



Implementation of State Auditor's Recommendations

**Audits Released in January 2003
Through December 2004**

Special Report to

*Assembly Budget Subcommittee #5—
Information Technology/Transportation*

February 2005
Report No. 2005-406 A5

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February 23, 2005

2005-406 A5

The Governor of California
Members of the Legislature
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

The Bureau of State Audits presents its special report for the Assembly Budget Subcommittee No. 5—Information Technology/Transportation. This report summarizes the audits and investigations we issued during the previous two years that are within this subcommittee's purview. This report includes the major findings and recommendations, along with the corrective actions auditees reportedly have taken to implement our recommendations.

This information is also available in a special report that is organized by policy areas that generally correspond to the Assembly and Senate standing committees. This special policy area report includes appendices that summarize recommendations that warrant legislative consideration and monetary benefits that auditees could realize if they implemented our recommendations. This special policy area report is available on our Web site at www.bsa.ca.gov/bsa/reports/subcom2005-policy.html. Finally, we notify auditees of the release of these special reports.

Our audit efforts bring the greatest returns when the auditee acts upon our findings and recommendations. This report is one vehicle to ensure that the State's policy makers and managers are aware of the status of corrective action agencies and departments report they have taken. Further, we believe the State's budget process is a good opportunity for the Legislature to explore these issues and, to the extent necessary, reinforce the need for corrective action.

Respectfully Submitted,

ELAINE M. HOWLE
State Auditor

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**Report Number 2002-126, California Department
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INTRODUCTION

This report summarizes the major findings and recommendations from audit and investigative reports we issued from January 2003 through December 2004, that relate to agencies and departments under the purview of the Assembly Budget Subcommittee No. 5—Information Technology/Transportation. The purpose of this report is to identify what actions, if any, these auditees have taken in response to our findings and recommendations. We have placed this symbol ☹ in the left-hand margin of the auditee action to identify areas of concern or issues that we believe an auditee has not adequately addressed.

For this report, we have relied upon periodic written responses prepared by auditees to determine whether corrective action has been taken. The Bureau of State Audits' (bureau) policy requests that auditees provide a written response to the audit findings and recommendations before the audit report is initially issued publicly. As a follow-up, we request the auditee to respond at least three times subsequently: at 60 days, six months, and one year after the public release of the audit report. However, we may request an auditee provide a response beyond one year or initiate a follow-up audit if deemed necessary.

We report all instances of substantiated improper governmental activities resulting from our investigative activities to the cognizant state department for corrective action. These departments are required to report the status of their corrective actions every 30 days until all such actions are complete.

Unless otherwise noted, we have not performed any type of review or validation of the corrective actions reported by the auditees. All corrective actions noted in this report were based on responses received by our office as of February 7, 2005.

To obtain copies of the complete audit and investigative reports, access the bureau's Web site at www.bsa.ca.gov/bsa/ or contact the bureau at (916) 445-0255 or TTY (916) 445-0033.

WIRELESS ENHANCED 911

The State Has Successfully Begun Implementation, but Better Monitoring of Expenditures and Wireless 911 Wait Times Is Needed

Audit Highlights . . .

Our review of the State's wireless enhanced 911 (wireless E911) program revealed that:

- Under the leadership of the Department of General Services' 911 Office (General Services), California has addressed many of the concerns raised by two federal reports on nationwide implementation of wireless E911.*
- Although much work remains to be done, General Services plans to have wireless E911 implemented throughout most of the State by December 2005.*
- Most California Highway Patrol (CHP) centers do not have systems to monitor how long they take to answer 911 calls, and more than half the centers that tracked wait times did not meet the State's goal to answer 911 calls within 10 seconds.*
- Wait times were high, in part, because dispatchers at CHP centers handled significantly more 911 calls per dispatcher than did local answering points we contacted.*

continued on next page . . .

REPORT NUMBER 2004-106, AUGUST 2004

Department of General Services' and California Highway Patrol's responses as of October 2004

Since 1993, Californians have relied on a landline enhanced 911 (landline E911) system for fast, lifesaving responses from police, fire, and emergency medical services. The landline E911 system improved on the original "basic" 911 system by routing calls to dispatchers at the appropriate public safety answering points (answering points) and providing the callers' locations and telephone numbers on dispatchers' computer screens. However, the increasing use of mobile phones for 911 calls has created the need for a similar wireless emergency call system (wireless E911).

According to a 2002 report from the Federal Communications Commission (Hatfield report), national progress toward a fully functioning wireless enhanced 911 system has been delayed, with many states lacking the central coordination and dedicated funding source to implement such a system. Thus, 911 callers using mobile phones may have trouble connecting to appropriate answering points, and may not have their locations or mobile-phone numbers transmitted to dispatchers. Such problems with wireless emergency calls can compromise the success of emergency response teams in protecting life and property.

The Joint Legislative Audit Committee (audit committee) requested that the Bureau of State Audits review the State's emergency 911 response program to explore efficiency improvements and identify the cause of answering delays. We were also asked to determine the status of the State's implementation of the wireless E911 project and to identify obstacles that are contributing to any delays. Further, the audit committee asked us to identify the locations in the State where wireless 911 call wait times are longest and to determine the factors that contribute to the delays.

- ☑ *Unfilled dispatcher positions at CHP centers contributed not only to longer wait times but also to significant overtime costs for the CHP.*
 - ☑ *The CHP does not expect the number of wireless 911 calls diverted to local answering points to exceed 20 percent statewide.*
-

The Department of General Services' 911 Office (General Services), which is responsible for coordinating the State's implementation of wireless E911, has helped the State avoid problems other states face during implementation. We are concerned, however, that the California Highway Patrol (CHP), which responds to the great majority of wireless 911 calls, has inadequately monitored the calls and has had difficulty hiring dispatchers.

Finding #1: General Services cannot readily differentiate expenditures for the wireless E911 project from those for the landline 911 program.

General Services enters expenditures from the 911 program into an expenditure database it maintains, enabling it to track its costs and manage the 911 program as a whole. However, General Services does not include elements in its database that would enable it to readily differentiate expenditures for the wireless E911 project from those for the landline 911 program. Rather, General Services can easily determine only its expenditures for the entire 911 program. As a result, when we asked General Services how much it had spent to date on the wireless E911 project, it could not provide us with that information. However, we analyzed data from General Services' database and determined it had spent at least \$4.7 million on wireless E911 as of June 2004. We were not able to obtain all of the wireless costs because some are not distinguished from landline 911 costs. Although the chief of General Services' 911 Office told us that a report that captures monthly costs for wireless E911 costs is under way, the report may not completely capture all wireless E911 costs because of the missing data elements in the database. Adding data elements to uniquely identify costs as wireless or landline would enable General Services to produce accurate expenditure information for both the landline and wireless E911 systems, use the information to make ongoing comparisons of actual expenditures and planned spending, and monitor the wireless E911 project to determine if its cost estimates are reasonable.

To adequately monitor the funding and progress of the implementation of wireless E911, General Services should separately track expenditures related to the wireless E911 project, comparing actual to anticipated expenditures.

General Services' Action: Corrective action taken.

General Services states that it has revised the existing project database to allow wireless 911 costs to be more easily identified, and developed a reporting system to assist management in monitoring those costs. Further, its staff have been trained on the new expenditure tracking and reporting system.

Finding #2: The State has diverted more than \$150 million of 911 program funds to the General Fund.

Although the Revenue and Taxation Code states that the money collected from the telephone surcharge must be used solely for the 911 program, the State Emergency Telephone Number Account (emergency account) has been tapped for other purposes. In six fiscal years since 1981–82, a total of almost \$177 million has been transferred from the emergency account to the State’s General Fund, and only \$24.6 million has been transferred back. The latest transfer was in fiscal year 2001–02 for more than \$63 million. It appears that the State does not intend to repay these transfers because it does not show any amounts receivable from the General Fund on its financial statements for the emergency account.

