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INDEPENDENT STATE AUDITOR'S

REPORT ON THE ACTIVITIES

OF THE CENTRAL ARTERY/THIRD HARBOR TUNNEL PROJECT
WRAP-UP INSURANCE PROGRAM

NOVEMBER 1, 1992 THROUGH OCTOBER 31, 1999

OFFICIAL AUDIT
REPORT

JUNE 14, 2000

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The Central Artery/Third Harbor Tunnel Project (CA/T) is a 7.5-mile interstate highway project designed to significantly reduce traffic congestion in downtown Boston through the construction of an eight- to 10-lane underground Central Artery, a four-lane underwater tunnel that crosses Boston Harbor, and a commercial traffic bypass road through South Boston. CA/T construction began in 1991 and is well underway in certain areas, including the South Boston Bypass Road, the Boston Marine Industrial Park, the tunnel crossing under Boston Harbor, the Bird Island Flats area of Logan International Airport in East Boston, and the Central Artery.

In 1987, the United States Congress passed the Surface Transportation and Uniform Relocation and Assistance Act (STURA), which made the CA/T Project eligible for a maximum of 90% federal reimbursement, depending upon the roadway classification and the availability of funds, with the Commonwealth bearing the remaining costs. Further, in 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which extended the federal government's financial support for the project through 1997. In June 1998, Congress passed the new Transportation Equity Act for the 21st Century (TEA-21). Under this legislation, it is estimated that Massachusetts will receive an average of \$520 million per year for highway projects through fiscal year 2003. This amount of federal funding is approximately \$310 million less than the \$830 million average under the old ISTEA legislation and will impact the Commonwealth's percentage share of the remaining project costs.

In 1989, CA/T management estimated that the project would cost \$4.4 billion and would be completed in 1998. However, the United States General Accounting Office (GAO) report, dated July 17, 1997, to the Subcommittee on Transportation and Related Agencies, Committee on Appropriations, of the House of Representatives found that the cost of the project will exceed the Massachusetts Turnpike Authority's (MTA) estimates and could reach as high as \$11.6 billion. It was noted that the increase occurred primarily because of growth in the project's estimated construction costs. Further, the report noted that CA/T management's cost containment goals envisioned a far better performance than had been achieved thus far and that the cost of completing the project could increase by between \$100 million and \$500 million if these goals were not achieved.

The project's 1998 Finance Plan indicated that project costs would total \$10.8 billion; however, an October 1999 U.S. Department of Transportation's Office of the Inspector General (OIG) draft report (issued in final in February 2000) noted that the actual figure was at least \$11.8 billion and that potential construction cost increases could add another \$942 million to this amount. Although the CA/T Project Director dismissed the OIG's estimated cost increase as being "totally unsupported," on February 1, 2000, the March 2000 amendment to the CA/T finance plan indicated that the project could cost \$13.1 billion.

Moreover, it was recently reported that the lowest bid submitted on one of the few remaining major project contracts (for the Logan Airport Interchange) came in at \$21.8 million over budget estimates due to labor and fuel cost increases. Because labor and fuel cost increases

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could very likely affect two other major contracts budgeted for almost \$500 million, CA/T may be once again required to increase its cost estimates for the project unless it implements aggressive cost containment measures and improves its management practices, as called for in prior Office of the State Auditor (OSA), GAO, and OIG reports.

Because of a surprise CA/T Project announcement on February 1, 2000 of a potential \$1.4 billion cost overrun, the U.S. Secretary of Transportation requested that the FHWA establish a multi-disciplinary Federal Task Force to analyze the oversight process for the Project, review the structure of the cognizant FHWA Division Office responsible for the oversight, and to determine the effectiveness of the supporting document reporting systems. On April 11, 2000, the Task Force issued its report stating that FHWA must move beyond its failed “partnership” approach that was betrayed by State actions. The Task Force made 34 recommendations to achieve independent and critical oversight of the CA/T Project. It also estimated that a more realistic cost estimate for the project is now \$13.4 to \$13.6 billion. As a result of this report, the Governor of the Commonwealth replaced the Chairman of the MTA, who had responsibility for the management of the project.

