

Department of Transportation:

*Its Seismic Retrofit Expenditures Comply
With the Bond Act, and It Has Continued
to Reimburse the Interim Funding for
Fiscal Years 1994–95 and 1995–96*



December 2002
2002-010

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CALIFORNIA STATE AUDITOR

ELAINE M. HOWLE
STATE AUDITOR

STEVEN M. HENDRICKSON
CHIEF DEPUTY STATE AUDITOR

December 17, 2002

2002-010

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As required by Chapter 310, Statutes of 1995, the Bureau of State Audits presents its audit report concerning the Department of Transportation's (department) revenues and expenditures authorized by the Seismic Retrofit Bond Act of 1996 (Bond Act). This report concludes that the department has ensured that seismic retrofit projects funded with bond proceeds are consistent with the purpose of the Bond Act. In addition, the department has continued to reimburse the State Highway Account (highway account) and the Consolidated Toll Bridge Fund (toll bridge fund) for expenditures incurred during fiscal years 1994-95 and 1995-96 as required by the Bond Act. As of June 30, 2002, the department has reimbursed the highway account \$78.1 million and the toll bridge fund \$79,000. According to the department, it intends to complete the reimbursement process for the highway account and the toll bridge fund before the Bond Act expires in 2005.

Respectfully submitted,

A handwritten signature in cursive script that reads "Elaine M. Howle".

ELAINE M. HOWLE
State Auditor

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SUMMARY

RESULTS IN BRIEF

In March 1996, California voters approved the Seismic Retrofit Bond Act of 1996 (Bond Act), which authorized the State to sell \$2 billion in general-obligation bonds to reconstruct, replace, or retrofit state-owned highways and bridges. Legislation passed in 1995 requires the Bureau of State Audits to ensure that projects funded by the Bond Act are consistent with this measure's purposes. This is the seventh in a series of annual reports on the Department of Transportation's (department) revenues and expenditures authorized by the Bond Act.

Overall, the department has moved toward its goal of retrofitting more than 1,150 state-owned highway bridges and 7 state-owned toll bridges. As of June 30, 2002, the department had spent \$1.69 billion for retrofit projects and had completed work on 98.3 percent of the highway bridges. It had also finished retrofitting 5 of the 7 toll bridges, while the other 2 bridges were either in retrofit design or under construction.

Our review found that the department has done a good job of ensuring that its seismic retrofit projects meet the criteria for funding outlined by the Bond Act. The department has also continued to reimburse other accounts for interim funding obtained during fiscal years 1994–95 and 1995–96. During those years, the State Highway Account (highway account) and the Consolidated Toll Bridge Fund (toll bridge fund) provided a total of \$114 million for retrofitting California's bridges.

Although the Bond Act requires that the department use bond proceeds to reimburse these expenditures, the State Treasurer's Office objected to reimbursing these funds directly because it believes such an action could jeopardize the bonds' tax-exempt status. To avoid this problem, the department decided to use Bond Act proceeds to fund future projects that would normally have been paid for by the highway account and toll bridge fund. As of June 30, 2002, the department had used this method to reimburse the highway account \$78.1 million and the toll bridge fund nearly \$79,000. The department stated it intends to fully reimburse both the highway account and the toll bridge fund before the Bond Act expires in 2005.

AGENCY COMMENTS

The department and the Business, Transportation and Housing Agency agree with the information provided in our report. ■

INTRODUCTION

BACKGROUND

After the Sylmar earthquake struck the Los Angeles area in 1971, the Department of Transportation (department) established a program to seismically retrofit bridges throughout the State. Seismic retrofit involves structural analysis to determine a bridge's potential vulnerability during earthquakes and a strategy meeting with engineers to discuss retrofit approaches and to determine the final retrofit design. This design may involve strengthening the bridge columns. This is done by encircling the columns with steel casings, fortifying some of the bridge footings by either placing additional pilings in the ground or using steel tie-down rods to better anchor the footings to the ground, and by enlarging the hinges that connect sections of the bridge decks to help prevent them from separating during severe ground movement.

Prior to the January 1994 Northridge earthquake, the department classified all state-owned highway bridges except toll bridges into two groups: single-column bridges and multiple-column bridges. After the Northridge earthquake, the department reclassified the bridges into Phase I and Phase II categories. Phase I bridges were bridges identified prior to January 1, 1994, as requiring retrofitting, while Phase II bridges included all of the remaining state-owned bridges, excluding toll bridges. In March 1996, California voters approved the Seismic Retrofit Bond Act of 1996 (Bond Act), which authorized the State to sell \$2 billion in general-obligation bonds to reconstruct, replace, or retrofit Phase II bridges and the seven state-owned toll bridges.