Although General Services believes these transfers will not adversely affect its ability to implement wireless E911, we believe the transfers could jeopardize future improvements to the 911 system. The Hatfield report raises serious questions about the nation’s 911 infrastructure. Specifically, the report states that the existing landline E911 infrastructure, although generally reliable, is seriously antiquated and built on outdated technology. To be effective in an overwhelmingly digital world, the analog infrastructure may need major upgrades to extend E911 access to a rapidly growing number of nontraditional devices. In response to these issues, General Services has indicated it is currently in the conceptual stages of a project to update the State’s landline E911 infrastructure, but it does not have a financial plan or cost estimate for such a project at this time. Should the State decide it is necessary to upgrade the infrastructure, the \$152 million in net transfers may hamper its efforts. Moreover, because the current surcharge is close to the legal maximum, if additional revenue is needed, legislation would be necessary to authorize that increase.

To ensure adequate funding is available for future upgrades of the 911 system infrastructure, General Services should complete its conceptual plan for the project and, if it determines significant upgrades are needed, complete a financial plan for the project.

The Legislature should consider the effects on future 911 projects when diverting funds from the 911 program.

General Services’ Action: Pending.

General Services reports that it is continuing work on the project it calls Next Generation E911 Network, in which General Services is evaluating ways to incorporate emerging

technologies with a more flexible, sophisticated and cost effective 911 system. General Services states that it is currently evaluating responses to a request for information that it sent out to obtain industry feedback on the 911 database requirements. General Services estimates that it will complete the evaluation process in February 2005. If it determines that significant upgrades are ultimately needed, General Services states that it will complete a financial plan for the database enhancement phase of the project.

Finding #3: Most CHP centers do not have systems to monitor how long they take to answer calls.

As required by state law, the CHP answers 911 emergency calls that originate from wireless phones and are not routed to local answering points, such as police, fire, or sheriff's departments. To respond to these calls, the CHP operates 24 centers that function as answering points for wireless 911 calls. Of the CHP's 24 centers, 15 lack systems to track either the amount of time a caller waits before a dispatcher answers a call or how many calls are unable to get through because all the center's lines are busy. Therefore, at these 15 centers, the CHP can neither determine how long a caller waits before reaching a dispatcher nor monitor its activities adequately to ensure that it answers 911 calls promptly. Thus, the CHP may be unaware that problems exist.

At nine of its 24 centers, the CHP has installed an automatic call distributor to improve its ability to answer calls. The call distributor routes incoming calls to available dispatchers and, when a dispatcher is not available, places the call in a queue until one becomes available. With these systems, the CHP is generally able to monitor how long callers must wait before being answered. However, according to its 911 coordinator, the CHP has not installed automatic call distributors in 15 of the 24 centers because it believes the volume of calls received by those centers does not merit the cost of installing and using the system. Rather, each of the 15 centers has a phone system with a certain number of phone lines. When a call comes into one of the centers, an available dispatcher answers the call. If no dispatcher is available, the call continues to ring until a dispatcher can pick up the line. Additionally, if the number of calls coming into the center exceeds its number of phone lines, the caller receives a busy signal. This type of system is likely to leave already-distressed callers even more upset by the lack of assurance that someone is responding to their emergencies.

Further, the system lacks a mechanism to track how long callers wait for dispatchers to answer. Although the CHP does not have a good system to monitor wait times, the chief of the CHP's Information Management Division has indicated that the CHP closely tracks citizen's complaints about its handling of 911 calls.

According to the CHP's 911 coordinator, as part of its implementation of wireless enhanced 911 (wireless E911), the CHP will be equipping each of these 15 centers with technology that will allow the CHP to monitor the amount of time callers wait before a dispatcher answers the call. The CHP expects to have the new systems in place by the end of 2005, consistent with the State's plan for implementation of wireless E911.

To assist it in answering 911 calls in a timely manner, as the CHP implements wireless E911, it should include a wait time monitoring system at the 15 centers that currently are without one.

CHP Action: Partial corrective action taken.

The CHP states that it is in the process of purchasing a management information system for all of its communications centers that will enable each center to monitor wait times. The CHP estimates that installation will be complete by December 31, 2005, dependent upon availability of funding and personnel resources.

Finding #4: The CHP handles significantly more 911 calls per dispatcher than any of the four local answering points we reviewed.

For the nine centers that collected data, the CHP received between 598 and 1,733 calls per dispatcher each month from January through March 2004, whereas the local answering points we contacted received from 95 to 214 calls per dispatcher in the same period. The difference in the calls per dispatcher between the CHP and the local answering points is significant because even with the implementation of the wireless E911 project and its associated benefits, if the CHP does not have enough dispatchers to answer the wireless 911 calls it receives, it will likely continue to struggle to answer calls within the 10-second goal set by the State.

Disparities in staffing, however, do not fully explain the wide range in wait times at the nine CHP centers. For January through March 2004, the center with the highest average number of calls (1,733) per staff person, the Orange County Region, also

had the shortest wait time, 4.7 seconds on average. On the other hand, the Los Angeles and San Francisco Bay Area regions had significantly fewer calls per staff and longer wait times—862 calls with a wait time of 49.2 seconds for Los Angeles and 598 calls with a wait time of 38 seconds for the San Francisco Bay Area Region. Dispatchers at CHP centers, as well as those at some local answering points, have duties other than answering emergency calls, such as answering nonemergency calls, but we do not know the relative impact on wait time of these additional duties at the various sites. The performances at the Los Angeles and San Francisco Bay Area CHP centers may also have been affected by their implementation of wireless E911. The 911 supervisor at the Los Angeles CHP center points out that implementation presented an additional challenge because the center's staff had to accustom themselves to the display information from the wireless E911 calls they answered while continuing to work with the original system on other calls. Further, he indicated that test calls for wireless E911 implementation take up time, as the dispatcher has to confirm that various data are correctly transmitted.

To assist it in answering 911 calls in a timely manner, the CHP should identify additional practices that enable some centers, such as Orange County, to answer 911 calls in a timely manner despite high calls to staff ratios, and determine if the practices can be incorporated at other centers.

CHP Action: Corrective action taken.

The CHP reports that it is addressing this recommendation through its Command Assessment Program, which requires biennial evaluation of the management practices and the essential functions of each CHP command. The CHP will incorporate innovations noted in these assessments into the training materials and curriculum at its statewide Dispatch Academy. The CHP also states that in November 2004, it will prepare written policy requiring division commanders to forward the assessment findings and recommendations pertaining to dispatch operations directly to the Information Management and Training divisions. The CHP believes this will expedite the review and consideration of findings by CHP personnel with responsibility for statewide dispatch policy. The CHP also adds that successful practices will be added to the agenda of its Communication Center Commander Conference, which it will convene no later than the third or fourth quarter of 2005, assuming funding is available for travel.

Finding #5: The CHP does not have a benchmark for the number of staff needed to answer calls.

According to the assistant commander of its Telecommunications Division, the CHP has not established a benchmark for the number of 911 calls per dispatcher that would allow the CHP to answer 911 calls promptly. If it had a benchmark, the CHP could compare its centers' current ratios of 911 calls per dispatcher against the benchmark to assess the need for additional dispatchers. To establish a reasonable benchmark, the CHP would need to develop a better system for tracking the total number of 911 calls received at each of its centers.

Currently, to monitor the number of 911 calls it receives, the CHP requires each center to track the number of 911 calls it handles during one day each month and report these counts to the CHP's Telecommunications Division. The CHP then multiplies the counts by the number of days in that month to arrive at an estimate of the total 911 calls the CHP answered for the month. However, this process has resulted in unreliable data. The CHP used a fully manual tally system to count 911 calls in 19 of the 24 centers. In these centers, the CHP relied on dispatchers to make tally marks on a sheet each time they completed a 911 call. However, administrators at several centers told us this process did not produce accurate results because it is difficult for dispatchers to remember to tally after each call. In fact, four of the 19 centers preparing manual counts had automatic call distributors, which enable the centers to produce automated reports detailing the number of 911 calls they receive each month.

