

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: August 17-18, 2005

Reference No.: 3.8
Information Item

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Chief Financial Officer

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Ref: **2005 FIRST QUARTER SEISMIC SAFETY RETROFIT REPORT**

The Department of Transportation's 2005 First Quarter Seismic Safety Retrofit Report is attached.

Attachment

**California Department
Of Transportation**

**Seismic Safety Retrofit
Program Report**



Phase 1, Phase 2, and Local Bridge Retrofit Programs

First Quarter (January 1 - March 31) 2005

Seismic Safety Retrofit Program First Quarter 2005 Quarterly Report

Purpose

The purpose of this report is to provide information on the status and progress in delivering the California Department of Transportation's (Department) non-toll seismic safety retrofit programs. This report fulfills the Department's statutory reporting requirement outlined in Assembly Bill (AB) 1717 (Chapter 525, Statutes of 2003), which amended Section 188.5 (h) of the Streets and Highways Code.

The Department has three non-toll seismic safety retrofit programs as outlined below. The Toll Bridge Seismic Retrofit Program is reported separately as outlined in Section 188.5 (g) of the Streets and Highways Code.

- Phase 1 Seismic Retrofit Program – Phase 1 consists of State bridges that were determined to be the most critical bridges requiring seismic retrofit based on the Department's initial seismic screening process.
- Phase 2 Seismic Retrofit Program – Phase 2 consists of the remaining State bridges that were determined to need seismic retrofit based on additional screening in the Department's seismic screening process.
- Local Bridge Seismic Retrofit Program – Consists of seismic retrofit of non-State public owned bridges. This program is funded and implemented by the local agencies having jurisdiction over the local bridges.

All of the information in this report is as of March 2005 unless otherwise noted. The dollar amounts shown in all charts and graphs are in millions of dollars unless otherwise noted.

Phase 1 Seismic Retrofit Program

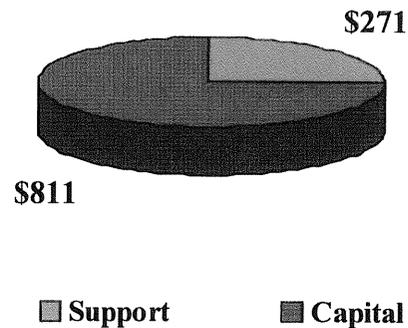
Progress Report / Milestones Achieved

Construction of all Phase 1 Seismic Retrofit Program bridges was completed in May 2000. A total of 1,039 State highway bridges were retrofitted under the Phase 1 program.

Program Funds

The total budget for Phase 1 was \$1.082 billion. A total of \$811 million was allocated for construction, and an additional \$271 million was expended for support. There is a balance of encumbered funds (approximately \$9 million) allocated for construction that will be sufficient to cover any outstanding claims and arbitration settlements that may occur. Because the program is complete and there is a balance of encumbered funds there will not be any cost overruns.

Program Expenditures



The funding for the Phase 1 program came from the State Highway Account and the Federal Trust Fund through the Department's State Highway Operations and Protection Program (SHOPP). State and Federal gas tax revenues provide the funds to the State Highway Account and Federal Trust Fund.

Program Delivery by Region / Department District

Region	Department District (Office)	District Bridges	Region Bridges	Percent Bridges	District Budget	Region Budget	Percent Budget
North Coast	1 (Redding)	21	23	2%	\$ 8	\$ 8	1%
	2 (Eureka)	2			\$ 0		
Bay Area	4 (Oakland)	396	396	38%	\$ 595	\$ 595	55%
Central Valley	3 (Marysville)	18	49	5%	\$ 4	29	2%
	5 (San Luis Obispo)	12			\$ 17		
	6 (Fresno)	14			\$ 6		
	9 (Bishop)	0			\$ 0		
	10 (Stockton)	5			\$ 2		
Southern California	7 (Los Angeles)	378	571	55%	\$ 275	\$ 450	42%
	8 (San Bernardino)	55			\$ 35		
	11 (San Diego)	87			\$ 122		
	12 (Irvine)	51			\$ 18		
Total		1,039	1,039	100%	\$ 1,082	\$ 1,082	100%

Phase 2 Seismic Retrofit Program

Progress Report / Milestones Achieved

The Phase 2 Seismic Retrofit Program is currently 98 percent complete. To date 1,139 State highway bridges, out of a total of 1,155 planned bridges, have been retrofitted under the Phase 2 program. Currently, there are eight bridges under construction and eight bridges under design. The planned delivery and retrofit completion dates of these 16 remaining bridges are outlined on the next page.

