

Accountability Report Transmittal Form

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**South Carolina Department of Transportation
Annual Accountability Report
Fiscal Year 2004-2005**

Section I- EXECUTIVE SUMMARY

Description of the Department of Transportation

The South Carolina Department of Transportation (SCDOT) is charged with the responsibility of systematic planning, construction, maintenance, and operation of the state highway system and providing mass transit services. SCDOT is responsible for managing the fourth largest state owned highway system in the nation.

Mission and Values

The mission of SCDOT is to provide a safe and efficient transportation system for the state of South Carolina. SCDOT builds and maintains roads and bridges, and administers mass transit services.

The values subscribed to by all members are described using the acronym RIGHT Team. As a member of the team, I do things the RIGHT way!

- Respectful and supportive of others
- Integrity at all times
- Good at what I do, because I am competent and knowledgeable
- Honest and fair in all my actions
- Teamwork through communication

Key Strategic Goals for Present and Future Years

SCDOT is transitioning to an updated Strategic Plan, which will allow focus on what is referred to as the “Five Big Rocks.” Below are the key strategic goals for present and future goals:

- Increase safety on South Carolina’s transportation systems and within SCDOT
- Improve the quality, efficiency and appearance of the state highway system
- Improve and expand the multi-modal transportation system in South Carolina
- Enhance and implement integrated financial and project management systems
- Improve employee skills, their work environment, and provide opportunities
- Improve management of our property, equipment and technology
- Provide the highest level of customer service

The “Five Big Rocks” are to (1) Increase safety on South Carolina’s transportation system and within the agency; (2) Continue to maintain and preserve the infrastructure across South Carolina (3) Excel in customer service, internally and externally; (4) Use resources wisely and efficiently; and to (5) Improve employee development for all employees.

The highlight of this year was the completion of the largest infrastructure project in the history of South Carolina. The Arthur Ravenel Bridge in Charleston, South Carolina was completed one year ahead of



schedule, within budget and constructed with an enviable safety record. The Arthur Ravenel, Jr. Bridge replaced the Grace Memorial Bridge and the Silas Pearman Bridge. The Arthur Ravenel Jr. Bridge is the longest cable stayed bridge in North America. This project is the result of a superb partnership between federal, state and local governments, the community and contractors. The Grace and Pearman Bridges are slated for demolition.

Safety continues to be the number one priority at SCDOT. This year the South Carolina General Assembly enacted Primary Safety Belt Legislation, which will result in South Carolina being eligible for \$11 million dollars in additional funding for safety enhancements to the transportation system. Progress has continued in reducing interstate fatalities. The department has completed 442.25 miles cable median barriers, with 421.33 miles on Interstate Routes. The barriers have been installed on one non-interstate route (Carolina Bays Parkway). The state has maintained lower urban interstate speed limits; continued truck lane restrictions; extended acceleration/deceleration ramps; and completed additional widening projects. Fatal crashes involving interstate median crossovers decreased from 27 in 2000 to 5 in 2004, a decrease of 81.5%. Interstate truck fatalities have dropped from 42 in 2000 to 26 in 2004, a 38% decrease. Urban interstate fatalities have dropped from 53 in 2000 to 26 in 2004, down 50.9%.

Opportunities and Barriers

Highway maintenance continues to be the agency's most daunting challenge. The current funding shortfall for highway maintenance is roughly \$567 million per year. This means that repairs are being delayed and the condition of the state's roads and bridges is gradually deteriorating, thus depriving the public of a top quality transportation system. Deferred maintenance adds to future costs, increases the funding deficit, and creates potential safety concerns.

The General Assembly has recognized this need and is beginning to take steps toward resolving the problem. Legislation passed in 2005 will generate an additional \$9 million in funding for state highway maintenance beginning this year. The increase in funding will grow to \$33 million per year in FY '07-'08. This will be used to resurface secondary roads that have gone four years with no resurfacing budget except the C-Fund which is a non-SCDOT program providing about \$17 million per year for that purpose. The annual cost of resurfacing the state's non-federal secondary roads is estimated at about \$196 million, so this new source of funding along with the C-Fund program will leave a shortfall of \$146 million in that category.

The Department plans to address a portion of the resurfacing shortfall through the federal "Soft Match" Program, but the annual resurfacing shortfall will remain well in excess of \$100 million per year. SCDOT will continue to work with the Governor and the Legislature to identify funding for highway maintenance. This will become increasingly difficult as the Federal-Aid program continues to grow, thus requiring increased state matching dollars for non-maintenance activities such as construction and engineering. When the Federal-Aid Program grows, the state maintenance program automatically shrinks unless the Legislature takes action to provide the matching dollars.

Congress enacted the Safe, Accountable, Flexible and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) in 2005. This legislation is expected to increase highway funding in South Carolina by 27% over the next five years. These federal dollars will be dedicated by law to construction, safety, mass transit and other non-maintenance programs. Congress does not provide funding for routine highway maintenance. The increase in federal dollars will help SCDOT meet the state's highway improvement needs. It will reduce the funding shortfall in this area by approximately \$100 million per year (from \$1.4



billion to \$1.3 billion). However, it will take funding away from Highway Maintenance because these new federal dollars will have to be matched with state dollars.

SCDOT is continuing to identify innovative and creative ways to get the job done. This requires partnerships with the public and private sectors to improve efficiency and resourcefulness.

Funding

In January 2005, SCDOT updated its 20-Year needs assessment based on input from the state's ten regional planning councils and the state's ten metropolitan planning organizations, and based on documented system maintenance needs. That assessment revealed a statewide needs shortfall of \$2.6 billion per year in 2004 dollars. Of that total, the construction and safety shortfall was about \$1.4 billion per year. The Maintenance shortfall was about \$600 million per year. The Mass Transit shortfall was also about \$600 million per year. After factoring in new state and federal funding, the construction and safety shortfall is now about \$1.3 billion, the mass transit shortfall is \$590 million and the highway maintenance shortfall is \$567 million.

Currently, South Carolina has the lowest level of state-source revenues per mile in the country. State-source revenues are about \$12,000 per mile. The next lowest state, West Virginia, invests about \$18,000 per mile in state dollars. The **national average is \$78,000 per mile**. Most states use a combination of state and federal dollars to construct and improve highways, however SCDOT does not have a state construction program. We rely solely on federal money to fund our construction program.

SCDOT receives federal-aid highway funds for improvements to the federal highway system. There are roughly 17,000 miles of federal-aid eligible highways in the South Carolina state highway system. Unfortunately, 24,500 miles of roads under state control (about 60% of the state system) do not qualify for federal-aid and must be improved using state dollars alone. Normal maintenance activities performed by SCDOT are not generally eligible for federal funding. Thus, SCDOT uses most of its state revenue for maintenance of all 41,500 miles of state roads and the rest is used for to match federal funds to make improvements to the 17,000 miles that are eligible for federal participation.

In 2003, SCDOT partnered with the South Carolina Division of the Federal Highway Administration to create a pilot "Soft Match" Program. This program has liberated state dollars – formerly used for federal match – for maintenance. As a result of this action, along with the passage of state funding legislation in 2005, SCDOT had created a \$50 million per year surfacing program for the states' non-federally eligible roads. Growth in federal funding from SAFETEA-LU will increase the amount of state funds needed to match federal dollars. By 2010, the state's match requirement will be nearly \$90 million per year more than it was in 1997. Thus, SCDOT will continue to look for new sources of funding in the foreseeable future.

Because of this crisis, SCDOT is asking the Governor and the Legislature to establish a long-range plan for meeting the state's highway needs over the next decade. South Carolina's decline in state-source highway funding took place over a forty-year period and we will not be able to increase the level of investment to its proper level over night. So, SCDOT intends to incrementally grow the highway construction and maintenance programs and allow the construction and materials industries to expand along with this growth. Good stewardship of resources requires that we balance the volume of work while doing everything possible to protect the state's enormous investment in its public infrastructure.



Lowering Death Rate Due to Highway Crashes

South Carolina has the eighth highest highway death rate in the nation. The death rate is 46% higher than the national average of 1.48, and 23% and 37% higher than our neighboring states of North Carolina and Georgia, respectively. The top goal of SCDOT's Strategic Plan is to increase safety on South Carolina's transportation systems and within the agency. We plan to do this by reducing the number of highway crashes, injuries, and fatalities in South Carolina by 5% through the development and implementation of a variety of statewide safety initiatives. The major challenge facing SCDOT is funding for safety improvements on South Carolina's secondary road system, especially with the highest proportion of highway deaths occurring on our secondary roads. Unfortunately, 24,500 miles of the secondary roads in South Carolina are *not* eligible for federal highway funds. SCDOT receives among the lowest state funding per mile of all states

Major Achievements From the Past Year

Major achievements will be described in length in the "Business Results Section" of this report. The highlight of some of the major achievements of SCDOT during FY 2004-2005 include the following:

Awards

- SCDOT received the National Roadway Safety Award from FHWA Operational Improvements to include installing cable barriers, truck lane restrictions, and using other practices to reduce interstate highway fatalities by nearly 1/3.
- SCDOT received the 2004 Keep America Beautiful/US Department of Transportation Award for the second consecutive year.
- The FHWA Division Administrator received the FHWA Safety Leadership Award for 2004.
- The American Road Builders and Transportation Association presented the Globe Award for the Cooper River Bridge Replacement Project.
- SCDOT Safety Director was awarded the AASHTO President's Award.
- I-95 widening project near Florence selected as one of the top 10 Road Projects in the United States by *Roads and Bridges* magazine

Project Completions and Other Achievements

- Completed the Arthur Ravenel Jr. Bridge over the Cooper River one year ahead of schedule.
- Completed the Carolina Bays Parkway in Myrtle Beach, South Carolina.
- Completed the Maybank Bridge.
- Completed US 78 & US 52 interchange.
- Completed I-77 widening in York County.
- Completed widening on SC 9.
- Completed I-77 rehabilitation in Lexington County.
- Completed rehabilitation of US 17 bridges over the Ashley River.
- Completed I-85 rehabilitation in Greenville.
- Completed US 378 in Florence.
- Completed the US 521 project in Greeleyville.
- Completed the Ladson Road project in Charleston County.
- Completed Phase 1 of the John N. Hardee Expressway in Lexington County.



Section II- BUSINESS OVERVIEW

SCDOT is one of the largest state agencies and has a staff of approximately 5,000 men and women who work in all of the state's 46 counties and the central headquarters located in Columbia.

A 7-member transportation commission is the policy making body for SCDOT. The Governor appoints the Commission Chairman and the other 6 members are appointed by the legislative delegations from the 6 congressional districts across the state. The Commission appoints the Executive Director, who carries out the daily operation of the agency and the direction of the staff.

Four Deputy Directors, who each manage a major division of the agency, assist the Executive Director. The divisions are Engineering (led by the State Highway Engineer), Finance, Administration and Operations, Mass Transit, and Disadvantaged Business Enterprises and Special Projects. Also serving on the Executive Team is the Deputy State Highway Engineer for Operations, Deputy State Highway Engineer for Design and the Director of Human Resources.

State Funding

The primary source of funding for SCDOT is the state motor fuel user fee. The state motor fuel user fee accounts for approximately 95% of the state's sources available to fund SCDOT. The motor fuel tax is primarily used to fund maintenance, program administration, mass transit, and to match federal-aid highway funds. The following chart (**Figure ES-1**) shows the available state funds for FY 2004-2005 and the categories in which they were expended.

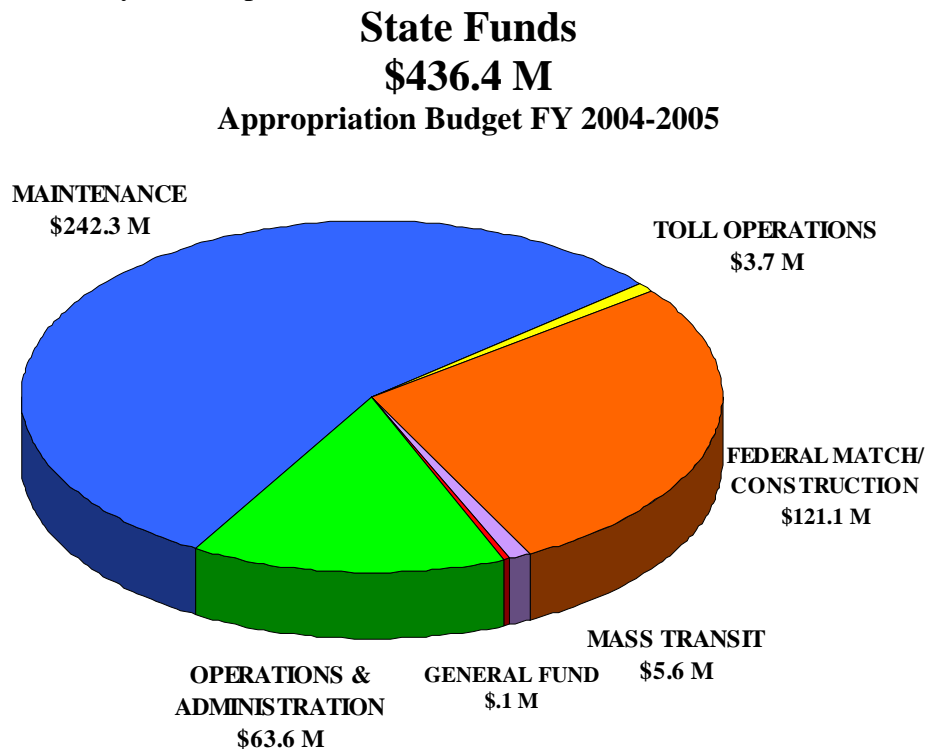


Figure ES-1

The Major Program Areas Chart is located on page 71 as Appendix 2.

Accountability Report – FY 2004-2005 Funding Obligation Plan

SCDOT relies totally on federal-aid funds for capital improvements. However, federal funds may only be used on 40% of the roads for which SCDOT has responsibility. As a result, many needed capital improvements remain unfunded. Maintenance on all roads for which SCDOT is responsible, must be funded from state funds. Current available state funding is insufficient to meet maintenance needs. The following table (**Figure ES-2**) shows the FY 2004-2005 funding obligation plan for both federal-aid and state highway funds.

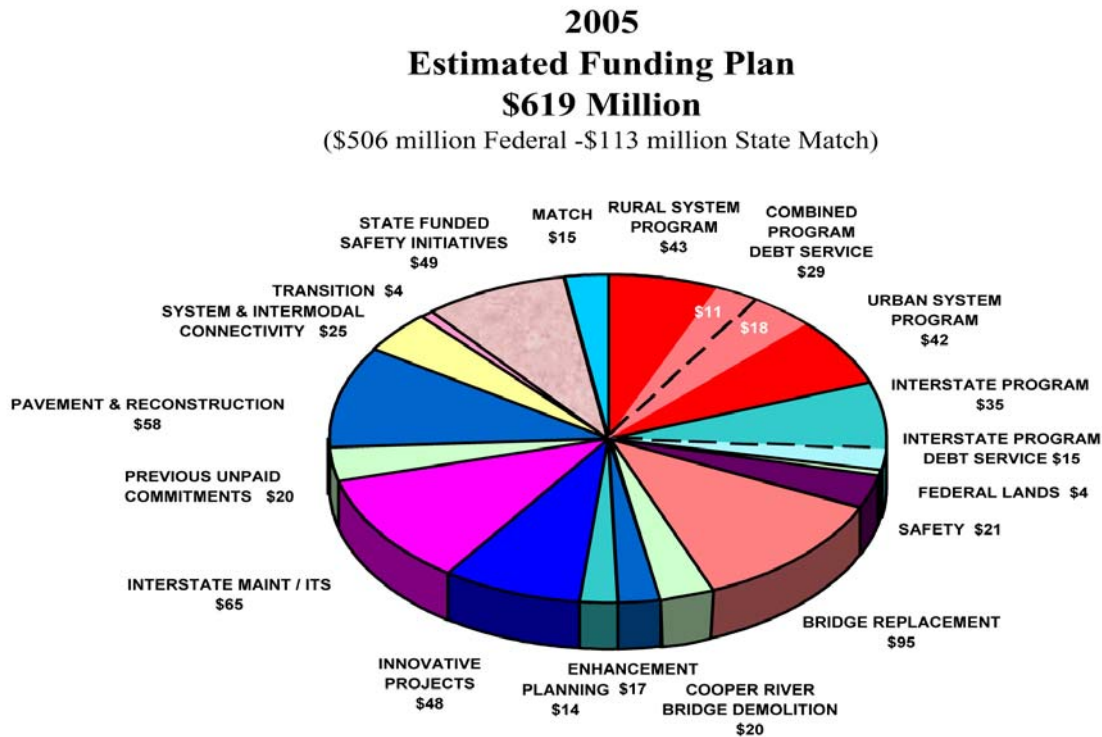


Figure ES-2

Key Customers

SCDOT partners with a number of key private sector partners to maximize efficiency and effectiveness. SCDOT considers the Federal Highway Administration (FHWA) as a partner, but they can also be considered a customer. Other key customers of SCDOT are the motoring public traveling in South Carolina and those citizens who use public transportation. SCDOT partners with its customers by frequent interactions in public meetings, timely responses to correspondence, and personal interaction by the Commission and staff.

Key Suppliers

When viewed from an economic perspective, SCDOT is among the largest businesses in South Carolina. There are approximately 17,000 suppliers in SCDOT’s Automated Procurement System that provide goods and services to the agency. There are approximately 77 key suppliers.



Major Products and Services

The major products and services are to build and maintain roads and bridges and to administer mass transit services to the citizens of South Carolina.

Others include:

- Statewide Intermodal Planning
- State Mapping
- Beautification of roadsides
- Operating and maintaining rest areas on the interstates
- Work Zone Safety Program
- Outdoor Advertising Permits
- Pedestrian and Bicycle Accommodations
- Providing staff for State Infrastructure Bank (SIB) and managing design and construction of SIB projects
- Research and Development of Construction Methods and Materials
- Incident Response Teams (Blue Trucks)
- Providing toll-free “hotline” to take citizens’ calls during emergencies
- Assisting Governor’s Safety Council and Emergency Management Division with emergency situations and planning

Section III – ELEMENTS OF MALCOLM BALDRIGE

Malcolm Baldrige National Quality Award Criteria

SCDOT is managed by incorporating the principles and seven elements of the Malcolm Baldrige Quality Award. This system has been institutionalized by the South Carolina General Assembly and the Budget and Control Board as the way South Carolina State Government is managed and operated. The seven elements are Leadership, Strategic Planning, Customer and Market Focus, Measurement Analysis and Knowledge Management, Human Resource Focus, Process Management, and Business Results.

CATEGORY 1: LEADERSHIP

1.1 How do senior leaders set, deploy, and communicate short and long-term direction; performance expectations; organizational values; organizational employment and learning, recognition, empowerment and innovation, and ethical behavior?

Short and Long-Term Direction

The Executive Director meets regularly with her Executive Staff and Senior Staff to review and renew the goals and objectives in the agency's strategic plan. Both short and long-term directions are identified in the plan. The Executive Staff is comprised of the State Highway Engineer, the Deputy Director for Finance, Administration and Operations, the Deputy State Highway Engineer for Operations, Deputy State Highway Engineer for Design, the Deputy Director for Disadvantaged Business Enterprises and Special Projects, the Deputy Director of Mass Transit, and the Director for Human Resources. The Senior Staff is comprised of the Deputy Directors, division heads within headquarters, and the 7 District Engineering Administrators, and the FHWA Division Administrator. Meetings with the Executive Staff are held weekly and meetings with the Senior Staff are held quarterly.

Performance Expectations

The Executive Director reviews “dashboard gauges” that contain essential information related to SCDOT's priorities and performance as outlined in the SCDOT Strategic Plan. Measures include (but are not limited to):

- Safety (South Carolina Traffic Fatalities)
- Incident Response Program
- Construction Contracts Awarded
- Cable Rail Cost
- Cable Rail Hits
- Toll Operations

Each objective that supports a goal in SCDOT Strategic Plan has a performance measure. Employee performance is tied to SCDOT's vision, values, and goals as outlined in the Strategic Plan.



Organizational Values

The organizational values are a part of the development and deployment of the strategic plan. This plan is a living and breathing strategic plan. We began the strategic planning process in 1997. When the plan was developed, a cross-section of employees, representing every facet of the agency, participated in the development of the values for SCDOT. SCDOT employees strive to meet SCDOT values by doing things the RIGHT way! SCDOT developed a special embossed lapel pin to remind employees of its values and SCDOT's vision of **"Public Trust: Earn it, Keep it!"**

Organizational Employment & Learning

SCDOT takes the responsibility seriously to develop competent leaders within the agency. SCDOT has developed and pursued continuous developmental programs for those presently charged with leading and managing.

As part of succession planning, 2 leadership development programs have been developed. The Strategic Training for Transportation Agency Representatives (STTAR) is a yearlong course for approximately 24 agency employees who exhibit potential for promotion to senior leadership positions in the agency. The STTAR Program has just begun its sixth year. The magazine, *Engineering News Record*, selected the Executive Director as one of the nation's top 25 newsmakers in recognition of the STTAR Program; to date 135 employees have completed the program.

SCDOT has developed a companion 8-month course, the Strategic Training and Education Program for the 21st Century (STEP-21). It is available for selected employees who show outstanding potential for mid-level managerial positions. This program is highly selective and has a maximum of 21 agency employees. To date, 149 employees have completed the STEP-21 Program.

SCDOT has also developed a dynamic four-day course – "Leadership Development for Supervisors." All managers and supervisors are required to take this course. In addition to these programs, 24 employees completed the Associate Public Manager Program; one member of the Senior Staff completed the Executive Institute; 2 senior leaders completed the National Transportation Institute, and 5 managers were awarded the Certified Public Manager (CPM) credential during the year. In an effort to develop skilled engineers for the future, SCDOT has an Engineering Development Program and an Engineering Skills Enhancement Program. The State Highway Engineer has developed an Engineering Cross Training Program.

Recognition, Empowerment and Innovation

SCDOT employees are rewarded for their creativity and innovative ideas. SCDOT rewards innovation with 3 types of recognition: (1) An On-the-DOT certificate is awarded for on-the-spot recognition of a noteworthy accomplishment or improvement in a work process or working condition. Any employee can initiate this award. While the certificate itself is an award, many other items are available such as hats, shirts, etc., to encourage and promote employee pride. (2) An On-the-DOT EXTRA is available for performance of a duty that is especially commendable. On-the-DOT EXTRA recognition is a cash award ranging from \$100 to \$250 and can be initiated by a division head; and (3) *Idea Express!* is where employees submit ideas for improving operations that result in the savings of time and/or money. Ideas accepted may result in cash awards depending on the savings generated.