The Bond Act initially required the department to use \$650 million of the bond proceeds to retrofit the toll bridges, and the remaining \$1.35 billion to retrofit Phase II bridges. However, on August 20, 1997, the governor signed into law Chapter 327, Statutes of 1997, which shifted the allocation of expenditures to \$790 million for the toll bridges and \$1.21 billion for Phase II bridges. Because the department estimated in 1997 that the cost to retrofit or replace state-owned toll bridges would be \$2.62 billion, the legislation also authorized additional retrofitting funds from various state and toll bridge revenue accounts.

As of June 30, 2002, the department estimated the total cost to retrofit the State's seven toll bridges at \$4.64 billion, or \$2.02 billion more than its 1997 estimate. In addition, the department does not expect to complete the San Francisco-Oakland Bay Bridge's east span until 2007 and its west span until 2009, which is at least four years later than the department estimated in 1997. As amended by Chapter 327, Statutes of 1997, the Bond Act will remain in effect until all the retrofitting of the toll bridges is complete, or until June 30, 2005—whichever is sooner.

The Bond Act also requires the department to use bond proceeds to reimburse the State Highway Account and the Consolidated Toll Bridge Fund for approximately \$114 million in interim funding that it expended for retrofits of Phase II and toll bridges during fiscal years 1994–95 and 1995–96. We discuss these reimbursements in greater detail in the Audit Results.

STATUS OF THE BOND ISSUANCES

Since the inception of the seismic retrofit program, the State has issued 19 general-obligation bonds under the Bond Act. Appendix A shows the date and amount of each issuance.

SCOPE AND METHODOLOGY

Chapter 310, Statutes of 1995, requires the Bureau of State Audits to annually audit revenues and expenditures authorized by the Bond Act to ensure that the projects funded are consistent with the act's purpose.

To better understand the seismic retrofit program, we reviewed the Bond Act's provisions, its amendment by Chapter 327, Statutes of 1997, and the related policies and procedures developed by the department. We also interviewed administrators and staff to determine their responsibilities for implementing Bond Act provisions and how they meet those responsibilities.

To determine how fully the department complied with Bond Act requirements, we reviewed a sample of seismic retrofit projects from fiscal year 2001–02 and assessed whether these projects should have been eligible for funding. We also reviewed a sample of seismic retrofit expenditures incurred by the department in fiscal year 2001–02.

We are continuing to follow up on the issues raised by the State Treasurer's Office regarding the federal tax implication of using bond proceeds to reimburse Phase II and toll bridge seismic retrofit expenditures from fiscal years 1994–95 and 1995–96. We reviewed the department's records and interviewed administrators to determine if the steps the department has taken satisfy the reimbursement requirement of the Bond Act while resolving federal tax concerns and confirming the department's status in making these reimbursements.

Finally, we reviewed bond-issuance records available through June 2002 to determine the status of the bond issuances and their use. ■

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AUDIT RESULTS

THE DEPARTMENT MADE APPROPRIATE CHARGES TO THE SEISMIC RETROFIT BOND FUND

As of June 30, 2002, the Department of Transportation's (department) records showed that it had retrofitted 98.3 percent of the Phase II bridges, or a total 1,135 bridges. Of the 20 Phase II bridges that still required retrofitting, the department had begun construction on 3 and was in the process of choosing retrofit designs for the remaining 17. In addition, the department finished retrofitting 5 of the 7 state-owned toll bridges; it plans to complete retrofitting the 6th toll bridge by the spring of 2005.

The department also made progress on the 7th toll bridge, the San Francisco-Oakland Bay Bridge (Bay Bridge). As of June 30, 2002, the department had awarded 8 of the 12 contracts needed for the Bay Bridge's retrofitting, and the construction related to 5 of these contracts was completed. Although the department began construction on the Bay Bridge in 1994 and planned to finish in late 2004, it more recently estimated that work would not be complete until 2009.

Appendix B shows the status of the seismic retrofit program. As of June 30, 2002, the department had recorded approximately \$1.69 billion in expenditures for retrofit projects funded with the Seismic Retrofit Bond Act of 1996 (Bond Act) proceeds. Appendix C shows the breakdown of these expenditures.