Additionally, this process assumes that the activity level of one day will be representative of the entire month. However, the volume of 911 calls the CHP receives is affected by factors that are highly variable, such as weather and major incidents. Therefore, one day would not necessarily be representative of others. Because these centers report the number of 911 calls for only one day each month, the results are not necessarily reliable and may result in an overstatement or understatement of call activity. Only the San Diego center reported calls for each month based on its automated call distributor data. Additionally, another center with the automated call distributor, Stockton, had not submitted tally reports during 2003.

During 2003, the Los Angeles CHP center performed manual tallies of its 911 counts. However, these manual counts significantly understated its actual number of 911 calls—by almost 705,000, or 43 percent. On the other hand, the Fresno CHP center produced

manual call tallies that significantly overstated its 911 calls—by almost 222,000, or 76 percent. Because the CHP does not track actual 911 calls at all its centers, we are unable to determine whether, in total, the CHP overstated or understated its 911 calls. Nonetheless, it is clear that the CHP's current process to develop an estimate of the number of 911 calls it receives produces unreliable results. Without reliable data relating to the number of 911 calls its centers answer, the CHP will have difficulty developing a benchmark for the number of 911 calls per dispatcher that would allow the CHP to answer 911 calls promptly.

To assist it in answering 911 calls in a timely manner, the CHP should implement a reliable system for monitoring the number of 911 calls its centers receive. Additionally, it should develop a benchmark reflecting the ratio of 911 calls per dispatcher that would allow the CHP to answer 911 calls within the state goal of 10 seconds.

CHP Action: Partial corrective action taken.

The CHP states that the management information system it is implementing, as described in finding #3 above, will also enable it to monitor the call volume at each of its call centers. Additionally, the CHP states that it intends to develop a benchmark that will consider call volume data, communication center size, and incorporate shift parameters that affect high traffic volumes along with seasonal and special events that can induce peaks. The benchmarks will be used to evaluate and validate dispatch staffing levels. The CHP reports that it is developing a committee comprised of management and dispatch personnel to evaluate study findings and develop a valid staffing matrix. This committee will first meet during the second quarter of 2005.

Finding #5: CHP dispatchers' salaries are generally lower than those of dispatchers at the local answering points.

We compared the dispatcher salaries paid by the CHP in its Los Angeles and Sacramento centers with those paid by selected local answering points in the same areas. The salaries of CHP dispatchers are generally lower than those of dispatchers at the local answering points we contacted. Although the starting pay for dispatchers at the Sacramento County Sheriff's Office is lower than the CHP's, all other local answering points we contacted paid starting salaries ranging from \$40 to \$842 per month more than the starting salaries for CHP dispatchers.

To help attract and retain dispatchers at its centers, the CHP should request that the Department of Personnel Administration perform a statewide salary survey to determine the adequacy of the current salaries for CHP dispatchers.

CHP Action: Partial corrective action taken.

The CHP states that it will request the Department of Personnel Administration conduct a statewide survey of dispatcher salaries prior to the end of March 2005.

STATEWIDE PROCUREMENT PRACTICES

Proposed Reforms Should Help Safeguard State Resources, but the Potential for Misuse Remains

Audit Highlights . . .

Our review of the State's procurement practices revealed the following:

- Until the governor's May 2002 Executive Order, departments did not compare prices among California Multiple Award Schedule vendors.*
 - Inadequate oversight by the Department of General Services (General Services) contributed to the problems we identified with departments' purchasing practices.*
 - Without comparing prices, the State purchased millions in goods and services for the Web portal from vendors that played a role in defining the approach and architecture for the project.*
 - Estimated Web portal project costs given to administrative control agencies and the Legislative Analyst's Office were sometimes inaccurate.*
 - Before the Executive Order, departments frequently misused alternative procurement practices—sole-source contracts and emergency purchases.*
-

REPORT NUMBER 2002-112, MARCH 2003

Department of General Services and the Stephen P. Teale Data Center responses as of March 2004

The Joint Legislative Audit Committee (audit committee) asked the Bureau of State Audits to audit the California Multiple Award Schedule (CMAS) program and the State's sole-source contracting procedures. Specifically, the audit committee asked that we review the process used by General Services when establishing the CMAS vendors list and the procedures and practices used to identify qualified contractors and consultants when using noncompetitively bid and CMAS contracts to procure goods and services. The audit committee also asked us to include in our review procurements related to the state Web portal.

Finding #1: Departments largely ignored recommended procedures for purchasing from CMAS vendors.

Our review of CMAS purchases made by nine state departments revealed that, before May 2002, when an Executive Order called for wholesale changes in the State's procurement practices, few departments took prudent steps, such as comparing prices, to ensure that they obtained the best value when acquiring goods and services from CMAS vendors. For example, largely at the request of two former officials of the Governor's Office, the Department of General Services (General Services), the Stephen P. Teale Data Center (Teale Data Center), and the Health and Human Services Data Center purchased more than \$3.1 million in goods and services for the state Web portal from one CMAS vendor without comparing prices or using some other means to determine that the selected vendor provided the best value to the State. Additionally, General Services and the Teale Data Center purchased items for the Web portal totaling \$690,000 that were not included in the vendors' CMAS contract.

Recent changes to the CMAS requirements have slowed but not halted departments' misuse of the CMAS program. Specifically, departments did not obtain at least three price quotes, as required, for two of the 25 CMAS purchases made after the date of the Executive Order.

In order to ensure that the State receives the best value when acquiring goods and services, we recommended that departments stress adherence to all CMAS requirements and reject requested purchases if these requirements are not met. Additionally, departments should review the appropriate CMAS contract to ensure that the requested good or service is included in the contract.

General Services' Action: Corrective action taken.

In February 2004, General Services issued a new Purchasing Authority Manual (PAM) governing the State's procurement function. The PAM provides the requirements for obtaining and maintaining delegated purchasing authority. It also serves as the resource that assists in ensuring departments apply consistent and sound business practices in state purchasing. The PAM contains purchasing authority requirements, including statutes, regulations, and policies and procedures applicable to information technology (IT) goods and services and non-IT goods. The PAM also includes information on how departments maintain compliance with the purchasing authority program.

Finding #2: The State's failure to compare prices created the appearance that some companies may have had an unfair advantage in selling Web portal components to the State.

The Web portal was developed with guidance from a group of executives from several private businesses, some of which later sold products for the project. Members of this group, called the Web Council, gave their "unanimous blessing to the portal's conceptual approach and its specific architecture." According to the minutes and agendas from Web Council meetings, representatives of several companies participating in the council made presentations to discuss their companies' products. Three of these companies ultimately sold hardware and software components to the State for the Web portal totaling \$2.5 million. These companies sold their products to

the State, either directly or indirectly through resellers with CMAS contracts. The concept of obtaining guidance from industry experts is meritorious if, after obtaining the guidance, the State engages in an open, competitive procurement process. However, if obtaining advice from industry experts is followed by procurement of their goods or services without comparing prices to those offered by others, as was the case with numerous CMAS purchases for the Web portal, an appearance of unfairness is created.

In September 2002, the Teale Data Center assumed responsibility for providing management, maintenance, and support for the Web portal project. To ensure that the State's investment in the Web portal is a prudent use of taxpayer resource, it should use the competitive bidding process for purchasing goods and services for the project.

Teale Data Center Action: Corrective action taken.

Teale Data Center regularly utilizes General Services' contract registry to seek competition. Further, it is standard Teale Data Center practice to exceed the minimum number of bids required for informal bids as this practice ensures diverse vendor participation. Finally, as the existing Web portal services and maintenance contracts required renewal, Teale Data Center has competitively bid all subsequent new contracts.

Finding #3: General Services and former officials of the Governor's Office did not follow state policy governing information technology projects.