In May of 2005, an Employee Recognition Celebration was conducted in headquarters and each of the districts, to celebrate the contributions of SCDOT employees. At the headquarters facility, the senior staff



cooked a light meal for the employees; a Chili-Cook Off Competition was part of the celebration.

SCDOT values its employees who are serving in the Armed Forces. Upon their return to regular employment, they are honored at a special ceremony attended by members of the SCDOT Commission and the Adjutant General and other senior military leaders. Three ceremonies have been held to honor their service. The Deputy Adjutant General, Major General Harry Burchstead, commended SCDOT for the caring attitude it shows to its military employees. Below is a photograph taken at one of the ceremonies.



SCDOT Employees honored for Military Service

Photo by Rob Thompson

In an effort to improve safety in the operation of heavy equipment, SCDOT sponsored an Equipment Operator's Rodeo, based on successful programs in Arkansas and Mississippi. Employees showcased their ability to safely operate a variety of maintenance equipment to include backhoes, mowing tractors, single and tandem axle dump trucks, motor graders, and truck tractors with lowboy trailers. Winners of the competition will match their abilities with DOT maintenance employees from Arkansas, Georgia, Mississippi, and North Carolina in the fall of 2005. This year's SCDOT winners are: Allen Moore of Oconee County Maintenance, Robert Perkins of Marlboro County Maintenance, Richard Stroble of Charleston County Maintenance, Chad Robertson of Saluda County Maintenance, Charles Reynolds of Spartanburg County Maintenance, Michael Murphy of Horry County Maintenance, Kenneth Eaddy of Florence County Maintenance, Jeffery Marshall of Chesterfield County Maintenance, Charles Whiten of Oconee County Maintenance, James Catote of Kershaw County Maintenance, and Jimmie Black of Hampton County Maintenance.

Ethical Behavior

“*Public Trust: Earn it, Keep it*” is the vision of SCDOT. All of its employees are advised of the state’s ethics law. SCDOT has established policies and procedures to prevent unethical behavior. SCDOT has begun a briefing on ethics at Senior Staff meetings and intends to have annual updates on this topic.

1.2 How do senior leaders establish and promote focus on the customer?

SCDOT’s vision is “Public trust: Earn it, Keep it!” Senior leaders of SCDOT focus on the customer by including public input in all SCDOT services. SCDOT has established formal partnerships with all its major partners and stakeholders. The public has many opportunities to actively participate in the planning and developing of highway projects. In addition, SCDOT leadership tracks correspondence and inquiries by using a Correspondence Tracking System. A key business requirement is *Quality Customer Service*. The actions in this business requirement will be discussed in depth in “Category 3-Customer Focus” of this report. SCDOT has also incorporated customer service as a strategic objective. Customer service is a key to its operations and is woven into its business plans. The Department has established a pilot customer outreach program in Engineering Districts 2, 3, 5 and 6. The Director of Maintenance Office instituted a Customer Service Survey to determine the quality of service provided by the department’s maintenance forces.

1.3 How do senior leaders maintain fiscal, legal, and regulatory accountability?

State law governs SCDOT’s operations; Title 23 of the United States Code of Laws governs the use of federal funds. SCDOT has incorporated in its culture a strong value system emphasizing honesty and integrity in all of its actions. There are periodic budget reviews and a strong internal and external audit process. During the past year, the Office of Contract Audits placed focus on conducting audits and field reviews to check for any purchase irregularities that may not comply with the State Procurement Code. SCDOT contracts with a commercial audit firm, approved by the South Carolina State Budget and Control Board, to conduct an annual audit of its financial records. During the past fiscal year, there has been a renewed effort to account for all non-inventory property and to dispose of surplus property. Department Directives have been revised to strengthen accountability of state vehicles. Over the past two fiscal years, the SCDOT Agency Audits Office performed full scope audits of various areas of SCDOT operations. Those audits produced thirty-two recommendations for improvement. Eighteen of the thirty-two recommendations have been fully implemented. Satisfactory progress is being made to implement the remaining fourteen recommendations.

1.4 What key performance measures are regularly reviewed by the Department’s Senior Leaders?

There are key performance measures assigned to each goal. The Senior Leadership reviews them on a quarterly basis. The performance measures are part of the Strategic Plan and support each of the seven goals. The measures and results are contained in “Category 7-Results” of this report.



1.5 How do Senior Leaders use organizational performance review findings and employee feedback to improve their leadership effectiveness and the effectiveness of management throughout the organization?

In late 2003, SCDOT developed an employee satisfaction survey that was administered to all employees. The purpose of the survey was to gauge agency strengths and to identify opportunities for improvements. There was a phenomenal 90% response rate from approximately 5000 employees. After the results were analyzed, meetings were held to communicate the results and to allow employees the opportunity to ask questions and make comments. The Executive Director makes frequent visits to county engineering offices to discuss issues with the employees.

1.6 How does the organization address the current and potential impact of the public on its products, programs, services, facilities and operations, including associated risks?

SCDOT uses a multitude of forums to determine and address highway and public transit issues that affect the public in South Carolina. The State Transportation Commission holds a monthly meeting in which stakeholders and the public are invited. While the General Assembly is in session, the Commission meets at SCDOT headquarters to allow the legislators the opportunity to attend and participate. The Commission encourages legislators and the general public to share their concerns. After the General Assembly concludes the Legislative Session, the Commission holds its monthly meetings at other locations around the state. Annually, SCDOT updates the State Transportation Improvement Plan, with input from the Councils of Governments (COG) and the Metropolitan Planning Organizations (MPO).

Public involvement is a key in our planning and developing of projects. Major projects usually begin with a local partnership established. Public involvement is encouraged at all levels of a project, through public hearings, newspaper editorials or announcements.

1.7 How does Senior Leadership set and communicate key organizational priorities for improvement?

The Senior Leadership holds frequent meetings throughout the year and establishes objectives that support the goals in the SCDOT Strategic Plan. Business Plans are established by each Division, which names priorities and objectives. Progress is monitored by reports linked to key measures. These reports are reviewed by the Senior Staff. These objectives and their measurements are cascaded to all organizational groups to ensure all employees of the agency understand the direction necessary to achieve the goals. The Executive Director communicates with all employees by a monthly video production titled, *Crossroads*. The videos are produced on location at county and headquarters offices.

1.8 How does Senior Leadership and the agency actively support and strengthen the community? Include how the Department identifies and determines areas of emphasis.

SCDOT is actively involved in strengthening the community in which the agency's people work and live. SCDOT's values help us in identifying the causes we support. SCDOT is totally committed to being a good corporate citizen. Throughout the year, employees participate in several volunteer programs such as "Families Helping Families," SCDOT C.A.R.E.'s, and Habitat for Humanity. We facilitate the Bicycle and Pedestrian Advisory Committee and the Roadside Enhancement Beautification Committee in South Carolina. SCDOT is a large family of families deployed throughout the state. There is SCDOT presence in all 46 counties.



CATEGORY 2: STRATEGIC PLANNING

2.1 What is your Strategic Planning Process, including participants, and how does it account for Customer needs and expectations, financial, societal, and other risks, human resource capabilities and needs, operational capabilities and needs and supplier/contractor capabilities and needs?

As we look to the future at SCDOT, there are many challenges and opportunities ahead. As one of South Carolina's largest state agencies, the SCDOT Commissioners and the Executive Director recognize the importance of planning and have accepted the responsibility to support and drive the plan. The executive leadership is charged with the development and deployment of the Strategic Plan. This plan is the foundational document that guides daily and long-term operations. The Strategic Planning Chart is located on page 69 as Appendix 3.

The *SCDOT Strategic Plan is a living document*, updated annually. Each year, meetings are held across the state in an effort to deploy the plan. In 2003, SCDOT initiated an internal survey to receive feedback from employees on needs and expectations. In the spirit of continual improvement of processes and practices within SCDOT, a consultant, renown for working with transportation departments, was retained to develop, distribute and analyze an Employee Satisfaction Survey. The survey provided data to facilitate understanding of employee concerns and to pinpoint areas of excellence and areas for improvement.

The results of the survey were dispersed to every employee. In reaction to the survey results, which were used as a basis for developing strategies, SCDOT is transitioning from a plan that had 7 goals to one that has 4 areas of focus. The Executive Director established these 5 focus areas: (1) Safety (2) Maintenance; (3) Resources; (4) Employee Development; and (5) Customer Service.

The plan involves all of SCDOT's employees and partners. Key partners include the Federal Highway Administration (FHWA) and the Construction Resource Managers (CRM). (The CRM is a firm or group of firms that has experience and expertise in highway/bridge design and construction. Presently, the CRM is assisting SCDOT with the construction of over 200 projects across the state.)

The Strategic Plan is a global/statewide plan, ranging from 3-5 years; the Business Plan is a local plan to enhance the strategic plan and is usually accomplished in 1 year. As the plan has matured through the years, employees have been asked to take an active part in the business planning process. These business plans are the foundation of the SCDOT's budget.

The goals of the Strategic Plan are accomplished through the business plans. The business plans are accountable with a performance measure and a completion date. The business plans are maintained by each division, with updates provided to the division Deputy Director, as well as to the Strategic Planning Committee. The FHWA is a partner of choice and an active participant in the strategic planning process. A monthly "dashboard report" is provided to the SCDOT Commission, Executive Director, senior staff members, and extended staff. The dashboard report is compiled from various information and typically changes from month-to-month, based on items of interest or concern. Items that appear on the monthly dashboard report reflect the strategic planning goals.

Beginning in April 2003, the Agency Operations, Organization, and Policy Course was deployed statewide. To ensure consistency, a senior manager was tasked to make the presentation live to each and every



employee. This course shows the employees where they fit in the overall operations of the agency and their part in the strategic planning process. The course continues to be deployed and is presented to all new employees early in their career.

Statewide Multi-Modal Long-Range Transportation Plan

SCDOT receives input from the Councils of Government (COG) and the Metropolitan Planning Organizations (MPO) in the development of the Statewide Multi-Modal Long-Range Transportation Plan. Because of the rapid population growth in South Carolina, we are looking to develop a system that will satisfy the needs of both residents and visitors. Each COG has worked with the Regional Transportation Authority (RTA), ports, MPO, and other interests to develop its regional plan. The SCDOT Office of Planning is responsible for producing the long-range plan for the state of South Carolina. Staff from the Mass Transit, Engineering, Rail, Multi-Modal, and the FHWA offices have worked with regional planning staff to develop the recommended "regional plan."

State Transportation Improvement Program

The State Transportation Improvement Program (STIP) is a comprehensive document report, developed each year. The STIP lists various types of projects for work planned in the next five years. It reflects the collaborative efforts of the MPO, COG, and Regional Transportation Authorities (RTA). The development of the STIP involves multiple working partners.

2.2 How do you develop and track action plans that address your key strategic objectives?

All strategic objectives are owned by a member of the senior staff (and their staff). There is a Quarterly Review by the Executive Team.

2.3 How do you communicate and deploy your strategic objectives, action plans, and performance measures?

An annual retreat is conducted for the primary purpose of updating the Strategic Plan, including its supporting objectives and performance measures. This information is cascaded to all levels of the agency. Appropriate business plans to support the Strategic Plan are developed by each major organizational unit. Quarterly updates regarding progress on performance measures are distributed to all managers. Additionally, the Executive Director and senior staff members visit the county offices on a regular basis to give updates on SCDOT activities and strategic plan progress. The employees ask questions and provide feedback regarding the Strategic Plan. *Crossroads*, The Executive Director's monthly video message to all employees is also used to communicate the plan.

CATEGORY 3: CUSTOMER FOCUS

3.1 Identify key customers and stakeholders.

The key customers of SCDOT are the citizens of South Carolina, as well as those people who visit the state for business or pleasure and use the transportation system. Our customers' concerns are addressed through a variety of methods. Those methods include representation by the MPO and COG. The County Transportation Committees (CTC) and other constituency organizations also address their concerns and needs. The state is divided into **10** MPOs and **10** COGs. Rural transportation needs are addressed through **18** public transit providers. Key stakeholders in the delivery of services include the FHWA and FTA.

3.2 How do you determine who your key customers are and what their key requirements are?

South Carolina State Law, Section 57-3-10, defines our key customers. SCDOT determines its requirements by interacting with elected representatives at the state, county, and municipal levels. SCDOT also holds a multitude of public forums and performs specific surveys of different stakeholders. In a recent customer survey conducted by the Institute for Public Service and Policy Research of the University of South Carolina, SCDOT identified some concerns where 826 citizens were interviewed. Over 2,000 telephone interviews and 5 focus group sessions were conducted statewide to determine if our customers understand the role of SCDOT. Many people mistakenly view the agency's role as enforcing the speed regulations and issuing drivers licenses. In addition, many of those surveyed did not understand how SCDOT is funded. This survey, coupled with SCDOT's focus on customer service training, responsiveness to work requests, user friendly web site, Incident Response Teams, and public meetings, allows the agency to learn and respond to the needs of its customer. A follow-up survey being conducted by the Moore School of Business and the results are expected in late 2005.

Customer Service Training

In January 2000, SCDOT initiated a training program to address the needs of its customers. In the program, conducted by Midlands Technical College, SCDOT employees were taught how to serve the public in a courteous and responsive manner. Since the inception of the program, 5,296 employees have attended the full-day training.

Internet Site

[SCDOT personnel continue to expand and update the information available on the agency's primary Internet site, \[www.scdot.org\]\(http://www.scdot.org\).](#) The average daily number of visitors has [risen to 4,200](#). [The new Article Manager application provides easy access to SCDOT's press releases.](#) [Visitors may view articles by the latest headlines or by categories, such as construction and maintenance, weather-related information, public hearings, or general information.](#) [All projects under construction can be viewed on the website, including schedules, budgets, and project information, Up to date data on road conditions and closures are easily accessible for viewing.](#)

SCDOT redesigned its Internet site to comply [with federal accessibility requirements \(Section 508\)](#). SCDOT employees are now [serving on state committees to develop a proposed policy for all state agencies to become compliant with these standards.](#) [The redesign was geared towards making it more user friendly to all visitors.](#) SCDOT is [constantly looking for ways to improve upon its site, thereby better serving the public.](#) [In July of 2004, we published an online survey providing a means by which visitors could](#)



comment on the [site](#). [This information, combined with new and improved network infrastructure and web technologies, will be used to plan for future pages, applications, and site redesigns.](#)

3.3 How do you keep your listening and learning methods current with changing customer/business needs?

SCDOT is actively involved in a myriad of professional associations and is active in the university community. Some of the organizations include the American Association of State Highway and Transportation Officials, the Transportation Research Board, the Transportation Association of South Carolina, and the American Society for Civil Engineers. SCDOT is involved in the local community and its employees are members of community and support organizations. SCDOT has made presentations to the American Association of General Contractors, the South Carolina Business Alliance, and the South Carolina Transportation Policy and Research Council. Regular meetings are held with the assistance of the Associated General Contractors, the Consulting Engineers of South Carolina, the Asphalt Association, the Concrete Association, and the Trucking Association to discuss issues regarding their respective industries.

Public (customer) input is received during the planning and developing stages of highway projects. Many design changes occur because of public input. SCDOT held 2 training sessions during the past year to reinforce listening to customers and developing highway projects within its context.

3.4 How do you use information from customers/stakeholders to improve services or programs?

The Maintenance Office tracks the time it takes to process a work request and, based on the data, SCDOT is able to evaluate resourcing and process management. SCDOT's Incident Response Teams ("Blue Truck") provide assistance to thousands of motorists annually. All motorists receiving assistance are surveyed and suggestions are incorporated to improve services. The district engineering staff reviews the data in order to make improvements, as necessary, to the program. SCDOT tracks all correspondence received to ensure a timely response and resolution to issues raised. The Oversize/Overweight Vehicle Permit Office surveyed its primary customers regarding the permitting process. Based on the information gained by the survey, SCDOT's Oversize/Overweight Vehicle Permit Office revamped and automated their processing for permits. The Rights of Way Office distributes surveys to landowners when property is acquired as to their experience with SCDOT. The Director of Maintenance surveys its customers by mail.



3.5 How do you measure customer/stakeholder satisfaction?

SCDOT measures customer and stakeholder satisfaction from the surveys obtained from selected programs. SCDOT also receives numerous comments from the public via its web site comment line. SCDOT surveys customers of the Cross Island Connector Toll Facility, Incident Response Teams, and citizens receiving road maintenance services and property owners during right-of-way acquisitions.

USC Survey

The Division of Research of the Moore School of Business at the University of South Carolina recently released the findings from the “Customer Input Concerning Highway Maintenance” public opinion survey. This survey gauged the public’s opinion as to which maintenance activities were most important. Based on the findings, the highway surface, bridges, and driveways were the most important maintenance activities. Focusing our maintenance funds and efforts in these areas should result in a higher level of customer satisfaction. The public rating of SCDOT on current maintenance activities was a “B” overall.

Establishment of Benchmarks

Benchmarks have been established for completing work identified through customer work requests. The measure is to complete 95% of routine work orders within 60 days. Requests of a critical nature are normally handled within 24 hours of their receipt.

Pilot Customer Outreach Program

A pilot customer outreach program has been established in a 4-district area. Customer Service Representatives have been appointed who have limited experience with SCDOT and brings an independent perspective to review current customer service activities.

Tracking System for Customer Inquiries/Complaints

There has been a system established at the district level to track customer requests with approximately 70,000 requests being tracked annually. There is also a correspondence tracking system in place.

Customer Service Survey

The Director of Maintenance Office has implemented a customer feedback program to develop data to improve customer service. The return survey can be sent with the postage pre-paid by the Department. The surveyed customers are identified by data collected in the Highway Maintenance Management System (HMMS).

3.6 How do you build positive relationships with customers and stakeholders?

Public Meetings

SCDOT invites the public to information meetings on all major highway projects. The designated Program Manager is present to answer all questions regarding the project. Prior to construction, the local businesses and residents are notified of the project by personal visits and distribution of flyers. For example, there is a project in Lexington County at the I-26/US 378 Interchange where the work involves relocating the frontage roads, reconfiguring the ramps, and replacing the existing bridge. Prior to construction, the public was notified by a series of presentations at churches, homeowners’ associations and civic club meetings, as well as newspaper articles and advertisements. A drive-through visualization and still renderings were generated to assist with the presentations. The contractor assists with the meetings.



During fiscal year 2004-2005, 93 public meetings were held and 237 presentations were made to various public, government and constituency organizations regarding road and highway improvements, which provided prompt responses to inquiries. SCDOT has begun to implement a context sensitive approach for project development. A context sensitive approach involves working with community stakeholders to preserve and enhance the human and natural environment. A discussion of this approach, including basic principles, has been incorporated into the 2003 Highway Design Manual.

Speakers Bureau Program

Educating the public about the department is the goal of the speakers Bureau Program that trains employees to deliver accurate and consistent messages about SCDOT's mission. Approximately 100 employees from across South Carolina attended a two-day training session. The participants were given material to assist them in their presentations to the public. The speakers are available to groups across South Carolina and arrangements for a speaker can be made by contacting the SCDOT Community Relations Office.

Historical Preservation

The replacement of the S. C. Route 72/121/215 Bridge over the Broad River was determined to have an adverse effect on the Fish Dam Ford Battlefield site. By shifting downstream and constructing the new bridge the Department was able to avoid closing the existing bridge and detouring traffic. This also insured that the project would avoid adverse effects to the prehistoric Fish Dam, or fish weir, located just upstream from the bridge. The Fish Dam site is listed in the National Register of Historic Places. The bridge construction would adversely affect the Fish Dam Ford Battlefield site by causing construction activities to damage and destroy portions of the site. This includes possible damage to rifle pits (fox holes) used by American pickets, and damage to the core area of fighting in the river bottom where Gen. Thomas Sumter was camped with the commands of Cols. Richard Winn and Thomas Taylor. This area is buried under seven feet of alluvium which would require upwards of \$ 2 million to excavate using normal archaeological data recovery techniques. In coordination with FHWA the department was able to acquire and preserve the site. In the process, the department managed to save South Carolina taxpayers approximately \$ 1.5 million.

Conferences and Workshops

SCDOT and its partner of choice develop conferences and workshops related to issues affecting the safety of the users of the state's transportation system. The "2004 Bicycle and Pedestrian Conference" was held this fiscal year to raise awareness of many issues regarding bicycle and pedestrian accommodations in South Carolina. The theme for this conference was, "*Bicycling and Walking: A Heritage from our Past, a Hope for our Future.*" The conference brought together participants from the private sector, highway engineers, planners, local, state, and federal leaders. The conference also celebrated initial successes in communities that had improved their bicycle and pedestrian accommodations. The next Bicycle and Pedestrian Conference is scheduled for December 2005. To keep its maintenance and construction forces updated, the Department conducts a maintenance conference, a maintenance foreman's conference and a construction conference.

Intelligent Transportation Systems

The SCDOT has developed and deployed Intelligent Transportation Systems (ITS) across the state. These systems include the latest transportation technologies, such as closed circuit television cameras, highway advisory radios, changeable message signs, local Traffic Control Centers (TCC) and a central Traffic Management Center (TMC).



There are now over 179 cameras in operation. Public television stations, WIS in Columbia, WSPA in Spartanburg, WYYF in Greenville, and WCSC in Charleston, use live video from the traffic cameras in their locale. These stations are also linked to the SCDOT's web site. The SCDOT also provides live feed to the South Carolina Emergency Management Division and the Department of Public Safety. In addition, the SCDOT has agreements to share traffic video with Air One, Citadel Broadcasting, Media General, and Traffic Patrol Broadcasting of Charleston.

Along with the cameras, the SCDOT utilizes 175 side-fire microwave speed detectors, 137 automatic traffic recorders, nearly 120 changeable message signs and two-dozen highway advisory radios. These devices are used to aid daily traffic operations as well as coastal evacuations. Also, many of these tools are utilized in SCDOT's support role to the State Law Enforcement Division for AMBER (America's Missing: Broadcast Emergency Response) Alerts. During FY 2005, SCDOT participated in three AMBER Alerts.

SCDOT Incident Response Program

One of the more visible customer-focused programs of SCDOT has been the Incident Response Program, which operates in 9 heavily congested areas of the state to provide assistance to motorists. This program uses specially equipped blue trucks with SCDOT's logo. Incident Response vehicles are equipped with fuel, water, and tools to enable quick repairs for disabled motor vehicles.

