127.0	126.7	126.7	(0.3)
Capital Outlay Construction	698.0	(94.9)	685.1	668.1	668.1	(17.0)
<b>Total</b>	<b>914.0</b>	<b>(101.9)</b>	<b>812.1</b>	<b>794.8</b>	<b>794.8</b>	<b>-</b>
<b>Benicia-Martinez Bridge Retrofit</b>						
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
<b>Total</b>	<b>177.8</b>	<b>-</b>	<b>177.8</b>	<b>177.8</b>	<b>177.8</b>	<b>-</b>
<b>Carquinez Bridge Retrofit</b>						
Capital Outlay Support	28.7	0.1	28.8	28.8	28.8	-
Capital Outlay Construction	85.5	(0.1)	85.4	85.4	85.4	-
<b>Total</b>	<b>114.1</b>	<b>-</b>	<b>114.2</b>	<b>114.2</b>	<b>114.2</b>	<b>-</b>
<b>San Mateo-Hayward Bridge Retrofit</b>						
Capital Outlay Support	28.1	-	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	(0.1)	135.3	135.3	135.3	-
<b>Total</b>	<b>163.5</b>	<b>(0.1)</b>	<b>163.4</b>	<b>163.4</b>	<b>163.4</b>	<b>-</b>
<b>Vincent Thomas Bridge Retrofit (Los Angeles)</b>						
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction	42.1	-	42.1	42.0	42.0	(0.1)
<b>Total</b>	<b>58.5</b>	<b>-</b>	<b>58.5</b>	<b>58.4</b>	<b>58.4</b>	<b>(0.1)</b>
<b>San Diego-Coronado Bridge Retrofit</b>						
Capital Outlay Support	33.5	-	33.5	33.2	33.2	(0.3)
Capital Outlay Construction	70.0	-	70.0	69.4	69.4	(0.6)
<b>Total</b>	<b>103.5</b>	<b>-</b>	<b>103.5</b>	<b>102.6</b>	<b>102.6</b>	<b>(0.9)</b>



## Appendix A-1: TBSRP AB 144/SB 66/AB 1175 Baseline Budget, Forecasts and Expenditures Cont. Through June 30, 2017, by bridge including program contingency (\$ Millions)

Contract	AB 144/SB 66/AB 1175	Approved Changes	Current Approved Budget (6/2017)	Cost to Date (6/2017)	Cost Forecast (6/2017)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
<b>Antioch Bridge</b>						
Capital Outlay Support	0.0	24.1	24.1	17.4	24.2	0.1
Capital Outlay Support by BATA	0.0			6.7		
Capital Outlay Construction	0.0	47.0	47.0	47.0	47.0	-
<b>Total</b>	<b>267.0</b>	<b>71.1</b>	<b>71.1</b>	<b>71.1</b>	<b>71.2</b>	<b>0.1</b>
<b>Dumbarton Bridge</b>						
Capital Outlay Support	0.0	46.0	46.0	39.5	47.5	1.5
Capital Outlay Support by BATA	0.0			7.9		
Capital Outlay Construction	0.0	66.4	66.4	64.4	64.8	(1.6)
<b>Total</b>	<b>483.0</b>	<b>112.4</b>	<b>112.4</b>	<b>111.8</b>	<b>112.3</b>	<b>(0.1)</b>
Subtotal Capital Outlay Support	1,682.9	189.4	1,872.2	1,857.9	1,920.7	48.5
Subtotal Capital Outlay	6,787.1	232.2	7,019.2	6,782.7	7,045.9	26.7
Subtotal Other Budgeted Capital	35.1	(32.8)	2.3	0.7	0.7	(1.6)
Miscellaneous Program Costs	30.0	-	30.0	25.5	25.5	(4.5)
Subtotal Toll Bridge Seismic Retrofit Program	8,535.0	388.7	8,923.7	8,666.8	8,992.8	69.1
Net Programmatic Risks**	0.0	-	-	-	31.4	31.4
Program Contingency	900.0	(871.7)	28.3	-	-	13.7
<b>Total Toll Bridge Seismic Retrofit Program***</b>	<b>9,435.0</b>	<b>(483.0)</b>	<b>8,952.0</b>	<b>8,666.8</b>	<b>9,024.2</b>	<b>72.2</b>
<b>Forecast Deficit To Current TBPOC Approved Budget:</b>					<b>(72.2)</b>	
<b>Forecast Surplus To Total TBSRP Budget</b>	<b>410.8</b>					
<b>Forecast Deficit To Current TBPOC Approved Budget:</b>					<b>(72.2)</b>	

\* Budget for Richmond-San Rafael Bridge includes \$16.9 million of deck joint rehabilitation work that considered to be eligible for seismic retrofit program funding.

