



# A Management Review of the SC Department of Transportation

## CONTRACT MANAGEMENT

#### Introduction

Members of the General Assembly asked the Legislative Audit Council to conduct an audit of the South Carolina Department of Transportation (SCDOT). We reviewed the operations of the department with primary emphasis on SCDOT's contracting and other issues relating to SCDOT's mission of building and maintaining roads and bridges. We also reviewed agencywide administrative issues.

The seven-member SCDOT Commission governs the agency. SCDOT is one of the largest state agencies with a staff of approximately 5,000. SCDOT has 7 district offices, and its employees work in each of the state's 46 counties.

South Carolina currently has about 42,000 miles of road in the state system, the fourth-largest system in the United States. This includes 17,000 miles of primary roads, including interstates, and 25,000 miles of two-lane secondary roads.

SCDOT did not always control expenditures in the areas we reviewed, particularly consultant contracts. Also, management did not always maximize available resources. However, SCDOT has taken appropriate action to control costs in construction contracts and some administrative areas.

# CRM CONTRACTS

We reviewed two ongoing contracts with private firms for construction and resource management (CRM). As of April 2006, SCDOT had spent approximately \$253 million for these contracts to manage construction projects. Although cost negotiation is required by federal regulations and should be documented by SCDOT, we could not determine why SCDOT accepted the contracts' compensation terms. These contracts did not adequately protect the state's interest and resulted in wasted funds.

- # The contracts provided for fixed payments prior to work being completed. Having fixed fees for program and financial management resulted in the contractors being paid approximately \$8.7 million for projects that were eliminated from the contracts.
- # The contracts' program and financial management fees were set too high, costing SCDOT millions. If the contracts had provided for program/financial management fees of 2%, as proposed by one of the contractors, instead of 4.5%, SCDOT and the state would have saved approximately \$32 million that could have been used for other road and bridge projects.

COMPENSATION IN CRM CONTRACTS Type of Compensation **AMOUNT Engineering Design** \$29,044,000 Overseeing Engineering Design 2,000,000 Services in Acquiring Right-of-Way \*18,323,744 Construction Management 146,499,000 **Overall Program Management** 54,363,043 **Overall Financial Management** 7,786,076 Information Technology \*\*9,870,895 **TOTAL** \$267,886,758

See full report for table notes.

- # Although the CRM contractors were to manage their assigned projects, SCDOT incurred substantial internal charges in overseeing the contractors' work. This increased the cost of 39 of the 84 projects they were responsible for managing by approximately \$15 million.
- # The CRM performance in managing construction contracts was no better than that of SCDOT managers. The projects managed by the CRM contractors were 7% more over budget than those managed by SCDOT.

## **CONSTRUCTION CONTRACTS**

In 2004 and 2005, SCDOT awarded approximately \$1.4 billion in construction contracts by a competitive bidding process. We reviewed SCDOT's management of construction contracts and did not identify significant problems.

- # SCDOT had implemented recommendations from our 2001 audit of road paving contracts. For example, the agency uses bid analysis software to improve its capacity to identify problems with bids.
- # The use of partnering, a formal collaboration between the contractor and SCDOT, has improved SCDOT's ability to complete projects within budget and on time. SCDOT calculated a cumulative \$17 million in savings for partnering as of March 2006.

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#### PRECONSTRUCTION CONTRACTS

SCDOT often contracts with consultants for preconstruction activities, including road and bridge design, environmental assessments, and obtaining right-of-way. We identified several problems with cost controls over the preconstruction process.

SCDOT's contractual history with one engineering firm raised questions of favoritism and ineffective management of resources. The firm was paid \$2.6 million in FY 04-05 and FY 05-06 for four contracts we reviewed. There were problems with the noncompetitive selection of the firm and the vague terms and scope of services in the contracts.

Through the contracts with this firm, SCDOT paid approximately twice as much as necessary to hire temporary employees, mostly former SCDOT employees. In a pre-award audit of one contract with this firm, SCDOT auditors recommended against contracting with this consultant because its liabilities greatly exceeded its assets.