We reviewed a sample of 15 of the department's seismic retrofit projects. We selected these 15 projects because they reflected expenditure activities of at least \$2,000 during fiscal year 2001–02 and we had not reviewed them during any of our six prior audits. Only Phase II and state-owned toll bridge projects are eligible for funding with Bond Act proceeds. Our review found that all projects were appropriate under the terms of the Bond Act. We also analyzed 40 expenditures totaling nearly \$28 million that the department charged to seismic retrofit projects during fiscal year 2001–02. We found that the expenditures met the intended purpose of the program.

THE DEPARTMENT HAS CONTINUED TO REIMBURSE EARLY SEISMIC RETROFIT EXPENDITURES

Article 2 of the Bond Act requires that the department use bond proceeds to reimburse the State Highway Account (highway account) and the Consolidated Toll Bridge Fund (toll bridge fund) for seismic retrofit expenditures incurred during fiscal years 1994–95 and 1995–96. The department’s records show these expenditures totaled \$114 million, including \$103 million from the highway account and \$11 million from the toll bridge fund. However, during the department’s initial attempt to comply with the Article 2 requirement, the State Treasurer’s Office (STO) raised the concern that reimbursing these past expenditures with bond proceeds could jeopardize the bonds’ federal tax-exempt status.

To address this issue, the department proposed that, rather than reimbursing the highway account and toll bridge fund directly, it would instead use bond proceeds to pay for future projects that would not otherwise be eligible for funding under the terms of the Bond Act. Specifically, the department proposed that \$103 million of the bond proceeds would be applied to state transportation projects, which would normally be funded with highway account funds, and that another \$11 million would be applied to construction work, which would normally be paid for by the toll bridge fund. By paying for these projects with bond proceeds, the department would in effect reimburse the highway account and toll bridge funds for their earlier seismic retrofit expenditures. The State’s bond counsel believed that the proposed plan would satisfy federal tax concerns.

According to the department, it needed to select projects scheduled for construction and completion within the term of the Bond Act in order to implement its proposed plan. Thus, on July 20, 2000, the department reported to the California Transportation Commission—the agency responsible for evaluating plans for transportation programs—that it had elected to use Bond Act proceeds to fund \$103 million in minor State Highway Operations and Protection Program (SHOPP) projects that would normally have been funded by the highway account. Appendix D shows that as of June 30, 2002, the department had reimbursed the highway account \$78.1 million by using Bond Act proceeds to pay for active SHOPP projects.

The department also progressed with its plan to reimburse the toll bridge fund. The department stated it elected to finance three projects from the toll bridge fund with bond proceeds:

the new Benicia-Martinez toll bridge, the Vincent Thomas toll bridge, and the San Diego-Coronado toll bridge. As of June 30, 2002, the department had reimbursed the toll bridge fund nearly \$79,000, although it plans to reimburse more than \$9 million of the \$11 million during fiscal year 2002–03. According to the department, it intends to complete the reimbursement process for both the highway account and the toll bridge fund before the Bond Act expires in 2005.

We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted government auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,



ELAINE M. HOWLE
State Auditor

Date: December 17, 2002

Staff: Denise L. Vose, CPA
Nasir Ahmadi, CPA
Mike Adjemian

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APPENDIX A

Bond Act Issuances as of June 30, 2002

TABLE A.1

**Seismic Retrofit Bond Act
General Obligation Bond Issuances**

Bond Series*	Date Sold	Amount Sold (In Millions)
A	03/18/97	\$ 50.0
B	10/08/97	300.0
C	10/07/98	344.9
D	02/23/99	100.0
E	04/07/99	76.0
F	06/09/99	20.0
G	10/20/99	66.0
H	04/19/00	134.5
I	10/17/00	50.0
K	11/29/00	45.0
M	02/27/01	48.0
O	06/12/01	28.0
P	10/30/01	59.0
Q	02/02/02	95.0
S	04/17/02	58.0
Total		\$1,474.4

* Series J, L, N, and R were refunding series that were issued to retire outstanding bonds. Because these issues did not increase the overall amount sold, we did not include them.

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APPENDIX B

Status of the Seismic Retrofit Program

Table B.1 and Table B.2 on the following page, depict the status of the seismic retrofit program for Phase II bridges and toll bridges as of June 30, 2002.

TABLE B.1

Status of Phase II Bridges

District	Retrofit Complete	Under Construction	In Design	Totals
1	64	1	4	69
2	12	0	0	12
3	36	0	0	36
4	144	2	5	151
5	106	0	1	107
6	77	0	0	77
7	292	0	1	293
8	124	0	6	130
9	7	0	0	7
10	40	0	0	40
11	172	0	0	172
12	61	0	0	61
Totals	1,135	3	17	1,155

Source: Quarterly Seismic Retrofit Status Report, fourth quarter, 2001–2002, issued by the Department of Transportation.