\*\* Programmatic Risks: Consists of \$14.51 million in Q2 2016 Program Risk Register costs plus, \$16.9 in Richmond-San Rafael (R/SR) Bridge project contingency used for R/SR deck joint replacement.

\*\*\* AB144/SB66 established a funding level of \$8.685 Billion in July 2005 for TBSRP; AB1175 added the retrofitting of the Antioch and Dumbarton Bridges in January 2010, providing another \$750 million in funding, bringing Total Toll Seismic Retrofit Program funding to \$9.435 Billion. Since 2010, \$483 million has been removed from the program, bringing the current TBPOC Approved Budget to \$8.952 billion. The \$483 million removed consisted of:

- Antioch Savings (4/12/10) \$137 million
- Dumbarton Savings (9/02/10) \$216 million
- Program Contingency Redirection (11/05/13) \$130 million.

(Due to the rounding of numbers, the totals above are show within \$0.1)

## Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures

Through June 30, 2017, by major contract, without program contingency (\$ Millions)

Bridge	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and encumbrances as of (6/2017) see Note (1)	Estimated costs not yet spent or encumbered as of (6/2017)	Total Forecast as of (6/2017)
a	b	c	d	e	f = d + e
<b>Other Completed Projects</b>					
Capital Outlay Support	144.9	144.9	144.6	-	144.6
Capital Outlay	472.6	472.6	471.9	(0.1)	471.8
Total	617.5	617.5	616.5	(0.1)	616.4
<b>Richmond-San Rafael</b>					
Capital Outlay Support	134.0	127.0	126.8	(0.1)	126.7
Capital Outlay	698.0	685.1	667.5	0.6	668.1
Project Reserves	82.0	-	-	-	-
Total	914.0	812.1	794.3	0.5	794.8
<b>West Span Retrofit</b>					
Capital Outlay Support	75.0	74.8	74.8	-	74.8
Capital Outlay	232.9	230.5	227.4	3.1	230.5
Total	307.9	305.3	302.2	3.1	305.3
<b>West Approach</b>					
Capital Outlay Support	120.0	119.5	119.5	-	119.5
Capital Outlay	309.0	340.0	332.2	5.9	338.1
Total	429.0	459.5	451.7	5.9	457.6
<b>SFOBB East Span -Skyway</b>					
Capital Outlay Support	197.0	181.2	181.2	-	181.2
Capital Outlay	1,293.0	1,237.2	1,237.3	(1.2)	1,236.1
Total	1,490.0	1,418.4	1,418.5	(1.2)	1,417.3
<b>SFOBB East Span -SAS- Superstructure</b>					
Capital Outlay Support	214.6	489.1	511.6	2.8	514.4
Capital Outlay	1,753.7	2,034.8	2,046.9	(10.1)	2,036.8
Total	1,968.3	2,523.9	2,558.5	(7.3)	2,551.2
<b>SFOBB East Span -SAS- Tower Anchor Rod Grouting</b>					
Capital Outlay Support	0.0	3.0	1.7	1.5	3.2
Capital Outlay	0.0	12.0	9.2	0.1	9.3
Total	0.0	15.0	10.9	1.6	12.5
<b>SFOBB East Span -SAS- Foundations</b>					
Capital Outlay Support	62.5	37.6	37.6	-	37.6
Capital Outlay	339.9	301.3	301.3	-	301.3
Total	402.4	338.9	338.9	-	338.9
<b>Small YBI Projects</b>					
Capital Outlay Support	10.6	10.2	10.2	-	10.2
Capital Outlay	15.7	15.2	15.2	-	15.2
Total	26.2	25.4	25.4	-	25.4
<b>YBI Detour</b>					
Capital Outlay Support	29.5	87.7	87.9	-	87.9
Capital Outlay	131.9	473.3	473.3	0.1	473.4
Total	161.4	561.0	561.2	0.1	561.3

## Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures Cont.

