# Accountability Report Transmittal Form

Agency Name <u>Department of Transportation</u>

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South Carolina Department of Transportation Annual Accountability Report Fiscal Year 2006-2007

#### **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, design, construction, maintenance, and operation of the state highway system and coordinating mass transit services. SCDOT operates and maintains 41,500 miles of roads and bridges, which ranks as the fourth largest state-owned highway system in the nation according to the Federal Highway Administration. Recently, the agency has emphasized the importance of system maintenance and preservation, safety, and environmental stewardship.

#### **Mission and Values**

South Carolina State Law, Section 57-3-10, stipulates that the Department shall have as its functions and purposes the systematic planning, design, construction, maintenance, and operation of the state highway system and the development of a statewide mass transit system that is consistent with the needs and desires of the public.

The Department coordinates state and federal programs relating to highways among all departments, agencies, and government entities of this State along with other duties and matters as may be delegated to it pursuant to law. The goal of the Department is to provide adequate, safe, and efficient transportation services for the movement of people and goods. With the recent increase in local-option sales taxes for transportation, the creation of the South Carolina Transportation Infrastructure Bank, and the expansion of regional and metropolitan planning organizations, the importance of partnering has grown. The Department has committed itself to collaboration and consultation in the exercise of its responsibilities.

SCDOT is now a cabinet agency, but it must follow numerous federal laws and regulations associated with the Federal-Aid Highway Program and the Federal Transit Administration. SCDOT has embraced the following recent trends in federal transportation policy, emphasizing the importance of:

- 1. Making highway safety the agency's number one priority
- 2. Proactively consulting with affected individuals and stakeholders
- 3. Addressing congestion management in innovative ways
- 4. Using intelligent transportation systems (ITS)
- 5. Making transportation plans consistent with local planned growth and development plans
- 6. Creating bicycle and pedestrian alternatives
- 7. Making projects and programs sensitive to the human and natural environment
- 8. Considering homeland security as a distinct planning factor



These values contained in the acronym RIGHT Team are promoted by SCDOT employees. As a member of the team, employees are to do things the RIGHT way!

Respectful and supportive of customers and coworkers

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, partnering, and actions

### **Major Achievements from the Past Year**

Major achievements will be described in length in the "Business Results Section" of this report. Additionally, page 33 depicts completed transportation projects. The highlights of some of the major SCDOT achievements and awards during FY 2007 include the following:

- Askew Award for Excellence presented to Herbert J. Cooper, Certified Public Manager, District 1
  Engineering Office
- Certificate of Achievement for Excellence in Financial Reporting Program, Government Finance Officers Association (second award)
- National Transportation Week Poster Contest won by daughter of an SCDOT employee
- Innovations in Outdoor Advertising Award, National Alliance of Highway Beautification Agencies
- Innovation Award in Transportation for the Integrated Transportation Management System from Intergraph
- 2007 Global Achievement Award "Quality Management in Construction and Maintenance, International Road Federation"
- American Red Cross Meritorious Award for Blood Donations by SCDOT employees
- Outstanding Fleet Management Awards to Richland and Cherokee Counties
- Streamlining and Integration in Outdoor Advertising Award, NAHBA
- FHWA Exemplary Ecosystem Award for Sandy Island
- SCDOT recycled 2,448,730 *tons* of material during FY 2007 that included 113,843 *tons* of recycled asphalt pavement and 110,375 *tons* of bridge concrete

#### **Key Strategic Goals for Present and Future Years**

SCDOT has a Strategic Plan that is also referred to as the "Five Big Rocks." Below are the key components of the Strategic Plan:

- Increase *safety* on South Carolina's transportation system and within the agency;
- Continue to *maintain and preserve* the infrastructure across South Carolina;
- Excel in *customer service*, internally and externally;
- Use <u>resources</u> wisely and efficiently; and
- Improve *employee development* for all employees.

#### **Opportunities and Barriers**

During the year, the South Carolina General Assembly held numerous public hearings and committee meetings on the subject of SCDOT reform. This was largely in response to the findings and concerns outlined in a 2006 report by the South Carolina Legislative Audit Council (LAC). The Department has taken positive action to address each of the recommendations contained in the LAC Report. Act 114 reforming SCDOT was signed into law by Governor Mark Sanford in June 2007. This legislation will require the development of new procedures and regulations. Upon passage of Act 114, SCDOT



immediately began taking action to transform the agency to conform to the requirements of the law.

SCDOT continues to move forward through the implementation of Act 176 of 2005, which provides state-funded for system maintenance. Highway maintenance funding resulting from that legislation exceeded first year projections by almost \$4M. The skyrocketing cost of oil has driven the prices of asphalt, steel, and cement up to three times the rate of inflation in the consumer price index. The revenue impact has been particularly troublesome because South Carolina does not index fuel user fee rates for inflation and because the state is overly dependent on motor fuel revenues for highway funding. State General Fund growth has outpaced state highway funding by almost a four-to-one ratio over the last forty years, yet very few revenue adjustments have been made to share this growth with the highway program. According to the Reason Report, The 16<sup>th</sup> Annual Report on the State Highway Systems, South Carolina is ranked second in the nation for overall cost effectiveness.