The Incident Responders have contact with the Highway Patrol and other emergency responders across the state. SCDOT continues to build on the program as part of ITS. **Figure 7.1a** depicts the number of motorists the SCDOT Incident Response Program has assisted in the past 3 fiscal years. Teams are located in Columbia, Charleston, Beaufort, Upstate Interstate 85, Rock Hill, Myrtle Beach, Florence and Cherokee. These teams assisted 77,795 motorists in FY 2004-2005. All motorists receiving assistance are given an Incident Response Survey and asked to complete it. The survey form is a Business Reply Mailing addressed to SCDOT.

Automatic Traffic Recorders

Automatic Traffic Recorders (ATR) are permanently installed traffic counting devices located across South Carolina on various interstate and major primary routes. In addition to traffic volumes, ATR can provide vehicle classifications and average speeds. Data is collected continuously and relayed back to the SCDOT via telephone lines or wireless telemetry.

In June, the SCDOT launched the Traffic Polling and Analysis System on its web site (www.scdot.org). Visitors to the site can view current traffic volume and speed data. This system will provide a more efficient method for processing, editing, and analyzing traffic data, as well as provide up to date volumes and speeds to the Emergency Management Division and the Governor during coastal evacuations.

Reduction of the Condemnation Rate

SCDOT made significant strides in improving public satisfaction in the appraisal and right-of-way acquisition process, which is an indication of customer satisfaction. The condemnation rate for FY 2004-2005 is 11%. SCDOT continually strives to reduce our condemnation rate by reaching amiable settlements for right-of-way acquisitions. SCDOT has established a goal of reducing this rate by 1% per year, until it reaches a level where it is no longer cost effective to try to reduce. We conducted a Landowner Opinion Survey and a Displaced Property Owners Survey with a rate of return of 30%. The condemnation rate on federal-aid projects declined to 11%. (See **Figure 7.1b**)



Cable Median Barriers

SCDOT continues to install cable median barriers with a total of 442.25 miles of barrier installed since the inception of the program. There have been 8078 hits occurring on installed cable rails since 2001, with 2555 hits during FY 2004-2005. SCDOT won the National Roadway Safety Award for installing cable barriers and implementing other practices to reduce interstate fatalities. FHWA Administrator Mary Peters recognized Executive Director Mabry, SCDOT, and the Division Administrator of FHWA, Bob Lee, for their joint efforts to reduce highway crashes.



CATEGORY 4: MEASUREMENT ANALYSIS AND KNOWLEDGE MANAGEMENT

4.1 How do you decide which operations, processes and systems to measure?

During SCDOT's strategic planning development process, the agency developed a set of key measures as indicators of how well it is achieving the agreed upon objectives. Each objective has a measure and progress is reported quarterly to the Strategic Planning Coordinator, the Executive Director, and the Deputy Directors.

SCDOT provides data related to the 12 performance measures of highway expenditure and system performance to the FHWA. This data is used for a variety of reports, such as the Annual Comparative Performance of State Highway Systems published by the University of North Carolina, Charlotte, Center for Interdisciplinary Studies. SCDOT also reviewed data developed by the FTA for comparison of mass transit operations. SCDOT is a member of several professional organizations, including the American Association of State Highway and Transportation Officials (AASHTO) and the Transportation Research Board (TRB), who also provide comparative data. Additionally, every goal in the Strategic Plan and the supporting objectives contain a measure.

4.2. What are our key measures?

The key measures are located in Category 7 of this report and in Appendix 1.

4.3 How do you ensure data quality, reliability, completeness, and availability for decision making?

SCDOT has developed various information systems and has adopted the use of AASHTO developed Shareware. SCDOT established a Construction Quality Management Team to ensure that construction and environmental standards were being followed. Seven key areas are inspected, including Bridges, Structures, and Foundations, Erosion Control, Estimates/Project Records, Field Construction Items, Sampling and Testing, and Traffic Control/Safety. The team makes unannounced visits to the construction sites throughout South Carolina; there were 59 formal reviews conducted. Additionally training was conducted for Resident Construction Engineers and support was provided to the Cooper River Bridge Replacement Project. The Director of Maintenance has established the Maintenance Assessment Program (MAP) to ensure an acceptable level of service of all of the key elements of road and bridge maintenance.

4.4 How do you use data/information analysis to provide effective support for decision-making?

The Executive Director has a monthly set of measures used as "dashboard indicators" that help her determine the pulse of the agency and how it is performing its mission. The "dashboard indicators" include the number of traffic fatalities, number of Incident Response Program assists, number of Construction Contracts awarded, Cable Rail Costs and hits, and Toll Operations. Quarterly, the Senior Staff and process owners review measures related to their divisions. SCDOT uses data from the South Carolina Department of Public Safety to analyze traffic accidents.

4.5 How do you select comparative data and information?

SCDOT uses comparative data from other transportation agencies across the nation, as well as information provided by professional organizations such as AASHTO and TRB. Providing the public, business



partners, and employees with access to timely information is an essential part of providing first-class service. SCDOT continues to implement information technology solutions “just in time” to match the demands of a technology driven workforce. SCDOT has a number of automated systems that allow it to select data for timely decision-making. SCDOT compares processes used by other transportation departments to develop a “best practice” model. SCDOT has also partnered with the Florida Department of Transportation and the FHWA to develop the framework for a 10-year cash flow forecasting model, and the Texas Department of Transportation in their use of a Transportation Equipment Replacement Model.

4.6 How do you manage organizational knowledge to accomplish the collection and transfer and maintenance of accumulated employee knowledge, and identification and sharing of best practices?

SCDOT has developed a variety of mentoring and leadership development programs to ensure the transfer of employee knowledge. SCDOT University has been established to formalize the process of transferring knowledge. A workforce development project continues to ensure that people are prepared to accomplish their duties and are compensated based on their assigned tasks. SCDOT is a member organization of many professional groups that allow SCDOT to identify “best practices.”

Crossroads

In an effort to improve the communications loop with all employees a monthly video is produced featuring the Executive Director and is disseminated to all employees. Videos are produced on location and they include interviews with employees and supervisors. The monthly video productions are archived and can be retrieved by way of the employee’s personal computer. County Engineering Offices incorporate Crossroads with their monthly safety meetings.

Video Conferencing

The department has developed an in-house video conferencing network with equipment located at the Headquarters and each of the District Engineering Offices. The media has resulted in savings of time and travel.

CATEGORY 5: HUMAN RESOURCE FOCUS

One of the four key strategic goals of SCDOT is employee development. The Human Resources Division's initiatives support that goal and the agency's mission by focusing on programs, measurements, processes and systems that recruit, retain, and train employees so they have the necessary skills and competencies to meet the challenges of the future. **Figure 7.4a** depicts the breakdown of the total workforce.

5.1 How do you and your managers/supervisors encourage and motivate employees (formally and/or informally) to develop and utilize their full potential?

SCDOT management recognizes the need to recruit, develop, and maintain a labor force of talented individuals that are capable of carrying out organizational commitments in an ever-changing work environment. SCDOT is also committed to developing and maintaining programs that foster individual growth for employees, target internal staff for advancement, and aid in creating a diverse workforce.

SCDOT utilizes and emphasizes the tuition assistance program that allows employees to be reimbursed for classes that are helpful to his/her current job performance or to prepare the employee for other positions within the agency. During the 2004-2005 fiscal year, there were 35 SCDOT employees that received tuition assistance. 19 employees received degrees with the help of the Department's Tuition Assistance program since its inception in 1994. (See **Figure 7.4b** – Tuition Assistance Budget.)

SCDOT recognizes employees who have made significant contributions through the use of Bonus's, On-the-Dot and On-the-Dot Extra recognition programs. These reward and recognition programs encourage peer-to-peer recognition and foster a work environment that rewards employees for exceptional customer service, productivity and other noteworthy contributions. 2276 employees received On the DOT Awards and 723 received an On the DOT Extra. Additionally, SCDOT places an emphasis on "State Employee Recognition Day" where senior staff uses this opportunity to thank SCDOT employees for their hard work, dedication and commitment. Headquarters and the district offices are encouraged to find creative ways to recognize and appreciate their employees on this special day.

Classification and Compensation Reform

SCDOT's Classification and Compensation Reform Project was implemented to establish career paths and identify professional development needs for all of its classification series. The agency's goal is to more clearly define class utilization and develop opportunities for employee career growth. Initially, the agency intended to review the classifications that would affect 70% of our employees by July 2006, reviewing the remaining classification no later than January 2007. As of July 2005, SCDOT is ahead of schedule having reviewed classifications affecting approximately 89% of our employees. Efforts have been initiated to review the remaining classifications and SCDOT is preparing to complete the project with implementation targeted for the months of April/May 2006. Daily management of the project is the responsibility of the Classification and Compensation Reform Oversight Committee. The four-member committee brings a diverse perspective to the process with representation from key functional areas of the organization.

The Oversight Committee is charged with the task of overseeing the efforts to develop career paths for all of the agency's classification series. Through the use of subcommittees, which consisted of knowledgeable



and experienced SCDOT employees from all levels around the State, tasks and relevant training needs were identified to establish opportunities for professional development and career growth. Subcommittees used Clemson University's Workforce Planning Model as a guide. Subcommittees have completed draft reports for Engineer/Associate Engineer, Engineering/Geodetic Technician, Trades Specialist, Mechanic, Equipment Operator, Incident Responder and Administrative positions. The Oversight Committee is establishing new subcommittees to establish career paths for the remaining class series. Subcommittees will begin assessments on the remaining classifications in August 2005.

To ensure a successful implementation, communication and conceptual understanding is important. During the coming months, the Oversight Committee will be developing a plan for conducting necessary briefings and training sessions to prepare management and employees for implementation of the approved career paths.

Benefits

During the 2004-2005 Benefits Annual Enrollment period, our Benefits Staff personally visited each county throughout the state to offer one-on-one assistance to any employee seeking to make a change to their coverage. This effort provided SCDOT employees with the accurate, first hand knowledge necessary to make their personal choices. As a result of this additional effort on the part of our Benefits Staff, there was a significant drop in the number of Notice of Elections returned for corrections due to errors in completion, resulting in fewer employees with delays in gaining proper coverage. Employees have been involved in pre-retirement consultation, benefits training, new employee orientation, and survivor consultation.

SCDOT's "Women's Forum" was created as a result of a State Task Force on Women in the Workforce. A committee was formed to develop a series of women's forums to address the needs of its female workforce. As a result, regional forums were conducted in 2002, which hosted 645 attendees; another series of forums were held in the fall of 2004 with 788 in attendance.

SCDOT looks at turnover in a variety of ways in order to develop strategies to retain its valuable employees. (See **Figure 7.4c** – Turnover.) Turnover is analyzed by termination reason code, EPMS evaluation, job classification, geographic location and by probationary status. Analysis of the past 3 years' data shows that the primary reasons for termination of employment are resignation, substandard performance of probationary employees, retirement, and acceptance of another job in the same city. Turnover by job classification shows that most of the agency's turnover exists in the job classification of Trades Specialist II.

Over the past 3 years, approximately 75% of SCDOT's turnover has been in pay bands 1 and 2. A special pay increase, approved by the State Office of Human Resources, was given effective March 2, 2003, to enhance SCDOT's efforts to recruit better candidates, assist in the retention of our current employees, and help reduce our extremely high turnover in these bands. A total of 1507 employees in bands 1 and 2 were eligible to receive a special pay increase of \$500. Another 102 employees received a partial increase due to the maximum of the pay bands. In addition, level minimums for these bands were also increased by \$500.

5.2 How do you identify and address key developmental and training needs, including job skills training, performance excellence training, diversity training, management/leadership development, new employee orientation and safety training?

The leadership of SCDOT is committed to furnishing employees with the resources they need to do their jobs and to accomplish SCDOT's mission. Personal and professional growth for its employees helps build important skills needed by SCDOT, as well as directly supporting employees as they pursue opportunities for advancement and promotion. In an effort to build a highly skilled workforce, SCDOT employees were given the opportunity to plan the training and development experiences that are important to them and to the agency. A tremendous emphasis is being placed on employee development and an effort is being made to link training initiatives to the strategic plan in support of the agency's mission.

Training needs assessments are completed annually at the same time as the annual EPMS. This information will be captured to create future training plans based on the identified needs. Functional/technical areas will be added as the SCDOT University grows to provide a more comprehensive approach to all training and development needs. This process ensures that employees are getting the training that is needed to improve work performance; also SCDOT will have the capability to generate training plans for the agency by using the information that is generated from the needs assessment. By using this approach the business objectives will be linked to training and the educational requirements will be customized to meet the needs of the employee and the organization. Approximately 30% of the department's workforce could retire within the next five years because of the potential for early and full retirements and participation in the Teacher and Employee Retention Incentive (TERI) Program. SCDOT is making positive strides in the area of workforce planning to address the gaps resulting from these projected retirements.

Workforce Planning Reports are provided to management to use as a planning tool in anticipation of pending retirements. These reports highlight positions held by TERI participants and those eligible for early and full retirement. The reports also provide an overview of potential workforce gaps that could surface during the next 3-5 years. Currently there are 477 TERI participants of which 74 conclude their TERI agreement by the end of 2005.

In May 2003, SCDOT entered into a contract with Clemson University to develop a workforce plan for the Trades Specialist classifications, which represents nearly half of the total employee workforce. This research project will identify issues, develop solutions, and prepare a workforce plan for the Trades Specialist series. This plan entails extensive data analysis, review of the strategic plan, benchmarking with other state departments of transportation, and field interviews. The processes include the development of career ladders, training requirements, competencies, prototype position descriptions, and cost structure projections for this classification series. Upon completion and implementation of the plan, SCDOT will incorporate the identified training into the SCDOT University in order to develop a more agile and technically trained workforce, with advanced problem solving skills to address future requirements.

During fiscal year 2004-2005, SCDOT spent an average of \$356.86 per employee for training compared to \$324.87 in 2003-2004. New employees with SCDOT begin their service with a 1-day orientation program. These new employees meet the leadership of the agency and learn more about the agency's mission and values, including doing things the RIGHT way.

SCDOT University is operational and links training initiatives to the strategic plan. The business objectives are linked with a curriculum that includes four basic tracks: employee, supervisor, manager, and executive. A web site has been developed that allows the scheduling of classes on-line. In addition to the new



employee orientation, there are a number of courses offered to the staff.

As part of the workforce planning for SCDOT's future staffing requirements, opportunities are available for selected staff including:

- Civil Engineering Training Program (CETP)
- Engineering Cross Training
- Maintenance Foreman Training
- Leadership Development for Supervisors
- Strategic Training and Education Program for the 21st Century (STEP-21)
- Strategic Training for Transportation Agency Representatives (STTAR)
- Certified Public Manager Program
- Associate Public Manager Program
- Public Professional Development

During fiscal year 2004-2005, an additional thirty-two (32) managers and supervisors were trained in Equal Employment Opportunity/Sexual Harassment for a total of 832. In addition, supervisors and managers have been trained in basic Human Resources skills.

Sexual Harassment training for non-supervisory employees was initiated during this fiscal year and has been incorporated into the Districts' New Employee Orientation program. In addition, Sexual Harassment training for non-supervisory employees was presented to seven hundred (700) Headquarter employees during this fiscal year.

5.3 How does your employee performance management system, including feedback to and from employees, support high performance?

In October 2004, SCDOT implemented an Employee Training Needs Assessment (ETNA) as part of the HR Suites information system. HR Suites was created by IT Services and houses Human Resources programs, forms and information. Previously, Training Needs Assessments were manually completed and not electronically linked to the Employee Performance Management Appraisal System (EPMS), which is housed in HR Suites. SCDOT employees complete an annual ETNA, which gives them the opportunity to request the training and development experiences that are important to them and to the agency. As part of the EPMS process, supervisors complete an employee's Training and Career Development Plan, by utilizing information from the ETNA, which is used to select the appropriate training and development for the employee. The information gathered from the ETNA will enable the agency to create future training plans based on the needs of the employees. SCDOT requires all employees to attend a minimum of three training and development courses during the review year. Another feature of HR Suites is the ability to access an employee's training transcript.

5.4 What formal and/or informal assessment methods and measures do you use to determine employee well being, satisfaction and motivation?

An Employee Satisfaction Survey was concluded this past year that had over a 90% participation rate. The survey provided insight from over 4300 employees concerning SCDOT's strengths and opportunities for improvement. This information was then integrated into the agency's strategic plan. Several actions related to this new approach to the strategic plan have been implemented and many other initiatives are in the works. The overall results of the survey were very positive and extremely informative in critical areas



of agency's operations. The survey was scored on a scale of 1 – 5. Most of the scores were higher than a mean score of 3.0, which was excellent and much higher than other public agencies, including transportation departments that had been surveyed by the consultant conducting the study. After the survey results were analyzed, senior staff communicated the results throughout SCDOT so that all employees were aware of the results. This survey presented results that were positive and allowed opportunities for improvement.

The results are as follows:

- 70.2% were satisfied with their job
- 69% of the employees intend to continue employment with SCDOT
- 60.3% are satisfied with SCDOT as a place to work
- 54.9% are satisfied with their supervisor
- 54.2% feel that they are able to express their opinion and get feedback
- 56.6% of the respondents feel that they are involved in decisions related to their work
- 49.8% feel a sense of teamwork at SCDOT
- 56.9% understand the mission of SCDOT
- 52.7% are satisfied with the training they receive

There is a follow-up survey being conducted in late summer with the results available in the fall of 2005.

5.5 How do you maintain a safe, secure and healthy work environment? (Include your workplace preparedness for emergencies and disasters.)

SCDOT has an active, involved Health and Wellness Program co-managed by a Registered Nurse and a Wellness Coordinator. The program is designed to promote, protect and improve the health and wellness of the SCDOT workforce. Most work locations have a volunteer Wellness Coordinator to assist in communicating between the medical staff and employees. In January 2005, a new “Wellness Committee” was created to look at additional methods of increasing employee’s awareness of personal health risks and providing additional programs and literature to educate employees throughout the year. An annual “Health Risk Screening” is provided to all employees on a voluntary basis. A health risk questionnaire is completed by the employee that records their medical history and a complete blood work-up is done to identify medical issues. All screenings include a consultation and referral to their physician, if necessary. A total of 3,021 employees took advantage of the Health Screening in FY 2004-2005. This is an increase of 305 employees, over FY 2003-2004, who participated in this worthwhile program. In addition, in FY 2004-2005, SCDOT made the decision to cover the cost of “Prostate Specific Antigen (PSA)” testing for those employees meeting the medical criteria. As a result, a total of 1,492 SCDOT employees received a free PSA screening; an increase of 884 employees over those tested in FY 2003-2004. Also, during FY 2004-2005, SCDOT launched a new statewide initiative to offer access to Mobile Mammography to employees statewide. Previously, the Mobile Mammography Van had only been available to the employees located in the Columbia Metropolitan area. Through this initiative and a coordinated effort between SCDOT Medical Services and Palmetto Baptist Comprehensive Breast Center, we were able to offer this service statewide with a total of 118 employees participating. In addition to health and wellness screening, SCDOT participates in Prevention Partners, Spring Wellness Walk, The Challenge, Weight Watchers, Red Dress Ambassadors, American Red Cross Blood Drives and The Heart and Sole Walk.

There has been an increase in the physical security of District and County Engineering Offices and with the move of the South Carolina Department of Motor Vehicles the headquarters building has been reconfigured



to afford security enhancements. All buildings have evacuation plans and unannounced tests are conducted on a periodic basis. The Executive Director serves as a member of the Governor's Counter Terrorism Task Force.

Occupational Safety

The SC Occupational Safety Council recognized SCDOT for outstanding occupational safety achievements. Greenwood Maintenance won the Palmetto Safety Excellence Award; Calhoun Maintenance, Hampton Maintenance, and Headquarters were awarded South Carolina Safety Certificates, and 57 SCDOT offices received safety achievement certificates. The SC Department of Labor, Licensing, and Regulation recognized SCDOT Headquarters for 2 million safe work hours without a work-related injury or illness involving lost time for the period of August 15, 2003 through January 1, 2005. In April the SC Chamber of Commerce recognized SCDOT for outstanding safety achievements. SCDOT Headquarters, McCormick and Calhoun County Maintenance Shops received awards. OSHA incidence rates reflect the average number of recordable injury cases that occur during the year. The incidence rate has decreased consistently for the last five years, from 9.61 in 2000 to 8.08 in 2004. This represents a 15.9% decrease since 2000. Additionally, the overall rate remains at less than 10, which is in accordance with our Business Plan goals. (See **Figure 7.4d**)



Calhoun Maintenance Receives Safety Award.



McCormick Maintenance Receives Safety Award.

Risk Management

A Risk Management Orientation program is in development to improve employee awareness of loss exposures of the SCDOT (claims and lawsuits against the SCDOT, workers compensation losses) and educate employees on how their positive actions can reduce these exposures and positively impact the safety of the motoring public. The program will be a self-contained package for supervisor use to allow new employees to receive training within the first weeks of employment and current employees to be trained as needed.

Training has been completed and authorized employees now have access to the Employee Injury, Form 576, and Fatal Crash Location Survey components of the Risk Management Information System (RMIS). Currently, the RMIS provides one point of entry for all data related to employee injuries, SCDOT vehicle accidents, and documentation of fatal vehicle crash site investigations. The RMIS will soon be expanded to include Claims Against the SCDOT and Claims Against the Public. This system will provide greater access to information and more timely reports to SCDOT management. For example, the Risk Management System will be used to monitor and control employee injuries and the associated time away from work.

Risk Management is also responsible for all insurance matters for the SCDOT. (See chart below.)



Nationwide, workers compensation premiums have increased dramatically over the last several years. This is also true for state governments and the SCDOT. As a result, SCDOT total insurance premiums have increased substantially since 2002. A committee has been established to reduce employee lost time due to injuries and illnesses, which is a primary factor in the recent workers compensation premium increases.

