



  
**Toll Bridge  
Seismic Retrofit  
Program Report**

**First Quarter Report**  
Ending March 31, 2005

California Department of Transportation

# Toll Bridge Seismic Retrofit Program

## CTC Update

May 26, 2005

**Will Kempton**  
**Director**



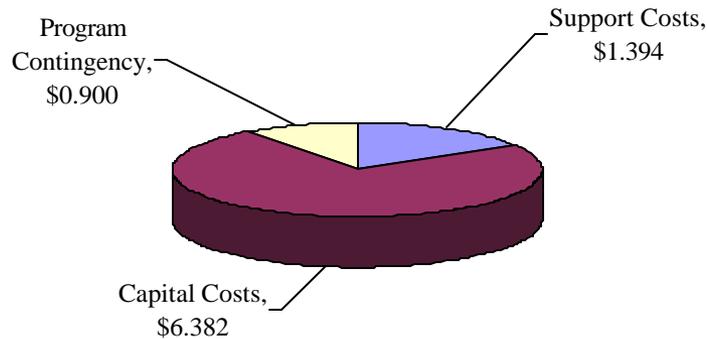
# Toll Bridge Seismic Retrofit Program

- Seismic retrofit of five toll bridges is complete.
- These bridges were more than \$48 million below AB 1171 budget.
- Work continues on the I-580 Richmond-San Rafael Bridge and the I-80 San Francisco – Oakland Bay Bridge (SFOBB).
- A decision on the SFOBB East Span connector section bridge type and TBSRP funding is critical to additional cost and schedule impacts.

Bridge Retrofit Complete	AB1171 (million)	August 2004 (million)	Savings (million)
Benicia - Martinez	\$190	\$180	\$10
Carquinez	\$125	\$115	\$10
San Diego - Coronado	\$105	\$105	\$0
Vincent Thomas	\$62	\$59	\$3
San Mateo - Hayward	\$190	\$165	\$25
<b>Total</b>	<b>\$672</b>	<b>\$624</b>	<b>\$48</b>

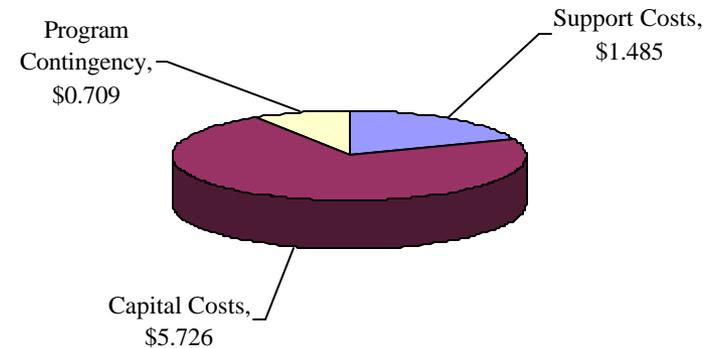
# Toll Bridge Seismic Retrofit Program Program Estimate

**Chart1. Program Estimate  
with the SAS Alternative  
(March 2005)  
(in billions)**



Total Program Estimate: \$8.676 billion

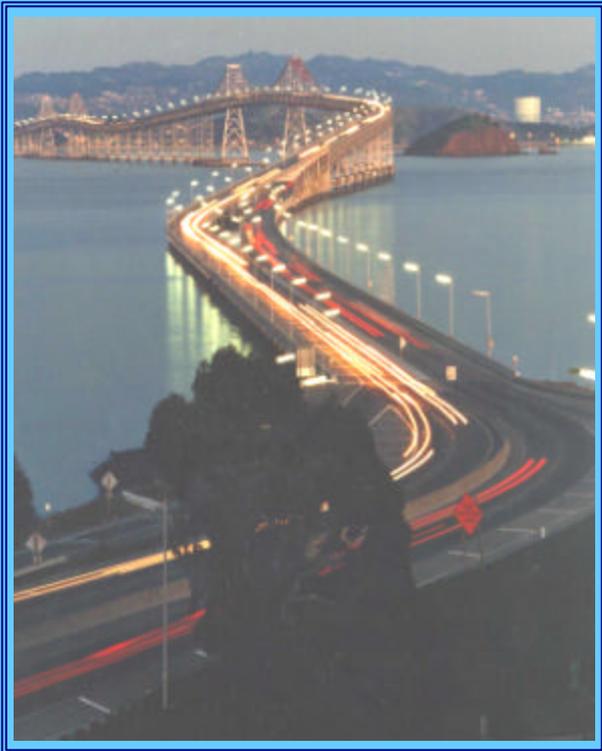
**Chart2. Program Estimate  
with the Skyway Extension Alternative  
(March 2005)  
(in billions)**