General Services—the administrator of the Web portal project—failed to obtain the necessary approvals from the former Department of Information Technology (DOIT) and the Department of Finance (Finance) before significant changes were made to the Web portal project. The changes, which increase previously approved project costs by 94 percent, were made at the direction of the former director of eGovernment. Among the changes, estimated to cost \$9.2 million, were significant enhancements related to the energy crisis and terrorist threats and ongoing maintenance provided by consultants rather than state personnel, as was originally planned. General Services submitted a special project report to DOIT and Finance explaining the reasons for the increased cost and seeking approval for the enhancements. However, the enhancements were completed four to six months before General Services submitted the report.

Additionally, General Services did not adequately coordinate and monitor Web portal purchasing and reporting activities. As a result, the special project reports submitted to DOIT, Finance, and the Legislative Analyst's Office (LAO) did not accurately account for all Web portal purchases. Specifically, at least one special project report that General Services submitted was inaccurate because it did not include more than \$1.3 million in Web portal costs incurred by its Telecommunications Division and the Health and Human Services Data Center. According to the former chief of General Services' Enterprise Business Office, only costs that were under her control were reported to the individual preparing the special project reports.

Finally, it appears that responsible officials at General Services were unaware that a revised Web portal project report, which nearly doubled the estimated cost of the project, had been submitted to DOIT, Finance, and the LAO reflecting a significant increase in total project costs. According to officials at Finance, they met with former officials of the Governor's Office and representatives from General Services to discuss the proposed cost increases. The officials at Finance stated that it is not uncommon for minor modifications to be made to a special project report after it has been submitted for approval. However, we believe that changes to a project that effectively double the estimated cost of the project do not constitute minor modifications. Moreover, Finance could not provide any documentation of its analysis of the proposed project changes and resulting cost increase. Nevertheless, it approved submitting the revised estimates to the Legislature based on available information, given the high priority of the project.

To ensure that Web portal costs are properly accounted for, the Teale Data Center should monitor project expenses by recording estimated costs when contracts and purchase orders are initiated and actual costs when paid. The Teale Data Center should also submit special project reports to Finance and the LAO when required and ensure that reported costs accurately reflect actual expenditures and commitments to date. Finally, the data center should make certain that special project reports contain estimates for at least the same number of years that earlier reports cover so that reviewers can easily identify changes in the overall projected costs.

Teale Data Center Action: Corrective action taken.

The Teale Data Center's administrative processes require an internal analysis and approval of estimated costs prior to the initiation of the bidding process. If the resulting procurement activity results in costs that exceed the original estimate, approval is required before acquisition can be completed. Teale Data Center's Finance Division has developed a spreadsheet used to monitor projected versus actual expenditures. Should requests for acquisitions vary from the original plan, they are analyzed to determine the reason for the change and if it is within budget authorization prior to the expenditure being made. The spreadsheet is updated monthly and is shared with the manager of the Web portal and the assistant director of the Enterprise Division. Furthermore, the Teale Data Center will continue to submit special project reports to Finance and the LAO, when required, which will accurately reflect all costs for the Web portal. Finally, the Teale Data Center will ensure that any future special project report and feasibility study report have consistent reporting periods.

Finding #4: The use of multiple departments to make purchases for the Web portal resulted in payments for services that were required under earlier agreements.

Several departments made Web portal purchases rather than one office coordinating and making all purchases. Consequently, no one office carefully tracked existing purchases and compared them to newly requested purchases, and the State contracted for some services even though the same services had already been required under earlier agreements. For example, General Services' Telecommunications Division issued a \$173,000 purchase order to a consulting firm for project management of ongoing operations and maintenance of the Web portal. However, the terms and services of this contract duplicated some of the terms and services of another purchase order that General Services' Enterprise Business Office had previously issued to the consulting firm.

Similarly, the Health and Human Services Data Center entered into a \$246,000 agreement with a consulting firm to create a plan to develop a Web portal mirror site. In reviewing the three reports that the consulting firm submitted in fulfillment of its agreement with the Health and Human Services Data Center,

we found that the content of the reports was information the consulting firm was already obligated to provide under an earlier contract with General Services.

General Services should review past payments to the consulting firm and another vendor by General Services, the Health and Human Services Data Center, and the Teale Data Center to ensure that the State has not paid for goods or services twice. If duplicate payments were made, General Services should recover them.

General Services' Action: Corrective action taken.

General Services reviewed the transactions in question and concluded that duplicate payments did not occur. However, General Services did note several instances when the scope of work supporting a purchase order did not clearly, concisely, or accurately reflect key information. Consequently, General Services has recognized that this is an area for improvement within the State's contracting program and is including this subject matter within its training and certification program.

Finding #5: Recent actions by General Services and the Teale Data Center have reduced Web portal costs.

According to the most recent special project report, jointly submitted by General Services and the Teale Data Center, total estimated costs of the Web portal were nearly \$6 million less than previously reported. The reduced costs were largely due to cutbacks in Web portal maintenance that included a major reduction in the number of hours for the consulting firm to maintain the portal.

In June 2002, the interim director of DOIT stated that the consulting firm's Web portal agreements were expensive and little had been done to transfer the consulting firm's expertise to state employees so that a state department could ultimately operate the portal. He recommended that General Services extend the consulting firm's contract until a competitively selected contractor became available. He also recommended reducing the size of the contract by restricting the consulting firm's role to limited maintenance and knowledge transfer functions, ultimately turning over the maintenance of the Web portal to state employees.

In January 2003, the Teale Data Center entered into a six-month contract with the same consulting firm for \$350,000 in Web portal maintenance. Unlike the manner in which previous maintenance contracts had been established, however, the Teale Data Center solicited proposals from 20 different companies and six firms responded. The Teale Data Center evaluated the responses and eventually chose the consulting firm, achieving a 39 percent average reduction in the hourly rate over previous noncompetitively bid agreements with the firm. Therefore, the Teale Data Center should continue to use the competitive bidding process for purchases of goods and services for the project.

Teale Data Center Action: Corrective action taken.

The Teale Data Center strongly supports the competitive bid process. The Teale Data Center independently seeks alternative suppliers and uses the General Services' contract registry to seek competition. Further, it is standard practice at the Teale Data Center to exceed the minimum number of bids required for informal bids.

Finding #6: State departments improperly used sole-source contracts and emergency purchase orders.

Before the May 2002 Executive Order, state departments often did not adequately justify the need for sole-source contracts. Requests for sole-source contracts were often ambiguous or failed to demonstrate that the contracted good or service was the only one that could meet the State's needs. In addition, because they failed to make sufficient plans for certain purchases, departments often used sole-source contracts inappropriately. We reviewed 23 requests for sole-source contract approval submitted by various departments and found eight examples of departmental misuse of this type of exemption. General Services, however, approved all 23 requests. In four requests that General Services approved, the departments failed to provide the kind or degree of justification we expected to see. We could not determine whether the circumstances warranted a sole-source contract for one of the 23 requests because the department's justification was ambiguous. Finally, in three of the 23 sole-source requests, the departments sought the contracts because they failed to properly plan for the acquisition and, as a result, did not have time to acquire the goods or services through the normal competitive bidding process.

Similarly, departments frequently misused the State's emergency purchasing process by failing to meet the legal requirements for this type of procurement. For 17 of the 25 purchase requests we reviewed, the departments were requesting emergency purchases. In the remaining eight cases, the departments were requesting approval for reasons other than meeting emergency needs, such as seeking the purchase of items to meet special needs. Although General Services did not have the proper authority to grant exceptions for these purchases, it approved all eight.

Of the 17 emergency purchase requests totaling \$21.3 million, nine totaling \$2.3 million completely failed to identify the existence of an emergency situation that fell within the statutory definition or to explain how the proposed purchase was related to addressing the threat posed by an emergency.

State departments should require their legal counsel to review all sole-source contracts and emergency purchases to ensure they comply with statutes governing the use of noncompetitively bid contracts. Departments should also ensure that adequate time exists to properly plan for the acquisition of goods and services.