TABLE B.2**Status of Toll Bridges**

Toll Facility	Number of Projects	Current Status	Current Retrofit Completion Date
San Francisco-Oakland Bay Bridge			
East Bay Span*	4	Design/Construction	Spring 2007
West Bay Span	8	Design/Construction	Spring 2009
Benicia-Martinez Bridge	2	Completed	Spring 2002
San Mateo-Hayward Bridge	3	Completed	Spring 2000
Richmond-San Rafael Bridge	1	Construction	Spring 2005
Carquinez Bridge (eastbound) [†]	1	Completed	Winter 2002
Vincent Thomas Bridge	1	Completed	Spring 2000
San Diego-Coronado Bridge	4	Completed	Spring 2002

Source: Quarterly Seismic Retrofit Status Report, fourth quarter, 2001–2002, issued by the Department of Transportation.

* Although the department has completed an interim retrofit of the East Bay Span, it intends to construct a new bridge.

[†] The retrofit of the westbound Carquinez Bridge will be accomplished by a new bridge.

APPENDIX C

Bond Act Expenditures as of June 30, 2002

TABLE C.1

Breakdown of Seismic Retrofit Expenditures For Fiscal Years 1994–95 Through 2001–02 (In Thousands)

Expenditures	1994–95	1995–96	1996–97	1997–98	1998–99	1999–2000	2000–01	2001–02	Totals
Phase II Bridges									
State operations									
Administration	0	0	\$ 7,248	\$ 18,314	\$ 24,038	\$ 10,010	\$ 6,055	\$ 48,868*	\$ 114,533
Legal	0	0	0	0	0	0	0	0	0
Operations	0	0	0	0	1	17	2	1	21
Capital outlay—support	\$12,452	\$19,248	70,609	80,542	34,928	21,321	17,675	16,293	273,068
Subtotals	12,452	19,248	77,857	98,856	58,967	31,348	23,732	65,162	387,622
Capital outlay									
Major construction	0	0	0	0	0	0	0	0	0
Major contracts	4,085	1,880	185,215	172,184	65,256	63,250	41,713	60,629	594,212
Minor construction	0	0	0	0	0	0	0	0	0
Minor contracts	1,043	1,961	4,615	1,718	219	796	380	490	11,222
Right-of-way	57	259	562	1,118	443	373	69	924	3,805
Subtotals	5,185	4,100	190,392	175,020	65,918	64,419	42,162	62,043	609,239
Total Phase II	17,637	23,348	268,249	273,876	124,885	95,767	65,894	127,205	996,861
Toll Bridges									
State operations									
Administration	0	0	3,490	11,789	15,694	6,536	3,953	-41,462*	0
Legal	0	0	0	0	0	0	0	0	0
Operations	0	0	0	0	0	0	0	0	0
Capital outlay—support	14,978	48,447	44,548	47,511	7,339	23	3	10	162,859
Subtotals	14,978	48,447	48,038	59,300	23,033	6,559	3,956	-41,452	162,859
Capital outlay									
Major construction	0	0	0	0	0	0	0	0	0
Major contracts	877	7,285	5,938	39,572	161,658	120,082	51,888	119,360	506,660
Minor construction	0	0	0	0	0	0	0	0	0
Minor contracts	0	0	0	0	0	0	0	0	0
Right-of-way	2	0	492	7,334	15,512	38	429	74	23,881
Subtotals	879	7,285	6,430	46,906	177,170	120,120	52,317	119,434	530,541
Total toll bridges	15,857	55,732	54,468	106,206	200,203	126,679	56,273	77,982	693,400
Grand Totals	\$33,494	\$79,080	\$322,717	\$380,082	\$325,088	\$222,446	\$122,167	\$205,187	\$1,690,261

* During fiscal year 2001–02, the department reclassified \$41 million of administrative expenditures incurred in prior years from the category of toll bridges to Phase II. These administrative expenditures are the State Treasurer's and State Controller's costs for managing the bonds. The Bond Act, as amended by Chapter 327, Statutes of 1997, requires the department to use \$790 million of bond proceeds exclusively for the seismic retrofitting of state-owned toll bridges. Therefore, according to the department, it made this adjustment to ensure that it uses the toll bridge portion of the bond proceeds only for the purposes authorized in the statutes, which does not include these administrative type costs. Additionally, the law does not preclude the department from charging the bond's administrative expenditures to the Phase II category.