In September 1998, the OSA reported (Audit Report No. 97-4060-3) that, because of differences between estimated and actual (audited) payrolls, CA/T paid more in workers’ compensation and general liability insurance premiums than was needed to cover third parties or employees actually working on the project. In a report dated May 24, 1999, the OIG confirmed the OSA’s conclusion that CA/T management overpaid premiums and should use the overpayments to pay for current project costs or return the funds to the U. S. Treasury. The report added that CA/T’s practice of investing insurance premium overpayments rather than applying them to project costs was not only contrary to existing regulations, but represented poor cash management practices by project management.

This interim report deals with aspects of CA/T’s workers’ compensation and general liability insurances under the wrap-up insurance program. To date, the OSA’s 12 interim reports have identified approximately \$446 million in unnecessary, excessive, and avoidable project costs as well as available savings opportunities.

AUDIT RESULTS

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1. CA/T Project Adopts OSA Recommendation to Use \$172 Million in Excess Insurance Reserve Funds Which Will Also Save the State Borrowing Costs of \$64 Million:

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In September 1998, the OSA reported that, because of differences between estimated and actual (audited) payrolls, CA/T paid more in workers’ compensation and general liability insurance premiums than was needed to cover third parties or employees actually working on the project. We also reported that CA/T used or planned to use much of the excess to offset premiums due and retain the balance in its insurance reserve. However, the project did not fully use the excess premiums, as planned, nor did it pay the entire amount in estimated premiums. Coupled with subsequent years’ excess premiums and certain other adjustments, the total now stands at \$103 million. Although CA/T initially responded unfavorably to our

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report recommendation, project officials have now indicated that they plan to use \$100 million from the trust fund to offset estimated workers' compensation premiums due for policy years 1999/00 and 00/01, or \$52 million and \$48 million, respectively. By using the \$100 million from the trust fund to offset workers' compensation premiums, related state borrowing costs of an estimated \$37 million could be saved.

Agreements and understandings between CA/T and its insurance carrier, American International Group, Inc., (AIG), limit the project's insurance losses under the workers' compensation and general liability insurances to an amount known as maximum aggregate loss. After total project payments for claims and certain expenses reach the maximum aggregate loss amount, AIG is liable for any additional insurance losses. In October 1999, we advised senior project management that CA/T essentially had sufficient reserve funds to cover the project's combined workers' compensation and general liability maximum aggregate loss. Nevertheless, CA/T planned to make additional workers' compensation premium payments and to maintain the trust intact until 2017, when it would reach an estimated \$826 million. That decision did not make sense because the project will be completed by then and the excess funds will not be available to help pay project costs. We recommended that the project forego the remaining premium payments for workers' compensation and use these funds for other project costs. As in the case of the \$100 million noted above, Project management initially disagreed citing other possible insurance costs. However, in its recently released Central Artery/Tunnel Project Finance Plan dated October 1999 and in the March 2000 finance plan update, CA/T indicates that the project plans to pay future workers' compensation premium payments totaling \$72 million from funds currently held in the trust which is, once again, consistent with our recommendation. This would further reduce state borrowing costs by another \$27 million for a total of \$64 million.

2. **Potential Uninsured or Underinsured Insurance Risks:** CA/T commissioned a study to assess the potential insurance risks faced by the project. The March 2000 update to the project's finance plan reports that the estimated range of potential risk, excluding exposure from workers' compensation and general liability, was from a low of \$513 million to a high of \$3.7 billion. The finance plan update reports that the project will probably purchase an additional \$195 million in insurance coverage and, for the present, self-insure the balance. The significance of this potential risk exposure and its concern to bondholders and other interested readers of the Commonwealth's financial statements require us to furnish this information to the audit group responsible for conducting the audit of the Commonwealth's Comprehensive Annual Financial Report which is done under the Single Audit Act of the United States.

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INTRODUCTION

Background

The Central Artery/Third Harbor Tunnel Project (CA/T) is a major 7.5-mile interstate highway project designed to significantly reduce traffic congestion in downtown Boston through the construction of an eight- to 10-lane underground Central Artery, a four-lane underwater tunnel that crosses Boston Harbor, and a commercial traffic bypass road through South Boston.