While work is progressing on these bridges, no specific milestones were achieved this quarter.

Proposition 192 (Seismic Retrofit Bond Act of 1996) provided \$2 billion for seismic retrofit, including \$1.21 billion for Phase 2 Seismic Retrofit. SHA/Federal funds expended prior to the passage of Proposition 192 provided the remainder of funds.

Program Delivery by Region / Department District

Region	Department District (Office)	District Bridges	Region Bridges	Percent Bridges	District Budget	Region Budget	Percent Budget
North Coast	1 (Redding)	69	81	7%	\$ 139	\$ 154	11%
	2 (Eureka)	12			\$ 15		
Bay Area	4 (Oakland)	151	151	13%	\$ 527	\$ 527	39%
Central Valley	3 (Marysville)	36	267	23%	\$ 40	184	14%
	5 (San Luis Obispo)	107			\$ 82		
	6 (Fresno)	77			\$ 18		
	9 (Bishop)	7			\$ 2		
	10 (Stockton)	40			\$ 42		
Southern California	7 (Los Angeles)	292	656	57%	\$ 301	\$ 485	36%
	8 (San Bernardino)	131			\$ 86		
	11 (San Diego)	172			\$ 82		
	12 (Irvine)	61			\$ 16		
Total		1,155	1,155	100%	\$ 1,350	\$ 1,350	100%

Phase 2 Seismic Retrofit Program (continued)

Program Delivery

The few remaining bridges are taking substantially longer to deliver because they are either total bridge replacement projects, or are follow-up contracts to earlier contracts. Bridge replacement contracts face delivery challenges including environmental protection, construction under heavy traffic conditions, and securing public input and acceptance for project approval.

Remaining Phase 2 Retrofit Program Bridges

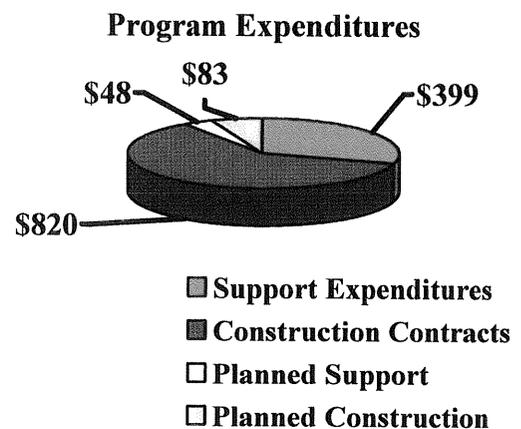
Bridge – Location	Number of Bridges	Target Delivery (RTL) ¹	Target Retrofit Complete	Prop 192 Cost
Hum-255 Humboldt Bay	3		Mid - 06	\$ 25
SBd-10 Colton IC	5		Late - 05	\$ 21
Under Construction	8			\$ 46
Men-1 Ten Mile River	1	Late - 05	Early - 09	\$ 33
Ala-80/580 Distribution (#3)	1	Mid - 05	Early - 07	\$ 15
Ala-880 High Street	2	Mid - 06	Late - 09	\$ 10 ⁽²⁾
Ala-880 5th Ave OH	1	Early - 05	Early - 11	\$ 19 ⁽²⁾
SB-101 Hollister Ave OC	1	Late - 07	Mid - 09	\$ 4
LA 47 Schuyler Heim	1	Late - 08	Late - 11	\$ 0 ⁽²⁾
Mojave River Bridge (#2)	1	Early -08	Mid - 09	\$ 2
In Design	8			\$ 83

“Early” – January to April; “Mid” – May to August; “Late” – September to December

Program Budget

The total budget for Phase 2 is \$1.35 billion. A total of \$820 million has been allocated for construction and right-of-way, and an additional \$399 million has been expended for support. Total commitments of \$1,219 million to date utilize approximately 90 percent of the available program funds.