Through June 30, 2017, by major contract, without program contingency (\$ Millions)

Contract	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and encumbrances as of (6/2017) see Note (1)	Estimated costs not yet spent or encumbered as of (6/2017)	Total Forecast as of (6/2017)
a	b	c	d	e	f = d + e
<b>YBI - Transition Structures</b>					
Capital Outlay Support	78.7	146.9	138.9	27.1	166.0
Capital Outlay	299.4	312.9	309.1	10.2	319.3
<b>Total</b>	<b>378.0</b>	<b>459.8</b>	<b>448.0</b>	<b>37.3</b>	<b>485.3</b>
<b>Oakland Touchdown</b>					
Capital Outlay Support	74.4	119.4	117.5	1.5	119.0
Capital Outlay	283.8	330.6	325.4	1.1	326.5
<b>Total</b>	<b>358.2</b>	<b>450.0</b>	<b>442.9</b>	<b>2.6</b>	<b>445.5</b>
<b>East Span Other Small Projects</b>					
Capital Outlay Support	212.3	197.9	197.9	-	197.9
Capital Outlay	170.8	141.3	126.5	9.4	135.9
<b>Total</b>	<b>383.1</b>	<b>339.2</b>	<b>324.4</b>	<b>9.4</b>	<b>333.8</b>
<b>Existing Bridge Demolition</b>					
	0.0				
Capital Outlay Support	79.7	62.9	36.4	29.6	66.0
Capital Outlay	239.2	321.5	293.0	79.5	372.5
<b>Total</b>	<b>318.9</b>	<b>384.4</b>	<b>329.4</b>	<b>109.1</b>	<b>438.5</b>
<b>Antioch Bridge</b>					
Capital Outlay Support	0.0	24.1	17.4	0.1	17.5
Capital Outlay Support by BATA	0.0		6.7	-	6.7
Capital Outlay	0.0	47.0	47.0	-	47.0
<b>Total</b>	<b>267.0</b>	<b>71.1</b>	<b>71.1</b>	<b>0.1</b>	<b>71.2</b>
<b>Dumbarton Bridge</b>					
Capital Outlay Support	0.0	46.0	39.6	-	39.6
Capital Outlay Support by BATA	0.0		7.9	-	7.9
Capital Outlay	0.0	66.4	64.7	0.1	64.8
<b>Total</b>	<b>483.0</b>	<b>112.4</b>	<b>112.2</b>	<b>0.1</b>	<b>112.3</b>
Miscellaneous Program Costs	30.0	30.0	25.5	-	25.5
Total Capital Outlay Support <sup>(2)</sup>	1,712.9	1,902.1	1,883.7	62.5	1,946.2
Total Capital Outlay	6,822.1	7,021.6	6,947.9	98.7	7,046.6
<b>Program Total</b>	<b>8,535.0</b>	<b>8,923.7</b>	<b>8,831.6</b>	<b>161.2</b>	<b>8,992.8</b>

(1) Total Capital Outlay Support includes program indirect costs.

(2) BSA provided a distribution of program contingency in December 2004 based on Bechtel Infrastructure Corporation input.

(3) Construction administration of the OTD Detour is under the YBITS1 contract. Encumbrance is included in YBITS1 contract.

(4) Construction administration of the cantilever segment is under the YBITS2 contract. Encumbrance is included in YBITS2 contract.

(Due to the rounding of numbers, the totals above are shown within \$0.1)

