Department of

Transportation:Its Seismic Retrofit Expenditures Comply
With the Bond Act and Its Reimbursement of Interim Funding for Fiscal Years 1994–95 and 1995–96 Is Nearly Complete



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CALIFORNIA STATE AUDITOR

STEVEN M. HENDRICKSON CHIEF DEPUTY STATE AUDITOR

December 2, 2004 2004-010

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

Dear Governor and Legislative Leaders:

laine M. Howle

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. As of June 30, 2004, the department had spent \$1.93 billion of the \$2 billion authorized by the Bond Act. In addition, the department has nearly completed its reimbursement of the State Highway Account and the Consolidated Toll Bridge Fund for expenditures incurred during fiscal years 1994–95 and 1995–96 as required by the Bond Act. As of June 30, 2004, the department had reimbursed the two funding sources \$95.7 million of the \$114 million that is owed to them.

Respectfully submitted,

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 that measure's purposes. This is the ninth 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 seven state-owned toll bridges. As of June 30, 2004, the department had spent \$1.93 billion for retrofit projects and had completed work on 98.4 percent of the highway bridges. It also has finished retrofitting five of the seven toll bridges. The other two bridges were 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 also has 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 normally would have been paid for by the highway account and toll bridge fund. As of June 30, 2004, the department had used this method to reimburse the highway account \$87.5 million and the toll bridge fund \$8.2 million.

AGENCY COMMENTS

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

INTRODUCTION

BACKGROUND

fter 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 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 placing additional pilings in the ground or by using steel tie-down rods to better anchor the footings to the ground, and enlarging the hinges that connect sections of the bridge decks to help prevent them from separating during severe ground movement.

Before 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 before January 1, 1994, as requiring retrofitting, and Phase II bridges included all 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. The department estimated in 1997 that the cost to retrofit or replace state-owned toll bridges would be \$2.62 billion, so the legislation authorized additional retrofitting funds from various state and toll bridge revenue accounts.

As of June 30, 2004, the department estimated the total cost to retrofit the State's seven toll bridges at \$4.94 billion, or \$2.32 billion more than its 1997 estimate. However, in its Toll Bridge Seismic Safety Retrofit Program Report dated August 2004, the department estimated the total cost to retrofit the State's seven toll bridges at \$7.41 billion, or \$4.79 billion more than its 1997 estimate. The department also indicated that it does not expect to complete the San Francisco-Oakland Bay Bridge's east span until 2011 and its west span until 2009, which is at least five years later than it estimated in 1997.

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 section of this report.

STATUS OF THE BOND ISSUANCES

Since the inception of the seismic retrofit program, the State has issued 25 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 audit annually the 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 expenditures incurred by the department in fiscal year 2003–04. In addition, we assessed whether the projects related to our expenditure sample were eligible for funding. Additionally, we reviewed the department's records to ensure that it is continuing

to use bond proceeds appropriately to reimburse Phase II and toll bridge seismic retrofit expenditures from fiscal years 1994–95 and 1995–96 as required by the Bond Act.

Finally, we reviewed bond-issuance records available through June 2004 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 BOND FUND

s of June 30, 2004, the Department of Transportation's (department) records showed that it had retrofitted 98.4 percent of the Phase II bridges, or a total of 1,137 bridges. Of the 18 Phase II bridges that still required retrofitting, the department had begun construction on 10 and was choosing retrofit designs for the remaining eight. However, the department indicated that it will take substantially longer to complete these retrofits because the remaining Phase II bridges are total bridge replacements or are follow-up projects to earlier contracts. As a result, the department estimates that the last of these bridges will not be completed until 2010.

In addition, the department finished retrofitting five of the seven state-owned toll bridges; it plans to complete retrofitting the sixth toll bridge in late 2005. The department also made progress on the seventh toll bridge, the San Francisco-Oakland Bay Bridge (Bay Bridge). As of June 30, 2004, the department had awarded 17 of the 24 contracts needed for the Bay Bridge's retrofitting, and the construction related to 11 of these contracts was completed. Of the seven remaining contracts, four are under development and design and three are in the bidding process. Although the department began construction on the Bay Bridge in 1994 and planned to finish in late 2004, it estimated in its Toll Bridge Seismic Safety Retrofit Program Report dated August 2004 that work will not be complete until 2011.

As of June 30, 2004, the department had recorded approximately \$1.93 billion in expenditures for retrofit projects funded with the Seismic Retrofit Bond Act of 1996 (Bond Act) proceeds. Appendix B shows the breakdown of these expenditures.