In 1984, the Massachusetts Highway Department (MHD) awarded a management consultant contract to the joint venture of Bechtel/Parsons Brinckerhoff to manage project design and construction activities. The management consultant has overall responsibility for project design, management, and interface coordination of all construction contracts. The Massachusetts Turnpike Authority (MTA) assumed ownership and management of the CA/T Project under a state law enacted in March 1997. Although much of the activities discussed in this report occurred under MHD's jurisdiction, we use the Massachusetts Turnpike Authority designation throughout this report.

CA/T construction, which began in 1991, is well underway in certain areas, including the South Boston Bypass Road, the Boston Marine Industrial Park, the tunnel crossing under Boston Harbor, the Bird Island Flats area of Logan International Airport in East Boston, and the Central Artery. This interim report deals with MTA's wrap-up insurance program and, in particular, certain aspects of its workers' compensation and general liability coverage.

In 1987, the United States Congress passed the Surface Transportation and Uniform Relocation and Assistance Act (STURA), which made the CA/T Project eligible for a maximum of 90% federal reimbursement, depending upon the roadway classification and the availability of funds, with the Commonwealth bearing the remaining costs. In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which extended the federal government's financial support for the project through 1997. In June 1998, Congress passed the new Transportation Equity Act for the 21st Century (TEA-21). Under this legislation, it is estimated that Massachusetts will receive an average of

\$520 million per year for highway projects through fiscal year 2003. This amount of federal funding is approximately \$310 million less than the \$830 million average under the old ISTEA legislation and will increase the Commonwealth's percentage share of the remaining project costs.

In 1989, CA/T management estimated that the CA/T Project would be completed in 1998 at a cost of \$4.4 billion. However, the United States General Accounting Office (GAO) report, dated July 17, 1997, to the Subcommittee on Transportation and Related Agencies, Committee on Appropriations, of the House of Representatives found that the cost of the project would exceed MTA's estimates and could reach as high as \$11.6 billion. It was noted that the increase occurred primarily because of growth in the project's estimated construction costs. Further, the report noted that CA/T management's cost containment goals envisioned a far better performance than had been achieved thus far and that the cost of completing the project could increase by between \$100 million and \$500 million more if these goals were not achieved.

The project's 1998 Finance Plan indicated that project costs would total \$10.8 billion; however, an October 1999 U.S. Department of Transportation's Office of Inspector General (OIG) draft report (issued in final in February 2000) noted that the actual figure was at least \$11.8 billion and that potential construction cost increases could add another \$942 million to this amount. Although the CA/T Project Director dismissed the OIG's estimated cost increase as being "totally unsupported", the March 2000 amendment to the CA/T finance plan indicated that the project could cost \$13.1 billion, or approximately 198% more expensive than the 1989 estimate.

Moreover, it was recently reported that the low bid submitted on one of the few remaining major project contracts (for the Logan Airport Interchange) came in at \$21.8 million over budget estimates due to labor and fuel cost increases. Because labor and fuel cost increases could very likely affect two other major contracts budgeted for almost \$500 million, CA/T may be once again required to increase its cost estimates for the project unless it implements aggressive cost containment measures and improves its management practices as called for in prior OSA, GAO and OIG reports.

Because of a surprise CA/T Project announcement on February 1, 2000 of a potential \$1.4 billion cost overrun, the U.S. Secretary of Transportation requested that the FHWA establish a multi-disciplinary Federal Task Force to analyze the oversight process for the project, review the structure of the cognizant FHWA Division Office responsible for the oversight, and to determine the effectiveness of the supporting document reporting systems. On April 11, 2000, the Task Force issued its report stating that FHWA must move beyond its failed "partnership" approach that was betrayed by State actions. The Task Force made 34 recommendations to achieve independent and critical oversight of the CA/T Project. It also estimated that a more realistic cost estimate for the project is now \$13.4 to \$13.6 billion. As a result of this report, the Governor of the Commonwealth replaced the Chairman of the MTA, who had responsibility for the management of the project.

In September 1998, the Office of the State Auditor (OSA) reported (Audit Report No. 97-4060-3) that because of differences between estimated and actual (audited) payrolls, CA/T paid more in workers' compensation and general liability insurance premiums than was needed to cover third parties or employees actually working on the project. In a report dated May 24, 1999, the U.S. Department of Transportation's Office of Inspector General (OIG) confirmed OSA's conclusion that CA/T management overpaid premiums and should use the overpayments to pay for current project costs or return the funds to the U. S. Treasury. The report added that CA/T's practice of investing insurance premium overpayments rather than applying them to project costs was not only contrary to existing regulations, but represented poor cash management practices by project management.