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures

Through June 30, 2017 (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (6/2017)	Cost to Date (6/2017)	Cost Forecast (6/2017)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
<b>San Francisco-Oakland Bay Bridge East Span Replacement Project</b>						
<b>East Span - SAS Superstructure</b>						
Capital Outlay Support	214.6	274.5	489.1	512.0	514.4	25.3
Capital Outlay Construction	1,753.7	281.1	2,034.8	1,973.3	2,036.8	2.0
<b>Total</b>	<b>1,968.3</b>	<b>555.6</b>	<b>2,523.9</b>	<b>2,485.3</b>	<b>2,551.2</b>	<b>27.3</b>
<b>SAS Tower Anchor Rod Grouting</b>						
Capital Outlay Support	0.0	-	3.0	1.3	3.2	0.2
Capital Outlay Construction	0.0	-	12.0	7.0	9.3	(2.7)
<b>Total</b>	<b>0.0</b>	<b>-</b>	<b>15.0</b>	<b>8.3</b>	<b>12.5</b>	<b>(2.5)</b>
<b>SAS W2 Foundations</b>						
Capital Outlay Support	10.0	(0.8)	9.2	9.2	9.2	-
Capital Outlay Construction	26.4	0.1	26.5	26.5	26.5	-
<b>Total</b>	<b>36.4</b>	<b>(0.7)</b>	<b>35.7</b>	<b>35.7</b>	<b>35.7</b>	<b>-</b>
<b>YBI South/South Detour</b>						
Capital Outlay Support	29.5	58.3	87.7	87.9	87.9	0.2
Capital Outlay Construction	131.9	341.4	473.3	473.4	473.4	0.1
<b>Total</b>	<b>161.4</b>	<b>399.7</b>	<b>561.0</b>	<b>561.3</b>	<b>561.3</b>	<b>0.3</b>
<b>East Span - Skyway</b>						
Capital Outlay Support	197.0	(15.8)	181.2	181.2	181.2	-
Capital Outlay Construction	1,293.0	(55.8)	1,237.2	1,235.6	1,236.1	(1.1)
<b>Total</b>	<b>1,490.0</b>	<b>(71.6)</b>	<b>1,418.4</b>	<b>1,416.8</b>	<b>1,417.3</b>	<b>(1.1)</b>
<b>East Span - SAS E2/T1 Foundations</b>						
Capital Outlay Support	52.5	(24.1)	28.4	28.4	28.4	-
Capital Outlay Construction	313.5	(38.7)	274.8	274.8	274.8	-
<b>Total</b>	<b>366.0</b>	<b>(62.8)</b>	<b>303.2</b>	<b>303.2</b>	<b>303.2</b>	<b>-</b>
<b>YBI Transition Structures (see notes below)</b>						
Capital Outlay Support	78.7	68.2	146.9	137.6	166.0	19.1
Capital Outlay Construction	299.4	13.6	312.9	299.6	319.3	6.4
<b>Total</b>	<b>378.0</b>	<b>81.8</b>	<b>459.8</b>	<b>437.2</b>	<b>485.3</b>	<b>25.5</b>
<b>* YBI- Transition Structures</b>						
Capital Outlay Support			22.8	16.4	22.8	-
Capital Outlay Construction			-	-	-	-
<b>Total</b>			<b>22.8</b>	<b>16.4</b>	<b>22.8</b>	<b>-</b>
<b>* YBI- Transition Structures Contract No. 1</b>						
Capital Outlay Support			72.1	69.9	70.7	(1.4)
Capital Outlay Construction			203.7	203.2	203.8	0.1
<b>Total</b>			<b>275.8</b>	<b>273.1</b>	<b>274.5</b>	<b>(1.3)</b>
<b>* YBI- Transition Structures Contract No. 2</b>						
Capital Outlay Support			51.0	51.0	71.5	20.5
Capital Outlay Construction			105.9	96.4	115.5	9.6
<b>Total</b>			<b>156.9</b>	<b>147.4</b>	<b>187.0</b>	<b>30.1</b>
<b>* YBI- Transition Structures Contract No. 3 Landscape</b>						
Capital Outlay Support			1.0	0.3	1.0	-
Capital Outlay Construction			3.3	-	-	(3.3)
<b>Total</b>			<b>4.3</b>	<b>-</b>	<b>1.0</b>	<b>(3.3)</b>