5.6 What activities are employees involved with that make a positive contribution to the community?

To be good corporate citizens, SCDOT employees participate in numerous volunteer programs and activities throughout the year such as:

- “Adopt-a-DOT Family”
- Habitat for Humanity
- American Heart Walk
- United Way
- Community Health Charities
- Limited English Proficiency Program (LEP) – A program developed to identify employees (26) who are fluently bi-lingual and interested in providing assistance to customers doing business with the agency.
- SCDOT CARES (Cares About Roads, Environment and Safety) – A program for elementary school classes.
- First Steps – A program that prepares employees to assist their preschool children and grandchildren for school readiness.
- K-12 Parenting Workshop – A program established to allow interested employees to attend a parenting workshop during lunch.
- Lunch Buddies Program – A voluntary mentoring program for underprivileged children conducted by SCDOT employees.
- Participation in the State Fair (public education)
- “Back to School Bash”
- STTAR Scholarship Program
- Toastmasters
- March of Dimes – Walk America Fundraiser by STEP-21 class
- Groundhog Shadowing Day
- Partnership with Felton Laboratory School
- Career Fairs

Summer Transportation Institute

The Summer Transportation Institute (STI) Program was established in 1993, as a partnership between the FHWA, SCDOT, SCDPS, and South Carolina State University (SCSU). The program expanded in 1996 to include Benedict College and in 2001, Denmark Technical College became a part of the institute. The STI is a four-week program, which includes room and board on college campuses for 10th and 11th grade students. The national curriculum includes academics, engineering, career speakers, field trips, and SAT preparation. The 2004 participation included 46 students.

CATEGORY 6: PROCESS MANAGEMENT

6.1 Key design and delivery processes for services

All SCDOT design and delivery processes relate to the mission of building and maintaining roads and bridges and in administering mass transit services. Therefore, the key processes are as follows:

- Construction
- Road and Highway - Maintenance and Preservation
- Traffic Operations
- Toll Operations
- Enhancements
- Mass Transit
- Adopt-A-Highway
- Highway Safety

Construction

During 2004-2005, SCDOT has continued to refine its partnering activities with its contractors and has completed a new construction manual.

Construction Underway



South Carolina is beginning to reap the benefits of the “27 in 7 Peak Performance” highway and bridge construction program. This program, initiated in 1999, uses a combination of innovative financing and contracting programs to complete 27 years of work in 7 years. The program uses Construction Resource Managers (CRMs) from private contracting firms to assist the agency in completing approximately 200 road and bridge projects. This enables SCDOT to complete the work without hiring additional staff. **Figure 7.3c** indicates the growth in dollars committed to construction over the past 4 years.

Carolina Bays Parkway - Construction was completed on the Carolina Bays Parkway and opened to traffic in December 2004. The 6-lane interstate standard road stretches for 20 miles between SC 9 and US 501.

Cooper River Bridge - The highlight of “27 in 7” is the opening of the Arthur Ravenel Jr., bridge over the Cooper River in Charleston, South Carolina. The bridge was completed one year ahead of schedule and can be attributed to the design build contract concept for major infrastructure projects, a superb project team, as well as community and political support. Now underway is the demolition of the Grace and Pearman Bridges.

Construction Resource Managers (CRM)

Because of its accelerated program, SCDOT had to be innovative to meet increased construction demands. FY 1999-2000 saw the addition of the CRM as an essential part of the “27 in 7 Peak Performance” construction program. Two CRM firms were hired to assist with managing 90 of the 200 construction projects that will be built in 7 years. The SCDOT accelerated bonded construction program increased the agency’s workload by a factor of 2.5 for several years. Without the assistance of the CRM firms, SCDOT would have to employ approximately 500 additional employees to meet the demand of the accelerated construction program. The 2 CRM firms act as an extension of SCDOT and report to agency program managers. Some of the accomplishments during the past year include:

- Utilization of over 300 employees working in the areas of project management, engineering, design, right-of-way acquisition, construction, inspection, and testing.
- In July 2004, the CRM firms completed the Program and Financial Management Services required by the contract. Construction Management Services are continuing as well as select services on some projects.
- The first phase of the Integrated Transportation Management system (ITMS) was delivered. ITMS allows for information sharing throughout the department.
- Implementation of a Program Controls System for agency-wide use.
- To date, the CRM firms have completed work on 4200 right-of-way parcels that have been purchased for construction of highways, while maintaining a condemnation rate of less than 12.1%.
- In partnership with SCDOT staff engineers, achieved savings of over \$121,031 million by making cost saving recommendations related to design and construction on highway improvement projects.

As of June 30, 2005, all Preliminary Engineering work has been completed on the CRM projects. There are currently 29 projects in progress and there are 41 projects completed and open to traffic.

Construction Projects Completed

During the fiscal year 2004-2005, 249 road and bridge projects totaling \$664.12 million were accepted for state maintenance by the Department. This included 29 federal/state bridge projects for 14.47 miles totaling \$110.74 million; 33 state secondary projects for 229.75 miles totaling \$22.18 million; 13 special-match projects for 54.83 miles totaling \$7.11 million; 22 interstate projects for 161.27 miles totaling \$228.09 million; 67 primary/urban projects for 527.83 miles totaling \$250.34 million, 50 maintenance projects (chip seal and full depth patching) for 2,306.91 miles totaling \$31.20 million; and 35 other (pavement marking, landscaping, resigning, etc.) for 11,684.33 miles totaling \$14.47 million.

Notable Projects Completed

- Completed the Arthur Ravenel Jr. Bridge over the Cooper River one year ahead of schedule.
- Completed the Carolina Bays Parkway in Myrtle Beach, South Carolina.
- Completed the Maybank Bridge.
- Completed US 78 & US 52 interchange.
- Completed I-77 widening in York County.
- Completed widening on SC 9.
- Completed I-77 rehabilitation in Lexington County.
- Completed rehabilitation of US 17 bridges over the Ashley River.
- Completed I-85 rehabilitation in Greenville.
- Completed US 378 in Florence.



Road and Highway- Maintenance and Preservation

SCDOT has the responsibility for maintaining the **fourth largest state highway system in the nation**, and does so at one of the lowest funding per mile in the nation. SCDOT expends \$5,430 per mile on maintenance, which is well below the national average of \$17,431 per mile. The maintenance budget for 2003 was \$190,000,000; the 2004 budget increased to \$225,357,000 due to the ability to use administrative costs associated with federal projects towards the State Match.

Key Maintenance Functions

- **Chip Seal:** Chip seal is a road surface treatment designed to seal the surface from water intrusion. A coating of polymer modified asphalt emulsion is sprayed on the road and is followed by a layer of lightweight aggregate. It is intended to be a preventative maintenance treatment designed to prolong the life of the pavement structure. During fiscal year 2004-2005, over 2000 miles of low volume secondary roads were chip sealed.
- **Drainage Structures:** Early detection of drainage problems along state maintained routes is the by-product of the inspection of our drainage structures. Improvements to the drainage system can make our highways safer by enhancing water runoff and increasing the life of the roadway. It is the Department's goal to inspect and clean the drainage structures on 20% of our road mileage each year.
- **Hurricane Evacuation & Cleanup:** Successfully reversed traffic on US 501 in Horry County to expedite evacuation in advance of Hurricane Charlie. Dealt with the cleanup and repair of highway structures in the aftermath of six named storms: Bonnie, Charlie, Francis, Gaston, Ivan, and Jeanne that impacted the state.
- **Winter Storms:** Provided the necessary anti-icing and de-icing operations to keep priority routes, such as interstates and major primaries, open to traffic.
- **Pavement Preservation Program:** Continued to use proven low cost maintenance treatments to extend pavement life and prepare roads for eventual resurfacing.
- **Traffic Safety:** Safety improvements performed include a program to upgrade traffic signals every twelve years. The number of traffic signals that were upgraded during the past year was 274, which exceeded the goal of 236.

Pavement Condition

The Office of Pavement Management collects pavement condition, GPS and digital image data on all three major road systems: Interstates, US and SC routes, and Secondary routes. Pavement Management has two very specific responsibilities: 1) to collect data only on travel lanes (excluding bridges), and 2) to provide a network view of the roads and highways in South Carolina.

An overall measure of pavement quality is calculated from the pavement condition data collected by Pavement Management. This measure is called the Pavement Quality Index, or PQI. The index ranges from zero to five, with five being a perfect road. The five condition classifications and their PQI ranges are: 1) Very Good (PQI = 4.1 to 5.0), 2) Good (PQI = 3.4 to 4.0), 3) Fair (PQI = 2.7 to 3.3), 4) Poor (PQI = 2.0 to 2.6), and 5) Very Poor (PQI = 0.0 to 1.9).

Trends for the Interstate system show the average condition of these pavements declining for 2004-2005,



after slightly increasing for 2004. Specifically, the overall PQI for the Interstate System fell from 3.48 in 2004 to 3.45 in 2005. Viewed another way, the percentage of the Interstate System classified as "Good" or "Very Good" dropped from 68.0% in 2004 to 61.8% in 2005. Similarly, the percentage of the Interstates with "Fair" or "Poor" PQIs rose from 31.6% in 2004 to 36.6% in 2005. The system-wide PQIs for the US and SC highways are presently in the "Fair" range of condition classifications. The most recent overall PQI for the US routes and SC routes stands is 3.20.

The Secondary System has an overall PQI of 3.10. A Secondary System measure must be interpreted differently from the interpretation of the same measure when applied to other systems. For example, Secondary roads are much rougher than the roads that comprise the Interstate, US, and SC systems.

In conclusion, network data collected by Pavement Management shows that the condition of the Interstate System has been stable in recent years (2003 – 2005). However the Interstate System has digressed from a high overall PQI of 3.65 in 1999 to its current condition of 3.45. The Primary System remains stable with an overall PQI of 3.2 to 3.1. The Secondary System shows some slight deterioration and is in "fair" condition; this condition is characterized by a high degree of roughness across the system.

Bridge Maintenance

SCDOT uses a Bridge Management System (BMS). The development, implementation, and data collection of the BMS began in the early 1990's, with full-scale operations starting in late 1998. The system provides detailed analyses of South Carolina's bridge needs and provides extremely valuable input for making priority recommendations.

Statewide bridge inspection continues to be a critical component of highway safety and the eligibility for federal-aid Bridge Program Funds. SCDOT inspects approximately 6,500 bridges per year and contracts for underwater bridge inspections of approximately 60 bridges per year. Data collected from inspection, maintenance, and construction activities are an integral part of the BMS.

The deck area of structurally deficient bridges continues to increase. Bridge funding levels are still far below that required to make significant improvements. Some of the primary factors that affect this trend are the overall construction history and age of the bridge infrastructure, historical lack of emphasis on bridge maintenance, and inadequate funding levels. Even though SCDOT uses a BMS, it is still very difficult to overcome the lack of proper funding. This trend is expected to continue because of a lack of funding, deteriorating conditions, and the growing transportation needs of the state. **Figure 7.2a** depicts two trend lines for the previous \$70 Million per year level and the current \$95 Million per year level. The third trend line shown is based on a needs study funding level that would eliminate all structurally deficient bridges over ten years. In an effort to further insure that the SCDOT Bridge Replacement Program though under funded, is providing the most benefit to the state, meetings concerning Strategic Planning for Bridges were held in each District this past fiscal year. Although not limited to just bridge replacement issues, they were the primary point of discussion. Through these meetings, it was determined that the SCDOT Bridge Program led by Bridge Maintenance in partnership with the Districts was providing a high level of benefit to the state.

Other strategic planning initiatives this past fiscal year included the following:

- Study and Analysis of Bridge Deck Conditions and Preservation Needs
- Develop 7 Bridge Replacement Projects Ready for Letting
- Develop a Bridge Maintenance Construction Training Program.



Quality Management of Maintenance Activities

The Maintenance Assessment Program (MAP) has been developed to help obtain an acceptable level of service of all of the key elements of maintenance.

The Director of Maintenance staff has identified the key elements of highway maintenance. These elements are pavement, shoulders and ditches, roadside, drainage structures, pavement markings, signs, and guardrail. Objective criteria have been identified for each element. The quality maintenance team (QMT) randomly selects two-tenth mile segments of roadway throughout the state and measures the maintenance performance of the seven elements. Performance thresholds have been defined to identify levels of service (LOS) for each element. The QMT is collecting data on a statistically significant sample of segments throughout the state.

Costs will be developed for each level of service thus allowing the maintenance budget to become a performance-based budget. These costs will be developed using data from the Highway Maintenance Management System (HMMS) and previous maintenance contracts. Once completed, it will be possible to define how much additional funding is required to obtain an acceptable (or the desired) level of service for each of the seven elements.

The MAP data will also be used to trend the maintenance performance over time, which will assist in determining the success of maintenance policies and identify areas of need. The MAP data is also being used on QMT county inspections. This information collected in the MAP is assisting in the rating of the performance of the county maintenance units.

Toll Operations

The Department of Transportation currently owns one toll facility in the Low Country, the Cross Island Parkway (CIP), and monitors a public/private partnership toll facility in the upstate, the Southern Connector. The CIP is a 7.5-mile toll road, located on Hilton Head Island that provides an alternative route to the south end of the Island and serves as a designated hurricane evacuation route. Daily operations and maintenance of the toll facility in Hilton Head are privatized with monitoring and violations processing provided by the Department's Toll Operations Center (TOC).

To improve collection efficiency, the TOC implemented the Department's Directive 30, which provides collection through the Department of Revenue for unpaid toll violation notices. Additionally, the TOC began development of the collection of outstanding toll usage and transponder fees for accounts that have been closed due to delinquency. These procedures will be in place in July 2005. Toll violation revenues exceeded \$63,000 this fiscal year. In regards to interoperability/reciprocity with the Southern Connector, the TOC negotiated a method of manually debiting CIP Pal Pass (PP) usage at the Southern Connector until an automated process can be implemented at a reasonable price.

In addressing customer service, the TOC, based on the results of a survey completed at the end of last fiscal year, implemented improvements at both the TOC and PP Customer Service Centers to meet our customers needs. Furthermore, the TOC is now preparing a bi-annual PP newsletter to strengthen our communications with the public. Additional terminals connecting the TOC to the PP software at the CIP have been added to each of the TOC's staff. In an effort to improve working knowledge and communications between the CIP and TOC staff, a training workshop was held. During Hurricane Charley, the CIP was "toll free" to assist in evacuation efforts.

Cost efficient operations are a major goal of the TOC. Hence, by purchasing directly from the vendor, transponder purchases have been reduced by over 50%. The TOC has begun investigating alternative methods for operating and maintaining the CIP in the future. RFP development began at the end of the fiscal year in hopes of reorganizing the operations/maintenance prior to the scheduled ACS contract termination date of February 2008.

Contractor operations and maintenance of the CIP were reviewed in detail through a number of financial and contractual audits. Recommendations for the Department have enhanced preventive maintenance measures and improved security of financial operations.

Enhancements

The objective of the enhancement program is to assist local communities with improving the quality of life in areas across the state by providing governmental entities funding to take on projects that might not otherwise be possible.

In January, the Commission approved the 2005 application cycle for the Transportation Enhancement Program. This year, the Enhancement Program Outreach office received 105 applications for non-metropolitan areas. The applications are currently being reviewed by the Technical Review Staff.

SCDOT Transportation Enhancement Program MPO & Non-MPO			
	Applications Submitted	Applications Funded	\$ Contributed by SCDOT
2003 MPO	32	32	\$2,587,207
2003 Non-MPO	105	53	8,336,000
2004 MPO	73	73	8,854,195
2004 Non-MPO	82	68	10,200,000

Figure 6.1a

Statewide Beautification Program

Gateways

- I-95 North Gateway, Dillon County, phase 2 - 95% completed
- I-95 South Gateway, Jasper County, phase 2 - The contractor has to seed the love grass and complete the bridge attachments for the irrigation system

Interchanges

- I-95/US 17 Hardeeville--funded and approved
- I-85/SC 187 (Exit 14) in Anderson County--completed
- I-95/ Hwy 261 in Manning--completed
- I-26/US 176 (Broad River Road) in Irmo--complete
- I-77/Garner’s Ferry Road--under construction
- I-85/US 76 (Exit 19) in Anderson County--funded and approved
- I-95/SC 63 (exit 53) in Colleton County-- funded and approved
- Grissom Parkway at Hwy 17 in Myrtle Beach-- funded and approved



- I-26/SC 219 in Newberry County-- funded and approved
- I-85/GSP Airport interchange (exit 57)—pending approval.
- I-77 Dave Lyle Boulevard--under discussion with the City of Rock Hill

Adopt-A-Highway

Implement successful litter abatement efforts, which is an important facet of the Department’s community outreach efforts. For 17 years the Adopt-A-Highway Program has provided an effective channel for cultivating public commitment to keeping our highways clean. The SCDOT county maintenance units and county coordinators oversee the Adopt-A-Highway Program on a local level, and all 46 counties in the state participate in the program. The Adopt-A-Highway volunteers, who cleanup roadside litter at least three times a year, are one of our state’s most valuable resources. Adopt-A-Highway volunteers continue to produce impressive results in their fight against litter.

SCDOT Adopt-A-Highway Statistics				
	Pounds	Miles	Groups	Volunteers
2002	1,970,364	7,679	2,032	33,284
2003	1,897,156	6,414	2,146	29,430
2004	1,226,239	5,469	1,694	21,370
TOTALS	5,093,759	19,562	5,872	84,084

Figure 6.1b

Educating the public about Adopt-A-Highway and the litter problem in South Carolina is also a top priority of the program. County coordinators and SCDOT employees dedicate countless hours informing the public of the importance of litter prevention and encouraging groups to adopt sections of highways. To assist in these efforts, promotional items have been developed for the Adopt-A-Highway program including informational brochures, stickers, safety handouts, car-litter bags, and pencils. Additionally, a toll free line, web page and e-mail address assist with the dissemination of information to the public.

Mass Transit

SCDOT’S Mass Transit Office supports public transit operators around the state through the administration of federal and state transit funds. Currently, the Mass Transit Office oversees federal and state transportation funds for approximately 120 human service agencies, 16 rural and small urban public transit agencies, 4 large urban public transit systems, 10 metropolitan planning organizations, and 5 councils of governments.

Innovative Public Transportation Activities

FAITH Volunteer Transportation Starts to Roll in the Lowcountry – An innovative transportation service for very special passengers has begun in South Carolina’s Lowcountry region. The new service is now in place for residents of Allendale and Hampton Counties. Plans are to eventually make the service available to residents of Beaufort, Colleton, and Jasper Counties as well.

With its primary focus being medical-related transportation, FAITH, an acronym for **F**ocused **A**lternative **I**nterfaith **T**ransportation for **H**ealth, uses volunteer drivers who use their own vehicles. There is no cost to the riders who must call 48 hours in advance of their need for a ride.



Initially conceived as an idea by the Lowcountry Regional Transportation Authority (LRTA) and the Hampton County Department of Social Services, the concept was presented to the ministerial community in Hampton County and approximately a dozen pastors endorsed the plan. FAITH now also has the support of the Hilton Head Regional Medical Center; the Coastal Carolina Medical Center, and the Marriott Vacation Club. Former U.S. Senator Ernest Hollings was instrumental in securing earmark money to get the service started. The South Carolina Department of Social Services has also endorsed the service. Other agencies that have assisted are the Federal Transit Administration, SCDOT's Mass Transit Office and the Lowcountry Regional Transportation Authority (LRTA). The LRTA provides staffing assistance at its headquarters, driver training, dispatching, maintenance and reimbursement for the drivers' mileage and parking costs. Volunteer drivers also receive supplemental liability insurance at no cost to them.

FAITH transports persons who cannot use other transportation options such as Medicaid or Veteran's Administration services. Caregivers and family members are allowed to travel along with their loved ones with prior notice. Trips are made for doctor appointments, dialysis, prescription pick-ups and other medical related purposes.

Purchase of Vehicles

The goal of the Transit Vehicle Acquisition Program is to purchase new vehicles for each transit agency in the state. A primary goal of this program is to reduce overall maintenance costs for the agencies. Newer, more modern vehicles will require less repair work resulting in reduced vehicle downtime and lower agency operating expenses. An added benefit is safer vehicles on the road resulting in a safer ride for all passengers.

Under this program, vehicles are still being delivered and delivery dates will continue throughout this fiscal year and into the next. By the end of fiscal year 2006, SCDOT is projected to spend over \$23 million on new vehicles bringing the total of replacement buses and cutaway vehicles purchased to over 390.

Statewide Transportation Coordination Program

The SCDOT was awarded a \$35,000 grant in late 2004 under the national United We Ride Program. The 100% federally funded grants were made available by the Federal Transit Administration to help states around the country address the gaps and needs that are related to human service transportation coordination. South Carolina is one of 45 states to receive one of these grants.

The grant funds, while not substantial, will allow South Carolina to further develop its statewide action plan for human service transportation coordination and to begin implementing elements of that action plan.

One of the first initiatives, implemented early in 2005, was the formation of a state inter-agency coordinating council made up of appropriate state agency representatives. The purpose of the council is to bring together the state agencies that are involved in client transportation services or the funding of such services.

SMARTRide Commuter Service

SMARTRide, the SCDOT-sponsored commuter express bus service operating in the Midlands of South Carolina, offered free rides during the period June 6th July 1, 2005. This incentive gave many more riders the opportunity to see for themselves that the service is reliable and provides a no hassle, stress-free, relaxing way to commute into Columbia. Both SmartRide providers, Central Midlands Regional Transit Authority (CMRTA) and Santee-Wateree Regional Transportation Authority (SWRTA), offered the free rides on the routes they serve. The CMRTA provides a morning route from Newberry with stops in Little Mountain and Chapin and ending in downtown Columbia; SWRTA has morning service originating in Camden with a stop in Lugoff and ending in downtown Columbia. In the afternoon, the express service follows the same routes in reverse. The SWRTA now also operates a vanpool form of SMARTRide service that transports commuters from Sumter to downtown Columbia.

In an innovative move, SMARTRide did its part in the summer of 2005 to fight ground level ozone and reduce traffic congestion at the same time. By partnering with the South Carolina Energy Office, the South Carolina Department of Health and Environmental Control (SCDHEC), SCDOT and its SMARTRide service providers offered free rides for commuters during the Midland's ozone action days. Ozone action days are the days when ground level ozone pollution is at its highest. The SCDHEC uses a color-coded rating system to identify daily ozone levels for the various regions of the state. The higher orange and red levels trigger ozone action days. On those days riders on the SMARTRide routes into Columbia ride free. These SCDHEC designated ozone action days begin around April 1st and will end this year on September 30th. Ground level ozone forecasts were made available to the public on a special website set up by SCDHEC.