We reviewed a sample of 40 expenditures totaling more than \$18 million that the department charged to seismic retrofit projects during fiscal year 2003–04. We found that the expenditures met the program's intended purpose. We also found that the expenditures were charged to projects that were eligible for funding with Bond Act proceeds.

THE DEPARTMENT HAS NEARLY COMPLETED REIMBURSEMENT OF 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—\$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 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 instead would use bond proceeds to pay for future projects that otherwise would not 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 that normally would be funded with highway account funds, and that an additional \$11 million would be applied to projects that normally would 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 the proposal 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 normally would have been funded by the highway account. Appendix C shows that as of June 30, 2004, the department had reimbursed the highway account \$87.5 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 with bond proceeds that normally are paid

for by the toll bridge fund. The first project relates to the new Benicia-Martinez toll bridge, which the department estimates will cost \$9.6 million. The other two projects relate to the Vincent Thomas toll bridge and the San Diego-Coronado toll bridge for a cost of \$216,200 and \$36,000, respectively. As of June 30, 2004, the department had reimbursed the toll bridge fund \$8.2 million.

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,

=laine M. Howle_

ELAINE M. HOWLE

State Auditor

Date: December 2, 2004

Staff: Denise L. Vose, CPA, Audit Principal

Kris Patel

Julianna N. Field

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APPENDIX A

Bond Act Issuances as of June 30, 2004

TABLE A.1
Seismic Retrofit Bond Act General Obligation Bond Issuances

Bond Series*	Date Sold	Amount Sold (In Millions)
Α	3/18/1997	\$ 50.0
В	10/8/1997	300.0
С	10/7/1998	344.9
D	2/23/1999	100.0
E	4/7/1999	76.0
F	6/9/1999	20.0
G	10/20/1999	66.0
Н	4/19/2000	134.5
1	10/17/2000	50.0
К	11/29/2000	45.0
М	2/27/2001	48.0
0	6/12/2001	28.0
Р	10/30/2001	59.0
Q	2/20/2002	95.0
S	4/17/2002	58.0
Т	10/9/2002	83.0
U	4/24/2003	153.0
X	6/19/2003	20.0
Υ	6/17/2004	60.0
Total		\$1,790.4

^{*} Series J, L, N, R, V, and W were refunding series that were issued to retire outstanding bonds. These issues did not increase the overall amount sold, so we did not include them.

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APPENDIX B

Bond Act Expenditures as of June 30, 2004

TABLE B.1

Breakdown of Seismic Retrofit Expenditures Fiscal Years 1994–95 Through 2003–04 (In Thousands)

Expenditures	1994–95 and 1995–96*	1996–97	1997–98	1998–99	1999– 2000	2000-01	2001–02	2002–03	2003–04	Totals
Phase II bridges										
State operations										
Administration	0	\$ 7,248	\$ 18,314	\$ 24,038	\$ 10,010	\$ 6,055	\$48,868 [†]	\$ 4,561	\$ 2,367	\$ 121,461
Operations	0	0	0	1	17	2	1	0	1	22
Capital outlay-support	0	70,609	80,542	34,928	21,321	17,675	16,293	11,475	10,496	263,339
Subtotals	0	77,857	98,856	58,967	31,348	23,732	65,162	16,036	12,864	384,822
Capital outlay										
Major contracts	\$ 15,930	185,215	172,184	65,256	63,250	41,713	60,629	36,307	31,344	671,828
Minor contracts	71,563	4,615	1,718	219	796	380	490	74	1	79,856
Right-of-way	0	562	1,118	443	373	69	924	422	5,233	9,144
Subtotals	87,493	190,392	175,020	65,918	64,419	42,162	62,043	36,803	36,578	760,828
Total Phase II	87,493	268,249	273,876	124,885	95,767	65,894	127,205	52,839	49,442	1,145,650
Toll bridges										
State operations										
Administration	0	3,490	11,789	15,694	6,536	3,953	(41,462)†	0	0	0
Capital outlay-support	0	44,548	47,511	7,339	23	3	10	(79)	0	99,355
Subtotals	0	48,038	59,300	23,033	6,559	3,956	(41,452)	(79)	0	99,355
Capital outlay										
Major contracts	7,985	5,938	39,572	161,658	120,082	51,888	119,213‡	150,276	(86)	656,526
Minor contracts	180	0	0	0	0	0	0	0	0	180
Right-of-way	0	492	7,334	15,512	38	429	74	0	210	24,089
Subtotals	8,165	6,430	46,906	177,170	120,120	52,317	119,287	150,276	124	680,795
Total toll bridges	8,165	54,468	106,206	200,203	126,679	56,273	77,835	150,197	124	780,150
Grand Totals	\$95,658	\$322,717	\$380,082	\$325,088	\$222,446	\$122,167	\$205,040	\$203,036	\$49,566	\$1,925,800