There is a balance of \$131 million of which \$83 million is planned to be allocated for construction, and \$48 million is planned for support. No cost overruns are anticipated. All remaining funds will be utilized to complete the Phase 2 program.



¹ RTL – Ready to List. Plans are complete, right-of-way is certified, project is ready to be advertised. Expenditures shown include allocated funds (encumbrances) for awarded contracts.

² Additional funding being provided by other programs due to other scope needs – i.e., Bridge Rehabilitation or Widening.

Phase 2 Seismic Retrofit Program (continued)

The following two tables outline the program funding and the allocation forecast.

Program Funds

Fund Source	State	Federal (MDL ³)	Prop 192 ⁴	Total
Program Funds	\$99.8	\$40.2	\$1,210	\$1,350
Expenditures ⁵	\$99.8	\$40.2	\$1,079	\$1,219
Reimbursements ⁶	(-\$99.8)	(-\$40.2)		
Funds Available	\$0.0	\$0.0	\$131	\$131

Remaining Phase 2 Seismic Retrofit Program Financial Allocation Forecast

Component	04-05	05-06	06-07	07-08	08-09	09-10	Total
Support	\$ 4	\$ 10	\$ 9	\$ 9	\$ 8	\$ 8	\$ 48
Construction/RW Allocations	\$ 15	\$ 33	\$ 29	\$ 2	\$ 4	\$ 0	\$ 83
Total	\$ 19	\$ 43	\$ 38	\$ 11	\$ 12	\$ 8	\$131

Utilization of Support Resources On Phase 1 and Phase 2 Seismic Retrofit Programs.

	A&E ⁷		State		Total
	Expenditures \$	Percent	Expenditures \$	Percent	\$
Phase 1	\$102	38%	\$169	62%	\$271
Phase 2	\$151	38%	\$248	62%	\$399
Total	\$253	38%	\$417	62%	\$670

³ MDL – Multi-District Litigation funds received through the Petroleum Antitrust Litigation agreement.

⁴ The Seismic Retrofit Bond Act of 1996 (Proposition 192) was approved by the voters at the March 26, 1996 general election.

⁵ Expenditures shown include allocated funds (encumbrances) for awarded contracts.

⁶ State funds expended from the State Highway Account SHA for Phase 2 prior to the passage of Prop. 192 were required to be reimbursed under SB 60. This reimbursement to the SHA from bond funds occurred in 2002.

⁷ A&E – Architectural and Engineering contracts (consultants).

Local Bridge Seismic Retrofit Program

There are 1,235 bridges with an estimated seismic retrofit cost of \$1.105 billion being tracked through the Local Bridge Seismic Retrofit Program. This program was mandated by emergency legislation (SB 36X) after the October 17, 1989, Loma Prieta earthquake. A combination of Federal and State funding was used to fund these projects through the Department's Local Assistance Program. The Governor signed AB 2996 in late 2002, removing the program as a State mandate and made the current allocation of State funds discretionary, subject to the annual Budget Act. The Department considers this program a high priority and continues work with local agencies to encourage timely completion of these seismic retrofit projects.

Progress Report

Bay Area Rapid Transit (BART) with 227 bridges and the State Department of Water Resources (DWR) with 24 bridges each in the Local Seismic Safety Retrofit Program made a presentation at the January 2005 California Transportation Commission (CTC) meeting as requested by the CTC. Both BART and DWR's presentations covered their progress and planned future work to complete their bridges in this program.