Highway Safety

Vehicle miles traveled is up 7.5% from 2000. With a 17.2% increase in the number of licensed drivers and an 18.7% increase in the number of registered vehicles, the following reductions are even more significant for highway safety statistics:

- The number of non-fatal traffic injuries declined by 5.7% from 53,721 in 2000 to 50,643 in 2004, and the number of South Carolinians injured in a crash dropped from 1 in 75 to 1 in 82. Data indicates a 1.6% reduction in fatalities since 2000, dropping from 1,063 to 1046.
- The number of fatalities increased sharply, almost 11% from 2003, when fatalities reached a 5 year low.

The major challenge facing SCDOT is reducing highway fatalities on South Carolina's secondary road system. Two out of 3 highway deaths occur on our secondary roads. Unfortunately, funding for improvements is limited. Although South Carolina received a large increase in funding from the Transportation Equity Act for the 21st Century (TEA-21), most federal highway funds are not eligible for improving 78% of the secondary road mileage in South Carolina. The increase in federal funds and match requirement has also significantly reduced available state funding for improvements on secondary routes. SCDOT is seeking additional funding from the legislature. One objective of the funding package is to create a state-funded safety program to reduce the fatality rate on these roads. The following chart reflects the mileage death rate of South Carolina in relation to the national average.



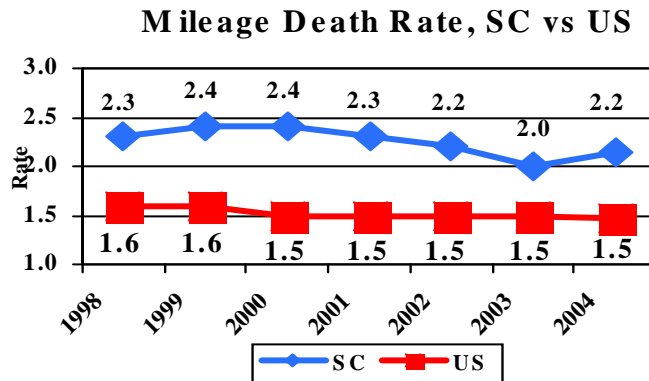


Figure 6.1c

Progress has continued in reducing interstate fatalities. SCDOT has completed 421.33 miles of interstate cable median barriers; maintained lower urban interstate speed limits; continued truck lane restrictions; extended acceleration/deceleration ramps; and completed additional widening projects. Fatal crashes involving interstate median crossovers decreased from 27 in 2000 to 5 in 2004, a decrease of 81.5%. Interstate truck fatalities have dropped from 42 in 2000 to 26 in 2004, a 38% decrease. Urban interstate fatalities have dropped from 53 in 2000 to 26 in 2004, down 50.9%.

The reporting methodology changed for Run Off Road crashes in 2001 so no valid comparison exists between the 2000 and the 2004 statistics; comparison with 2001 data, while limited to only a 4-year perspective, provides the only accurate benchmark. Fatalities in Run Off Road crashes increased by 34.3%, from 361 in 2001 to 485 in 2004.

Crashes involving pedestrians are down from 920 in 2000 to 890 in 2004, a decrease of 3.3%; however, fatalities resulting from these crashes have increased from 83 to 86, a 3.6% increase.

CRISOS (Crash Reduction by Improving Safety on Secondaries) Program

Since implementation on July 29, 2003, the SCDOT Safety Office has actively pursued projects that support and enhance engineering efforts for this program, which targets reduction of crashes, injuries, and fatalities on the state's secondary roads. Four consultants (Campco; Civil Engineering Consulting Services (CECS); Parsons, Brinkerhoff, Quad, & Douglas (PBQ & D); and Post, Buckley, Schu, & Jernigan (PBS & J) were chosen to address the long term strategies for the 102 roads and 9 intersection projects roads that were identified in Phase I & II of the CRISOS program. SCDOT has completed all short-term improvements and has begun extending contracts to accomplish intermediate strategies for these roads. Identification of another 25 roads for short-term improvements that will start Phase III of the program is complete. In January of 2005, SCDOT submitted a new CRISOS Program Outline covering the scope of the program, the funding source, and the approach as well as short-term, intermediate, and long-term solutions. A CRISOS Status Summary Sheet provided a compilation of Safety, Traffic Engineering, Accounting and Maintenance information and a CRISOS server was created to house all information pertaining to CRISOS. The Safety Office received approval for federal grant funding to hire a temporary grant employee to evaluate the safety benefit of short-term improvements.



Interchange RUSH

The Ramp Upgrades for Safer Highways (RUSH) Program was created to develop low-cost safety and operational improvements to interstate interchanges. FHWA and SCDOT began this program in 2001 to address the increased volumes on interstate ramps by reducing the occurrences of vehicles from backing up onto the interstate and allowing safer merging and diverging movements for motorists entering and exiting the interstate. Funded projects involve no additional right-of-way and minimal environmental impacts. To date, 28 projects have been completed, and the development of additional projects is currently ongoing.

Road Safety Audit Program (RSA)

The RSA program is still relatively new to the SCDOT. Under this program, a formal examination of an existing or future road or traffic project by a multidisciplinary team identifies safety concerns. SCDOT hired a new Program Coordinator in March 2005 to oversee ongoing implementation and operation of the program. The SCDOT team completed an audit report on S-34 in Lexington County and submitted it to the District Engineering Administrator for review and response. The Director of Safety assisted a national task force in developing national RSA guidelines and developing a synthesis on the state of the practice of RSA's in the United States, published in 2004. FHWA has asked SCDOT to assist in the production of an RSA educational video and brochure for national distribution.

Work Zone Safety Campaign

In spring of 2005, as a joint initiative, in partnership with SCDPS, AGC, FHWA, and local law enforcement, SCDOT implemented the newest Work Zone Safety Campaign. The Work Zone Safety High Visibility Enforcement Campaign spring boarded from the previous campaigns; however, the focus moved from education to a combination of education and enforcement. In the first two enforcement blitz periods, SCDOT law enforcement partners reported issuing a total of 8,365 citations for traffic violations within the work zones.

In May 2004, SCDOT released two new television ads, telling the real-life stories of two people killed in work zone crashes, Ted Yandle and Brad Sanders. The ads aired 8,579 times during FY 2004-2005 on television stations across South Carolina. SCDOT produced and distributed brochures that tell the stories in more detail in an effort to encourage motorists to slow down and pay attention in highway work zones. These two ads won Silver Addy Awards, presented by the Columbia Advertising Federation in February 2005. Current enforcement-oriented ads aired 5,546 times between April – June 30, 2005.

Truck-Lane Restrictions

This year, SCDOT and FHWA continued the truck-lane restrictions on interstate sections having six lanes or more based on recommendations from a pilot study. A pilot study was conducted on I-85 in Anderson and Spartanburg Counties. The number of crashes with injuries was down 72%. Since implementing 111 miles of Restricted Truck Lanes. Interstate truck fatalities have dropped from 42 in 2000 to 26 in 2004, a 38% decrease.

Work Zone Crash Statistics

Work Zone Collision Statistics and High Visibility Enforcement. While a reduction in work zone fatalities occurred in 2002, the number climbed again in 2003 exceeding the 2001 total. In 2004, fatalities were down by 2, or 8.7%. The rate of increase in work zone collisions slowed between 2002 and 2003 and in 2004, dropped by 24.4% to 1,967. Research shows speeding is a leading cause of work zone collisions and of work zone fatalities, and that education is effective in improving safety when coupled with enforcement. During 2004, SCDOT developed strategies that combined both elements and entered into partnerships with



law enforcement agencies to address these issues through a statewide high visibility enforcement campaign.

Through these partnerships, a high visibility enforcement campaign has begun in work zones, targeting the months of highest risk from April through October of 2005. Under the agreement, SCDPS has designated troopers dedicated to the enforcement effort; State Transport Police are supporting the initiative, as are local Law Enforcement Networks. Efforts include four “blitz” periods with visible enforcement, and enforcement-oriented media advertising, and a zero tolerance policy for violations occurring in work zones.

During the first blitz period of April 10-30, 2005, law enforcement issued 6,365 citations. Preliminary results of the second blitz period, June 23-30, 2005 show 2,095 citations with less than 50% of results reported. Based on the April results for Work Zone Collisions since 2001, the High Visibility Enforcement Initiative appears to have made an impact on the number of collisions and injuries occurring in work zones. The number of collisions that occurred this April is the lowest in 5 years, down 9.2% from 2001 and 36.7% from 2002 as is the number of injuries in work zone collisions (down 24.4% from 2001 and 38.1% from 2002).

6.2 Meeting Key Performance Requirements

Research and Materials

SCDOT ensures that key performance requirements are met by the development of performance measures that are incorporated in SCDOT Strategic Plan. Additionally, process owners are held accountable and are assessed in the annual EPMS.

The Office of Construction continues to use Quality Assurance Teams to ensure that roads and bridges are constructed to specification and that quality materials are used throughout the project. The staff of the Research and Materials Laboratory (RML), including district laboratories in Charleston, Greenville, and Florence, provides technical assistance to district and CRM personnel on material matters statewide. Field technicians and materials engineers from the central and district laboratories routinely visit projects statewide in order to assure that proper sampling and testing procedures are being followed and all field testing equipment is calibrated and in proper working order.

Supplier/Consultant Support

SCDOT is providing customer service to design/build contractors by providing oversight and technical services from its RML. Inspectors from the RML, who are trained and certified in all areas of sampling and testing, have been temporarily assigned to the quality assurance monitoring of such projects. SCDOT has provided these quality assurance services for the Conway Bypass project and the Carolina Bays Parkway project.

Quality Assurance

During the last fiscal year the OMR provided customer service to Design/Build contractors by providing oversight and technical services on these projects. This service was accomplished by frequent visits to the project sites during which time the OMR staff was able to provide technical assistance for any materials issue that had developed. OMR staff members regularly attended the joint contractor/SCDOT standing meeting for the Cooper River Bridge project to discuss Quality Control/Quality Assurance and Independent Assurance activities. OMR engineers, along with an engineer from the Federal Highway Administration (FHWA) have begun a quality control audit of the design/build contractor’s testing records for the Cooper River Bridge project. These engineers will review materials test results for the project to assure that



contractual materials requirements have been met and assist in preparing the Final Materials Certification for the project.

Personnel from the OMR also assist CRM engineers in auditing construction projects. These audits include in-depth analysis of staff qualifications, construction practices, construction materials quality, and record keeping.

Research

The SCDOT receives Federal funds for research through the State Planning and Research (SPR) Program. The FHWA administers these funds. In FY 05, a total of \$2,377,695 was received for research, which represented an increase of approximately 10% over FY 04. Efforts have continued to expand and broaden the scope of the research program to include all areas of the SCDOT as well as to emphasize goals and objectives contained in the Strategic Plan.

In FY 05, the remaining studies resulting from the last Research Workshop and approved by the Research and Development Executive Committee (RDEC) were initiated. These projects span a wide range of the SCDOT's activities and all relate to the Strategic Plan. Three of the studies pertain to the number one goal of increasing safety on the transportation system. One project is in the area of measuring customer satisfaction through a survey of the public to assess their perception of the performance of the SCDOT. Another study is related to the goal of improving and expanding the multi-modal transportation system in the state. The remaining projects all pertain to the goal of improving the quality, efficiency, and appearance of the highway system.

In addition, two customer satisfaction surveys pertaining to research projects were initiated. Both were designed to provide feedback from research project Steering and Implementation Committee members. One focused on work performed by the Principal Investigator for the study and the other focused on the administrative handling of the project by OMR staff.

Improving Customer Service

The OMR established an initiative to provide testing and reporting of at least 80% of samples other than concrete cylinders within twelve days. From July 2004 to June 2005, approximately 21,000 non-concrete cylinder samples were tested. Of these, an average of 98% were tested within twelve-days. The OMR has been able to maintain this average for a two-year period, even as the initiative was changed in the spring of 2004 from 75% of all non-concrete samples reporting in fourteen days to 80% of all non-concrete samples reporting in twelve days.

To meet the demands of the department's accelerated construction program, and to continue to avoid adding any additional personnel, the OMR utilizes private, accredited testing firms as needed to maintain the expected level of customer service. Specifically, private testing firms completed approximately seven percent of all soil testing for the SCDOT this fiscal year. Other types of materials that are outsourced for testing include thermoplastic paint and large diameter concrete reinforcing steel.

Material Source Monitoring

Consistent review and monitoring of materials sources is a major service provided by the OMR. Key to this effort is the maintenance of over 50 listings of approved sources for a wide variety of products ranging from aggregates to elastomeric bearing pads for bridges. In recent years, the OMR transitioned from a paper-based source listing to an internet-based listing, thereby greatly increasing their level of service to



their customers. As new sources are added, or new information becomes available, immediate updates are uploaded to the SCDOT website. These rapid updates provide the OMR customers nearly instantaneous access to the latest and most accurate information.

To be included on the SCDOT's Approved Sources Listing, each materials source must typically provide a detailed quality control plan, as well as key test results and product certifications. To the greatest extent possible, the OMR performs testing to verify the properties claimed by suppliers. Whenever a sample is encountered that does not meet department standards, a copy of the test report is provided to the supplier. Materials engineers at the OMR then work with the supplier to ensure that they maintain adequate levels of quality. These same engineers also monitor trends in supplier quality control testing and investigate any problem areas. This monitoring provides a means for the agency to limit use of inferior products in construction and maintenance operations. As highway construction becomes more complex, the number of approval listings is expected to increase, allowing innovative new products to be incorporated into SCDOT construction while maintaining materials quality.

6.3 Key Support Processes

The key support processes of SCDOT include those activities that provide administrative and logistical support. These processes include Administration, Information Technology Services, Supply and Equipment, Facilities Engineering, Finance and Accounting, Legal, Human Resources, Employee Support Services, Staff Development and Training Offices. All key support processes are aligned to support SCDOT's mission and are linked to support the goals in the strategic plan. The people that perform the support processes are focused on the mission of SCDOT. They are part of a larger process of building and maintaining roads and providing mass transit services.

Procurement

In 2004, the Universal Public Purchasing Certification council recognized the SCDOT Procurement Office for having a fully certified staff. Only 24 public agencies in the United States and Canada were qualified to earn this prestigious honor in 2004. SCDOT's procurement staff has been recognized as a model agency that is committed to professionalism and has demonstrated that commitment through the Certified Public Purchasing Officer and Certified Public Procurement Buyer designations. Dedication and leadership is essential in achieving this honor. SCDOT was recognized for this honor at the 2004 NIGP (National Institute of Governmental Purchasing, Inc.) Forum in Biloxi, Mississippi, and received a *Certificate of Excellence*.

Procurement Process Improvement

The Procurement Division of SCDOT has developed a more efficient way to process necessary paperwork through the approval process, creation of solicitation documents, awarding of contracts, issuing of Purchase Orders, and ultimately storing all paperwork associated with each procurement transaction it handles.

Procurement along with IT Services has designed an Electronic Document Management System (EDMS) that will allow electronic signature of documents created to begin the procurement process. The system tracks the workflow to determine where documents are during any phase of the procurement process. After work is completed and documented through EDMS for each procurement transaction, all associated records are scanned in and metadata is pulled from the mainframe procurement system to create a contract file for every procurement.

This system has allowed us to implement a paperless procurement system where authorized personnel



within SCDOT can view records for any procurement transaction. This solution has greatly reduced time-intensive processes, delays due to manual processing, tracking down paper copies that could be misplaced or misfiled, and locating a procurement that is in process.

In the very near future we will begin to fax Purchase Orders to vendors, suppliers and contractors through a Right-Fax solution to further eliminate the need to print Purchase Orders and send via US Postal Service. This will expedite the process even further and will save additional time and money. The EDMS application was highlighted in the June edition of *Government Procurement* in an article titled “*Paperless Procurement Drive State DOT Efficiency.*”

Agency Certification Limits

Pursuant to the South Carolina Consolidated Procurement Code in § 11-35-1210, pertaining to Procurement Certification, the Budget and Control Board may assign differential dollar limits to individual governmental bodies allowing the agency to make direct procurements. In order to have certification levels increased an agency’s internal procurement operation must be reviewed at least every three years. This review is to ensure the agency is consistent in applying and adhering to the provisions of the SC Consolidated Procurement Code and ensuing regulations.

Another factor taken into consideration is the qualifications of the agency’s Procurement staff. The SCDOT’s Procurement staff is 100% certified as either a Certified Professional Public Buyer (CPPB) or a Certified Public Purchasing Officer (CPPO). This certification ensures the buyers have gained the knowledge required to handle more complex procurements.

SCDOT has consistently received good audit reports and the result has been an increase in procurement authority. In early 2005 the South Carolina Budget and Control Board approved an increase in certification authority for the department raising the limit for purchase of supplies from \$250,000 to \$1,000,000 per commitment and for construction services from \$250,000 to \$500,000 per commitment.

Information Technology

SCDOT depends upon information technology to help employees fulfill the agency’s mission and achieve strategic goals. IT Services supports the following software systems:

- Risk Management System
- Sign Inventory Module for the Highway Maintenance Management System (HMMS)
- Signal Inventory Forms
- Accounts Receivable Billing and Cash Receipts System
- Online Budget/Expenditure System
- Procurement EDMS
- Microsoft Outlook Web Access
- Project Web (web based road plans)
- Site Manager™
- Highway Maintenance Management System (daily work and planning)
- Bridge Management System (detailed analysis of bridge conditions and needs)
- Pavement Management System (pavement quality indicator)
- Road Inventory Management System (includes traffic density and pavement quality)
- Electronic Bidding for highway construction contracts, and
- Transportation Equipment Replacement Model (TERMS).



- Proposals and Estimates (PES)
- Letting and Awards (LAS)

6.4 Management of Key Suppliers/Contractors/Partner Interactions and Processes to Improve Performance

SCDOT has established an Office of CRM Operations, headed by an engineering director who coordinates and supports CRM Operations. The Department uses a variety of methods to improve performance of key suppliers, contractors, and partners. SCDOT has a well-established Quality Assurance Program supported by the RML, Contract Audit Services, and a Procurement monitoring process. The program managers are involved in construction projects from the beginning until project completion. The Director of CRM Operations monitors the work product and costs of the CRM Program.

Innovations in Property Management

SCDOT owns and manages a large portfolio of state property, the majority of which is acquired for rights-of-way. In 2004, all property was inventoried and segregated by those parcels used for rights-of-way and those used for business purposes. The property was further segregated by those parcels in use, surplus, and those to be used later. Additionally, the Director of Maintenance, Assets Management, and District Engineering Administrators are developing long-range plans to use our facilities more efficiently that may include consolidation or elimination of some facilities.

Innovations in Finance and Cost Efficiency

SCDOT has partnered with FHWA staff to continue effectively managing construction contracts and to improve the Financial Management Strategic Planning System (FMSP). Through the improved FMSP, SCDOT is able to maximize available resources by enhancing its capability to forecast construction payouts. Departments of Transportation in Oregon, Kentucky, North Carolina, and Washington have sent financial and engineering staff to learn about FMSP. Of particular interest is the FSMP application in the bonding program.

An essential partner of SCDOT is the South Carolina Department of Revenue (SCDOR), who collects the state fuel user fee. In an effort to maximize the collection of user fees, an automated motor fuel tax collection and auditing system titled “ZYTAX” was purchased by SCDOT. In a partnership with SCDOT and FHWA, “ZYTAX” was successfully completed on schedule.

CATEGORY 7 – BUSINESS RESULTS

7.1 Performance Levels and Trends for Customer Satisfaction

The Incident Response Teams is a key component of the South Carolina Intelligent Transportation System and is used to aid stranded motorists and assist in evacuations. **Figure 7.1a** depicts the number of motorists assisted over the past 3 years.

AREAS	FY 2003	FY 2004	FY 2005
Columbia	8,639	8,883	7,693
Upstate (Greenville and Spartanburg)	12,103	11,733	15,152
Rock Hill	4,016	3,566	3,522
Charleston	14,880	17,121	18,035
Anderson	9,122	10,498	6,440
Myrtle Beach	10,313	10,505	9,110
Beaufort	1,175	6,352	6,770
Florence	8,184	9,448	9,056
Cherokee	0	1,580	2,017
Total Reponses	68,432	79,686	77,795

Figure 7.1a

Condemnation Rate

The objective is to improve customer satisfaction in right-of-way transactions. The chart below depicts the condemnation rate.

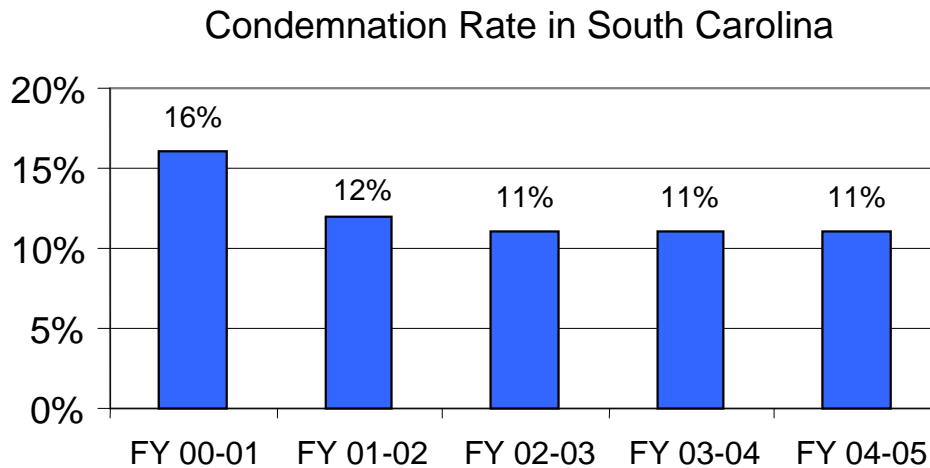


Figure 7.1b

The SCDOT-sponsored commuter express bus service, “SMARTRide” offers two routes, which are depicted below in **Figure 7.1c**. June 2004 was the start of a Free-Ride month with a total ridership of 1,376. With the March 2005, increase in gas prices, the ridership increased to 1,584. In June 2005, also a free month, the ridership increased by 759 riders (from June 04 to June 05) for an annual percentage increase of 55%.