Because of South Carolina's relatively low user fee on fuel, the state is required by International Fuel Tax Agreement (IFTA) to compensate other states when truckers purchase fuel here that is consumed elsewhere. The IFTA program is administered by the Department of Motor Vehicles on behalf of the trucking industry; however, funding for administration of the program is currently coming from the State Highway Fund rather than the General Fund.

Federal highway funding for Federal Fiscal Year (FFY) 2006 was less than expected, especially for those programs that are used to develop the Statewide Transportation Improvement Plan (STIP). This lower level of funding carried into FFY 2007 as the Federal Highway Administration operated under a Continuing Resolution until February 2007, when funding levels were finally raised to the levels that were promised in 2005. The lack of growth in the federal-aid program, along with inflation, has had a negative impact on the agency's ability to accurately project cash flow for the year.

Highway maintenance remains the Department's greatest challenge as the state's 41,500 miles of roads and 8,329 bridges continue to age. This is primarily a state responsibility since federal dollars must be used for specific purposes designated by Congress. While overall highway funding in South Carolina is expected to increase over the next five years, a portion will be in the form of Congressional earmarks. The predicted increases will require additional state matching dollars, thus putting a greater strain on the state's ability to provide highway maintenance dollars. Earmarks actually impact the STIP because funding comes out of the South Carolina federal funding.

Today's high fuel prices make people consider alternative transportation such as rail and bus. This also presents the Department with an opportunity to enhance transit services and advance rail planning. The greatest barrier to overall mass transportation progress in SC remains funding, as the Department remains the lowest funded DOT in the nation on a per-mile basis. Less than 50 cents of every dollar sent to Washington is returned to SC for use in Mass Transit.

**New Directions -** The Secretary of Transportation recommended and the Commission approved the change in South Carolina State Highway Road signs as depicted in the footer of this document. These signs will go into effect during the normal replacement cycle of signs currently in use. The SC 90 route was chosen to signify SCDOT's 90<sup>th</sup> year, 1917-2007.





**Funding and Planning -** Despite funding barriers, SCDOT has created opportunities to move forward. In 2007, the SCDOT Commission elected to reduce the state secondary system "cap" each time a road was removed from the state system. The Commission also shifted its method of disbursing secondary resurfacing dollars to a formula that takes statewide road conditions more heavily into consideration. The previous formula divided funds strictly on the basis of Engineering Districts, with priorities being set within each district based on need.

In the spring of 2007, the Commission reviewed a draft Statewide Priority List that had been prepared by the Engineering Division based on empirical analyses of each identified project location in the state. Later the Legislature included a similar prioritization requirement in Act 114. This new Priority List will provide an excellent tool for selecting projects to be included in the State Transportation Improvement Plan. The Department has made efforts to inform the public and the General Assembly of insufficient revenue to adequately construct and maintain the state highway system and other transportation programs. During that time, the immediacy of the funding shortfall was forestalled by innovative financing programs and numerous internal efforts to reduce overhead and improve efficiency. These efforts have been maximized, yet the state is still faced with road and bridge requirements exceeding foreseeable revenues.

Each year, the state appropriations process focuses almost exclusively on general fund agencies with no built-in review of transportation needs that are funded by the State Highway Fund. State Highway Fund revenues are not included in the annual Board of Economic Advisors (BEA) briefing to the House Ways and Means Committee and the Senate Finance Committee. This has contributed toward the long-term disparity in growth between the General Fund and the Highway Fund.

Our neighboring states have done a better job of investing in their state highway systems by either supplementing their motor fuel revenues with other sources of funding, historically placing their roads under local control instead of state ownership, or indexing revenues to inflation. The following chart is based on recurring revenues and cash. This data came from 2005 Federal Highway Administration statistics and 2007 Census Bureau population estimates.

	Per Capita	Per Mile	Per Capita Per 100 Miles*
South Carolina	\$140	\$14,632	\$0.34
North Carolina	\$244	\$27,368	\$0.31
Georgia	\$108	\$56,464	\$0.60
LIS	\$221	\$85,046	\$1.42

\*The "Per Capita Per 100 Miles" number shows how much each citizen contributes annually in user fees for each 100 miles in the state highway system. In effect, the South Carolina taxpayer pays 34¢ per year in user fees for the use of 100 miles of highways, while across the nation taxpayers pay \$1.42.

SCDOT is guided by the 20-year needs assessment and plans from the states ten Councils of Government, ten Metropolitan Planning Organizations, and data derived from the continuous inspection of all roads and bridges. To better understand the state's true needs, SCDOT has convened a comprehensive group of stakeholders to update the 20-year Statewide Multimodal Plan that should be completed in 2007.

