

## 13 Best Management Practices

**89.56** (GP: Best Management Practices) By September 1, of each year agencies appropriated funds in this act must report on their website a self assessment of the agency's use of the following best practices during the prior fiscal year. Agencies are encouraged to partner with other agencies for a peer review process. For each of the best practices, the agency must publicly rate itself as in compliance, in progress, or in non-compliance. State institutions of higher education are exempt from this requirement.

The following is a self assessment of the South Carolina Department of Transportation's use of the 13 best management practices during fiscal year 2009. Agencies are encouraged to publicly rate themselves as **In Compliance, In Progress or In-Non-Compliance**.

### 13 Best Management Practices

### Status

**1. Integration of Planning and Budgeting:** The agency employs **In-Compliance** a multi-year strategic planning process that links the planning process with the annual budget review.

SCDOT initiated a Strategic Planning Process early in 1997. The Plan, which is updated each year, was developed in 1998. The current plan, developed in 2008 is an appendix to the agency's Annual Accountability report, can be found at:

[http://www.scdot.org/inside/strategic\\_plan10.shtml](http://www.scdot.org/inside/strategic_plan10.shtml)

To insure integration of the Plan with business processes, each major unit of SCDOT prepares an annual business plan that outlines the strategies that unit will use to meet the Plan's goals and objectives. Quarterly reports graphically demonstrating progress through performance measures are prepared and distributed to the business units and the employees. SCDOT's budget is tied to the Strategic Plan since the business plans form the basis for the budget requests by each SCDOT unit. Also the performance measures, that quantify work, are strongly considered in budget preparation.

As part of the Strategic Plan, the SCDOT offices of Planning, Federal Aid, Finance and Mass Transit work together to produce the state's annual Statewide Transportation Improvement Program (STIP). The STIP is a five year planning document which estimates the amount of federal funding (and the state match) that will be available, the projects to be worked on, geographical area of the project, the phases of work (such as preliminary engineering, purchasing rights of way, construction, etc), the estimated costs of each phase, and the year in which each phase is to be performed. The STIP is financially restrained, i.e., the projects costs cannot exceed the total amount of federal funds plus the state's funding for the 20% match. The federal allocation amount, thus the state match, varies each year. Also, actual project costs may overrun or under run the estimates. Therefore the STIP is adjusted each year to update estimates, and if necessary,

to revise project scope and/or schedule, in order to keep the STIP in balance with the funding.

Federal funding is derived from an 18 cents per gallon federal user fee which is collected at the pump. Important points about federal funding are:

- (1) SC is a “donor” state-receives about 88 cents for each dollar collected in our state.
- (2) Federal funds are received, as reimbursement-SCDOT must first pay 100% of the costs of a federal project as it is built- The Federal Highway Administration (FHWA) reimburses about 80% of the amount paid by our state.
- (3) The 20% that is not reimbursed is the state’s “match”.
- (4) Federal funds cannot be used for routine maintenance on any highway (such as mowing, pothole patching, picking up dead animals, etc.)
- (5) Federal funds cannot be used on highways that are not federal aid eligible and of SC’s 41,500 miles of state maintained highways; 21,000 miles are not eligible for federal funds.
- (6) SCDOT does not have adequate federal funds to meet the needs of the 21,000 miles of federal aid eligible highways. SC has even less state funding for the 21,000 miles of non-federal eligible highways, plus the routine maintenance on the total system.
- (7) South Carolina depends on the federal government for more than half its recurring highway revenue. (It is extremely unusual for a state to have less state funds than federal funds).

About three-fourths of SCDOT’s recurring state funding comes from the 16 cent per gallon motor fuel user fee, which was last adjusted in 1987. It is collected based on consumption (per gallon), not value. According to the American Petroleum Institute, it is now the fourth lowest fuel tax in the nation. Each penny in SC generates about \$32 million. SCDOT does not receive all the revenues; about \$79 million goes to the County Transportation Committees (CTC’s) (\$69.5M directly and \$9.5 by transfer), \$1 million goes to the Department of Motor Vehicles, \$3 million to Department of Natural Resource and about \$25 million to the State Infrastructure Bank. Nearly one third of the remaining state funds received by SCDOT is needed to make the match for the federal funds. The amount left is insufficient for routine maintenance on the 41,500 mile system, and to resurface and make safety improvements to the 21,000 miles of roads ineligible for federal funds. SCDOT’s linkage of the budget to the Strategic plan and its STIP component is critical to SCDOT’s success each year in anticipating, planning and budgeting the 20% "match" needed to receive all available federal funding, and in finding innovative ways to accelerate federal improvements and also “liberate” some federal funding for routine maintenance. SCDOT is a national leader in the creation and use of an engineering-based project prioritization process.