SMARTRide Boardings
(June 2004-2005)

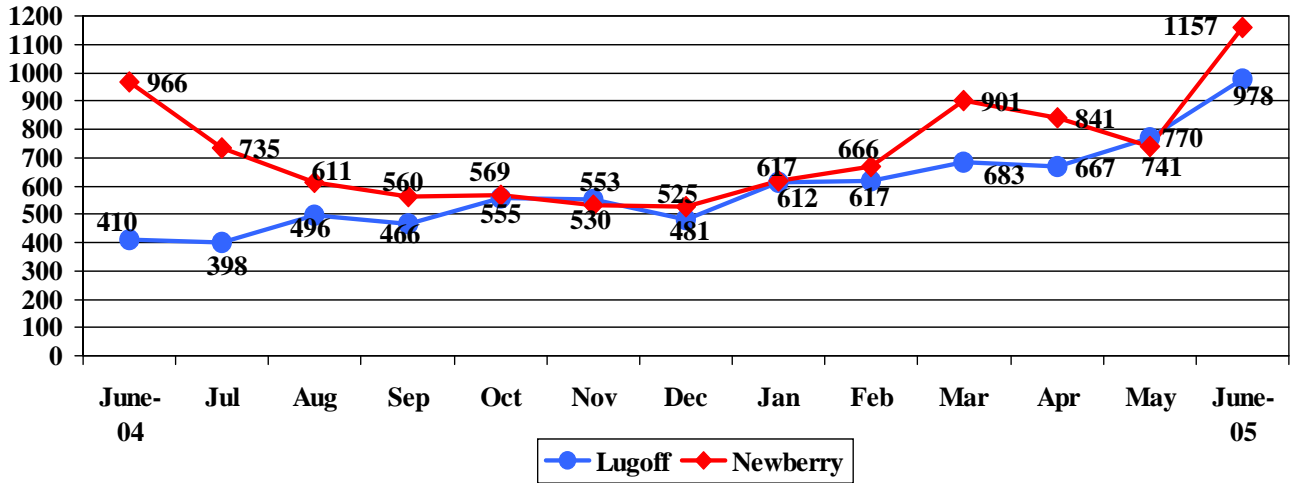
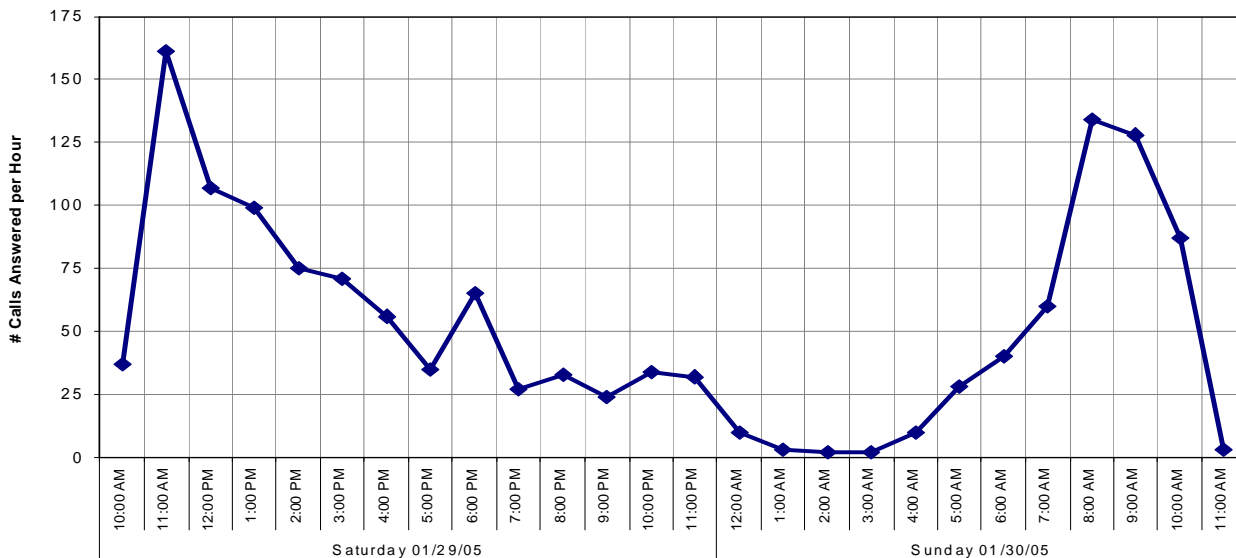


Figure 7.1c

Responses to the 2005 Winter Storm

IT Services modified the Snow/Ice Road Conditions application to make it easier for people to locate conditions of Interstate and Primary roads. These efforts paid off when a snowstorm struck the state on January 29th and 30th. Volunteers from SCDOT, FHWA, and business partners manned the agency’s toll-free Help Line to assist over 1,300 citizens with information about road conditions around the state. The chart below shows the number of calls received per hour. During that same timeframe, the agency’s Internet site had nearly 42,000 visitors who primarily accessed road condition information and traffic camera images. Under normal conditions, the average number of daily visitors to the SCDOT main web

SCDOT Emergency Road Conditions Helpline
1/29/05 at 10 AM - 1/30/05 at 11 AM
Total Connected Calls 1,363



site is 6,500.

Figure 7.1d



The improvement of our customer service has been a major part of the business plan; therefore, SCDOT monitors its response to the citizen work request with a goal to complete all work requests within 60 days. SCDOT completed 96% of work requests within 60 days; this is below the goal of completing 95% within 60 days.

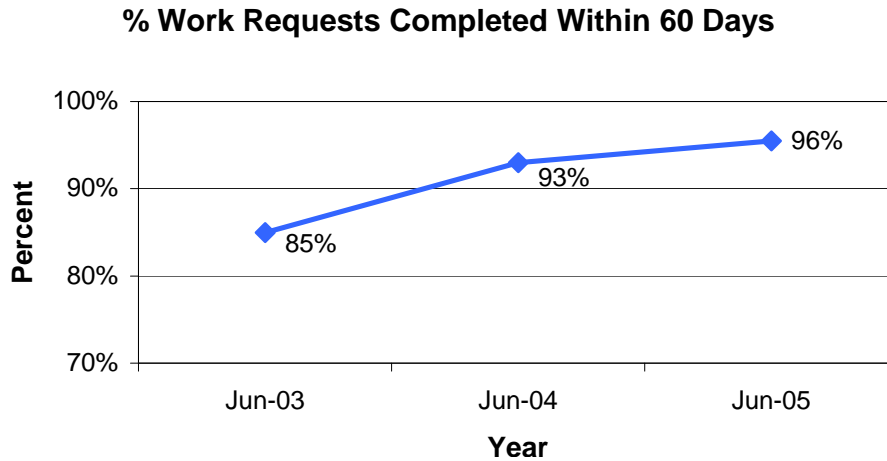


Figure 7.1e

7.2 Performance Levels and Trends for Key Measures of Mission Accomplishment.

Below is a graph showing two trend lines for the previous \$70 Million per year level and the current \$95 Million per year level. The third trend line shown is based on a needs study funding level that would eliminate all structurally deficient bridges over ten years.

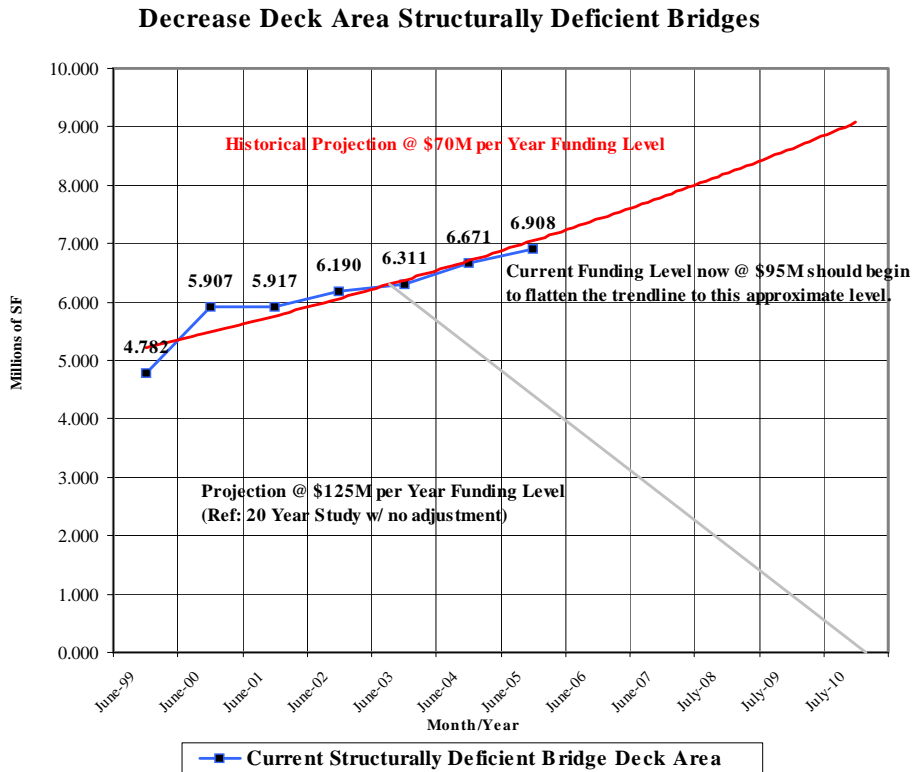


Figure 7.2a



Work Zone Collision Statistics and High Visibility Enforcement

While a reduction in work zone fatalities occurred in 2002, the number climbed again in 2003 exceeding the 2001 total. In 2004, fatalities were down by 2, or 8.7%. The rate of increase in work zone collisions slowed between 2002 and 2003 and in 2004, dropped by 24.4% to 1,967. Research shows speeding is a leading cause of work zone collisions and of work zone fatalities, and that education is effective in improving safety when coupled with enforcement. During 2004, SCDOT developed strategies that combined both elements and entered into partnerships with law enforcement agencies to address these issues through a statewide high visibility enforcement campaign.

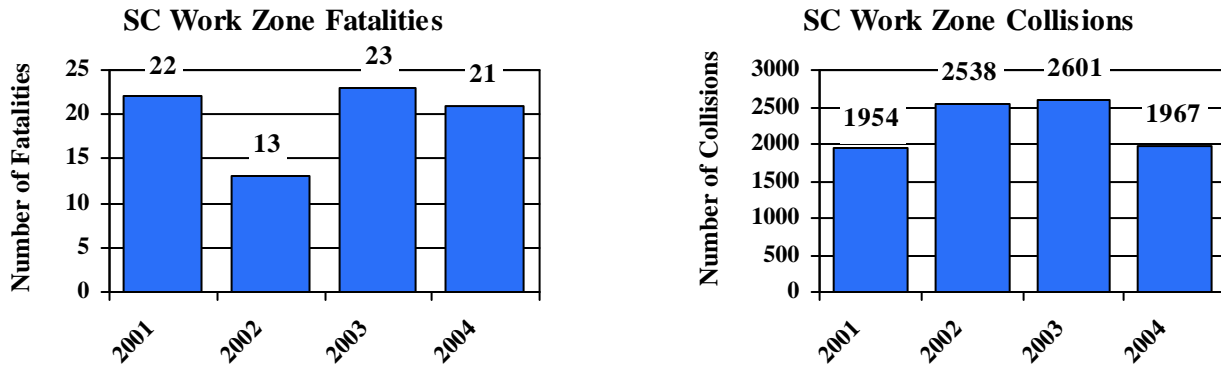


Figure 7.2b and 7.2c

Below is a chart depicting Statewide Ridership. Ridership information is compiled annually and includes Public and Human Services. The reduction in rider-ship is due to Charleston Area Transit reducing service, which accounts for over 1.5 million riders a year.

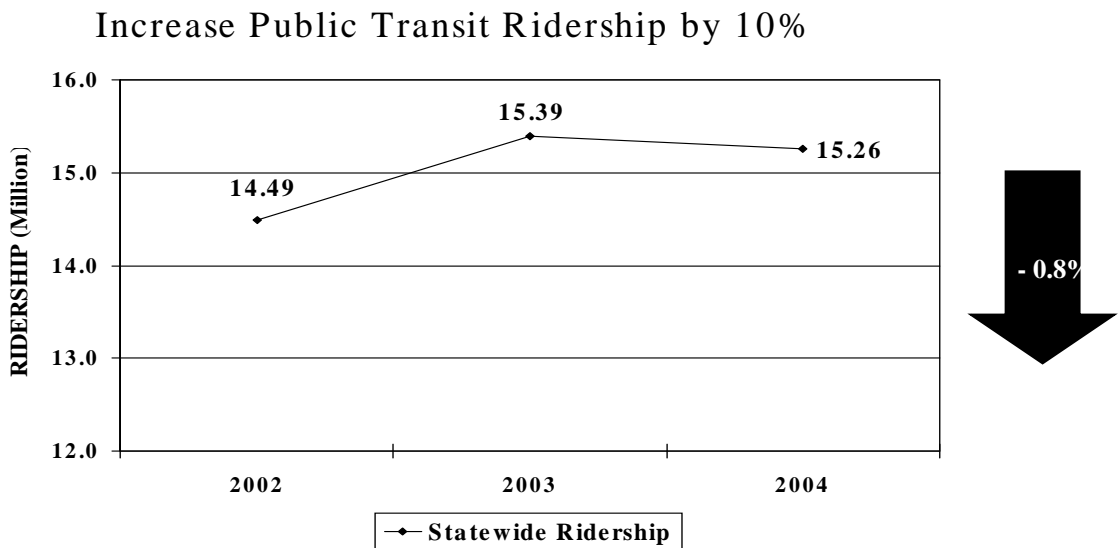
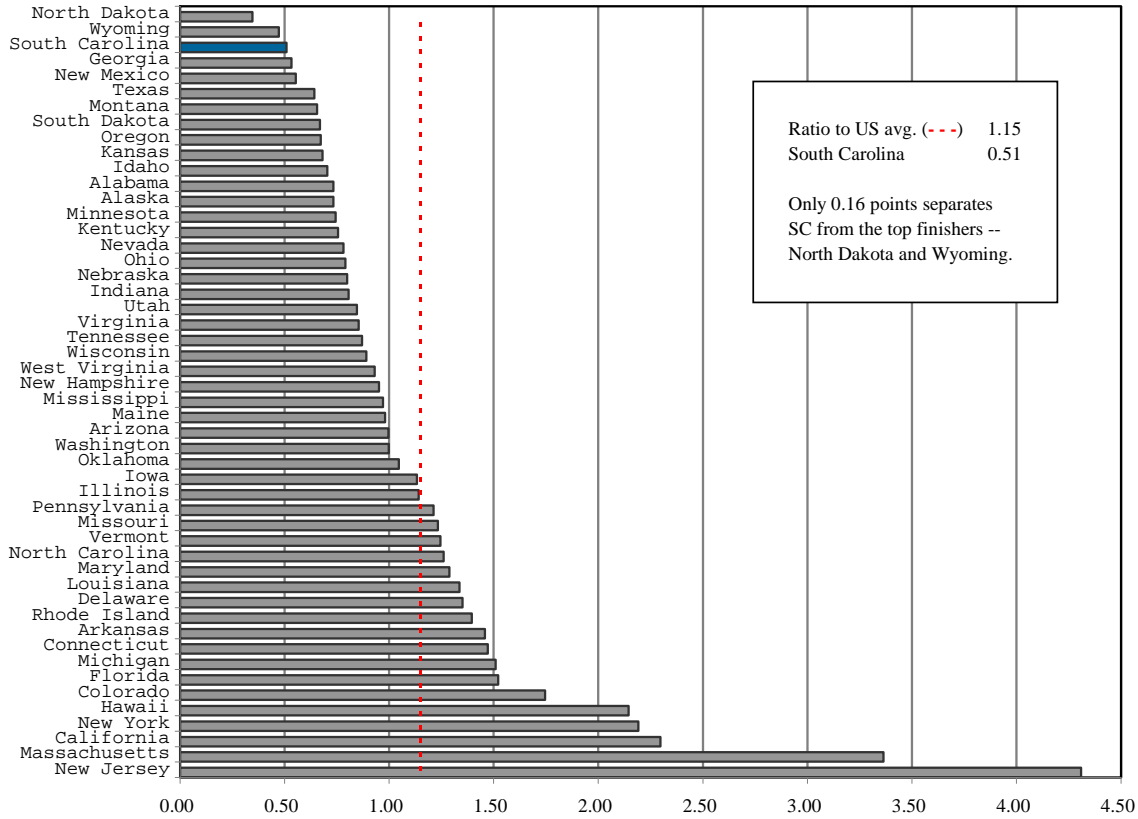


Figure 7.2d

7.3 Key Measures of Financial Performance

The 2003, version of the UNC-Charlotte study published in 2005, depicts the overall cost-effectiveness of SCDOT. South Carolina ranks third in the nation, where only 0.16 points separates us from the top two finishers. SCDOT uses its resources wise and efficiently.

Overall Cost-Effectiveness, 2003



Source: TEA21's Impact: Performance of State Highway Systems 1998-2003, Dr. David Hartgen, UNC-Charlotte, 02/23/05

Figure 7.3a

Meals for One day Trips

The South Carolina Legislative Audit Council performed a review of State Travel in May 2005. Their report indicated that SCDOT adopted a policy that states “Reimbursements for the lunch meal will be allowed only if the employee is traveling overnight or is in a work status for a least twelve hours. **Figure 7.3b** depicts the savings by adopting this practice.

AGENCY	FY 01-02	FY 03-04	DECREASE
Department of Transportation	\$98,857	\$1,647	98%
State Law Enforcement Division (SLED)	\$84,506	\$3,533	96%
Department of Social Services	\$163,638	\$8,030	95%
Department of Probation, Parole & Pardon Services	\$23,813	\$5,268	78%

Source: Comptroller General

Figure 7.3b

Construction Dollars Obligated

The chart below depicts the federal aid construction dollars obligated by fiscal year.

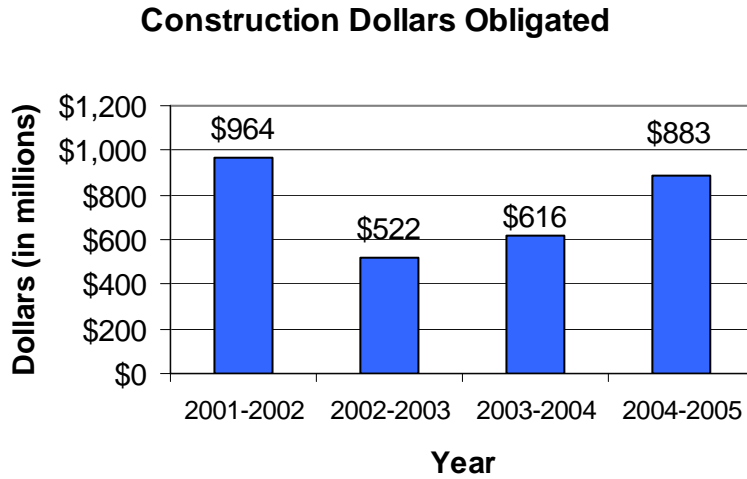


Figure 7.3c

Improving maintenance equipment utilization has been a priority in SCDOT's business plan. In FY 2004-2005, maintenance equipment utilization continued to increase, and SCDOT exceeded its goal of 86.5% utilization with 88.7%. The quantity of vehicles and equipment in service continued its downward trend. Since 1997, SCDOT's fleet has been reduced by approximately 1800 units. In FY 2004-2005, SCDOT introduces a new software tool to track vehicle and equipment costs. This new program, TERMS, also helps guide replacement recommendations by way of economic life calculations and item comparisons.

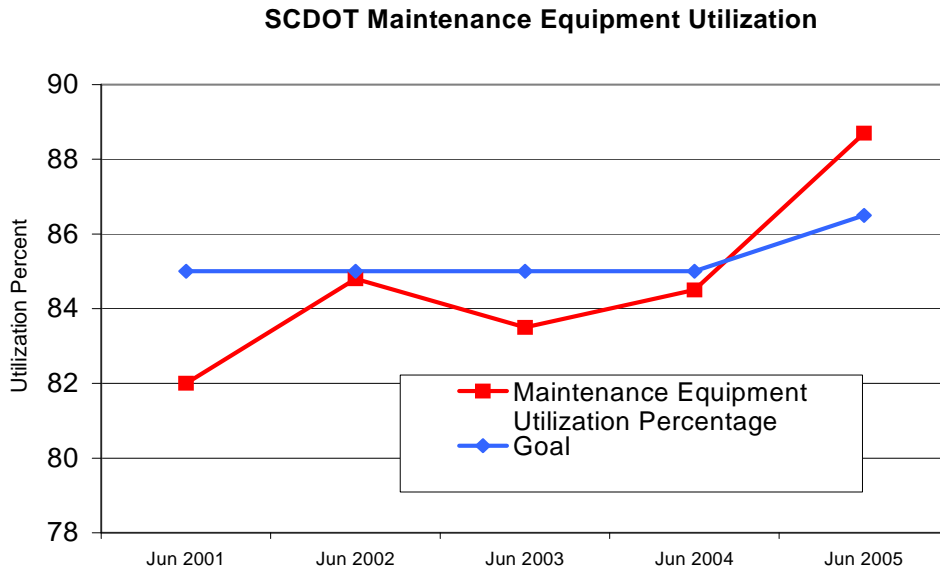


Figure 7.3d

Toll Operations

The Department of Transportation currently owns one toll facility in the Low Country, the Cross Island Parkway (CIP), and monitors a public/private partnership toll facility in the upstate, the Southern Connector. The CIP is a 7.5-mile toll road, located on Hilton Head Island that provides an alternative route to the south end of the Island and serves as a designated hurricane evacuation route. Daily operations and maintenance of the toll facility in Hilton Head are privatized with monitoring and violations processing provided by the Department's Toll Operations Center (TOC).

Traffic grew on the CIP at a rate of 2.5% with over 8.4 million vehicles passing through the facility. Revenues from toll operations totaled \$5.9 million in FY 2005. By utilizing other State Agency resources, the TOC anticipates collection of supplemental revenues from out of state violation collection in the upcoming fiscal year.

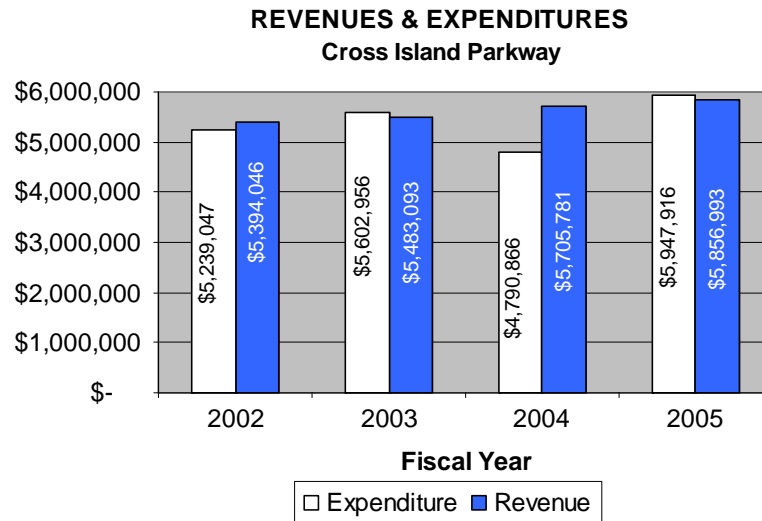


Figure 7.3e

SCDOT continues to furnish transit vehicles to South Carolina public transportation providers. Between September 2004 and May 2005, transit properties received delivery of thirty large transit buses along with forty-three medium duty vehicles. In FY 05-06, SCDOT will order forty-eight additional transit vehicles to begin drawing down the \$3.9 million dollar earmark designated for transit vehicle replacement.