Moreover, General Services should require its Office of Legal Services to review all sole-source contract requests above a certain price threshold. General Services should also implement review procedures for sole-source contracts and emergency purchase orders to ensure that departments comply with applicable laws and regulations and require departments to submit documentation that demonstrates compliance. General Services should reject all sole-source and emergency purchase requests that fail to meet statutory requirements. Finally, General Services should seek a change in the current contracting and procurement laws if it wants to continue to exempt purchases from competitive bidding requirements because of special or unique circumstances.

General Services' Action: Partial corrective action taken.

General Services has implemented policies and procedures that provide for its Office of Legal Services to review all non-competitively bid contract requests that exceed \$250,000. Additionally, General Services has developed a form that requires detailed information be provided to justify non-competitively bid procurements. Specifically, the form requires departments to provide detailed responses

for various issues, including (1) why the acquisition is restricted to one supplier, (2) background events that led to the acquisition, (3) the consequences of not purchasing the good or service, and (4) what market research was conducted to substantiate the lack of competition. Finally, General Services is working to enhance the form to provide additional assurance that non-competitive procurements are properly justified. General Services has existing policies in place to review and reject all sole-source and emergency purchases requests that fail to meet statutory requirements.

Legislative Action: None.

General Services is reviewing the need for additional exemption authority related to competitive bidding. At this time, a final decision has not been made on the need to pursue additional authority in this area.

Finding #7: General Services needs to strengthen its oversight of state purchasing activities.

General Services has provided weak oversight and administration of the CMAS program. We found that General Services, which is responsible for auditing state departments for compliance with contracting and procurement requirements, is not performing the audits required by state law. Specifically, between July 1999 and January 2003, General Services had completed only 105 of 174 required reviews. Moreover, less than one-half of the 105 reviews were completed on time.

Additionally, General Services does not sufficiently review CMAS vendors to ensure that they comply with the terms of their contracts with the State. For instance, from July 1998 through September 2002, General Services had only reviewed 29 of 2,300 active CMAS vendors. Perhaps more importantly, General Services does not always make sure that other state and local government contracts on which CMAS contracts are based are, in fact, awarded and amended on a competitive basis. As a result, the State may be paying more than it should for the goods and services it purchases. Finally, General Services does not consistently obtain and maintain accurate data on departments' CMAS purchases. Consequently, it is sometimes charging other state departments more than it should for administrative fees. For example, we reviewed 90 CMAS purchases at nine departments and found 24 instances in which General Services had either entered the incorrect amount in its accounting system or had no record of the

transaction. We further reviewed 10 of the 24 transactions and determined that General Services had overcharged departments more than \$219,000.

We recommended that General Services implement the recommendations made by the Governor's Task Force on Contracting and Procurement Review (task force), which include increasing the frequency of audits and reviews of state departments. General Services should consider reducing or eliminating the delegated purchasing authority of departments that fail to comply with contracting and procurement requirements. Additionally, General Services should increase the frequency of its reviews of CMAS vendors and ensure that processes established by other governmental entities for awarding and amending contracts are in accordance with CMAS goals. Finally, General Services should consult with departments to determine what can be done to facilitate monthly reconciliation of CMAS purchasing and billing activities.

General Services' Action: Partial corrective action taken.

General Services is committed to fully addressing the recommendations contained in the task force's report and is continuing to assign resources to that activity. For instance, General Services has initiated a cornerstone of the procurement reform effort—the training of state procurement officials. Additionally, General Services implemented a uniform process for reporting the State's procurements. Specifically, a database is now readily accessible to provide comprehensive information on the State's purchasing and contracting activities. Beginning July 1, 2003, all state agencies were required to enter summary information via the Internet for all purchasing and contracts over \$5,000. The system, entitled State Contract and Procurement Registration System, captures information that provides General Services with data to oversee the State's contracting and procurement functions.

Further, representatives of General Services have met with executive management of Finance's Office of State Audits and Evaluations (OSAE) to discuss the feasibility of revising existing audit procedures to provide additional coverage of CMAS and sole-source bid contract transactions. The OSAE agreed that its existing guide for evaluation of internal controls within state agencies should be strengthened in those areas. It was estimated that the revised guide would

be complete by April 2004. In addition to the revised guide, General Services' audit and review staff will limit their activities in an individual department if the work performed by that department's internal audit unit sufficiently addresses areas under the purview of General Services. General Services noted that compliance with purchasing and contracting requirements is a major part of maintaining approved purchasing authority. If these requirements are not met, purchasing authority will be reduced or eliminated. General Services believes implementing a program that results in more frequent vendor reviews should be a priority. However, the State's current budget situation limits General Services' ability to assign additional resources to this activity. In the interim, General Services is focusing its limited resources on the review of the most frequently used CMAS suppliers. General Services has also implemented policies and procedures intended to strengthen the review of processes used by other governmental entities when awarding contracts to ensure that they meet the State's standards for solicitation assessment. Policies and procedures also provide that only the most senior CMAS analysts perform the reviews. Finally, General Services believes that the implementation of a mandatory statewide electronic procurement system would enable it to capture department purchasing activity in real time and would provide the ultimate solution to its billing challenges. However, implementation of such a system is not feasible in the current fiscal environment. As an interim corrective measure, in September 2003, General Services issued a memorandum to all departments advising them of the importance of regularly reconciling their purchasing information with invoices.

Finding #8: Although task force recommendations address most weaknesses, some cannot be immediately implemented and others are needed.

In August 2002, the task force recommended 20 purchasing reforms, completing its directive from the governor's Executive Order issued on May 20, 2002. The recommendations, which focus on the use of the CMAS program and noncompetitive bid contracts, call for comprehensive changes in the State's contracting and procurement procedures. Prompted by the controversy surrounding the Oracle enterprise licensing

agreement, the governor asked the task force to review the State's contracting and procurement procedures and recommend the necessary statutory, regulatory, or administrative changes to "ensure that open and competitive bidding is utilized to the greatest extent possible." The task force's recommendations include the following:

- Departments must compare prices among CMAS vendors.
- Acquisitions of large information technology projects using CMAS contracts and master agreements should be prohibited unless approved in advance.
- General Services needs to establish specific criteria to qualify piggybacking vendors.¹
- General Services should increase the frequency of its compliance reviews of purchasing activities of state departments.
- General Services should implement a new data integration system to address deficiencies in its ability to capture data and report on contracting and procurement transactions.

In general, we believe the task force's recommended changes, if properly implemented, should address many of the weaknesses in the CMAS program and noncompetitive bidding procedures we identified in our report. However, we believe that additional steps should be implemented based on the results of our audit. For example, General Services should revise its procedures for awarding contracts to vendors based on contracts they hold with other government entities because it often awards CMAS contracts without adequately evaluating the competitive-pricing processes that other state and local governments use to award base contracts.

General Services also needs to develop classes that provide comprehensive coverage of sole-source contracts, emergency purchases, and CMAS contracts, and departments need to ensure that affected personnel attend the classes periodically. Also, because most of the departments we surveyed indicated they had experienced problems working with CMAS vendors, General Services should also consider holding periodic information sessions with the vendors. Further, in addition to implementing a new data integration system, which both

¹ Vendors that do not have an existing federal multiple-award schedules contract but obtain a CMAS contract by agreeing to provide goods and services on the same terms as vendors that do have a multiple-award contract through the federal or some other government entity, are commonly referred to as piggyback contracts.

General Services and the task force acknowledge is a long-term solution, we believe General Services should work with departments to establish a process to reconcile their purchasing information with invoices and reports prepared by General Services. Such reconciliation would allow departments to report and correct errors to General Services, thereby preventing incorrect billings and increasing the reliability of purchasing data. Finally, to increase departments' ability to access online information about the CMAS program, General Services should explore the possibility of including copies of vendor contracts on its Web site.

General Services' Action: Partial corrective action taken.