#### How the Accountability Report is used to improve organizational performance.

The Accountability Report is used as a vehicle for short and long range planning and as an indicator for various performance measures. The report is made available to all employees and its preparation is a shared project with all divisions and sub-divisions in the Department. It is posted on the agency's website. Additionally, a trained Baldrige Examiner develops and disseminates a feedback report using Malcolm Baldrige Performance Award criteria.

#### Section II- ORGANIZATIONAL PROFILE

SCDOT is one of the largest state agencies in South Carolina 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. Based on a legislative reform package - Act 114 of 2007 - the way SCDOT is managed has seen some significant changes. SCDOT is now a cabinet agency under the Governor. The Governor appoints the Secretary of Transportation who serves as the Chief Administrative Officer. The Secretary of Transportation is assisted by three directors who manage the three divisions of the agency - Engineering, Finance and Administration, and Mass Transit.

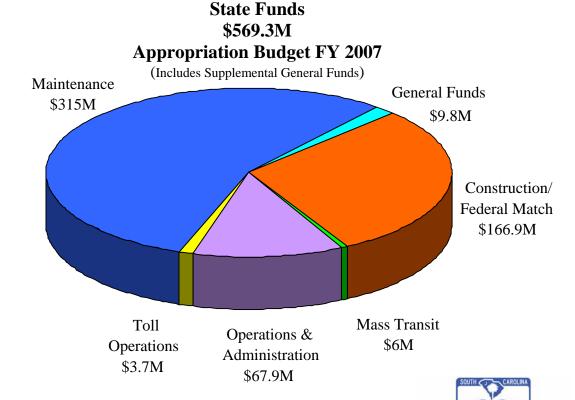
There is also a Commission consisting of seven commissioners. One is an at-large member appointed by the Governor and six other members are elected by the legislative delegations from the six congressional districts across the state. The Commission body elects the Chairman.

Act 114 requires the Secretary of Transportation and the Commission to assume many of the responsibilities previously held by lower-level SCDOT personnel. The new law requires many items to be recorded. This has created additional layers of approval for curb cuts, traffic signal installations, encroachment permits, and various other requests. As the fiscal year came to a close, the agency realized that the new law had the potential of creating a significant challenge as it tries to meet the needs of the public in the future.

## **State Funding**

Figure ES-1

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 funding sources available to SCDOT. The motor fuel user fee 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 2007 and the categories in which they were budgeted. For information on actual expenditures, the Major Program Areas Chart is located on page 70 as Appendix 4.



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SCDOT relies heavily on federal funds for capital improvements and long-term maintenance of the interstate, primary, and federally-aid eligible secondary roads. The SCDOT Commission approved the following funding plan with emphasis in the Bridge Program, Pavement and Reconstruction, and Interstate Maintenance areas. This is seen below in **Figure ES-2**.

# Federal Funds \$614M (may include state match) Budget FY 2007 Dollars in Millions

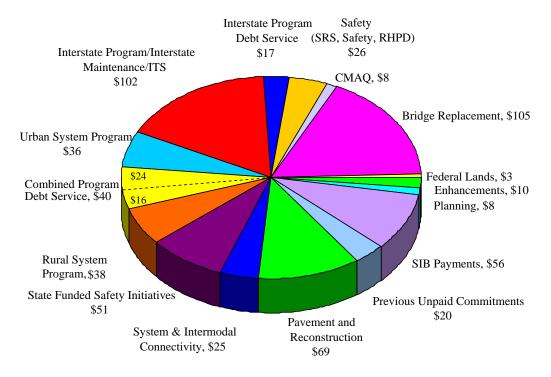


Figure ES-2

The Mass Transit funding programs increased as a result of the 2007 Federal Appropriations Act, as well as state supplemental funding of \$1.3M of state general funds increasing the state portion to \$7M. The categories shown, with the exception of State Transit Programs, are federal programs and may include a state match. The federal and state distribution for the mass transit funding is shown in **Figure ES-3** on the following page.



# Mass Transit Funds \$41M (\$34M federal/ \$7M state) Budget FY 2007

**Dollars in Millions** Vehicle Acquisition Program, 1.90 Small Urban, 8.09 MPO Planning, 0.60 RTAP, 0.16 New Freedom, 1.17 State Transit Programs, 0.72 Rural, 13.03 Large Urban, 10.75 Job Access Reverse Commute, 0.19 Statewide Planning, 0.16 Transit Facilities/Construction,

Figure ES-3

#### **Statewide Multimodal Transportation Plan**

0.48

SCDOT is in the process of updating the statewide 20-year long-range transportation plan to provide coordination and consideration of three primary elements:

Elderly & Persons with Disabilities, 1.77

- The *Statewide Corridor Plan* will strategically focus on corridors of multi-regional and statewide significance. Corridors will be evaluated based on a multimodal assessment of current needs and future opportunities for expanded efficiencies.
- The *Statewide Mass Transit Plan* will provide a vision for carrying mass transit forward into the next twenty years to assist decision makers in formulating plans for meeting the mobility needs of South Carolinians who rely on mass transit. The vision will incorporate all modes of public transportation across the state, including intercity bus, light rail, commuter rail, and intercity high-speed passenger rail into a seamless transportation system. Related to public transportation services, SCDOT is also developing a regional coordinated public transit/human service planning process and plan in accordance with federal requirements. The regional coordination plan(s) are required as a condition of receiving funding for programs directed at meeting the needs of older individuals, persons with disabilities and low-income persons.
- The *Statewide Railroad Right-of-Way Preservation Plan* will enable SCDOT to better fulfill state statutory requirements of preserving railroad rights-of-way for future transportation use. Candidate railroad lines will be identified that are or will be potentially available for acquisition through donation or purchase.



#### **Key Customers**

SCDOT collaborates with a number of key private sector partners to maximize efficiency and effectiveness. The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) are considered as partners but also customers. 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 SCDOT employees.

## **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 of SCDOT are building and maintaining of roads and bridges and administering mass transit services for the citizens of South Carolina. Others include:

- Statewide Intermodal Planning
- Beautification of roadsides
- Operating and maintaining rest areas on the interstates
- Work Zone Safety Program
- Outdoor Advertising Permits Program
- Pedestrian and Bicycle Accommodations
- Providing staff and managing design and construction of South Carolina Transportation Infrastructure Bank projects
- Research and Development of Construction Methods and Materials
- Incident Response Teams (Blue Trucks)
- Providing toll-free "hotline" to take citizens' calls during widespread weather-related emergencies
- Assisting Governor's Safety Council and Emergency Management Division with emergency situations and planning
- Encroachment Permits
- Strategic Highway Safety Plan in partnership with Department of Public Safety
- SCDOT response to citizens on individual transportation concerns
- Management of C-funds for 27 counties
- Environmental Stewardship as a Municipal Separate Storm Sewer System (MS4) Permit Participant
- Oversize Overweight Permits
- Virtual Transit Enterprise
- Vehicle Acquisition Program (Mass Transit)



#### 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, Workforce Focus, Process Management, and Business Results.

#### **CATEGORY 1: LEADERSHIP**

1.1 How do senior leaders set, deploy, and ensure two-way communication for: a) short and long term direction and organizational priorities, b) performance expectations, c) organizational values, d) empowerment and innovation, e) organizational and employee learning, and f)ethical behavior?

#### **Short and Long-Term Direction**

The Secretary of Transportation meets regularly with 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. Senior staff is comprised of the division directors, sub-division heads within headquarters, and the seven District Engineering Administrators.

## **Performance Expectations**

The Secretary of Transportation reviews data that contains essential information related to SCDOT's priorities and performance as outlined in the SCDOT Strategic Plan. Each objective that supports a goal in SCDOT's Strategic Plan has a performance measure. Employee performance is tied to a business plan based on SCDOT's vision, values, and goals as outlined in the Strategic Plan. Examples of measures include, but are not limited to:

- Reduce lost workdays
- Manage secondary road system with an increased budget
- Reverse the upward trend in deficient bridge deck
- Develop and implement a Strategic Highway Safety Plan
- Reduce crashes in congested areas
- Construction Contracts Awarded
- Incident Response Program
- Upgrade all traffic control devices
- Improve use of human resources

#### **Organizational Values**

The organizational values are a part of the development and deployment of the Strategic Plan. 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 these values by doing things the RIGHT way! SCDOT developed a special slogan to remind employees of its values and SCDOT's vision of "Public Trust: Earn it, Keep it!"



### **Organizational Employment and Learning**

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

As part of succession planning, two leadership development programs have been developed. The Strategic Training for Transportation Agency Representatives (STTAR) is a yearlong course for agency employees who exhibit potential for promotion to senior leadership positions in the agency. The STTAR Program has completed its tenth session. One hundred seventy-one employees have completed the STTAR program.

SCDOT has developed a companion 8-month course, the Strategic Training and Education Program for the 21<sup>st</sup> Century (STEP-21). It is available for selected employees who show outstanding potential for midlevel managerial positions. To date, 192 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, one employee completed the Associate Public Manager Program; one member of the senior staff completed the Executive Institute; two senior leaders completed the National Transportation Institute, and four 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.