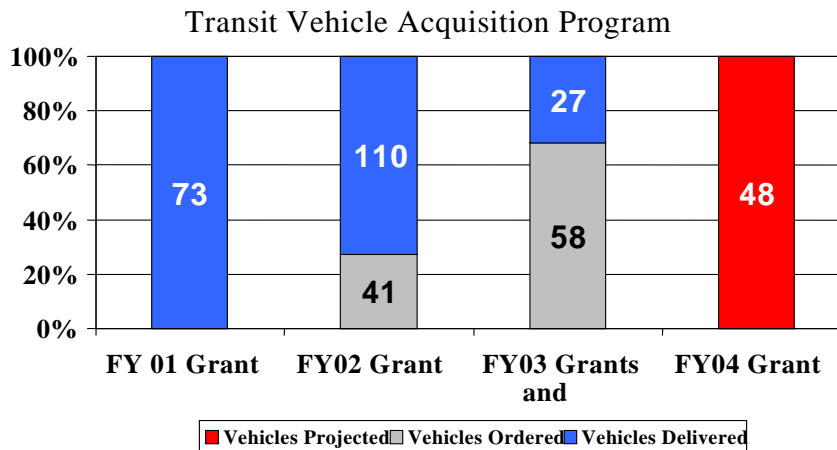
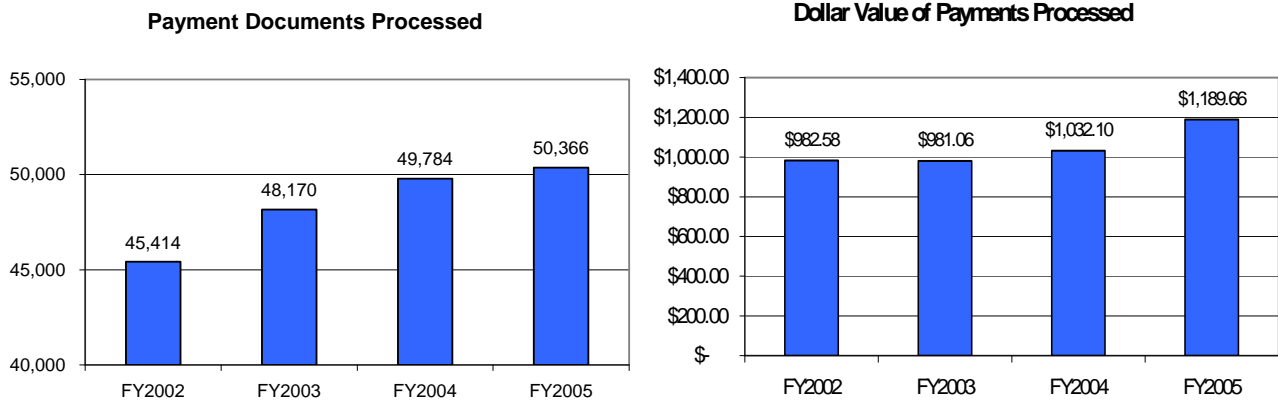


Figure 7.3f

Accounts Payable

The Accounts Payable area of the Finance Division strives for excellence in customer service. All payment functions of SCDOT are centralized into one location with seventeen employees. The approximate process time from receipt of invoice, creation of voucher package, and delivery to the Comptroller General office is eight days. Over the past four years, the number of payment documents has grown 10%. For efficiency purposes payments to the same vendor are combined to eliminate extraordinary paperwork and time, therefore, each payment document represents multiple invoices. The dollar value associated with the payments has also grown by 17%. The graphs below depict the number and dollar value of payment documents processed per fiscal year.



Figures 7.3g and 7.3h

7.4 Key Measures of Human Resources

The chart below depicts the percentage of minorities and females in the SCDOT workforce.

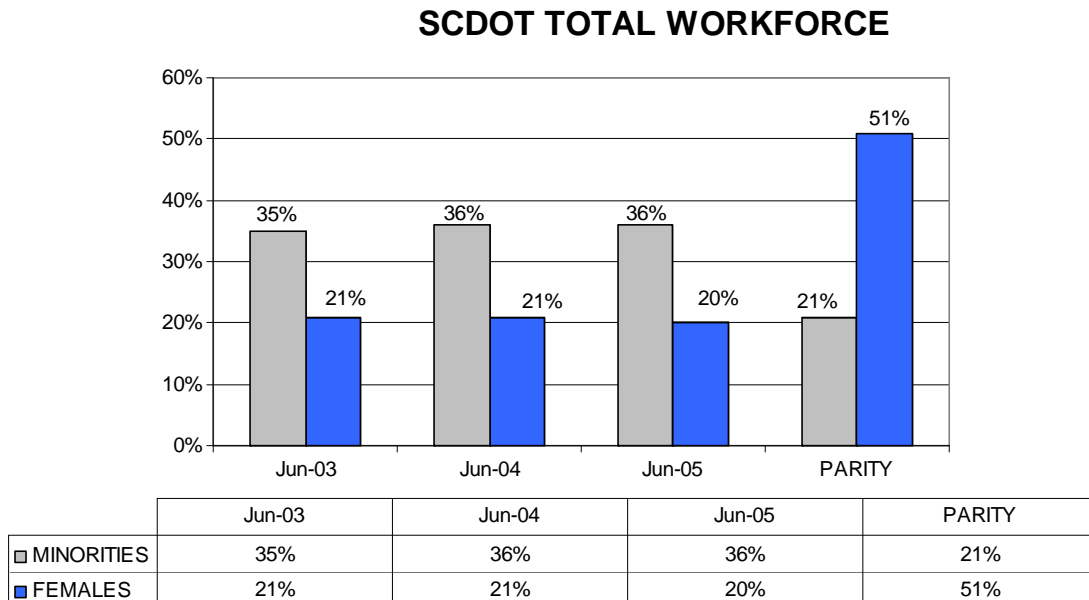


Figure 7.4a

Figure 7.4b reflects the amount of tuition assistance expended for SCDOT employees to further their formal education. During the 2004-2005 fiscal year, there were 35 employees that received tuition assistance. A total of nineteen SCDOT employees have received their degrees through the assistance of this program since its inception in 1994; three received degrees during FY 2004-2005.

Tuition Assistance Program

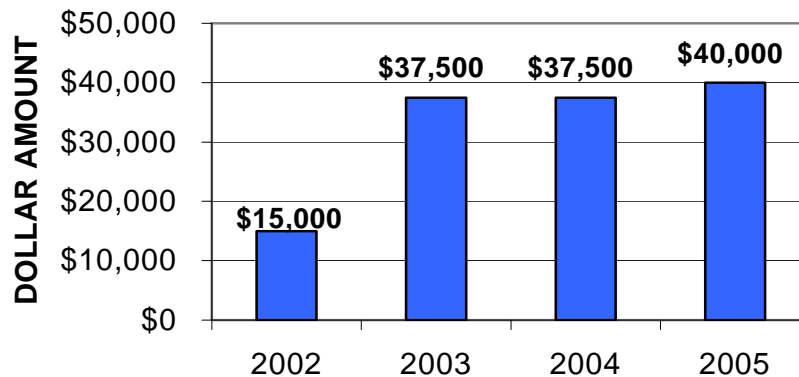


Figure 7.4b

The figure below provides information of trend data for employee turnover for the last three years.

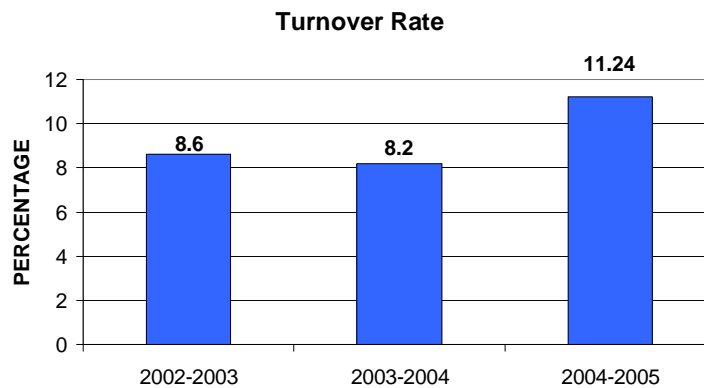


Figure 7.4c

OSHA incidence rates reflect the average number of recordable injury cases that occur during the year. The incidence rate has decreased consistently for the last five years, from 9.61 in 2000 to 8.08 in 2004, representing a 15.9% decrease. Additionally, the overall rate remains at less than 10, which is in accordance with our Business Plan goals. **Figure 7.4d** below shows the recordable cases per 200,000 hours worked.

OSHA Incidence Rates

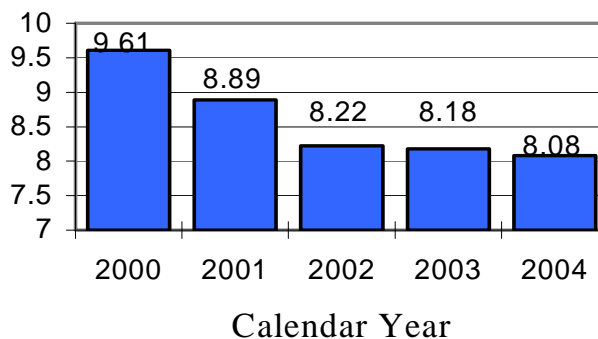


Figure 7.4d
7.5 Key Measures of Regulatory/Legal Compliance and Community Support
Independent Financial Audit for June 30, 2004 revealed:

1. The **strategic objective** of self-preparation of a complete financial reporting package in conformity with Generally Accepted Accounting Principles (GAAP) has been achieved for the first time in Department history. This is a very complicated process, which is attempted by only a handful of state agencies, primarily the colleges and universities.
2. Records were closed and the **audit completed** within the earliest timeframe in recent history. SCDOT was **one of the first agencies to submit** its financial report to the Comptroller General for inclusion in the statewide financial statements. This marks the culmination of a multi-year, complex effort to convert and upgrade our accounting systems.
3. The **Independent Auditor's Opinion** concerning our Financial Statements was, as in past years, "Unqualified," the highest level of attainment. This means that the financial statements present the financial affairs of SCDOT completely and fairly. The independent auditors found **no significant exceptions in our financial records or statements – the highest level of achievement possible.** For a Department that receives and expends more than one billion dollars each year, with over 47,000 non-payroll disbursement transactions alone, this is the ultimate endorsement of our accountability.
4. Audit fees were **reduced 40%**, from \$98,000 to \$59,000.

Agency Certification Limits

SCDOT has consistently received good procurement audit reports and the result has been an increase in procurement authority. This increase is shown in the chart below:

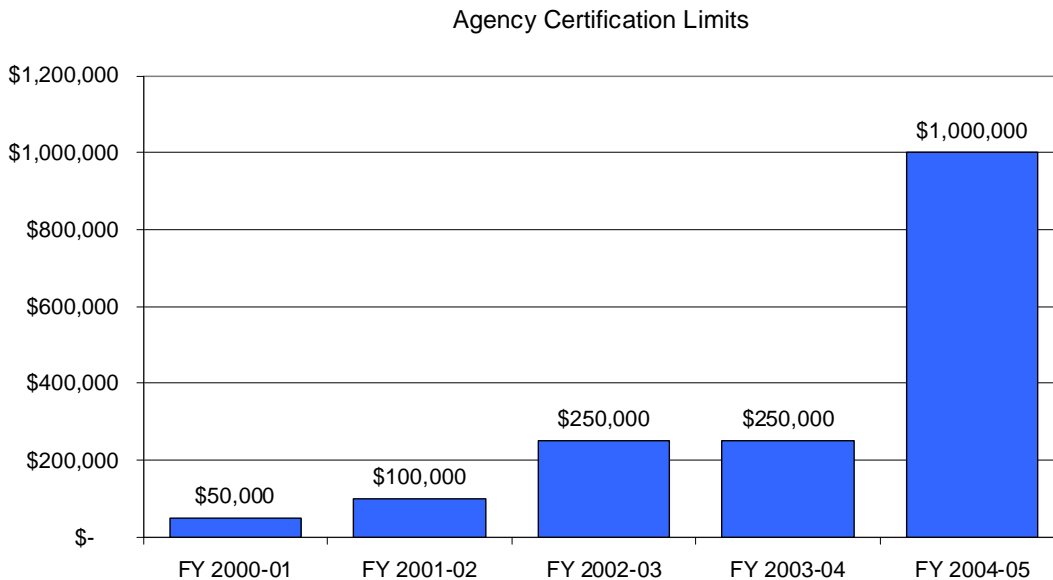


Figure 7.5a



Questions 7.2, 7.3, and 7.5 of the Malcolm Baldrige Quality Award Criteria

Appendix 1 to the 2003-2004 Annual Accountability Report

SCDOT's Strategic Plan contains the agency's goals, objectives, and performance measures. Progress is measured by the review of data submitted by the Process Owner. The Executive Director reviews "dashboard indicators" essential for her to make informed timely decisions. This data is provided monthly by the Process Owners. Quarterly Reports are submitted by the Process Owners on each objective and the data is analyzed during In-Progress Reviews.

STRATEGIC PLAN UPDATE 2002-2003

GOAL 1--Increase safety and security on South Carolina's transportation systems and within SCDOT.

1. Reduce the number of highway crashes, injuries, and fatalities in South Carolina by 5% by 2005 through the development and implementation of a variety of statewide safety initiatives.

Completion date: 12-31-2005

Performance Measure: Annual number of fatalities

2. Reduce the number of lost workdays involving SCDOT employees due to occupational accidents by 5% by 2003 through the continued implementation and expansion of various employee safety programs and the establishment of a SCDOT Safety Committee.

Completion Date: 12-31-2003

Performance Measure: Annual number of lost workdays

3. Reduce work zone-related crashes, injuries, and fatalities by 10% by 2005 through the development and implementation of a comprehensive work zone safety program.

Completion Date: 12-31-2005

Performance Measure: Annual number of work zone fatalities

4. Reduce speed-related crashes, injuries, and fatalities by 5% by 2005 through the continued implementation and expansion of a comprehensive speed management program.

Completion Date: 12-31-2005

Performance Measure: Annual number of speed-related fatalities

5. Begin implementation of the Corridor Safety initiative in at least two districts.

Completion Date: 6-30-2003

Performance Measure: Number of Corridor Safety initiatives underway

6. Begin implementation of a program to reduce traffic crashes where hydroplaning is a significant factor.

Completion Date: 12-31-2002

Performance Measure: Number of hydroplaning crashes



7. Reduce the number of run-off-the-road crashes, injuries and fatalities statewide by 5% by 2005 through the implementation of the AASHTO Run-Off-Road demonstration project, the Safety on Secondary Roads District project, and the Hazard Elimination Program.

Completion Date: 12-31-2005

Performance Measure: Annual number of run-off-road fatalities

8. Reduce the number of pedestrian and bicycle crashes, injuries and fatalities by 5% by 2005 in the five counties with the highest frequencies of such incidents through the implementation of pedestrian assessments and supporting programs.

Completion Date: 07-01-2005

Performance Measure: Annual number of pedestrian and bicycle fatalities

9. Develop the capability to conduct crash analysis on any road in the state in a timely manner.

Completion date: 06-30-2004

Performance Measure: Completion of milestones

10. Conduct vulnerability assessment of South Carolina's Transportation Infrastructure designed to prevent terrorist acts and to identify appropriate countermeasures.

Completion date: 12-31-2002

Performance Measure: Assessment complete

11. Complete the installation of interstate median barriers on the highway.

Completion Date: (A) 07-31-2002; (B) 07-31-2003

Performance Measure: A) Phase I: Number of hits/installed miles

B) Phase II: Number of hits/installed miles

12. Implement a low cost interchange improvement program.

Completion date: 01-01-2004

Performance Measure: Percent of projects complete

13. Develop and implement a plan to widen shoulders on three miles of secondary roads in each county.

Completion date: 6-30-2003

Performance Measure: Miles completed

14. Develop a Risk Management Training/Awareness Course and provide training to Districts and applicable Headquarters personnel.

Beginning Date: 06-30-2003

Performance Measure: Number of persons trained

15. Develop an Intranet based program for Risk Management Data Collection and Analysis.

Completion Date: 06-30-2003

Performance Measure: Program implemented

16. Analyze the top 50 claims paid by SCDOT, prioritize into categories of claim type, and provide countermeasures to reduce the top three categories.

Completion Date: 06-30-2003



Performance Measure: Countermeasures report submitted

17. Develop and implement a “Return to Work” Program for injured SCDOT employees.

Completion Date: 06-30-2003

Performance Measure: Implementation of program

GOAL 2--Improve the quality, efficiency, and appearance of the State Highway System.

1. Complete the construction of all bonded and non-bonded Interstate interchange improvement projects.

Completion date: 07-01-2005

Performance Measure: A) Number of bonded Interchange projects completed
B) Number of non- bonded Interchange projects completed

2. Expand the Pavement Management system to cover all paved roads in the State System.

Completion date: 06-30-2003

Performance Measure: Percent of state roads added to the pavement management system

3. Implement the new modules of the Maintenance Management System statewide.

Completion date: 06-30-2003

Performance Measure: Percent complete

4. Maintain paint system on statewide bridge system.

Completion Date: 06-30-2003

Performance Measure: A) Reduce percentage of tons of steel needing painting
B) Tons of steel painted

5. Develop and implement a plan to decrease the number of deficient bridges in the state.

Completion date: 06-30-2003

Performance Measure: Reduce percentage of square footage of bridge decks that are deficient

6. Carolina Bays Parkway design-build project to be completed.

Completion date: A) 10-01-2002 B) 01-31-2004

Performance Measure: Phase I: project accepted by SCDOT
Phase II: project accepted by SCDOT

7. SC 170 design-build project to be completed.

Completion date: 05-01-2005

Performance Measure: Project accepted by SCDOT

8. Cooper River Bridges design build project to be completed.

Completion date: 06-30-2006

Performance Measure: Project accepted by SCDOT

9. Bobby Jones Expressway (Phase 1) to be completed.

Completion date: 06-30-2004



Performance Measure: Project accepted by SCDOT

10. I-95 widening near Florence to be completed.

Completion date: 08-31-2004

Performance Measure: Project accepted by SCDOT

11. Ashley Phosphate Interchange upgrade to be completed.

Completion date: 07-30-2005

Performance Measure: Project accepted by SCDOT

12. Implement the SIB projects according to the schedules and budgets in the intergovernmental agreements and STIP.

Completion date: 06-01-2008

Performance Measure: A) Percent of projects on or ahead of schedule
B) Percent of projects on or below budget

13. Implement the MPO projects according to the schedules and budgets in each of the bonding agreements and STIP.

Completion date: 06-01-2006

Performance Measure: A) Percent of projects on or ahead of schedule
B) Percent of projects on or below budget

14. Implement the COG projects according to the schedules and budgets in each of the bonding agreements and STIP.

Completion date: 06-01-2008

Performance Measure: A) Percent of projects on or ahead of schedule
B) Percent of projects on or below budget

15. Implement System and Intermodal Connectivity projects according to the schedules and budgets in STIP.

Completion date: 06-01-2011

Performance Measure: A) Percent of projects on or ahead of schedule
B) Percent of projects on or below budget

16. Let to contract 2 Interstate Gateways as part of SCDOT's 5-Year Beautification Vision.

Completion Date: 06-30-2003

Performance Measure: Sites let to contract

17. Develop a Long-Range Plan for the Intelligent Transportation System.

Completion date: 09-30-2002

Performance Measure: Plan approved and adopted by SCDOT

18. Improve scores of the Quality Management Team reviews of construction project sites and project records to ensure conformity with plans and specifications.

Completion date: 06-30-2003

Performance Measure: Average quality index of reviews increase by 10%



19. Complete second year of a six-year program to maintain all rural roads with less than 500 ADT with a chip seal treatment.

Completion date: 06-30-2003

Performance Measure: Percent of miles resurfaced with chip seal as compared with miles yet to seal

20. Complete second year of a five-year program to inspect all the shoulders and ditches for deficiencies that require maintenance.

Completion date: 06-30-2003

Performance Measure: Number of miles of ditches inspected

21. Reduce the time required to receive individual environmental permits by 30%.

Completion date: 10-01-2004

Performance Measure: Average time to obtain 404/401/OCRM permits

22. Ensure all MPOs, designated as non-attainment areas, develop transportation plans and programs to conform to Clean Air Act requirements.

Completion date: 06-30-2004

Performance Measure: Approved Air Quality Plans

23. Ensure that all MPO's have a current certified Long Range Transportation Plan.

Completion date: 06-30-2003

Performance Measure: Plans accepted by FHWA

24. Complete second year of a traffic signal maintenance program, which includes annual inspections and the replacement and upgrade of equipment on a twelve-year cycle.

Completion date: 06-30-2003

Performance Measure: A) Annual inspections

B) Number of traffic signals upgraded as compared to the number to be upgraded

25. Perform quarterly reviews on all projects with NPDES Permits.

Completion date: 07-01-2003

Performance Measure: Perform quarterly reviews with no violations cited by Environmental Agencies.

26. Complete 50% of a statewide sign inventory to include the placement of barcodes on all signs.

Completion Date: 6-30-2003

Performance Measure: Percentage of signs inventoried

27. Develop and implement a Maintenance Quality Review Team to conduct appraisals of all maintenance units.

Completion date: 06-30-2003

Performance measure: Number of appraisals conducted

28. Develop detour plans for potential interstate closures at any interchange location.

Completion date: 6-30-2004

Performance Measure: Percent of plans complete



29. Implement a common filing system statewide for all maintenance units and District Office maintenance files.

Completion date: 12-31-2002

Performance measure: Percent of units using new system

30. Complete feasibility study for new I-73 corridor from the North Carolina state line to the South Carolina Coastal area.