**2. Internal Audit:** The agency utilizes an active internal audit process that includes:(a) programmatic reviews along with fiscal reviews; (b) Consistent follow-up on audit findings; and (c) reporting of the internal audit function to the institutional head and/or to the governing board, if applicable. Agencies that cannot afford a separate internal audit staff should use internal reviews that serve the same function as an internal auditor. **In Compliance**

Act 114 promulgated by the General Assembly in 2007 created the Office of Chief Internal Auditor who reports to the SCDOT Commission. The focus of the office is on programmatic, or performance audits, and financial related audits. The process includes formal follow up procedures to ensure proper implementation of the corrective actions that are identified. Recommendations from final reports are placed in a database. The internal audit staff conducts periodic follow-ups until all recommendations are adequately resolved. Status reports describing progress toward implementation are provided to the SCDOT Commission. The SCDOT Commission places emphasis on implementation of internal audit recommendations, thereby enhancing the success rate of audit resolutions.

**3. Collaboration and Partnerships:** The agency demonstrates financially beneficial collaborative efforts with other public entities in performance of business functions including, but not limited to financial management, energy management, printing and publications, mail service, procurement, warehousing, public safety, security, space utilization and parking. **In Compliance**

SCDOT strongly believes that the public benefits from collaborative relationships among and between public and private partners. In performing its mission, SCDOT must work closely with key state agencies, such as the Department of Public Safety (DPS), Department of Natural Resources (DNR), Department of Health and Environmental Control (DHEC), and the Emergency Management Division (EMD) of the Adjutant Generals Office. SCDOT has developed strong partnerships with these agencies, which enhances each agency's ability to provide services to the public. Examples include SCDOT sharing information from interstate cameras with DPS, SCDOT and DHEC, working together to address impacts from the new Air Quality standards, SCDOT equipment and operators assisting DNR in emergency situations and DNR using its boats and operators to assist SCDOT in situations where needed.

SCDOT's primary partners in delivering services to the public is the SC Division of the FHWA and the Federal Transit administration. SCDOT and FHWA have worked with the Associated General Contractors (AGC) to begin an extensive partnering program for key personnel on road and bridge improvement projects. The citizens of South Carolina gain by expedited project delivery, quality work and cost savings

Other key partners, who play a major role in helping plan projects and in keeping the public informed about projects are the Metropolitan Planning Organizations, the Councils of Government and the Regional Transportation Authorities.

SCDOT continues its partnering efforts with South Carolina State University and its Center for Transportation Studies, and the Engineering Colleges of the University of South Carolina and Clemson University. Partnerships with these institutions allow SCDOT to promote transportation careers for the students, and to receive excellent research work and assistance from the institutions.

SCDOT partners with counties and cities in special match programs that encourage local governments to spend local funds on state highway system projects in their jurisdiction. The local governments can double the amount of work their dollars can support, and SCDOT can increase the amount of funding available for state system work.

**4. Outsourcing and Privatization:** The agency examines opportunities **In Compliance** for contracting out various business functions, has performed cost analyses, and has implemented, where economically feasible, cost savings contracts.

Since 1997, outsourced maintenance contracts have been a significant portion of SCDOT's maintenance work. A few examples of work that is primarily performed by contract include: mowing of roadsides; guardrail repair and installation; traffic signal installation and upgrades; sidewalk repair; highway striping; pavement marker installation; roadway sweeping; rest area/welcome center maintenance; resurfacing; reclamation; microsurfacing; crack seal; and chip seal, just to name some of the most common activities performed in part or entirely by the private sector. Approximately 36% (\$123.3 million) of the FY 2009 Maintenance Budget was spent on contract maintenance. Of the funds spent by SCDOT for maintenance in the FY 2009 Budget, approximately 63% (\$217.5 million) of the work went to the private sector for maintenance work, construction work, and all types of materials and equipment.