To date, our 12 interim reports have identified approximately \$446 million in unnecessary, excessive, and avoidable costs as well as available saving opportunities.

CA/T Insurance Program

While design and construction contractors generally purchase their own insurance coverage and recover costs through their contracts, the CA/T Project purchased "wrap-up" insurance that provides contractors working at the CA/T Project with coverage for a variety of risks. Wrap-up insurance

programs usually result in lower total insurance costs for a number of reasons, including the elimination of redundant insurance services and profit margins associated with the purchase of insurance by each contractor and subcontractor. According to CA/T officials, the insurance savings from the project's wrap-up will result from, among other things, a better-than-expected safety record, which would reduce workers' compensation claims, and a lower-than-expected accident claims record, which would reduce payments under the project's general liability insurance. We were informed that if the better than expected loss experience continues through the end of the project, the available funds will be used by the state for Title 23, Federal-Aid Highway purposes.

Included among the insurance coverage provided contractors under the CA/T wrap-up program is workers' compensation insurance, which covers all project workers for job-related injuries or diseases, and general liability insurance, which covers project workers and third parties for injuries and losses resulting from negligence or omissions.¹ Approximately 64%, or almost \$500 million, of the estimated CA/T wrap-up insurance program cost of about \$779 million, represents workers' compensation insurance coverage costs. Approximately 30%, or almost \$234 million, represents general liability insurance coverage costs.

Workers' Compensation and General Liability Insurance: The CA/T Project entered into agreements with the American International Group, Inc., (AIG) of New York City to provide workers' compensation insurance and general liability insurance. In addition, AIG provides payroll auditing services and financial reporting, loss control, safety, and drug programs. The workers' compensation agreement contains large deductibles or loss limits, with AIG providing coverage in excess of the loss limits. Specifically, CA/T is responsible for up to \$1 million for individual claims and up to \$3 million per occurrence. To cover the risk and certain costs that AIG incurs, the company received 8.3% of the workers' compensation premium for the first three policy years and approximately 12.5% thereafter; the

remaining amount is placed in a reserve fund to cover the risk assumed by CA/T within the loss limits. AIG received a total of approximately \$30 million as of December 31, 1999. Of the \$30 million, AIG was paid \$7.1 million for the risk it assumes. The remaining \$23 million was paid to AIG for its overhead and support services it provides. AIG has also earned approximately \$19.5 million in investment income and advisory fees from the trust as of December 31, 1999.

The general liability agreement likewise contains large loss limits. Specifically, CA/T is responsible for claims up to \$2 million per insured contractor, per occurrence, and up to \$6 million per occurrence for all insureds. The AIG policy contains separate liability limits of \$25 million for the I-90 and I-93 work areas.² To cover the expenses that AIG incurs, the company receives 12% of subject premium³ for policy years 1992-1996, 8% for policy years 1997 and 1998, and 8.7% thereafter. AIG has also received an average of 21% of the total premium to cover the risk it assumes for losses. As of December 31, 1999, AIG had been paid approximately \$29 million in premiums for its share of the risk and approximately \$11 million for overhead and expenses. According to the project's insurance advisor, AIG has earned approximately \$5.2 million in investment income from general liability reserves as of May 1999.

AIG also pays workers' compensation and general liability claims on behalf of CA/T and is reimbursed for the administrative costs to pay the claims. CA/T's administrative cost reimbursement to AIG for claims handling (investigating, negotiating, and paying claims) is set forth in the respective agreements. Since inception through October 1999, CA/T has been responsible for approximately \$50.7 million and \$18.2 million, respectively, in workers' compensation claims and general liability claims,

¹In addition to the workers' compensation and general liability insurances, CA/T's wrap-up insurance program covers builders' risk, professional liability, railroad protective, and airport contractors' liability.

² In addition to the \$25 million in general liability coverage purchased from AIG, CA/T also purchased an additional \$175 million for both I-90 and I-93 in general liability coverage from other companies.