#### **Checks and Balances**

SCDOT is accountable to the taxpayers of South Carolina and many other entities to include:

- The Governor
- SCDOT Commission comprised of six members elected by the Legislature and one member appointed by the Governor
- Directly accountable to four House and Senate Committees
- Budget approved by the Legislature
- All expenditures reviewed and approved by the Comptroller General and Treasurer
- Oversight, audit and program review by FHWA and FTA
- Subject to reviews by the USDOT Inspector General and General Accounting Office
- SCDOT Annual Accountability Report
- Annual Financial Audit
- Internal Audit
- Materials Management Office Procurement Audit

#### **Recognition, Empowerment and Innovation**

SCDOT employees are rewarded for their creativity and innovative ideas. SCDOT rewards innovation with three types of recognition: (1) 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) On-the-DOT EXTRA is available for performance of a duty that is especially commendable; (3) *Idea Express!* is where employees submit ideas for improving operations that result in the saving of time and/or money.

Ideas accepted may result in cash awards, depending on the savings generated.

In May of 2007, an Employee Recognition Celebration was conducted in headquarters and each of the districts, to celebrate the contributions of SCDOT employees.

In an effort to improve safety in the operation of heavy equipment, SCDOT sponsored an Equipment Operator's Roadeo, 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, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia in the fall of 2007.

#### **Ethical Behavior**

"Public Trust: Earn it, Keep it" is the vision of SCDOT. The new reform law requires SCDOT Commissioners, along with the Secretary of Transportation, the Chief Auditor and senior staff to take two hours of training every two years concerning ethics and the Administrative Procedures Act. The SCDOT Commission and all senior leaders were provided at least two hours of ethical training in the first months of 2007. All other Department employees will be required to take two hours of training every two years concerning ethics.

#### 1.2 How do senior leaders establish and promote a focus on customers and other stakeholders?

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 operations and is woven into agency business plans. 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 does the organization address the current and potential impact on the public of 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 SCDOT Commission held monthly meetings in which stakeholders and the public were invited. The Commission encourages legislators and the general public to share their concerns. SCDOT updates the State Transportation Improvement Plan (STIP) as needed with input from the Councils of Government (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.



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

State law governs SCDOT's operations, and 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. The Office of State Auditor conducts annual reviews of the Division of Mass Transit.

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. Department Directive 41, Professional Consultant Services - Acquisition and Administration, was revised in an effort to refine the consulting and contracting process. Over the past two fiscal years, SCDOT's Agency Audits Office performed full scope audits of various areas of SCDOT operations. SCDOT has addressed the recommendations and concerns of those audits.

#### 1.5 What key performance measures are regularly reviewed by your senior leaders?

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

# 1.6 How do senior leaders use organizational performance review findings and employee feedback to improve their own leadership effectiveness and the effectiveness of management throughout the organization? How do their personal actions reflect a commitment to the organizational values?

In late 2006, SCDOT, in conjunction with the State Office of Human Resources and the University of South Carolina, developed an employee satisfaction survey. The purpose of the survey was to gauge agency strengths and to identify opportunities for improvement. The overall results were favorable. Ninety-five percent of employees participated in the survey. Employees had a positive view of their work environment. There were solid positive scores on issues related to recognition, overall job satisfaction, job design and support given to employees. Less favorable responses dealt with employees' perception of fairness, Human Resource policies and practices, and not being rewarded for innovation. After the results of the survey were analyzed, focus group meetings were held to communicate the results and to allow employees the opportunity to ask questions and make comments. The Secretary of Transportation and senior staff makes frequent visits to county engineering offices to discuss issues with employees.

# 1.7 How do senior leaders promote and personally participate in succession planning and the development of future organizational leaders?

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

As part of succession planning, two leadership development programs have been developed. 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, one employee completed the Associate Public Manager Program; one member of the senior staff completed the Executive Institute; two senior leaders completed the National Transportation Institute, and four

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.

# 1.8 How do senior leaders create an environment for performance improvement, accomplishment of strategic objectives, and innovation?

SCDOT employees are rewarded for their creativity and innovative ideas. SCDOT rewards innovation with three types of recognition which includes the On-the-DOT certificate, On-the-DOT Extra and *Idea Express!* The Department's Office of Materials and Research makes a significant investment in research projects related to surface transportation issues and currently has 13 ongoing research projects.

# 1.9 How does senior leadership actively support and strengthen communities in which your organization operates? Include how senior leaders and employees contribute to improving these communities?

SCDOT is actively involved in strengthening the community in which the agency's people work and live. SCDOT is totally committed to being a good corporate citizen. The Department facilitates the Bicycle and Pedestrian Advisory Committee and the Roadside Enhancement Beautification Committee in South Carolina. There is a presence of SCDOT in all 46 counties.

Governor Mark Sanford proclaimed May 13-19<sup>th</sup> as Transportation week in South Carolina. SCDOT celebrated National Transportation Week with an open house in each of the 46 counties on Saturday, May 19<sup>th</sup>. Approximately 8,862 people attended the open house celebrations. Events included live demonstrations, historical photos and displays of equipment. The open houses provided an opportunity for the public to meet the local SCDOT employees and learn what it takes to maintain one of the nation's largest highway systems. Additionally more than 900 fifth graders across the state participated in the annual Transportation Week poster contest. Students drew their interpretation of the national theme, "One Nation on the Move: Technology and Innovations." A total of 929 posters were received. Eighty students were recognized as winners at the annual awards ceremony in Columbia on May 17<sup>th</sup> at the Zone.