Also, SCDOT paid more than \$121,000 to another firm for business advisory services without competitively procuring these services as required by the state procurement code.

### **Preconstruction Cost Control Issues**

- # SCDOT's procurements of preconstruction contracts do not always ensure the most qualified contractor receives the job. In half of the selections we reviewed, SCDOT selected firms that did not receive the highest scores based on the written criteria.
- # SCDOT has not implemented adequate controls to ensure that preconstruction contracts are obtained at a reasonable price. Once a qualified firm has been selected, SCDOT is required by federal regulations to negotiate the price. We found no evidence of how SCDOT negotiated the price of the contract in 25% of the consultant contracts we reviewed.
- # Federal regulations require agencies to prepare an independent cost estimate to evaluate the price proposed by the consultant. For half of the contracts we reviewed, there was no evidence that SCDOT prepared an independent estimate. For contracts where SCDOT prepared an estimate, the costs were reduced an additional 3 percentage points from those where there was no evidence of an SCDOT estimate.

  # SCDOT's audit program for preconstruction contracts is inadequate, ineffective, and not in compliance with
- is inadequate, ineffective, and not in compliance with federal law. SCDOT does not comply with federal law in verifying contractors' overhead rates.

# PROGRAM MANAGEMENT

We reviewed SCDOT's management of its programs to construct and maintain the state's roads and bridges and identified problems relating to resource management.

- # We found evidence to support allegations that SCDOT attempted to lower SCDOT cash balances during the legislative session by delaying billings for reimbursements from the Federal Highway Administration (FHWA). Deferred billings in FY 03-04 and FY 04-05 may have cost the agency more than \$1.5 million in lost interest (see table).
- # SCDOT spent over \$3 million to address several environmental violations. From 1992 to 2005, SCDOT paid penalties totaling \$163,880. Also, in 2002, the federal EPA required SCDOT to undertake a \$2.9 million supplemental environmental project as part of sanctions against the agency.
- # We examined SCDOT planning procedures for building and maintaining roads to determine if the process adequately prioritized projects. We found that SCDOT complies with federal regulations and generally has appropriate processes in place for planning construction and maintenance projects statewide.
- We found that SCDOT has an ongoing strategic plan and has regularly measured many of its actions. However, SCDOT has reported comparative data that is not valid, and the agency has not adequately published the extent to which it is achieving its goals.

Estimate of Interest Income Lost  Due to Delayed FHWA Reimbursements				
FHWA BILLING DATE	Unclaimed Amount on Federal Billing	INTEREST CALCULATED ON DAYS IN BILLING CYCLE*		
12/31/03	\$100,411,847	\$ 175,708		
01/31/04	\$128,635,628	263,264		
02/29/04	\$148,296,203	355,058		
03/31/04	\$181,676,516	185,839		
12/31/04	\$133,162,366	85,468		
01/11/05	\$145,845,870	180,138		
01/31/05	\$156,945,316	151,342		
02/15/05	\$165,333,708	141,799		
02/28/05	\$60,612,186	9,712		
TOTAL		\$1,548,328		

See full report for table notes.

## **SCDOT'S FUNDING**

#### REVENUES AND EXPENDITURES

SCDOT's revenues for FY 04-05 were more than \$1.39 billion. The primary source of revenue is reimbursements from the Federal Highway Administration (FHWA) for construction of roads and bridges. South Carolina relies on federal money to fund its construction program since it does not receive general funds for construction. SCDOT receives revenues from the state motor fuel user fee (gas tax) of 16¢ per gallon. The motor fuel user fee has not been increased or adjusted for inflation since 1987 and is among the lowest in the nation. SCDOT's expenditures for road and bridge construction and maintenance are shown in the following table.