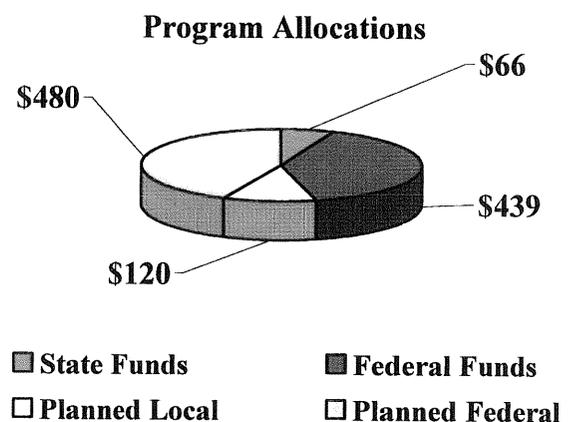
- BART is working on a system-wide retrofit program that includes all their bridges, stations, and the Trans Bay Tube. BART has completed a Vulnerability Study for their system-wide retrofit. Preliminary Engineering for 70 bridges has been completed. BART otherwise reported that the entire retrofit program is close to being fully funded after passage of their bond measure. BART's schedule for completion of the entire BART retrofit program is the end of the year 2012.
- DWR plans to perform analysis in the 06/07 Fiscal Year (FY) and begin construction as early as the 07/08 FY.

Program Delivery

590 bridges (48 percent) have been delivered. A total of \$505 million (46 percent) of the estimated cost has been allocated. As shown on the table on the next page, \$600 million of Federal and Local funds remain to be allocated.

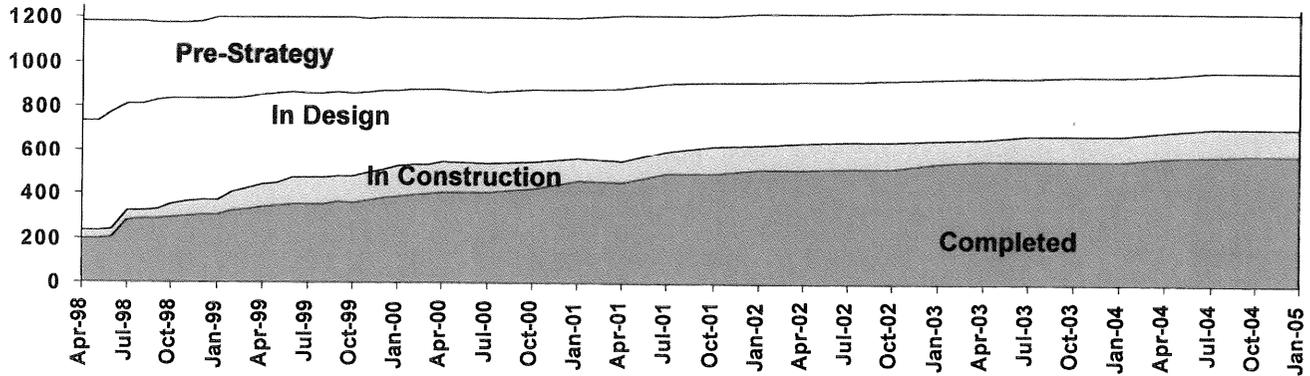
Local agencies are responsible for assessing the need for seismic retrofit work on their own public owned bridges, and identifying required retrofit work. Each bridge owner is responsible for securing environmental approvals, right-of-way clearances, and administering construction contracts.

The Department has completed its previously mandated obligations as a lead agency for the Local Bridge Seismic Retrofit Program.



Local Bridge Seismic Retrofit Program (continued)

Local Bridge Seismic Retrofit Progress Chart



Remaining Local Bridges Seismic Retrofit Program Financial Allocation Forecast

The Federal and State program funding for the Local Bridge Program is likely to come from gas tax revenues utilizing funds through subventions from the Local Assistance Program, which is in turn funded from the State Highway Account and Federal Trust Funds.

FISCAL YEAR

04-05	05-06	06-07	Beyond	TOTAL
\$68	\$23	\$94	\$415	\$600