³Subject premium is the premium amount that is placed in the trust to cover losses for which the project is liable.

including related administrative costs. AIG has incurred approximately \$711,000 for one workers' compensation claim and approximately \$3.5 million for two general liability claims on its own behalf as of March 31, 2000.

The insurance broker to CA/T is the firm Sheppard, Riley, Coughlin (SRC). SRC's work involves administration of the insurance programs, financial reporting, risk management, and coordination of claims handling /loss control. SRC and its subconsultants bill by the hour for their services and have received approximately \$11.5 million as of December 31, 1999.

Formation and Development of Insurance Reserve Funds: During the early program years, AIG and CA/T agreed that the project would establish a fund to cover losses under workers' compensation that were the responsibility of the project. As part of the agreement, CA/T established a trust to ensure that funds would be available to meet its obligations. The funds were maintained by AIG and represented CA/T's reserves and interest earned on those funds. In February 1996, CA/T established a trust at State Street Bank, and AIG deposited approximately \$186 million into the trust. Since that time, CA/T has paid its share of premium payments into the trust in accordance with its agreement with AIG. Because of premium payments and the investment income earned, the trust fund has increased to approximately \$275 million as of October 31, 1999.

Recently, AIG and CA/T agreed that the project would soon transfer its general liability reserve funds into the trust at State Street Bank to cover potential general liability losses of the project. The funds have been at AIG since November 1992 and represent CA/T's premium payments (net of losses) and interest earnings. Funds currently being held at AIG totaled an estimated \$87 million as of October 31, 1999.

The Governor has proposed withdrawing \$150 million from the insurance trust as early as November 2002 to meet the project's commitment and cash-flow requirements. The project has calculated that \$150 million can be withdrawn from the trust in November 2002, assuming the project's current good loss experience continues. CA/T is reviewing various options of restructuring the insurance program to meet

the project's cash needs, while at the same time appropriately insuring against the project's risk exposures.

Agreement between AIG and CA/T Limits Losses under the Workers' Compensation and General Liability Insurance Programs: The agreements and understandings between AIG and CA/T covering the workers' compensation insurance program limit CA/T losses to a stated percentage of the standard modified premium (SMP)⁴. The loss limit is known as the "maximum aggregate loss."⁵ The agreement for the first three years (November 1, 1992 through October 31, 1995) limits CA/T losses to 145% of the SMP. For the next three-year period (November 1, 1995 through October 31, 1998), CA/T losses were limited to 107.5% of the SMP. For the period from November 1, 1998, through project completion in 2005, CA/T expects to limit losses to 100% of the SMP.

The agreement between AIG and CA/T covering the general liability insurance likewise limits CA/T losses. In the case of general liability, losses are limited to a percentage of subject premium -- the portion of the premium that covers the risk retained by the project. An amount (non-subject premium⁶) is paid to AIG to reimburse it for the risk it assumes. These two, added together, represent the maximum aggregate loss under the general liability policy. According to its understanding with AIG, CA/T losses for the first four years (November 1, 1992 through October 31, 1996) were limited to 175% of subject premium plus the amount of non-subject premium. For the next two years (November 1, 1996 through October 31,

⁴ Standard modified premium is the payroll amount multiplied by the state established premium rate and modified by an experience factor that is based on the project's actual loss experience.

⁵ Maximum aggregate loss is the audited standard modified premium for the policy years, multiplied by the maximum loss percentage, minus the portion of the premium paid to AIG. The maximum aggregate loss is calculated on a cumulative basis by policy year.

⁶ Non-subject premium is paid to AIG to cover the risk transfer to AIG, i.e. losses above the deductible limits and maximum aggregate loss.

1998), CA/T losses were limited to 150%, and beginning November 1, 1998, losses are limited to 125% of the subject premium plus the amount of the non-subject premium.⁷

Audit Scope, Objectives, and Methodology

We reviewed premium payment schedules and other pertinent documents, including AIG's payroll audit reports for policy years beginning in 1992 and ending in 1997. We analyzed the various accounts established by CA/T and AIG to track premium payments and investment income. We reviewed OIG audit reports and consultant studies of the CA/T insurance program, in particular, and other studies of owner-controlled wrap-up insurance programs. We met with CA/T officials, including representatives of Bechtel/Parsons Brinckerhoff and Sheppard, Riley, Coughlin (SRC) to discuss the workers' compensation and general liability insurance programs. The objective of our review, which covered the period November 1, 1992 to October 31, 1999, was to determine the effectiveness of certain aspects of the management of the workers' compensation and general liability portions of the wrap-up insurance program. Our examination was made in accordance with applicable generally accepted government auditing standards for performance audits.