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APPENDIX D

Bond Act Reimbursements as of June 30, 2002

TABLE D.1

Status of Reimbursements for Interim Funding (In Thousands)

	State Highway Account	Consolidated Toll Bridge Fund*	Totals
Expenditures			
Fiscal years 1994–95 and 1995–96	\$103,048	\$11,003	\$114,051
Reimbursements			
Fiscal year 2000–01	26,302	0	26,302
Fiscal year 2001–02	51,838	79	51,917
Subtotals	78,140	79	78,219
Balance to Be Reimbursed	\$ 24,908	\$10,924	\$ 35,832

* While the Consolidated Toll Bridge Fund (toll bridge fund) incurred seismic retrofit expenditures during fiscal years 1994–95 and 1995–96, the toll bridge fund consisted of five individual accounts. Since that time, however, Chapter 328, Statutes of 1997, required the department to transfer the existing fund balances of two of these accounts to the Bay Area Toll Authority (BATA). The department stated that it identified approximately \$9.6 million of the reimbursement for these early seismic expenditures related to these two funds, and it plans to transfer the funds to BATA when needed for BATA’s Benicia-Martinez bridge project. As of June 30, 2002, the department had reimbursed BATA for \$79,000 of the \$9.6 million. According to the department, it plans to complete the reimbursement process by financing selected projects of two other accounts included in the toll bridge fund: approximately \$580,000 for Vincent Thomas and \$865,000 for San Diego-Coronado.

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Agency's comments provided as text only.

Business, Transportation and Housing Agency
980 9th Street, Suite 2450
Sacramento, CA 95814-2719

December 4, 2002

Elaine M. Howle
State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Howle:

Attached is the Department of Transportation's (Department) response to your draft report, *Department of Transportation: Its Seismic Retrofit Expenditures Comply With the Bond Act, and It Has Continued to Reimburse the Interim Funding for Fiscal Years 1994-95 and 1995-96* (#2002-010). I am pleased that your review of seismic retrofit projects and testing of expenditures found that, in all instances, the Department made appropriate charges to the seismic retrofit bond fund.

Thank you for acknowledging the substantial progress the Department has made by completing the seismic retrofitting of 98.3 percent of more than 1,150 state-owned highway bridges, and five of the seven state-owned toll bridges. I know the Department will continue to work hard to complete the few remaining bridges that are currently in the design or construction stages.

I appreciate the opportunity to respond to your audit report. If you need additional information, please do not hesitate to contact me, or Michael Tritz, Chief of the Office of Internal Audits within the Business, Transportation and Housing Agency, at (916) 324-7517.

Sincerely,

(Signed by: Al Lee for)

MARIA CONTRERAS-SWEET
Secretary

Attachment

Department of Transportation
Office of the Director
1120 N Street
Sacramento, CA 95814

December 2, 2002

Maria Contreras-Sweet, Secretary
Business, Transportation and Housing Agency
980 - 9th Street, Suite 2450
Sacramento, CA 95814

Dear Secretary Contreras-Sweet:

I am pleased to provide our response to the Bureau of State Audits' (BSA) draft audit report entitled "Department of Transportation: Its Seismic Retrofit Expenditures Comply With the Bond Act, and It Has Continued to Reimburse the Interim Funding for Fiscal Years 1994-95 and 1995-96."

We are pleased that the draft audit report found that the California Department of Transportation (Department) has done a good job of ensuring that its seismic retrofit projects meet the criteria for funding outlined by the Bond Act and does not offer recommendations for the Department to implement.

The Department has worked hard over the past decade to reconstruct, replace or retrofit state-owned highway and toll bridges throughout California. As noted in the draft report, the Department has completed work on 98.3 percent of the highway bridges and five of the toll bridges. The remaining bridges are either in retrofit design or under construction. We are confident that the Department will achieve seismic safety on all of the State's bridges as authorized by the Bond Act.

If you have any questions, or require further information, please contact Gerald Long, External Audit Coordinator, at (916) 323-7122.

Sincerely,

(Signed by: Jeff Morales)

JEFF MORALES
Director

cc: Members of the Legislature
Office of the Lieutenant Governor
Milton Marks Commission on California State
Government Organization and Economy
Department of Finance
Attorney General
State Controller
State Treasurer
Legislative Analyst
Senate Office of Research
California Research Bureau
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