^{*} This column differs from the amounts we reported in our previous audits of the Bond Act. For those audits, we reported the expenditures the department incurred during fiscal years 1994–95 and 1995–96 as originally funded by the State Highway Account (highway account) and the Consolidated Toll Bridge Fund (toll bridge fund). However, beginning in fiscal year 2002–03, because the department has reimbursed a significant portion of the amounts it owes the highway account and toll bridge fund, we believe it is more appropriate that this column reflect the department's use of the Bond Act proceeds during fiscal years 2000–01 to 2003–04 to reimburse these two funds. These amounts now will agree with the status of the reimbursements for the interim funding as shown in Appendix C.

[†] 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.

[‡] This amount differs from the amount we reported in our audit of the Bond Act for fiscal year 2001–02 because, according to the department, it incorrectly recorded reimbursements of the toll bridge fund totaling \$147,294 as a fiscal year 2001–02 seismic retrofit expenditure. Thus, to reflect these reimbursements appropriately, we reduced these expenditures by \$147,294 and recorded them as reimbursements of the toll bridge fund. We also describe this in a related footnote in Appendix C.

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APPENDIX C

Bond Act Reimbursements as of June 30, 2004

TABLE C.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	147 [†]	51,985
Fiscal year 2002–03	7,945	3,488	11,433
Fiscal year 2003–04	1,408	4,530	5,938
Subtotals	87,493	8,165	95,658
Balance to Be Reimbursed	\$ 15,555	\$ 2,838	\$ 18,393

^{*} Although 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 use that amount of Bond Act proceeds to fund a project related to the BATA's Benicia-Martinez bridge. As of June 30, 2004, the department had reimbursed BATA for \$8 million of the \$9.6 million.

[†] This amount differs from the amount we reported in our audit of the Bond Act for fiscal year 2001–02 for two reasons. First, according to the department, its records for fiscal year 2001–02 incorrectly reflected that it had reimbursed BATA \$79,000 and it did not discover its error until fiscal year 2002–03, at which time it reversed this entry. Thus, our audit for fiscal year 2001–02 reflected the incorrect amount of \$79,000. Second, the department's records for fiscal year 2001–02 also should have reflected that it reimbursed the toll bridge fund \$147,294. However, as described in a related footnote in Appendix B, it had recorded these reimbursements incorrectly as seismic retrofit expenditures.

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Agency's comments provided as text only.

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

November 15, 2004

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 (Department) response to your draft report, *Department of Transportation: Its Seismic Retrofit Expenditures Comply With the Bond Act, and Its Reimbursement of Interim Funding for Fiscal Years 1994-95 and 1995-96 Is Nearly Complete* (#2004-010). 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 continued progress the Department has made in reimbursing the State Highway Account and the Consolidated Toll Bridge Fund, and the work the Department has done to complete the seismic retrofitting of 98.4 percent of the highway bridges and five of the seven toll bridges. I know the Department will continue to work hard to finish retrofitting the few bridges that are not yet complete.

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: Sunne Wright McPeak)

SUNNE WRIGHT MCPEAK Secretary

Attachment

Department of Transportation Office of the Director 1120 N Street Sacramento, CA 94273

November 10, 2004

Sunne Wright McPeak, Secretary Business, Transportation and Housing Agency 980 – 9th Street, Suite 2450 Sacramento, CA 95814

Dear Secretary McPeak:

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 Its Reimbursement of Interim Funding for Fiscal Years 1994-95 and 1995-96 Is Nearly Complete."

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 Seismic Retrofit Bond Act and does not offer recommendations for the Department to implement. Specifically, the auditors found that the Department has made appropriate charges to the seismic bond fund and has nearly completed reimbursement of early seismic retrofit expenditures.

The Department has worked hard over the past decade to reconstruct, replace, or retrofit State-owned highway and toll bridges throughout California. We look forward to the day when seismic safety is achieved on all of the State-owned bridges.

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

Sincerely,

(Signed by: Will Kempton)

WILL KEMPTON 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
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