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures

Through June 30, 2017 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (6/2017)	Cost to Date (6/2017)	Cost Forecast (6/2017)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
Oakland Touchdown (see notes below)						
Capital Outlay Support	74.4	45.0	119.4	119.0	119.0	(0.4)
Capital Outlay Construction	283.8	46.8	330.6	326.5	326.5	(4.1)
Total	358.2	91.8	450.0	445.5	445.5	(4.5)
* OTD Prior-to-Split Costs						
Capital Outlay Support			20.1	20.0	20.0	(0.1)
Capital Outlay Construction			-	-	-	-
Total			20.1	20.0	20.0	(0.1)
* OTD Submarine Cable(1)						
Capital Outlay Support			0.9	0.9	0.9	-
Capital Outlay Construction			5.7	5.7	5.7	-
Total			6.6	6.6	6.6	-
* OTD No. 1 (Westbound)						
Capital Outlay Support			51.2	51.2	51.2	-
Capital Outlay Construction			205.3	202.8	202.8	(2.5)
Total			256.5	254.0	254.0	(2.5)
* OTD No. 2 (Eastbound)						
Capital Outlay Support			37.6	38.1	38.1	0.5
Capital Outlay Construction			72.6	71.2	71.2	(1.4)
Total			110.2	109.3	109.3	(0.9)
* OTD Touchdown 2 Detour <sup>(2)</sup>						
Capital Outlay Support			8.1	8.0	8.0	(0.1)
Capital Outlay Construction			47.0	46.7	46.7	(0.3)
Total			55.1	54.7	54.7	(0.4)
* OTD Electrical Systems						
Capital Outlay Support			1.5	0.8	0.8	(0.7)
Capital Outlay Construction			-	-	-	-
Total			1.5	0.8	0.8	(0.7)
Existing Bridge Dismantling						
Capital Outlay Support	79.7	(16.8)	62.9	36.4	66.0	3.1
Capital Outlay Construction	239.2	82.3	321.5	209.8	372.5	51.0
Total	318.9	65.5	384.4	246.2	438.5	54.1
* Bridge Dismantling Prior-to-Split Cost						
Capital Outlay Support			3.9	3.9	3.9	-
Capital Outlay Construction			-	-	-	-
Total			3.9	3.9	3.9	-
* Cantilever Section						
Capital Outlay Support			1.6	1.6	1.6	-
Capital Outlay Construction			69.0	68.5	69.0	-
Total			70.6	70.1	70.6	-
* 504/288 Sections						
Capital Outlay Support			21.0	9.2	13.7	(7.3)
Capital Outlay Construction			103.5	72.2	82.2	(21.3)
Total			124.5	81.4	95.9	(28.6)

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures

Through June 30, 2017 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (6/2017)	Cost to Date (6/2017)	Cost Forecast (6/2017)	At- Completion Variance
a	c	d	e = c + d	f	g	h = g - e
<b>*Marine Foundations</b>						
Capital Outlay Support			36.4	21.7	46.8	10.4
Capital Outlay Construction			149.0	69.2	221.4	72.4
<b>Total</b>			<b>185.4</b>	<b>90.9</b>	<b>268.2</b>	<b>82.8</b>
Sunk Cost for Marine Foundation			-	5.8	5.8	5.8
<b>Pier-3 Demonstration Project</b>						
Capital Outlay Support			-	4.0	4.0	4.0
Capital Outlay Construction			17.5	16.8	16.8	(0.7)
<b>Total</b>			<b>17.5</b>	<b>20.8</b>	<b>20.8</b>	<b>3.3</b>
<b>Remaining Marine Foundations<sup>2</sup></b>						
Capital Outlay Support			-	11.9	37.1	37.1
Capital Outlay Construction			131.5	52.3	204.5	73.0
<b>Total</b>			<b>131.5</b>	<b>64.2</b>	<b>241.6</b>	<b>110.1</b>
<b>Pier-E4 to Pier-E18</b>						
Capital Outlay Support			-	11.3	24.3	24.3
Capital Outlay Construction			131.5	52.3	156.8	25.3
<b>Total</b>			<b>131.5</b>	<b>63.6</b>	<b>181.1</b>	<b>49.6</b>
<b>Pier-E2 and Pier-E19 to Pier-E22</b>						
Capital Outlay Support			-	0.6	12.8	12.8
Capital Outlay Construction			-	-	47.8	47.8
<b>Total</b>			<b>-</b>	<b>0.6</b>	<b>60.6</b>	<b>60.6</b>
<b>YBI/SAS Archeology</b>						
Capital Outlay Support	1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction	1.1	-	1.1	1.1	1.1	-
<b>Total</b>	<b>2.1</b>	<b>-</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>-</b>
<b>YBI - USCG Road Relocation</b>						
Capital Outlay Support	3.0	(0.3)	2.7	2.7	2.7	-
Capital Outlay Construction	3.0	(0.2)	2.8	2.8	2.8	-
<b>Total</b>	<b>6.0</b>	<b>(0.5)</b>	<b>5.5</b>	<b>5.5</b>	<b>5.5</b>	<b>-</b>
<b>YBI - Substation and Viaduct</b>						
Capital Outlay Support	6.5	(0.1)	6.4	6.4	6.4	-
Capital Outlay Construction	11.6	(0.3)	11.3	11.3	11.3	-
<b>Total</b>	<b>18.1</b>	<b>(0.4)</b>	<b>17.7</b>	<b>17.7</b>	<b>17.7</b>	<b>-</b>
<b>Oakland Geofill</b>						
Capital Outlay Support	2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction	8.2	-	8.2	8.2	8.2	-
<b>Total</b>	<b>10.7</b>	<b>-</b>	<b>10.7</b>	<b>10.7</b>	<b>10.7</b>	<b>-</b>
<b>Pile Installation Demonstration Project</b>						
Capital Outlay Support	1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction	9.2	(0.1)	9.2	9.3	9.3	-
<b>Total</b>	<b>11.0</b>	<b>(0.1)</b>	<b>11.0</b>	<b>11.1</b>	<b>11.1</b>	<b>-</b>