We did not conduct a reliability assessment of AIG's payroll audits because CA/T and SRC could not implement the agreed upon Federal Highway Administration's (FHWA) recommended method effectively. Instead, with FHWA approval, an alternative method to ensure that AIG's payroll audits were accurate was developed. However, because of its relatively recent implementation and of even more recent changes to the system, a reliability assessment could not be performed during the period of our fieldwork.

⁷ The reductions in the percentages for maximum aggregate loss for workers' compensation and general liability are contained in recently negotiated agreements between CA/T and AIG that are currently awaiting Federal Highway Administration approval.

AUDIT RESULTS

1. CA/T Project Adopts OSA Recommendation to Use \$172 Million in Excess Insurance Reserve Funds Which Will Also Save the State Borrowing Costs of \$64 Million

In September 1998, the Office of the State Auditor (OSA) reported that, because of differences between estimated and actual (audited) payrolls, the Central Artery/Third Harbor Tunnel Project (CA/T) paid more in workers' compensation and general liability insurance premiums than was needed to cover third parties or employees actually working on the project. We also reported that CA/T used or planned to use much the excess to offset premiums due and retain the balance in its insurance reserve. However, CA/T did not fully use the excess premiums as planned or pay the entire amount in estimated premiums. Consequently, coupled with subsequent years' excess premiums and certain other adjustments, the total now stands at \$103 million. Although CA/T initially responded unfavorably to our prior report's recommendation, project officials have now indicated that they plan to use \$100 million from the trust fund to offset estimated workers' compensation premiums due for policy years 1999/00 and 00/01, or \$52 million and \$48 million, respectively. By using the \$100 million from the trust fund to offset workers' compensation premiums, related state borrowing costs of an estimated \$37 million could be saved.

Agreements and understandings between CA/T and its insurance carrier American International Group, Inc., (AIG) limit the project's insurance losses under the workers' compensation and general liability insurances to an amount known as the maximum aggregate loss. After total project payments for claims and certain expenses reach the maximum aggregate loss amount, AIG is liable for any additional insurance losses. In October 1999, we advised senior project management that CA/T essentially had sufficient reserve funds to cover the project's combined workers' compensation and general liability maximum aggregate loss. At that time CA/T planned to make additional workers' compensation premium payments and to maintain the trust intact until 2017, when it would reach an estimated \$826 million. That decision did not seem to make sense because the project would be completed by then and the excess funds would not be available to help pay project costs. Accordingly, we recommended that the

project forego the remaining premium payments for workers' compensation and use these funds for other project costs. As in the case of the \$100 million noted above, CA/T management initially disagreed, citing other possible insurance costs. However, in its recently released Central Artery/Tunnel Project Finance Plan dated October 1999 and in the March 2000 finance plan update, CA/T indicates that the project will pay future workers' compensation premium payments totaling \$72 million from funds currently held in the trust which is, once again, consistent with our prior recommendation. This would further reduce state borrowing costs by another \$27 million.

a. CA/T Adopts Previous OSA Report Recommendation Regarding Freeing up Insurance Funds: In an OSA report dated September 30, 1998 (No. 97-4060-3), we reported that CA/T during the period 1992 to 1996 paid more in workers' compensation and general liability insurance premiums than was needed to cover third parties or employees actually working on the project. The overestimates occurred for the most part because construction work schedules, which proved to be too optimistic, were used for estimating purposes. Although the project used or planned to use much of the excess to pay for or offset project insurance costs, an excess of \$80 million⁸ including investment income remained. In addition, a net excess premium payment and offset for workers' compensation and general liability insurances was made for policy year 1997/98 of approximately \$23 million, bringing the current total of unused excess premiums to approximately \$103 million.