Total Program Estimate: \$7.92 billion

# Richmond-San Rafael Bridge

Project	AB 1171 Budget (\$ million)	August 2004 Review (\$ million)	Difference (\$ million)	Funds	(\$ million)
				Toll Bridge Seismic Retrofit	914
Capital Outlay Support	95	134	39	SHOPP - Trestle Replacement	58
Capital Outlay	570	780	210	BATA - Joint Repair	55
Total	665	914	249	Total	1,027



- Construction is more than 95% complete.
- Contract completion is expected August 2005.
- All projections indicate the project will closeout under the \$914 million August 2004 estimate.

# San Francisco-Oakland Bay Bridge West Span/West Approach

- **West Span**

- Construction was complete on June 25, 2004.
- Project costs are within the August 2004 estimate.

- **West Approach**

- More than 44% complete and on track to complete in 2009.
- Final cost is projected to be within the August 2004 estimate.
- Summer 2005 public awareness campaign planned.

Bridge	AB 1171 Budget (million)			Current Estimate (million)		
	CO	COS	Total	CO	COS	Total
SFOBB West Span	\$237.0	\$68.0	\$305.0	\$232.9	\$75.0	\$307.9
SFOBB West Approach	\$309.0	\$86.0	\$395.0	\$309.0	\$120.0	\$429.0

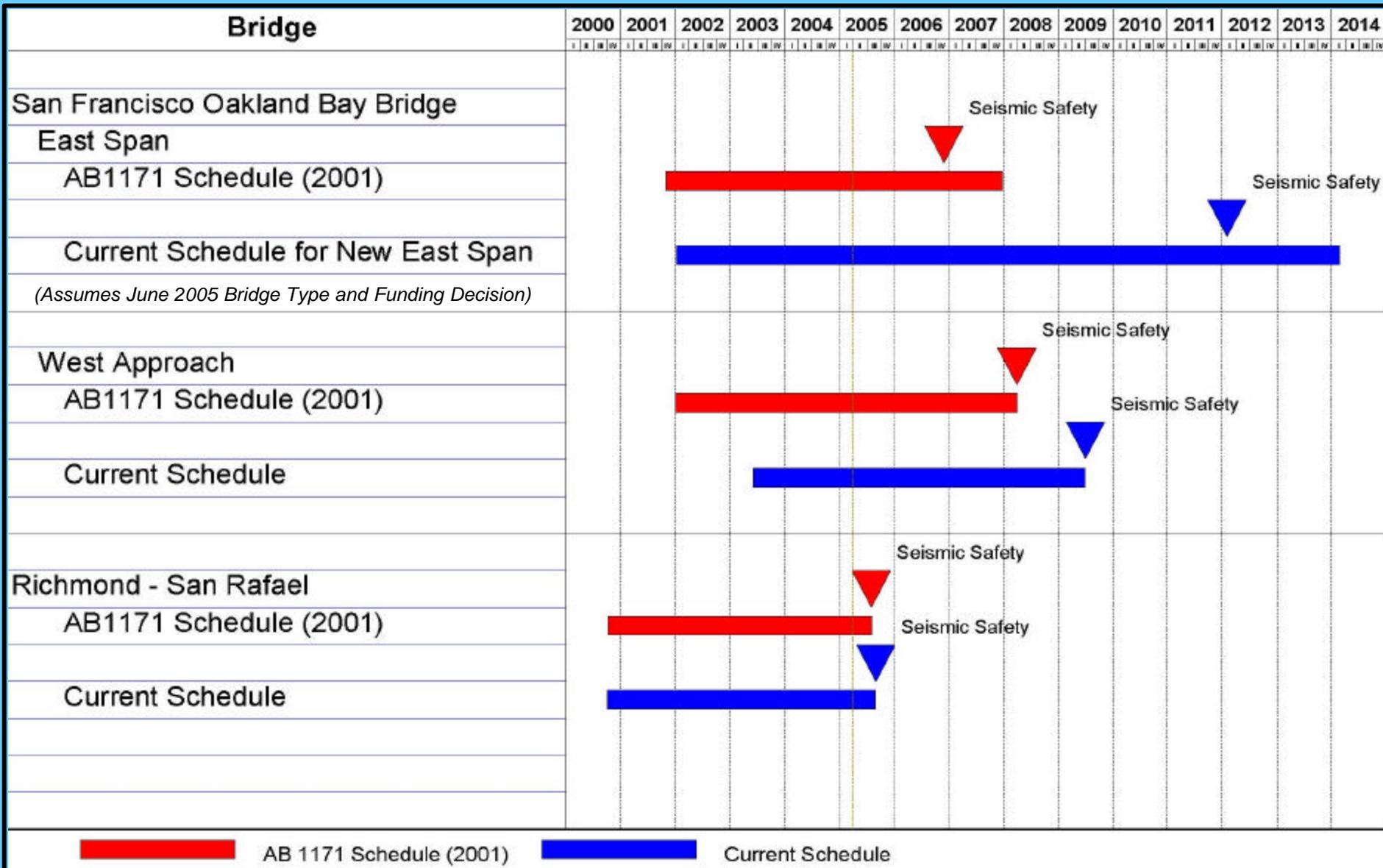
# San Francisco-Oakland Bay Bridge West Approach