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

- "Adopt-a-DOT Family"
- American Heart Walk
- United Way
- Community Health Charities
- Engineering in Schools
- Limited English Proficiency Program (LEP) A program developed to identify (fluently) bilingual employees (26) who assist customers doing business with the agency
- SCDOT CARES (Cares About Roads, Environment and Safety)
- Lunch Buddies Program A voluntary mentoring program for underprivileged children conducted by SCDOT employees
- "Back to School Bash"
- STTAR Scholarship Program



- Toastmasters
- March of Dimes Walk America Fundraiser by STEP-21 class
- Construction Career Day (partnering with area high schools)
- Groundhog Shadowing Day
- Partnership with Felton Laboratory School
- Career Fairs
- Habitat for Humanity sponsored by the 2007 STTAR Class



2007 STTAR Class and other SCDOT employees building a Habitat for Humanity Home.



### **Summer Transportation Institute**

The Summer Transportation Institute (STI) Program was established in 1993 as a partnership between SCDOT, the Federal Highway Administration (FHWA), South Carolina Department of Public Safety (SCDPS) and South Carolina State University (SCSU). The program expanded in 1996 to include Benedict College and again in 2005 to include Claflin University. The purpose of the STI is to create awareness and stimulate interest among secondary school students to take maximum advantage of the career opportunities that exist in the transportation industry. The goals of the institute are to expose secondary school students to a series of academic experiences designed to motivate them toward professions in the transportation industry and to provide them with mathematics, science and technological enrichment, enabling them to pursue a career in transportation. The STI is a four-week program, which includes room and board on college campuses for 9<sup>th</sup> - 12<sup>th</sup> grade students. The national curriculum includes academic, engineering, career speakers, field trips and Scholastic Aptitude Testing preparation. There were 52 participants this year.

#### **Job Shadowing Day**

SCDOT and FHWA sponsored Job Shadowing Day in February 2007. Over 40 students from various schools throughout the Midlands participated in the Job Shadowing Day activities. Students were given a presentation on various careers in the transportation industry, and were provided a tour of the Traffic Management Center.

#### **Engineering in Schools**

SCDOT Engineering District One teaches *Engineering in Schools* to students in 5-6 local high schools each semester (fall/spring). The classes consist of six sessions which take the students through the life cycle of a construction project. The sessions include, introduction to civil engineering, planning/pre-construction design, surveying, road design, traffic engineering and construction and maintenance.



#### **CATEGORY 2: STRATEGIC PLANNING**

2.1 What is your strategic planning process, including key participants, key process steps and how does it address: your organization's strengths, weaknesses, opportunities and threats; financial, regulatory, societal and other potential risks; shifts in technology or the regulatory environment; human resource capabilities and needs; the opportunities and barriers you described in the Executive Summary, business continuity in emergencies; your ability to exercise the strategic plan.

In the future at SCDOT, there are many challenges and opportunities ahead. As one of South Carolina's largest state agencies, SCDOT Commissioners and the Secretary of Transportation recognize the importance of planning and have accepted the responsibility to support and drive the plan. The senior staff is charged with the development and deployment of the Strategic Plan, which is the foundational document that guides daily and long-term operations. The Strategic Planning Chart is **Appendix 3**.

SCDOT has five areas of focus acknowledged by the Secretary of Transportation: (1) Safety; (2) Maintenance; (3) Resources; (4) Employee Development; and (5) Customer Service. The Strategic Plan involves all of SCDOT's employees and partners. Key partners include the FHWA and FTA. The Strategic Plan is a statewide plan, ranging from three-five years. The goals of the Strategic Plan are accomplished through the business plans for each functional area.

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 Plan. The course continues to be deployed and is presented to all new employees early in their career at SCDOT.

# 2.2 How do you develop and track action plans that address your key strategic objectives, and how do you allocate resources to ensure the accomplishment of these plans?

All strategic objectives are championed by a member of senior staff (and their staff). There is a quarterly review by the senior staff.

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

An annual meeting 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. Additionally, the Secretary of Transportation and senior staff members visit the county offices on a regular basis to give updates on SCDOT activities and progress of the Strategic Plan.

### 2.4. How do your measure progress on your plans?

Quarterly updates regarding progress on performance measures are distributed to all managers. Progress is also tracked using the Employee Performance Management System.



# 2.5. How do your strategic objectives address the strategic challenges you identified in your Organizational Profile?

The strategic objectives identified in the strategic plan mirror the challenges identified in the organizational profile.