As previously stated, General Services is continuing to focus efforts on obtaining assurance that processes used by other governmental entities to execute contracts are in accordance with CMAS goals. For instance, General Services' staff, through a review of documents and conversation with the awarding entity, must ensure that the process used by the awarding entity meets the State's standards for solicitation assessment. As of June 2003, approximately 700 state employees had attended classes within General Services' comprehensive training and certification program. These classes dealt with acquisition ethics and leveraged procurement. However, a backlog of approximately 900 potential participants existed. Consequently, General Services is continuing to provide these courses as part of its Basic Certification Program. Additionally, General Services is offering a number of workshops on such subject matters as preparing a statement of work, documenting the procurement process, evaluating bids, and contracting for services. Procurement professionals who have completed the Basic Certification Program and at least two workshops will be eligible for the Intermediate Certification Program that is scheduled for implementation in September 2004. The Advance Certification Program, General Services' final certification program, is also planned for implementation during fiscal year 2004-05.

DEPARTMENT OF TRANSPORTATION

Various Factors Increased Its Cost Estimates for Toll Bridge Retrofits, and Its Program Management Needs Improving

Audit Highlights . . .

Our review of the Department of Transportation's (Caltrans) Toll Bridge Seismic Retrofit Program (program) found that:

- Cost estimates have increased \$3.2 billion since April 2001, including a \$900 million program contingency reserve.*
 - Approximately \$930 million of the \$3.2 billion increase relates to the May 2004 bid for the superstructure of the signature span of the San Francisco-Oakland Bay Bridge's east span (East Span); the remainder is attributable to other categories.*
 - Various factors have driven cost increases, including volatile markets for steel and contractor services, a lengthening of the East Span's timeline, and Caltrans past experience with the program, which is reflected in contingency reserves.*
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REPORT NUMBER 2004-140, DECEMBER 2004

Department of Transportation response as of December 2004

The Joint Legislative Audit Committee (audit committee) requested that the Bureau of State Audits examine the delays and higher cost estimates for the Toll Bridge Seismic Retrofit program (program). Specifically, the audit committee requested that we identify the factors contributing to additional capital and support cost increases, which of these factors were unforeseen at the time that the AB 1171 estimates were prepared, and the extent to which the design of the signature span of the San Francisco-Oakland Bay Bridge's east span (East Span) independently contributed to costs increases. In addition, the audit committee requested that we examine Caltrans' basis for the program's schedule, evaluate the adequacy of procedures for modifying cost estimates and completion dates, and determine whether Caltrans employs best practices when managing projects that cost more than \$1 billion. Specifically, we found:

Finding #1: Rising costs and delays plague completion of the State's largest public safety project.

In its August 2004 report to the Legislature on the status of the program, Caltrans disclosed cost estimates that were \$3.2 billion, or about 63 percent, higher than the estimates it prepared in April 2001. Caltrans' 2001 estimates formed the basis for the program budget the Legislature adopted in AB 1171. Caltrans' reevaluation of program costs was triggered in May 2004 by receiving the sole bid for the signature span's superstructure, which exceeded Caltrans' 2001 estimate by \$930 million. Caltrans' revised cost estimate for individual toll bridges was about \$2.8 billion more than the cost estimates used for AB 1171, while the estimated program contingency reserve rose by \$452 million.

The East Span accounted for most of the increases with \$2.5 billion more in estimated costs. In turn, the East Span's signature span component was estimated to cost \$1.3 billion more. Since 2001, the East Span also has been the source of the program's longest schedule delays and this delay can be attributed almost entirely to the signature span. Caltrans postponed the bid opening for the signature span's superstructure by almost one year, and agreed to give contractors three more years than it originally envisioned to complete it.

Finding #2: Various factors contributed to higher cost estimates and delays.

No one factor alone caused the significant rising cost estimates affecting the seismic retrofitting of selected toll bridges. The multiplicity of factors, along with the limited access Caltrans has to the proprietary data that supports contractors' bids, makes it difficult to attribute dollar effects to specific causes. Nevertheless, comparing Caltrans' two cost estimates, from 2001 and 2004, we found that much of the program's cost increases occurred in several areas. Estimates for structural steel, contractor overhead, and contingency reserves for the East Span's skyway and signature span increased by \$598 million, \$585 million, and \$207 million, respectively. In addition, estimates for the program's support costs rose \$556 million and the program contingency reserve increased by \$452 million.

Contributing to the higher cost estimates have been volatile markets for materials and contractor services, which have yielded bids that include higher than expected steel and contractor overhead costs. For example, we estimated that a 26 percent increase in steel prices in 2004 added \$95 million to structural steel costs. With regard to the remaining cost increases in these areas, Caltrans said it believes the bidding contractor may have added on a margin to its materials costs to cover other project costs not identified individually in the project bid items. Caltrans said that future significant material escalations, bonding and insurance costs, and the perceived risk of the project might have been included in such a margin. Caltrans also said that market conditions after September 11, 2001, led to higher insurance and bonding costs, and greater scrutiny of risk on large projects, which has contributed to higher overhead bid amounts.

Schedule delays and contract extensions also increased contractor overhead and Caltrans support costs. Caltrans' efforts to increase competition among contractors by extending the

bidding period for the signature span's superstructure, and its lengthening of the time allowed for contractors to complete this contract, pushed out the program's completion date by four years. These changes indicate that the signature span's superstructure was more complicated than Caltrans originally envisioned and so could be expected to use considerably more administrative resources.

In addition, Caltrans established contingency reserve amounts for the skyway, signature span, and the Richmond-San Rafael Bridge that are significantly higher than contingency reserve levels of more typical projects, reflecting the greater amount of risk these projects have for schedule delays and cost overruns. Caltrans determined these contingency reserve amounts based on the results of a probabilistic risk analysis model for construction costs used by a consultant. This represents the reserve level that the consultant concluded was required to provide an 80 percent likelihood that the program cost estimate will not be exceeded.

Finding #3: By not consistently following risk management best practices, Caltrans has not addressed the East Span project's risks adequately.

Even though Caltrans has acknowledged that risk management is an essential component of project management, it has not focused sufficiently on managing the risks of the East Span, including the self-anchored suspension component, or signature span. Caltrans did not create a risk management plan to define how it would identify, prioritize, quantify, respond, and track risks for the project. Although Caltrans identified certain risks and opportunities through quality assurance, risk analyses, and information sessions with potential suppliers, steel fabricators, and contractors, Caltrans has not performed some of the major processes—planning, tracking, and quantifying—necessary to maximize the chances of positive rather than adverse events in the East Span project.

In October 2004, Caltrans put together a summary that is supposed to be the risk management plan for the East Span project. This summary includes primarily a historical description of methods Caltrans used to identify risks, and names of individuals who are a part of its Project Quality/Risk Assessment/Oversight Group. However, the summary omits how Caltrans will perform key risk management processes. For example, it does not define how Caltrans will identify and quantify risks

throughout the life of the project and how risk activities will be documented and tracked. Moreover, Caltrans created this summary especially for us, so it was not actually used as the plan to manage the East Span project's risk.

Further, Caltrans did not update its cost estimates to incorporate quantified risks identified through project analyses. Three of the five analyses it initiated included such information. According to Caltrans' director, after AB 1171 became law, Caltrans managed to the budget set in the bill by mitigating potential risks. He stated that since 2001, the cost update in Caltrans' August 2004 report included its first program-wide cost update and that an August 2004 cost review performed by an outside consultant was the only program-wide quantitative risk analysis.

We recommended that the department establish a comprehensive risk management plan, quantify the effect of identified risks in financial terms, and establish documents to track identified risks and related mitigation steps.

Caltrans Action: Pending.