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures

Through June 30, 2017 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (6/2017)	Cost to Date (6/2017)	Cost Forecast (6/2017)	At-Completion Variance
a	c	d	e = c + d	f	g	h = g - e
<b>Stormwater Treatment Measures</b>						
Capital Outlay Support	6.0	2.2	8.2	8.2	8.2	-
Capital Outlay Construction	15.0	3.3	18.3	16.9	16.9	(1.4)
Total	21.0	5.5	26.5	25.1	25.1	(1.4)
<b>Right-of-Way and Environmental Mitigation</b>						
Capital Outlay Support	0.0	-	-	-	-	-
Capital Outlay & Right-of-Way	72.4	-	72.4	60.9	70.0	(2.4)
Total	72.4	-	72.4	60.9	70.0	(2.4)
<b>Sunk Cost - Existing East Span Retrofit</b>						
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	-
<b>Other Capital Outlay Support</b>						
Environmental Phase	97.7	0.1	97.8	97.8	97.8	-
Pre-Split Project Expenditures	44.9	-	44.9	44.9	44.9	-
Non-Project Specific Costs	20.0	(16.8)	3.2	3.2	3.2	-
Total	162.6	(16.7)	145.9	145.9	145.9	-
Subtotal Capital Outlay Support	959.3	376.6	1,335.9	1,320.9	1,383.4	47.5
Subtotal Capital Outlay Construction	4,492.2	685.5	5,177.7	4,967.8	5,225.6	47.9
Other Budgeted Capital	35.1	(32.8)	2.3	0.7	0.7	(1.6)
<b>Total SFOBB East Span Replacement Project</b>	<b>5486.6</b>	<b>1,029.3</b>	<b>6,515.9</b>	<b>6,289.4</b>	<b>6,609.7</b>	<b>93.8</b>

(1) Current contract allotment to install two submarine electrical cables is \$5.7 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available programs funds has been made available by the Treasure Island Development Authority.

(2) Construction administration of the OTD Detour is under the YBITS#1 contract.

(3) Construction administration of the Cantilever segment is under the YBITS#2 contract.

(Due to the rounding of numbers, the totals above are shown within \$0.1).





## Glossary of Terms

**AB 144/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.

**AB 144/SB 66/AB1175 PROJECT COMPLETE BASELINE:** The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

**APPROVED CHANGES:** For cost, changes to the AB 144/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.

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

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

**CAPITAL OUTLAY SUPPORT (COS):** Cost of developing and administering a capital project.

**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.

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

**CURRENT APPROVED BUDGET:** The sum of the AB 144/SB 66 Budget or BATA Budget and Approved Changes.

**HINGE PIPE BEAMS:** Pipes between roadway sections designed to move within their sleeves during expansion or contraction of the decks during minor events, such as changes in temperature. The beams are designed to absorb the energy of an earthquake by deforming in their middle or "fuse" section. Hinge pipe beams are also found at the western piers where the SAS connects to the YBITS (Hinge "K" pipe beams).

**PROJECT COMPLETE CURRENT APPROVED SCHEDULE:** The sum of the AB 144/SB 66 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.

**% COMPLETE:** % Complete is based on an evaluation of progress on the project, expenditures to date, and schedule.



*The information in this report is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) on the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs.*