### 2.6. How do you evaluate and improve your strategic planning process?

The Department holds periodic meetings to evaluate progress and its relationship to evolving issues. We use feedback from SCDOT customers, stakeholders, and employees to improve the process.

2.7 If the agency's strategic plan is available to the public through the agency's internet homepage, please provide an address for that plan on the website.

http://www.scdot.org/inside/strategic\_plan05.shtml



#### **CATEGORY 3: CUSTOMER FOCUS**

### 3.1. How do you determine who your key customers are and what their key requirements are?

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, there were over 2,000 telephone interviews, 826 face-to-face interviews, and 5 focus group sessions conducted statewide to determine if our customers understand the role of SCDOT. Many people mistakenly view the agency's role as enforcing 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 website, Incident Response Teams, and public meetings, allows the agency to learn and respond to the needs of its customer. A follow-up survey conducted by the Moore School of Business was completed in April 2006.

# 3.2. How do keep your listening and learning methods current with changing customer/ business needs and expectations?

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, Transportation Curriculum Coordination Council, Community Transportation Association of America, American Public Transportation Association, 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 Associated General Contractors in America, 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 development stages of highway projects. Many design changes occur because of public input.

# 3.3. How do you use information from customers/stakeholders to keep services or programs relevant and provide for continuous improvement?

The Director of Maintenance Office tracks the time it takes to process a work request and, based on the data collected, 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 of concern. 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 Office surveys its customers by mail after the work is completed.

SCDOT conducted a Landowner Opinion Survey that had a response rate of return of 30%. (See **Figure 7.2-6** on page 54.)

# 3.4. How do you measure customer/stakeholder satisfaction and dissatisfaction, and use this information to improve?

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

#### **Establishment of Benchmarks**

Benchmarks have been established for completing work identified through maintenance work requests. The measure is to complete 99% of routine work orders within 60 days (See **Figure 7.1-7** on page 51). Requests of a critical nature are normally handled within 24 hours of their receipt.

#### **Transit Provider On-Site Reviews**

The annual on-site reviews are held to enhance customer service, and oversight. On behalf of the Division of Mass Transit, and as part of the division's oversight and monitoring responsibilities, Milligan and Company provided on-site reviews to eleven transit providers

### **Tracking System for Customer Inquiries/Complaints**

Tracking systems have been established at the state and district levels to track customer requests, with more than 70,000 requests being tracked annually.

#### **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 SCDOT. The surveyed customers are identified by data collected in the Highway Maintenance Management System.

#### **Internal Customer Satisfaction Survey**

Improving internal customer service is a major focus in SCDOT's Strategic Plan. Human Resource Services conducted an online survey and personal interviews to establish a baseline of customer satisfaction and identify areas of concern. The survey measured satisfaction with the administration of benefits, staff development and training, recruiting, and classification and compensation. Building Services initiated an interactive work order request on the intranet. The request has a component that has a built-in customer survey initiated when the action is completed.

# 3.5 How do you build positive relationships with customers and stakeholders? Indicate any key distinctions between customer groups.

SCDOT invites the public to information meetings on all major highway projects. Program Managers are present to answer questions regarding the project. An example is the proposed I-73 that will enter South Carolina in the Pee Dee. Ten public meetings have been held and numerous presentations have been made to community groups. When completed, I-73 will provide an interstate connection with Myrtle Beach. During FY 2007, 93 public meetings were held and 237 presentations were made to various public, government and constituency organizations regarding road and highway improvements.



SCDOT has instituted 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. SCDOT takes pride in rapid response, as evidenced by the team repair effort needed to replace a portion of the J. E. McTeer Bridge (Beaufort County) and Lockhart bridge repair on SC Route 9 (Union County). These efforts involved meeting with community groups to discuss plans and traffic routing. The Secretary of Transportation, State Highway Engineer and District Engineering Administrator personally met with community leaders and the public.

### **Rail Development**

Significant planning has been undertaken to develop rail services in South Carolina. The vision is to have a seamless transportation system that integrates commuter rail, light rail, and bus transportation to provide rapid modes of transportation for the state. These systems working in unison will promote the growth of industry and tourism making the State of South Carolina a more appealing place to live, work and visit. A number of meetings were held within the state to inform the public, plan and evaluate the future of rail service in the state. A Program Manager has been recently appointed to coordinate the development of rail service.

#### **Speakers Bureau Program**

Educating the public about SCDOT 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 SCDOT's Community Relations Office. The Speakers Bureau made 22 presentations this year.

#### **Conferences and Workshops**

The Department has created a Special Events Committee which exercises oversight that reviews and approves all events hosted or co-hosted by SCDOT. The Department held the first SCDOT Conference and Event Planning Workshop, which was mandatory for all those anticipating involvement in event planning during FY 2008. A guidebook was developed in conjunction with this workshop for use in the future.