With the assistance of consultants, Caltrans indicates that it has developed a risk assessment report. Further, Caltrans says that it will designate a dedicated project risk management coordinator (coordinator) who will regularly update the risk assessment and prepare a risk response plan in accordance with Caltrans' Project Risk Management Handbook. The coordinator will also conduct quarterly meetings of the risk response team to reevaluate risks, revise the risk response plan, and determine whether the risk response plan is being followed. Caltrans states that the risk response team will classify risks as high, moderate, or low impact and will estimate the most probable and credible financial impact of each high impact risk. Caltrans also says the coordinator will maintain records assessing progress in implementing the risk response plan. Finally, Caltrans states that the project manager will incorporate the risk response plan in the evaluation of project budgeting, control, and monitoring activities.

Finding #4: Caltrans does not regularly update program cost estimates to monitor the program's budget appropriately.

In managing the project's cost, Caltrans has not followed generally accepted cost management practices to ensure that the project could be completed within its 2001 budget,

approved by the Legislature in AB 1171. Caltrans did not regularly update its cost estimates for some components of the East Span or the entire program, including updating estimates for capital and support costs. Also, Caltrans did not use information about identified risks to regularly reassess its contingency reserves for potential claims and unknown risks. For example, Caltrans indicated to the Federal Highway Administration (FHWA) in February 2004 that its program support costs would be \$766 million, \$30 million less than the AB 1171 estimated amount. However, Caltrans' accounting records show that it already had spent \$612 million in support costs by October 2003, leaving only \$154 million to pay such costs for eight more years, through 2011. Just six months later, in August 2004, it raised its estimated support costs to \$1.352 billion.

Without updated cost estimates, Caltrans' program managers forego the benefits of a detailed overview of the program's capital and support costs for all the bridges. Further, Caltrans indicates that since October 2001, when AB 1171 was passed, its only published program-wide cost update was its August 2004 report to the Legislature, which disclosed the \$3.2 billion cost overrun. Had it been monitoring the program's costs regularly, Caltrans would have realized much earlier that the program was exceeding its budget under AB 1171.

We recommended that the department update its estimates of capital and support costs, reassess its contingency reserves for potential claims and unknown risks, and integrate this information into a program-wide report on a regular basis.

Caltrans Action: Partial corrective action taken.

Caltrans says it will update capital outlay estimates annually during design and each quarter for contracts under construction, and will update support costs quarterly. However, based on Caltrans' experience with the bid for the signature span's superstructure, annual updates of cost estimates for unbid projects may not provide up to date and relevant information. Further, to meet its mandate under state law to report to the Legislature when it determines that the program's actual costs exceed the budget would necessitate more frequent internal monitoring of the program's expenditures and estimated projected costs so that it can appropriately make this determination. As we noted in our audit, FHWA strongly recommends development of a monthly report with current cost forecasts.



Caltrans also states that it will quarterly assess the adequacy of contingency reserves on each construction contract and that it will budget reserves for contract risks that have been quantified and are deemed highly likely to occur. While we agree with Caltrans that it is important to reassess the contingency reserve for individual projects, however, it is also important for Caltrans to reassess the sufficiency of the contingency reserve for the entire program based on risks identified and quantified through its risk assessment process. In addition, it is important for Caltrans to reassess contingency reserves for construction contracts that have not yet been bid and to determine reserves for awarded contracts where additional costs are quantifiable and probable, not just where they are deemed highly likely to occur.

Finding #5: Caltrans did not employ good communications management, resulting in the failure to report cost overruns to stakeholders in a timely fashion.

Caltrans has neglected communications planning and management, failing to inform significant stakeholders regularly of relevant changes in its estimates of program costs and cost overruns. State law requires Caltrans to provide periodic status reports to the Legislature, but Caltrans provided no statutorily required annual status report for 2003 and no statutorily required quarterly status report in 2004 until August of that year. It chose not to disclose program information according to the regular reporting schedule established by law and disclosed the large cost overruns long after it should have known that the program likely would exceed its budget. As a consequence, Caltrans placed the Legislature in the awkward position of having to try to devise a funding solution six weeks before the bid on the signature span's superstructure was set to expire.

In November 2003, Caltrans submitted a legally required financial plan update to FHWA showing that the program's projects were going beyond the AB 1171 cost levels and that less than a 3 percent program contingency reserve remained. In response to FHWA's questions, Caltrans did not reveal the probable extent of estimated program costs. Based on internal Caltrans' reports and the amounts it eventually reported to the Legislature in August 2004, Caltrans should have known about the huge cost overruns. For example, although Caltrans had advertised the contract for the signature span's superstructure at \$733 million, internal analyses showed that as early as August 2002 this contract could be as high as \$934 million, while

later estimates placed its potential price at more than \$1 billion. Further, the uncommitted balance of \$122 million in the contingency reserve was grossly insufficient given that Caltrans had not received the superstructure bid, the East Span's skyway was only 31 percent constructed, and the Richmond-San Rafael Bridge retrofit costs were underreported by \$43 million to \$78 million.

In addition, Caltrans provided no information on potential program funding shortfalls before May 2004 to the Metropolitan Transportation Commission, a critical stakeholder that represents the commuters who pay to use the toll bridges.

We recommended that Caltrans submit quarterly status reports to the Legislature as the law requires, ensure that reports to FHWA and other stakeholders provide an accurate representation of the program's status, and quickly inform stakeholders when key events affect the program's overall budget and schedule.

We recommended that the Legislature require Caltrans to submit quarterly reports within a given time period, and that it require Caltrans to certify these reports and to include additional financial information in them. Also, in reviewing the options to complete the East Span, we recommended that the Legislature consider requesting that Caltrans provide sufficient detail to understand the financial implications of each option, including a breakdown of costs for capital outlay, support, and contingencies at the project and program level.

Caltrans Action: Pending.

Caltrans agreed to submit quarterly status reports to the Legislature as the law requires and to ensure that reports to FHWA and other stakeholders provide an accurate representation of the program's status. In addition, Caltrans said that the impact of key events on the budget and schedule will be reflected in quarterly updates of the risk response plan, project status, and statutorily required reports, and that updating will be reported to stakeholders immediately if warranted by significant events.

Legislative Action: Pending.

Senate Bill 172, introduced in February 2005, would require Caltrans to provide quarterly reports within 45 days of the end of each quarter that would include a programwide summary of the program's budget status for support and capital outlay construction costs. In addition, the bill would incorporate into state law the audit recommendations we directed to Caltrans.

DEPARTMENT OF TRANSPORTATION

Investigations of Improper Activities by State Employees, February 2003 Through June 2003

**ALLEGATION I2002-700 (REPORT I2003-2),
SEPTEMBER 2003**

Department of Transportation's response as of September 2003

Investigative Highlights . . .

A Caltrans' employee engaged in the following improper governmental activities:

- Misappropriated \$622,776 by requesting purchases and confirming the receipt of products that Caltrans did not receive.***
 - Directed a company to hold state funds outside the State Treasury and act as a fiscal agent without approval.***
-

We investigated and substantiated an allegation that an employee for the Department of Transportation (Caltrans) misappropriated \$622,776 in state money. Our investigation showed that the employee submitted two purchase requests for products the department never received. The employee arranged for the company to hold these funds from these fictitious purchases and act as the State's fiscal agent.

Finding: An employee misappropriated state funds.

The employee misappropriated \$622,776 by submitting two purchase requests. After submitting the purchase requests, the employee directed the company to cancel delivery of the items and hold the payments in a company maintained account. In addition to initiating the purchase, the employee also verified the receipt of the products even though the company never sent these items. According to the employee, she directed the company to hold these funds outside the State Treasury and act as a fiscal agent to correct clerical errors and purchase training and information technology (IT) products for her unit.

In addition, poor management contributed to the misappropriation of funds. The employee's manager did not verify the receipt of the products on the fictitious purchases. The employee's unit gave the employee the responsibility and authority to request products, ensure their receipt, and monitor the funds used, which created the opportunity to misappropriate the funds.