Completion date: 01-01-2003

Performance measure: Corridor analysis available to begin preliminary engineering.

31. Provide the Preconstruction office with advance Project Planning Reports for all system upgrades.

Completion date: 10-01-2003

Performance measure: Reports accepted and approved by affected MPO/COG prior to the obligation of design funds.

GOAL 3--Improve and expand the multi-modal Transportation System in South Carolina.

1. Develop and pursue the implementation of legislation for a statewide coordination plan.

Completion date: 06-30-2003

Performance Measure: Plan approved by SCDOT and state agencies.

2. Support efforts to increase mass transit ridership statewide by 3.0%.

Completion date: 12-31-2003

Performance Measure: (A) Number of meetings and planning actions carried out jointly with transit providers to increase ridership.

(B) Percentage change in ridership at end of FY 2002-2003

3. Implement an ongoing improvement program for transit vehicles.

Completion date: 12-31-2003

Performance Measure: Dollar savings in maintenance costs

4. Initiate statewide assessment and improvement plan for mass transit facilities.

Completion Date: 06-60-2003

Performance Measure: The development of a statewide plan/document.

5. Increase transit technology statewide.

Completion date: 05-31-2003

Performance Measure: Number of new applications available for use by transit agencies

6. Increase the number of certified DBEs in highways and mass transit by 10%.

Completion date: 05-31-2003

Performance Measure: Number of certified DBE's

7. Meet or exceed the goals set for the DBE Program in highways.

Completion date: 09-30-2003

Performance Measure: Dollars committed



8. Develop a long-range, intermodal plan for South Carolina.

Completion Date: 12-31-2002

Performance Measures: Plan approved by SCDOT Commission

9. Develop a 27-in-7 Post Program.

Completion date: Annual updates

Performance measure: Milestones accomplished

GOAL 4--Enhance and implement integrated financial and project management systems.

1. Develop and generate timely, meaningful financial reports for management.

Completion date: 12-31-2002

Performance Measure: Number of reports accepted by management and placed into production

2. Develop an on-line browser in the General Ledger System.

Completion Date: 12-31-2002

Performance Measure: Number of browsers placed on-line

3. Pay all invoices within vendor/contractor terms.

Completion date: 09-30-2002

Performance measure: Average number of days to pay invoices each month

4. Use Electronic Fund Transfer (EFT) for contractors who requests payments electronically.

Completion date: A) 12-31-2002 and B) 06-30-2003

Performance Measure: A) EFT used for 50% of contract payments

B) EFT used for 100% of contract payments

5. Pay 95% of construction estimates within 90 days of final acceptance.

Completion date: 12-31-2002

Performance Measure: Percent invoices paid in 90 days

6. Close 95% of projects within 90 days of payment of final construction estimates.

Completion date: 3-31-2003

Performance Measure: Percent of projects closed in 90 days

7. Implement and track the SCDOT Construction Resource Manager Planning and Reporting System to track schedules and financial requirements.

Completion date: 09-30-2002

Performance Measure: System fully operational

8. Develop (Phase I) Integrated Transportation Management System (ITMS) to support current and long-term data integration, reporting, and analysis.

(A) Implement new Road Inventory Management System (RIMS)

Completion Date: 09-30-2003

Performance measure: Successful implementation of an online browse/update Road Information Management System with Photo Log, GIS, and complex query capabilities

(B) Digitize all county maps for GIS interface

Completion Date: 12-31-2003

Performance Measure: County maps are digitized

(C) Develop system architecture and begin phased implementation

Completion Date: 07-01-2003

Performance Measure: Pavement and Bridge modules implemented

9. Begin analysis of output data from AASHTO software programs.

Completion Date: 07-01-2003

Performance Measure: Analysis of information in BAMS/DSS for collusion, unbalanced bidding, bid rigging, etc.

10. Prepare in-house year-end financial statements in conformity with universal Generally Accepted Accounting Principles.

Completion date: 06-30-2003

Performance measure: Complete financial reports

11. Develop a methodology to provide special pay information to employees.

Completion date: 12-31-2003

Performance measure: Provide special pay notices with payroll/check stubs

12. Develop a long-range plan for migration to an enterprise Financial/Accounting system compatible and completely interactive with developing a statewide system.

Completion date: 03-31-2003

Performance measure: Completion of plan.

GOAL 5--Improve employee skills, their work environment and provide opportunities.

1. Maintain donations to the Employee Leave Pool.

Completion date: On going

Performance Measure: Number of donations to exceed number of requests.

2. Recruit and attract quality employees and ensure a diverse workforce.

Completion date: 12-31-2003

Performance Measure: Achieve at least 90% of availability for minorities and women at all levels of our work force.

3. Establish a Human Resources Web Page.

Completion date: 6-30-2003

Performance Measure: Follow-up evaluation to measure helpfulness.



4. Provide HR Skills Training to Supervisors and Managers.

Completion date: 12-31-2004

Performance Measure: Number trained. Follow up evaluation confirms that skills are being used

5. Provide sexual harassment/workplace violence training to all employees.

Completion date: 12-31-2003

Performance Measure: Reduction in the number of incidents

6. Provide leadership development training to managers and supervisors.

Completion date: 12-31-2004

Performance Measure: Number trained. Follow up evaluation confirms that learned skills are being used

7. Develop and deploy a workforce development planning process.

Completion date: 12-31-2004

Performance Measure: Phase I- establish career ladders for Trades Specialist series

8. Update Environmental Training Course.

Completion date: 06-30-2003

Performance Measure: Employees trained

GOAL 6--Improve management of our property, equipment, and technology.

1. Upgrade PC's and install Windows 2000.

Completion Date: 06-30-2004

Performance Measure: A) Percent of computers with new systems

B) Replace 1/3 of computers yearly if budget permits

2. Develop and adopt a Phase I and Phase II comprehensive Total Asset Management Program.

Completion date: Draft plan 07-30-2002 Final plan 12-31-2002

Performance Measure: Plan accepted by Comptroller General and SCDOT

3. Update Capital Improvement Plan to Include Year 2008.

Completion date: 06-30-2003

Performance Measure: Plan approved by SCDOT Executive Committee

4. Develop and Implement a Correspondence Tracking System, (Phase I) of an Electronic Document Management System.

Completion date: 02-01-2003

Performance Measure: EDMS system in place

5. Review all facilities including rest areas, semi-annually to ensure each facility is physically and environmentally clean. Districts will provide report to the Director of Maintenance by the end of March and September of each year.

Completion date: 6-30-2003

Performance Measure: Inspections completed



6. 85% of all maintenance equipment listed on the present utilization chart will meet minimum usage standards.

Completion date: 06-30-2003

Performance Measure: Percent of equipment meeting minimum usage standards

7. Perform comprehensive environmental audit at one maintenance facility in each district.

Completion date: 6-30-2003

Performance measure: Number of audits completed.

8. Develop a deployment strategy for implementation of the Malcolm Baldrige performance management system.

Completion date: 06-30-2003

Performance measure: Completion of milestones

9. Create an environmental database to track all pertinent information for our facilities.

Completion date: 6-30-2003

Performance measure: Completion of milestones

10. Develop a tracking system to log all materials entering SCDOT facilities.

Completion date: 12-31-2002

Performance measure: Completion of milestones

11. Identify all surplus land and buildings and develop a marketing strategy to dispose of property not needed by the Department.

Completion date: 12-31-2002

Performance measure: Number of parcels identified and sold

GOAL 7--Provide highest level of customer service.

1. Participate in the annual statewide customer service survey in coordination with the University of South Carolina Institute for Public Affairs.

Completion date: Survey 12-31-2002 and Survey results by 06-30-2003

Performance Measure: A) Final report received

B) Number of initiatives resulting from report

2. Measure customer input in project and program activities and in business plans.

Completion date: 12-31-2002

Performance Measure: Customer satisfaction measurements included in annual business plan

3. Improve customer service & responsiveness of oversize/overweight permit process.

Completion date: 6-30-2003

Performance Measure: New system operational

4. Report to public on success of the 27-in-7 program and the impact on SC.

Completion Date: 12-31-2003

Performance Measure: Begin semi-annual reports in the July & December issues of the "Connector" and updates on SCDOT's web site



5. 95% of all requests and complaints received by the maintenance units will be completed within sixty calendar days.

Completion date: 06-30-2003

Performance Measure: Percent of requests/complaints completed

6. Reduce delays due to incidents on urban freeways through the expansion of SHEP, and ITS, and increased interagency coordination on Incident Management.

Completion Date: 12-31-2003

Performance Measures: A) Number of hours of SHEP operation, miles covered, & responses

B) Number of miles under video surveillance

C) Number of Incident Management Teams Established

7. Reduce condemnation rate by 1% annually.

Completion date: 06-30-2003

Performance Measure: Annual condemnation rate

SCDOT/FHWA Strategic Plan

FY 2006-2008

Strategic Rocks	End State	Goals
SAFETY	Reduce SC fatality rate to within 10% of national average	Reduce 20% of Run-off-Road crash fatalities by June 2008
		Reduce 25% of Intersection crash fatalities by June 2008
		Reduce 20% of Bicycle and Pedestrian fatalities by June 2008
		Reduce 25% of Work Zone fatalities by June 2008
		Incorporate crash data analysis and safety countermeasures on all Projects by June 2008
		Complete cost-benefit analyses of safety programs and optimize safety investments
	Improve driver behavior through expanded partnerships	Develop and Implement a Comprehensive State Strategic Highway Safety Plan by June 2006
		Reduce 20% of DUI related fatalities by June 2008
		Increase seatbelt usage to 80% by June 2008
		Decrease 20% of speed related fatalities by June 2008
		Decrease 20% of motorcyclist fatalities by June 2008
	Reduce Crashes in Congested Areas by 25%	Develop a program to manage Interstate and Primary highway capacity by June 2006
		Increase 30% of ITS coverage Statewide by June 2008
		Begin 24/7 ITS Operations by December 2005, and open the Traffic Management Center by June 2007
		Establish a base line to calculate delays in urban areas by June 2006
		Reduce 10% of delays due to incidents in urban areas by June 2008
		Reduce 10% of statewide Commercial Motor Vehicle crashes by June 2008
	Reduce lost work days by 25% in 5 years	Reduce 25% of work related Injury Accidents and illness by June 2008
		Improve Case Management to reduce average time to return to work to 7 days or less by June 2008
		Implement annual workplace violence awareness training by June 2006
	Be Ready for Disaster Response and Recovery	Complete alternate routing system for critical infrastructure by December 2006
Develop contingency plans to restore traffic and emergency plans to repair/replace critical infrastructure following a catastrophic event by December 2006		
CUSTOMER SERVICE	Improve external customer satisfaction by 10%	Conduct survey of public to establish a benchmark for external satisfaction and understanding of SCDOT's mission and functions by December 2005
		Continue to implement programs to improve customer satisfaction and knowledge of the mission and functions of SCDOT and monitor progress through surveys every two years
		Establish customer service office (in HQ) and a hotline number (# 511) by June 2006
		Develop and implement Customer Service training tailored for field offices (construction and maintenance) by June 2006
		All districts would have customer service representation by January 2006
	Improve internal customer satisfaction by 10%	Develop and conduct internal surveys of two units to assess customer service provided by support areas each year
		Implement programs to address concerns identified in surveys of support areas within one year of receiving survey results



Strategic Rocks	End State	Goals
MAINTENANCE/ PRESERVATION	Manage secondary road system with an increased budget	Revise/update secondary road standards to include PQI and ride-ability by December 2005
		Optimize funding improvements through use of the pavement management system
		Spend \$30 million each year on resurfacing and widening of secondary roads in fair condition (PQI > 2.9) and/or where patching and shoulder widening has been completed the prior year
		Spend \$15 million each year on maintenance of secondary roads in poor condition (PQI < 2.9)
		Preservation of secondary roads with less than 500 ADT: Surface seal 1,000 miles each year
	Reverse the upward trend in deficient bridge deck area	Identify needs and develop a multi-year bridge replacement program to reverse trend; dedicate additional funding by October 2005
		Develop and implement a bridge preservation program by January 2006
		Implement and evaluate innovative bridge replacement and preservation methods to reduce costs and time by June 2006
	Resurface Interstate and Primary routes on a 12-15 year resurfacing cycle	Identify needs and develop a multi-year comprehensive work plan by December 2005
		Dedicate additional federal funds for multi-year budget by December 2005
	Upgrade all traffic control devices	Complete 30% of remaining signal replacement by June 2007; dedicate funding to continue 12-year replacement cycle
		Continue District/County marking, signing and guardrail upgrade and replacement programs; dedicate \$10 million each year
EMPLOYEE DEVELOPMENT	Adequately staffed, qualified workforce able to carry out the mission of SCDOT	Establish career paths and identify training requirements for 70% of workforce by July 2005
		Establish career paths and identify training requirements for remaining applicable employees by January 2007
		Reduce agency vacancy rate to 5% by June 2008
		Establish an agency wide workforce plan by December 2006
		All EPMS will include annual business unit goals by December 2005
	Increase Employee Satisfaction by 20%	Address the top 5 issues identified in Employee Satisfaction Survey by December 2005
		Continue employee satisfaction survey every two years, and address the top 5 issues identified from each survey



Strategic Rocks	End State	Goals
RESOURCES	Improve utilization of SCDOT Human Resources	Adopt a system that defines levels of service for maintenance and construction activities, and projected workforce needs by January 2006
		Enhance SCDOT contract management/quality assurance functions through increased outsourcing to supplement current staffing levels by June 2006
		Conduct annual FHWA/SCDOT partnering meetings and improve three key areas or processes each year
		Increase pool of contractors and material suppliers by June 2006 by: (1) Make a 10-year annual funding commitment to resurfacing to increase contractor/supplier bidding by October 2005 (2) Increase number of DBE firms participating in contracts by 10% each year (3) Complete two successful DBE protégé/mentor programs by June 2007 (4) Reduce the number of contracts more than 25% behind schedule to 15% by June 2007
	Improve utilization of physical assets	Develop a capitol land and building allocation plan by June 2006, and reduce the inventory of excess property by 10% each year
		Obtain statewide average equipment utilization of 85% with no District less than 75% by June 2007 Reduce 15% of the automobile/SUV fleet by January 2006
	Improve utilization of financial resources	Fully implement a 10-year cash flow model by October 2005
		Obtain increased state revenue and/or leverage Federal and local funding for secondary road preservation of at least \$45 million per year by July 2007
		Reduce the obligated/unspent Federal balance to less than \$500 million by October 2007
		Maintain average annual cash balance at less than \$80 million per year
	Improve program delivery such that 90% of all projects are delivered on time and within budget	Develop and implement phase II of ITMS by December 2007 by: (1) Bring in Site Manager, Preconstruction Project Management System (PPMS), and the Highway Maintenance Management System (HMMS) (2) Link to the Electronic Document Managing System (EDMS), and (3) Create the Master Linear Reference System (MLRS)
		Increase accuracy of original STIP project schedules and budgets to within 10% for 85% of the projects by October 2006
		Reduce average time to complete EA/FONSIs to 12 months by December 2007
		Maintain a reliable 12-Month Project Letting List including all projects such that 85% are let within the original month published by October 2005
		Improve average 401/404 Permit approval time to 3 months by June 2006
		Reduce average contract time extensions for completed projects by 5% each year
		Reduce the average contract cost overages on completed projects by 5% each year
		Obtain and maintain a ROW condemnation rate 9% or less each year
		Increase public involvement by 5% each year from planning through maintenance and satisfy commitments on all projects
		Meet transportation planning and air quality requirements such that no projects are delayed
Increase transit vehicle replacement to 70% by July 2007		



Appendix 2 to the 2004-2005 Annual Accountability Report

Major Program Areas

Program Number and Title	Major Program Area Purpose (Brief)	FY 03-04 Budget Expenditures	FY 04-05 Budget Expenditures	Key Cross References for Financial Results*
05010000 - General Administration	General Administration is the agency-wide executive management and support service function.	State: Federal: Other: 31,797,508.83 Total: 31,797,508.83 % of Total Budget: 3%	State: Federal: Other: 32,676,257.09 Total: 32,676,257.09 % of Total Budget: 3%	Sections 7.3 a-e Sections 7.3 g-h
20010000 - Engineering Administration	This program funds the core management to support the delivery of the highway construction program.	State: Federal: Other: 73,381,483.22 Total: 73,381,483.22 % of Total Budget: 7%	State: Federal: Other: 76,581,712.86 Total: 76,581,712.86 % of Total Budget: 7%	Sections 7.3 a-e Sections 7.3 g-h
20030000 - Engineering Construction	This program is the construction of roads, bridges, and rest areas.	State: Federal: Other: 640,446,870.35 Total: 640,446,870.35 % of Total Budget: 63%	State: Federal: Other: 705,062,119.46 Total: 705,062,119.46 % of Total Budget: 60%	Sections 7.3 a-e Sections 7.3 g-h
20050000 - Highway Maintenance	This program maintains 41,496 road miles, 8,377 bridges, 539 buildings, 24 rest areas, and 10 welcome centers.	State: Federal: Other: 199,221,188.62 Total: 199,221,188.62 % of Total Budget: 19%	State: Federal: Other: 255,793,578.71 Total: 255,793,578.71 % of Total Budget: 22%	Sections 7.3 a-e Sections 7.3 g-h
99000000 - Capital Projects	Permanent Improvements financed by bonds. Bonds are used to construct roads, bridges, and rest areas	State: Federal: Other: Total: 276,389.13 % of Total Budget: 0%	State: Federal: Other: 1,395,558.26 Total: 1,395,558.26 % of Total Budget: 0%	Sections 7.3 a-e Sections 7.3 g-h

Below: List any programs not included above and show the remainder of expenditures by source of funds.

05050000 - Land and Buildings, 30000000 - Toll Operations, 95050000 - State Employer's Contributions, 40000000 - Mass Transit

Remainder of Expenditures:	State:	State:
	Federal:	Federal:
	Other: 77,418,836.53	Other: 96,543,864.63
	Total: 77,418,836.53	Total: 96,543,864.63
	% of Total Budget: 8%	% of Total Budget: 8%

* Key Cross-References are a link to the Category 7 - Business Results. These References provide a Chart number that is included in the 7th section of this document.



Strategic Planning			
Program Number and Title	Supported Agency Strategic Planning Goal/Objective	Related FY 04-05 Key Agency Action Plan/ Initiative(s)	Key Cross References for Performance Measures *
Safety	Reduce SC fatality rate to within 10% of national average	Reduce 20% of run-of-the-road crash fatalities by June 2008	Goal 1 - Objective 7
		Reduce 20% of bicycle and pedestrian fatalities by June 2008	Goal 1 - Objective 8
		Reduce 20% of work zone fatalities by June 2008	Goal 1 - Objective 3
		Incorporate crash data analyses of safety countermeasures on all projects by June 2008	Goal 1 - Objective 9
	Improve driver behavior through expanded partnerships	Decrease 20% of motorcyclist fatalities by June 2008	Goal 1 - Objective 4
	Reduce lost workdays by 25% in 5 years	Reduce 25% of work-related injury accidents and illness by June 2008	Goal 1 - Objective 2
		Improve case management to reduce average time to return to work to 7 days or less by June 2008	Goal 1 - Objective 17
	Be ready for disaster and response recovery	Complete alternate routing system for critical infrastructure by December 2006	Goal 2 - Objective 28
Maintenance/Preservation	Manage secondary road system with an increased budget	Optimize funding improvements through use of the pavement management system	Goal 2 - Objective 2
	Manage secondary road system with an increased budget	Spend \$30 million each year on resurfacing and widening of secondary roads in fair condition (PQI > 2.9) and/or where patching and shoulder widening has been completed the prior year	Goal 1 - Objective 13
	Manage secondary road system with an increased budget	Preservation of secondary roads with less than 500 ADT: Surface seal 1,000 miles each year	Goal 2 - Objective 19
	Reverse the upward trend in deficient bridge deck area	Reverse the upward trend in deficient bridge deck area	Goal 2 - Objective 5
	Upgrade all traffic control devices	Complete 30% of remaining signal replacement by June 2007; dedicate funding to continue 12-year replacement cycle	Goal 2 - Objective 24
Customer Service	Improve external customer satisfaction by 10%	Conduct survey of the public to establish a benchmark for external satisfaction and understanding of SCDOT's mission and functions by December 2005	Goal 7 - Objective 1
Employee Development	Ensure adequately staffed, qualified workforce able to carry out the mission of SCDOT	Ensure adequately staffed, qualified workforce able to carry out the mission of SCDOT	Goal 5 - Objective 2
Resources	Improve utilization of SCDOT human resources	Increase pool of contractors and material suppliers by June 2006: (1)Make a 10-year annual funding commitment to resurfacing to increase contractor/supplier bidding by October 2005 (2)Increase number of DBE firms participating in contracts by 10% each year (3)Complete two successful DBE protégé/mentor programs by June 2007 (4)Reduce the number of contracts more than 25% behind schedule to 15% by June 2007	Goal 3 - Objective 6
	Improve utilization of physical assets	Develop a capitol land and building allocation plan by June 2006, and reduce the inventory of excess property by 10% each year	Goal 6 - Objective 2,3

Appendix 3 to the 2004-2005 Annual Accountability Report



Glossary

AASHTO	American Society for State Highway and Transportation Officials
BMS	Bridge Management System
CIP	Cross Island Parkway
Condemnation rate	The number of land acquisitions where property is acquired for public purposes through legal proceedings under the power of eminent domain.
COG	Councils of Government
CRM	Construction Resource Managers
DBE	Disadvantaged Business Enterprise
ETNA	Employee Training Needs Assessment
FHWA	Federal Highway Administration
FMSP	Financial Management Strategic Program System
FTA	Federal Transit Administration
ITS	Intelligent Transportation System
MAP	Maintenance Assessment Program
MPO	Metropolitan Planning Organizations
OMR	Office of Materials & Research
OSHA	Occupational Health and Safety Administration
QA/QC	Quality Assurance/Quality Control
Rutting	A sunken groove or track made by the passage of vehicles.
RUSH	Ramp Upgrades for Safer Highways
RTA	Regional Transportation Authority
SCDOT	South Carolina Department of Transportation
SCDPS	South Carolina Department of Public Safety
SCIRF	South Carolina Insurance Reserve Fund
STEP 21	Strategic Training and Education Program for the 21 st Century.
STTAR	Strategic Training for Transportation Agency Representatives
TRB	Transportation Research Board