We recommended in our September 1998 report that CA/T use the excess insurance premiums for current project needs because the premium payments were based on construction work schedules that proved to be too optimistic. Because the estimates from those schedules contained labor costs that were never incurred, there can be no workers' compensation claims against those premium payments. CA/T

⁸ CA/T used only \$47.2 million in excess premiums to offset premium payments due of the \$77.5 million it planned to use when our September 1998 report was issued. In addition, we were told that estimated premiums during the period 1992 through 1996 were not always paid in full, which overstated excess premiums and related investment income by approximately \$15.4 million. Adjusting for these factors leaves a remaining excess premium for policy years 1992 through 1996 of \$80 million, including investment income of \$7 million.

initially responded unfavorably to our report's recommendation. However, in a meeting held in mid-October 1999, senior project officials informed us that they are now planning to use \$100 million from the trust fund to offset estimated workers' compensation premiums due for policy years 1999/00 and 2000/01, or approximately \$52 million and \$48 million, respectively. This use of the excess premiums is consistent with our recommendation and could reduce related state borrowing costs by approximately \$37 million. Nevertheless, although project management implemented our prior report recommendation and plans to use \$100 million in excess premium payments to meet project insurance costs, we believe that an opportunity still exists to use additional excess insurance reserves.

b. CA/T Will Forego Making \$72 million in Workers' Compensation Premium Payments and Use Trust Funds Instead: At an October 1999 meeting with CA/T senior management, we discussed our recommendation that CA/T not pay the remaining workers' compensation premium payments and instead use the funds already in the trust to meet these obligations. We reported that our analysis showed that maximum aggregate loss was essentially covered by the funds currently in the trust. CA/T officials, once again, objected to this suggestion, citing potential uninsured risks and additional possible costs for workers' compensation insurance. However, despite the objections expressed by CA/T and Sheppard, Riley, and Coughlin (SRC) senior management to our recommendation, the most recent Central Artery/Tunnel Project Finance Plan dated October 1999 (released to the OSA in February 2000) and March 15, 2000 update reports that the project will offset future workers' compensation premium payments, an estimated \$72 million, with funds from the trust. This is consistent with the recommendation made during our October 1999 meeting with senior CA/T officials. Using the \$72 million would further reduce state borrowing costs by another \$27 million.

2. Potential Uninsured or Underinsured Insurance Risks

CA/T commissioned a study to assess the potential insurance risks faced by the project. The study reported that the estimated range of potential risk, excluding workers' compensation and general liability exposures, was from a low of \$513 million to a high of \$3.7 billion. The March 2000 finance plan update

reports that the project will probably purchase an additional \$195 million in insurance coverage and for the present, self-insure the balance. The significance of this risk exposure and its potential concern to bondholders and other interested readers of the Commonwealth's Comprehensive Annual Financial Report require us to furnish this information to the audit group responsible for conducting the financial review under the Single Audit Act of the United States, as well as the Secretary for Administration and Finance, the State Treasurer, and the State Comptroller.

The matters addressed in our current report relate to the availability of CA/T trust funds to protect the project against workers' compensation and general liability insurance claims and the use of excess trust funds at State Street Bank or, as in the case of general liability, funds soon to be added to the trust at State Street Bank. Our work did not cover the adequacy of the coverage maintained under the workers' compensation or general liability policies or other insurance policies, which are part of CA/T's insurance program. Likewise, we did not evaluate the adequacy or completeness of the total insurance coverage that CA/T has to protect the interests of the project and the state.

In light of the results of a recent report entitled "CA/T Project Potential Risk Management Exposures" dated February 29, 2000, we are obligated under the disclosure principles required of independent auditors to comment on the magnitude of such risks. The study that lead to the report was commissioned by CA/T to assess the potential risks faced by the project. A memorandum dated February 29, 2000, to CA/T officials from SRC and Bechtel officials estimated the range of potential risk from a low of \$513 million to a high of \$3.7 billion.

The above report separated the risks into two categories, levels A and B. The Level A risks were characterized as insurable-type risks and, in total, ranged from a low of \$500 million to a high of \$3.1 billion. Level B was characterized as risks not usually insured. The range for Level B risks was from a low of \$13 million to a high of \$580 million. The summary listed seven Level A risks, including pollution liability; general liability risks over and above the project's current coverage of \$200 million; professional errors and omissions risks, which could exceed the current coverage of \$50 million; and

builders' risks, including delay costs, which can "affect overlapping contracts and could contribute to huge increases" in final project costs.