Although Caltrans cannot completely account for the misappropriated funds, it paid unauthorized taxes and fees to the company. The balances that the employee and the company

maintained did not reconcile partly because the company commingled state funds with its own. However, the State did pay unauthorized taxes and fees. The company retained \$44,191, which represented sales taxes associated with the false purchase requests, and charged the State \$68,505 to maintain the account. Although the company likely earned interest during the two-year period it retained these funds, it did not allocate this interest to the State. Nevertheless, the company remitted \$75,698 to Caltrans, an amount it considered to be the balance the State paid for undelivered products.

Caltrans' Action: Corrective action taken.

Caltrans reported that it reinstated its prior policy of having all IT purchases shipped to, received, accepted, inventoried, and tagged by its Shipping and Receiving and Property Control units. Further, Caltrans reported that it initiated a practice of utilizing the Department of General Services' Technology and Acquisitions Support Branch for all IT procurements over \$500,000. Caltrans transferred the employee to another branch where her duties do not include procurement-related duties and issued her a letter of warning. Caltrans added that it contacted the appropriate law enforcement agencies to investigate any criminal implications or activity relating to the misappropriation; however, the district attorney declined to prosecute the case. Caltrans also reported that it made changes to its procedures after completing a review of its internal controls related to approval authorizations and documentation.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Low Cash Balances Threaten the Department's Ability to Promptly Deliver Planned Transportation Projects

Audit Highlights . . .

Our review of the Department of Transportation's (department) delivery of projects in the State Transportation Improvement Program (STIP) and Traffic Congestion Relief Program (TCRP) revealed that:

- A lack of cash in the State Highway Account will result in the California Transportation Commission (commission) allocating almost \$3 billion less than it had originally planned for STIP projects scheduled in fiscal years 2002-03 and 2003-04.*
- Funding uncertainties associated with the Traffic Congestion Relief Fund (TCRF) have resulted in the commission halting all TCRP allocations, including those to 15 projects that currently need \$147 million in order to continue work.*
- Delayed or cancelled transportation projects will affect the State's aging transportation infrastructure, resulting in deteriorated highways, more traffic congestion, and reduced air quality, as well as higher costs for California residents, in terms of wasted fuel and lost productivity.*

continued on next page . . .

REPORT NUMBER 2002-126, JULY 2003

California Department of Transportation's and the California Transportation Commission's responses as of July 2004

The Joint Legislative Audit Committee asked us to examine the Department of Transportation's (department) delivery of projects in the State Transportation Improvement Program (STIP) and Traffic Congestion Relief Program (TCRP). We found that the department's ability to promptly deliver transportation projects is affected by low cash balances in the State Highway Account (highway account) and Traffic Congestion Relief Fund (TCRF), and consequently, delayed and cancelled transportation projects will negatively affect the State's aging transportation system. The low cash balances in the highway account and TCRF were caused by several factors.

Loans from the highway account and TCRF to the State's General Fund drained cash reserves from these accounts at the same time that the department saw highway account revenues decrease from weight fees. Further, uncertainties related to the former governor's mid-year spending proposal have caused the California Transportation Commission (commission) to halt all allocations to TCRP projects until the budget uncertainties are resolved. Moreover, the department's cash forecast updates continue to be optimistic, and consequently the department could end fiscal year 2003-04 with a negative account balance in the highway account. The department and the commission have alternatives to fund projects in the short-term. However, most of these alternatives also have the potential to decrease the future flexibility of scheduling projects for the STIP and one could be perceived as unfair, so the commission needs to carefully consider and set guidelines for their use.

☑ *Many of the commission's and the department's alternatives to provide needed funding for projects on a short-term basis have the drawback of reducing the department's flexibility to fund future projects, and one potential option available to the commission may be perceived as unfair.*

Finding: The department has insufficient cash to allow it and regional agencies to deliver planned transportation projects in the STIP and TCRP at the levels originally planned.

Lacking sufficient cash in its major transportation funds and accounts, the department and regional transportation planning agencies are unable to deliver many of their planned transportation projects scheduled in the STIP and TCRP. Specific areas our audit identified include:

- Projected cash shortages identified by the department in its December 2002 cash forecast caused the department to temporarily halt allocations to STIP and TCRP projects. While the department's revised March 2003 cash forecast update prompted the commission to resume allocations to STIP (but not TCRP) projects, the department's estimates may be overly optimistic, and could result in the commission making allocations for which the department will lack available funds when later presented with reimbursement requests from implementing agencies.
- Although the commission resumed allocations to STIP projects in April 2003, the allocations are at dramatically lower levels than originally planned. Specifically, 194 projects needing \$103 million in order to move forward with the next phase of project delivery will not receive allocations in fiscal year 2002–03. Moreover, the commission's actual and planned allocations for fiscal years 2002–03 and 2003–04 is almost \$3 billion lower than the amounts originally planned.
- Minimal cash reserves in the TCRF will affect the department's ability to deliver at least 106 projects that require a minimum of \$3.4 billion more in allocations to continue work. Since December 2002, 15 TCRP projects have submitted requests for allocations totaling \$147 million, and work has ceased on 12 of these projects due to lack of spending authority.
- The former governor's May 2003 revision to the governor's budget threatens TCRF funds, calling for the Legislature to delay \$938 million of the transfer of state gasoline sales tax revenues from the General Fund to the Transportation Investment Fund (TIF). Because state law provides for only a set number of annual transfers of specified amounts from the TIF to the TCRF, delays or reductions in amounts transferred to the TIF could result in a permanent annual loss of revenues to the TCRF of up to \$678 million, unless the Legislature acts to obligate the General Fund to repay the TCRF in the future.

- Delayed or cancelled projects will affect the State's aging transportation system, resulting in deteriorated highways, increased traffic congestion, and reduced air quality. Additionally, delays in making improvements means that California residents will pay higher direct costs for wasted fuel and lost productivity. Also, consumers will pay increased indirect costs of the delays in the form of higher prices for goods and services, as well as compounding repair costs for fixing later what the department should fix now.
- The department and commission have alternatives that they could use to fund projects over the short term. However, many of these alternatives have the potential to make future project scheduling inflexible, and one option—pursuing the ability for the commission to rescind TCRP allocations—could be perceived as unfair.

We recommended that, considering the State's fiscal crisis, the Legislature may wish to allow the TIF to transfer the entire \$678 million to the TCRF, and then authorize a loan of the money from the TCRF to the General Fund so that those funds would be repaid to the TCRF and therefore still be available in future years.

Further, we recommended that the department do the following to ensure that it can meet its short-term cash needs:

- Continue its efforts to become more precise in revising its revenue and expenditure estimates and ensure that these revisions are properly supported and presented in cash forecast updates to the commission.
- Continue to cautiously pursue other funding alternatives (Grant Anticipation Revenue Vehicle (GARVEE) bonds, State Infrastructure Bank (SIB) loans, direct-cash reimbursement, and replacement projects) to meet short-term project funding needs, and continue to set limits on these alternatives to avoid making future project scheduling inflexible.

Finally, we recommended that should the commission be granted the authority to rescind unspent allocations, it should carefully consider statewide priorities and ensure that all counties are treated fairly before taking such actions.

Department and Commission Action: Partial corrective action taken.

The department states that its cash management team continues to monitor cash flows and is working to improve its cash forecasting capabilities. The department reports that its cash management team also continues to refine the monthly projections of expenditures in the toll bridge seismic retrofit account, the TCRF, and the public transportation account to improve its projection of cash in the transportation revolving account. The department further reports that its cash management team is continually adding to the functionality of the internal project-tracking database to track data at various levels of detail.

The department agrees with our recommendation that it should continue to cautiously pursue other funding alternatives. Toward that end, the department has implemented SIB loans and GARVEE financing, which it is using for several projects.

The commission also stated that it has not been granted the authority to rescind unspent allocations.

Legislative Action: Partially implemented.

Two urgency measures were passed by the Legislature and chaptered since July 1, 2004, that provide for repayment of the loans made to the General Fund from the TCRF on or before June 30, 2008.