**5. Process Analysis:** The agency makes a critical examination of its business processes in an effort to increase productivity, reduce waste and duplication, and improve quality of services provided to its internal customers. **In Compliance**

SCDOT uses many tools to examine its processes including internal and external audits. Additionally the Department has established Quality Management Teams to examine maintenance and construction processes. The Maintenance Review Team inspects Maintenance Complexes and various maintenance programs managed by the 7 Engineering Districts. The Construction Quality Management Team examines Construction Projects. In FY 2008 the Department implemented a study of the 7 Engineering Districts as required by statute. The Research and

Materials Laboratory provides Contractor and Program Management support to ensure quality end products.

**6. Use of Automation and Technology:** The agency uses a Long range plan for improved use of technology to enhance Business processes and takes deliberative efforts to implement this technology within budget constraints. **In Compliance**

Information Technology plays a critical role in SCDOT's ability to fulfill its mission. The agency has a statewide network that links headquarters with all county and district offices. Over 3,500 personal computers are used by employees in performing their work. All road plans developed in-house are now done on CADD workstations. Budget preparation; accounting systems and engineering management systems all depend on information technology. The Intelligent Transportation System has over 300 cameras statewide for emergency evacuations and traffic control. The agency submits an annual report to the Budget and Control Board's Department of Information Systems Technology, outlining existing and planned Information Technology projects. SCDOT's technology system is highly specialized and compatible with the other Departments of Transportation, as well as with the FHWA system, which provides federal funds through reimbursement. Many of the systems and software are products of joint development agreements through the American Association of State Highway and Transportation Officials (AASHTO) where SCDOT has often joined with several other states to create specialized systems for electronic bidding, bid analysis, estimating costs, etc. The joint development agreements allow SCDOT to gain extremely beneficial programs at a fraction of the normal cost, and for very little maintenance costs. These specialized systems require special training of our engineering staff. The result is that SCDOT is an agency with a strong highly trained professional group of employees who are able to accomplish more work, in less time, with better quality, at less costs. SCDOT has representatives on the AASHTO Committees which look at long-term needs and the development of programs and systems to meet those needs. Internal teams at SCDOT also work with the private sector in forecasting and developing systems and processes for future needs.

The agency is utilizing information technology resources to save costs agency-wide. For example, video conferencing and taking a virtual trip using the Integrated Transportation Management System is reducing the numbers of meetings requiring travel thereby saving on fuel consumption.

Federal funds are the primary source of funding for technology development at SCDOT.

**7. Energy and Other Resource Conservation and Management** **In Compliance**  
The agency has submitted an Energy Conservation Plan as required by Section 48-52-620 to the South Carolina State Energy office with a goal of reducing energy consumption by 1% per year from 2000-2020. SCDOT has applied for an Energy Stimulus Grant under the provisions of the American Resource and Reinvestment Act. The Department has

completed a procurement process exploring the use of an Energy Performance Contract. All new and renovated facilities use standards cited in the International Energy Conservation Code (IECC), 2000 Edition, including the 2001 Modifications and the ASHRAE/IESNA 90.1 - 1999, Energy Efficient Design of New Buildings except low-rise residential buildings. Additionally SCDOT is one of the top state agencies in recycling paper and other materials. SCDOT was the winner of the DHEC Award for recycling in 2008. The Department also participates in a program managed by the Office of State Fleet Management where a certain percentage of new vehicles are configured to use alternative fuels. The Department now has 566 Alternative Fuel Vehicles in service.

## **8. Preventive and Deferred Maintenance**

### **In Compliance**

A recommendation of the 1997 State Performance Audit was that the Department establish a Deferred Maintenance Program for its buildings. The purpose of the Deferred Maintenance Program is to identify maintenance deferred because of the non-availability of funds. The building custodian identifies maintenance needed to preserve the building from damage or deterioration, replace equipment at the end of its lifecycle, or to eliminate a safety hazard. As funding becomes available, the repair and/or improvement will be implemented. Preventive maintenance is the cornerstone of the Deferred Maintenance Program. The program is updated annually each October 15th.

## **9. Alternate Revenue Sources**

### **In Compliance**

The agency makes substantial efforts to identify and secure alternate revenue sources (excluding categorical grants for specific functions) to supplement funds available from state appropriations.