The most recent Central Artery/Tunnel Project Finance Plan update dated March 2000 mentions the potential risk faced by the project. The update reports that CA/T will probably purchase additional insurance coverage of \$100 million in general liability insurance at an estimated cost of \$1.5 to \$2.0 million and \$95 million in marine insurance at an estimated cost of \$2.0 to \$3.0 million. Senior project management officials told us that those costs will be covered under the existing budget. These same officials stated that the remaining potential uninsured or underinsured risks will be self-insured for the time being.

The significant amount of this potential risk exposure and its possible concern to bondholders and other interested readers of the Commonwealth's Comprehensive Annual Financial Report require us to furnish this information to the cognizant audit group responsible for conducting the state's annual financial audit under the Single Audit Act of the United States. That review should consider the potential impact and materiality that this recently identified potential risk has on the financial statements of the Commonwealth and the extent of disclosure in the state's financial reports, if any, required by professional standards.

Conclusions and Recommendations: The actions planned by the project are consistent with the recommendation in our September 1998 report to use excess insurance reserve funds for current project purposes. By using the \$100 million and \$72 million, or a total of \$172 million, from the trust to offset workers' compensation premiums due for policy years 1999/00 through 2005, related state borrowing costs of an estimated \$64 million could be saved. Because CA/T has not always used the amount of excess premium payments it has planned to use to offset future premium payments, we reiterate our recommendation that CA/T adhere to its present plan and use the \$172 million to offset workers' compensation premiums. In addition, CA/T officials should meet with appropriate officials from the

offices of Administration and Finance, the State Treasurer and the State Comptroller to ensure that proper disclosures are made in appropriate official statements and documents.

Auditee's Response: In commenting on the matters discussed in this report, the acting CA/T Project Director confirmed that:

. . . the Project plans to cease making new Worker's Compensation premium payments into the Trust for the policy year's 99/00 and 00/01, for an estimated pay-in reduction of \$100 million. Further, the current Project Finance Plan budget assumes no resumption of new Worker's Compensation premium payments for the duration of the Project through the 04/05 policy year, for an additional estimated pay-in reduction of \$72 million. We trust this will resolve the issues you raise in your Report.

Notwithstanding the foregoing, the acting Project Director advised us that the report does not take into account:

. . . that the Project is responsible to reimburse AIG for: losses on a cumulative basis; the carrying costs of the program [claims handling fees, taxes, and residual market loads (RMLs)]⁹; additional amounts such as changes in worker's compensation benefits; and that the Trust funding levels do not cover the maximum loss for Worker's Compensation and General Liability insurance.

Regarding the notification of appropriate state agencies of the Project's recently identified uninsured and underinsured project insurance risk, the acting Project Director advised us that he agrees with our recommendation.

Auditor's Reply: In connection with the first point, the actions planned by the Project are consistent with our past and current report recommendations relative to this matter. We will monitor the Project's implementation of the recommendations.

Regarding the second point, we disagree with the acting Project Director's assertion that we did not consider such items as cumulative losses, claims handling expenses, RMLs, and taxes in our computation of maximum aggregate loss. In fact, with the exception of RMLs, our computation does include these items. Regarding RMLs, according to the Project's insurance broker, the Project to date has never paid

⁹Residual Market Loads (RMLs) are charges to offset operating deficits in the state's assigned risk pool. If a deficit develops, the Division of Insurance assesses all worker's compensation carriers in Massachusetts who, in turn, pass through the charge to the insured.

an RML charge. The possibility of a future RML charge or, for that matter, an increase in the benefit levels under worker's compensation insurance is pure conjecture at this time, particularly since worker's compensation rates have declined steadily since 1991. Moreover, the Project's concurrence to offset \$172 million in premium payments will not forego the achievement of maximum aggregate loss, but rather, slow down its accumulation to the later years, thus providing a more realistic cash management approach.

In the event that the Project should need additional funds in the interim to cover any future unknown worker's compensation or general liability funding shortfall, the Project could exercise its option to issue the bonds not issued as a result of implementing our recommendations. Although the need to implement such a strategy is unlikely, it should alleviate project concerns about the availability of maximum loss coverage.

We commend the Project's positive acceptance of the third point and will monitor the implementation of our recommendation to notify appropriate state agencies of the unmet financial insurance risk facing the Project.