Construction and Maintenance Expenditures						
Construction	FY 02-03	FY 03-04	FY 04-05			
Highway Construction	\$658,119,275	\$681,283,177	\$755,727,441			
Other	11,717	149,152	1,005			
TOTAL Construction	\$658,130,992	\$681,432,329	\$755,728,446			
Maintenance						
Highway Maintenance	\$186,111,307	\$193,496,524	\$222,156,810			
Pavement Preservation and Special Projects	58,341	19,607,569	53,325,732			
County Transportation Program	38,441,666	31,693,944	42,064,730			
TOTAL Maintenance	\$224,611,314	\$244,798,037	\$317,547,272			

## FEDERAL FUNDING FOR HIGHWAY CONSTRUCTION

Under the federal-aid highway program, each state is required to match federal highway funds with state or local funds. The match ratio is usually 80% federal funds and 20% state funds. According to SCDOT, only about 40% of the state's highway system is eligible for federal highway funds; the remaining 60% of the state's roads must be maintained and improved with state funds. In 2005, the General Assembly passed Act 176 to reallocate various sources of revenue to increase funding for road maintenance. SCDOT estimates it will receive \$26.6 million from this reallocation during FY 06-07.

SCDOT officials have been concerned about the agency's cash balances. Lower federal funding for FY 05-06 is one factor of concern (see table below). Also congressional earmarks, funds that must be set aside for specific projects, have increased significantly. SCDOT officials cited higher costs of construction and flat fuel tax revenues as additional problems. Cash management concerns may impose limits on future highway construction and maintenance. Because the department has limited resources, it is important for SCDOT management to control expenditures to minimize waste and maximize cost-effectiveness.

South Carolina Appropriations from FHWA Federal Fiscal Year 2004 Through 2006 (in millions)					
FEDERAL FISCAL YEAR	Total Appropriated	Congressional Earmarks	Available Funding for SCDOT Projects		
2004	\$482.0	\$27.0	\$455.0		
2005	\$540.7	\$65.3	\$475.4		
2006	\$520.6	\$81.4	\$439.2		

## ADMINISTRATIVE MANAGEMENT

AUDITS BY THE LEGISLATIVE
AUDIT COUNCIL CONFORM TO
GENERALLY ACCEPTED
GOVERNMENT AUDITING
STANDARDS AS SET FORTH BY
THE COMPTROLLER GENERAL
OF THE UNITED STATES.

FOR MORE INFORMATION

Our full report, including comments from SCDOT, and this document are published on the Internet at

LAC.SC.GOV

Copies can also be obtained by calling

(803) 253-7612

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During the period FY 02-03 through FY 04-05, we found that SCDOT took steps to reduce its administrative costs. However, we also found some issues of compliance and suggestions for further reductions.

- We reviewed SCDOT's headquarters renovations and found that the agency had not complied with requirements for oversight of capital improvements by the Joint Bond Review Committee (JBRC). Five projects were not initially submitted to the JBRC as required.
- # Our review of SCDOT's expenditures for conferences identified issues relating to conference finances. SCDOT's report of expenditures for the 2004 "BikePed" conference did not fully disclose conference costs. In violation of state law, SCDOT used private checking accounts from a credit union to handle registration fees and sponsor contributions for two conferences. Also, SCDOT has solicited contributions from its contractors to support conference activities. This creates a conflict of interest.
- In 2005, SCDOT initiated new procedures for planning agency conferences and events that has resulted in lower costs. However, additional cost savings could be realized from having conferences at a central location.
- # Our review of SCDOT's management of its passenger vehicle fleet did not reveal significant problems. In 2005, SCDOT made changes to improve compliance with legal requirements for commuting reimbursements and to increase efficiency (see graph). The agency reduced the number of permanently assigned vehicles.

- # Some aspects of SCDOT's
  management of temporary employees
  and the executive director's interns have
  created the appearance that SCDOT
  management showed favoritism in
  dealing with employees. SCDOT should
  take steps to ensure that its
  employment decisions are well justified
  and documented. Also, SCDOT's
  practice of employing long-term
  temporary employees does not comply
  with state law.
- SCDOT's internal audit department does not report to the appropriate officials to provide adequate independence for the audit function. The activities of the internal audit department are not reported to the commission on a regular basis, and the commission does not have a standing audit committee.
- # SCDOT could save by implementing the recommendations of a 2005 internal committee report. The agency could achieve savings by deactivating unnecessary pagers and eliminating the practice of issuing more than one computer to individual employees.