In 2008, The South Carolina Secretary of Transportation testified in Congress to the House Transportation Committee. He urged Congress to develop a national funding mechanism for replacing or supplementing the per-gallon tax on motor fuels. The current method is not indexed to inflation and does not take alternate vehicular power sources into consideration.

On the state level, supplemental revenue sources might include a 'Point of Purchase' user fee on vehicles in lieu of the current vehicle sales tax; an *ad valorem* (sales) tax on fuel to partially replace the current excise tax on fuel; a half percent statewide general sales tax dedicated to transportation; an increase in license and registration fees; replacing the fuel excise tax with a sales tax on fuel collected at the wholesale level; and state general fund dollars.

SCDOT also seeks local participation in funding through programs that encourage local governments to provide matching funds.

**10. External Annual Audit Findings:****In Compliance**

The agency avoids or minimizes all management letter and single audit findings in the annual audit performed or supervised by the State Auditor, especially violations of state law, material weaknesses, and single audit “findings” and “questioned costs.”

SCDOT seriously addresses all matters of internal control identified by the external auditors. SCDOT staff works closely with the auditors to understand and implement acceptable corrective action. There were only two deficiencies noted in the audited financial statements for the fiscal year ending June 30, 2007. One, considered to be a material weakness, regarded the tracking and recording of participation revenue; and the other comment, not considered to be a material weakness, regarded the development of a fraud risk management program. SCDOT has worked diligently with agency staff to develop, modify, and formalize policies and procedures to address the tracking and recording of the participation revenue. SCDOT also recognizes the importance of the development of a comprehensive fraud risk management program which is a primary responsibility of the Internal Audit staff. SCDOT produced its first Comprehensive Annual Financial Report (CAFR) in 2005 for submission, review, and certification by the National Government Finance Officers Association. SCDOT has been awarded the Certificate of Excellence in Financial Reporting for the CAFR for the past four years SCDOT will continue to maintain the high standards of financial reporting to achieve the certification each year for the Comprehensive Annual Financial Report.

**11. External Review Findings:****In Compliance**

The agency avoids or minimizes all non-compliance findings related to its business practices in external reviews and audits.

The SCDOT employs a staff of auditors who perform pre-award progress and final audits of contracts between SCDOT and consultants, local governments and other sources.

The auditor’s function is to determine whether the outside parties accounting system is capable of segregating and accumulating reasonable and allowable costs. During Final audits, costs and compliance with State, Federal, and other appropriate regulations are verified.

The audits are performed to assure the State receives a quality product at a fair and reasonable cost.

The Federal Highway Administration and the Federal Transit Administration conduct periodic reviews of the audit process and individual contracts.

**12. Long Range Capital Plan:****In Compliance**

The institution uses a long range (minimum three to five years) Capital Improvement Plan for major capital requirements for its buildings and has, subject to fund availability, begun implementation of the plan.

SCDOT develops and prepares an annual Comprehensive Permanent Improvement Plan. The plan is reviewed by the Capital Improvements Committee (three Deputy Secretaries, the Assets Manager, and Capital Improvements Manager) and forwarded to the SCDOT Commission and Secretary of Transportation for approval. Projects in the plan are selected by using a Facilities Assessment System that develops quantitative and qualitative analysis of existing facilities coupled with the buildings relevancy in support of the SCDOT Mission. SCDOT's Capital Improvement Plan is contingent on the availability of funding.

**13. Risk Management:****In Compliance**

The agency has an active Risk Management program in place to minimize its losses.

In 1998 the Department created a Risk Management function with the mission to reduce losses and loss exposure to the Department through a variety of control and risk financing activities. Our insurers, the South Carolina Insurance Reserve Fund and the State Accident Fund, have provided recommendations to improve our Risk Management Program and reduce insurance premiums.

As part of the SCDOT Strategic Plan emphasis is being made to reduce lost workdays and the number of workman's compensation claims.

The Department has created a Risk Management Information System and can be accessed at <http://smpintraapps/rmis/>

RMIS contains information to manage all data pertaining to crash scenes, claims against the department, claims against the public, employee injury, and SCDOT vehicle and equipment accidents.

The Departments Information Technology Office provides training to users on the use of RMIS.

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