**The New Fremont/Folsom Street Off-Ramp.**

# Toll Bridge Seismic Retrofit Program Schedule

## Baseline AB 1171 and Projected Schedule (May 2005)



# San Francisco-Oakland Bay Bridge East Span



- **Skyway**

- Construction is over 71% complete.
- Current construction contract allotment is \$1,176.5 million.
- August 2004 estimate of \$1,293 million is based on cost review with Bechtel. Budget for potential claims is included.



- **South/South Detour**

- Construction is over 20% complete and the suspension of field work was lifted as of April 1, 2005, with the exception of portions of the East and West Tie-in operations.

# San Francisco-Oakland Bay Bridge East Span



- **Marine Foundations E2/T1**

- Termination of the contract was initiated on January 5, 2005. However, the termination process was suspended as of March 14, 2005, and is incurring suspension costs each month until an East Span connector section decision is made.

- **YBI Electrical Substation**

- All viaduct retrofit work is complete. The substation is complete and energized. The existing bridge is now powered from the new substation and the old substation has been removed.

# San Francisco-Oakland Bay Bridge East Span Contracts

	Contract Descriptions	Construction Start	Completion Date	Percent Complete
1	East Span Seismic Retrofit	09/07/95	10/02/97	Complete
2	Interim Retrofit	02/06/98	07/12/00	Complete
3	East Span Skyway	02/06/02	04/15/07	71%
4	East Span SAS Superstructure*			
	East Span SAS- Foundations:			
5	W2 Land Foundation	06/21/03	10/20/04	Complete
6	E2/T1 Marine Foundations**	04/22/04		
7	YBI/SAS (Archeology)	06/14/02	01/10/03	Complete
8	YBI - US Coast Guard Road Relocation	08/13/03	06/22/04	Complete
9	YBI - Electrical Substation & Viaduct Retrofit	04/30/04	05/31/05	95%
10	South/South Detour	04/09/04	05/24/06	20%
11	YBI Transition Structure			Design 80% (SAS) 50% (Skyway Ext.)
12	Oakland Touchdown			Design 90% Complete
13	Oakland Touchdown Geofill	01/14/02	04/07/03	Complete
14	Pile Installation Demonstration	07/12/00	12/18/00	Complete
15	Existing Bridge Demolition			Design 10%
16	Stormwater Treatment Measures	11/27/05	01/02/08	Design 60% Complete

**Notes:** There will be potential additional costs to the East Span contracts due to impact from the SAS schedule delay.

\* This is the connector span contract which received a single bid on May 26, 2004.

The bid expired, subsequently this contract is being reviewed for either re-bid or re-design.

\*\* Termination of the contract was initiated on January 5, 2005. However, the termination process was suspended as of March 14, 2005.

# Risk Management Implementation

- Risk Management Coordinators.
- Risk Identification.
- Risk Response and Mitigation.
- Qualitative Analysis.
- Quantitative Analysis.
- Incorporation of Risks into Cost and Schedule Forecasts.