#### **Environmental Stewardship and Historical Preservation**

SCDOT takes pride in protecting the environment and preserving our historical heritage. Coincidental with planning of widening US 17, a mitigation plan has been developed for the Combahee Ferry historic site along the Combahee River at the site of the new Harriet Tubman Bridge. It consists of an eighteenth and nineteenth century archaeological site, including at least two building foundations and associated archaeological deposits, the site of Revolutionary War actions, the remains of Confederate earthworks from the Civil War, and the remains of the old Combahee Ferry.

This site will eventually be part of the National Park Service's Gullah-Geechee Corridor established through a Congressional Act passed in 2006. The Combahee Ferry site is a part of a larger proposed National Register of Historic Places Historic District, including the nearby Confederate earthworks, a historic African American cemetery, a submerged wooden vessel thought to be part of a Confederate pontoon, and a number of historic rice fields. To mitigate adverse effects to the site, SCDOT is proposing historic research and data recovery excavations; documentation, photographic recordation, and mapping for Confederate earthworks; public outreach through written publications; on-site signage such as historical markers and kiosks; and, historical exhibits at local museums, libraries, and schools.



In coordination with Department of Parks, Recreation, and Tourism, SCDOT continues to promote and develop the Heritage Corridor.

#### **Intelligent Transportation Systems**

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 300 cameras in operation. Television stations, including 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 SCDOT's website. SCDOT also provides live feed to the South Carolina Emergency Management Division and the Department of Public Safety. In addition, SCDOT has agreements to share traffic video with Air One, Citadel Broadcasting, Media General, and Traffic Patrol Broadcasting of Charleston.

Along with the cameras, SCDOT utilizes 300 side-fire microwave speed detectors, 141 automatic traffic recorders, nearly 125 changeable message signs and 24 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, fugitive alerts, and safety campaigns. During FY 2007, SCDOT participated in six 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 nine 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 7.1-1** (on page 48) depicts the number of motorists SCDOT's Incident Response Program has assisted in the past three fiscal years. These teams assisted 46,070 motorists in FY 2007. 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.

#### **Integrated Transportation Management System (ITMS)**

In 2003, SCDOT began developing a work plan for an Integrated Transportation Management System (ITMS). The agency needed to provide spatially enabled, real-time access to information across the enterprise. Management needed access to data from multiple, disparate systems to enhance daily business operations and decision-making. The common system link would be county, route, and milepost data. In addition, a mechanism was needed to ensure mapping standards are in place for all applications. ITMS allows all users to access more of the information they need from one interface, including map-based query results, photo log images, and tabular reports.

The first phase, delivered in June 2005, focused on development of an integration tool to query data across multiple database and application platforms. It included the deployment of roadway inventory (including photo logs), traffic, bridge, and pavement data via a web-based interface. It

also involved deployment of the base map to serve as the basis for the agency's geographical information system (GIS). Resurfacing project information was added next.

The second phase, delivered in August 2006, focused on linking information sources to ITMS, such as data from Site Manager (construction management), Highway Maintenance Management System (HMMS), Preconstruction Program Management System (PPMS), and the Electronic Document Management System. It creates a Master Linear Reference System to uniquely identify a route or ramp within a county.

In July 2007, several additional features were added to ITMS. Through ITMS, road design data and proposed routes and projects, as well as traffic signals inventory and intersection information, are now available in real-time. Information can be joined real-time across other transportation management systems and applications to ensure answers are available when needed.

#### **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 SCDOT via telephone lines or wireless telemetry. In June 2005, SCDOT launched the Traffic Polling and Analysis System on its website. 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 current volumes and speeds to the Emergency Management Division and the Governor during coastal evacuations.

## **Virtual Transit Enterprise (VTE) Program**

The VTE project is a federally funded intelligent transportation system (ITS) project geared toward using technology to leverage transit resources in the state. The project has four focus areas: communications, electronic reporting/invoicing, automated scheduling and dispatching, and fleet maintenance management. The program is designed to improve operating efficiencies to public transit providers. During FY 2007, RouteMatch<sup>TM</sup> software was implemented for seven service providers.

## **Transit Vehicle Acquisition Program**

In 2002, SCDOT initiated a vehicle acquisition program. The program is designed to maximize available earmark funds to replace South Carolina's aging transit fleet within three to five years whereas conventional replacement methods would take 10-15 years. In FY 2007, there were 47 vehicles purchased.

#### **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 2007 is 8%, which is 3% lower than FY 2006. SCDOT continually strives to reduce its 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.

#### **Cable Median Barriers**

SCDOT continues to install cable median barriers with a total of 470.04 miles of barrier installed since the inception of the program in 2001; there have been 12,334 hits occurring on installed cable median barriers. There were 2,368 hits during FY 2007. As a result, fatalities due to crossover accidents have decreased from 27 in 2000, the year prior to the initial installation of the barrier to one fatality in FY 2007.



#### CATEGORY 4: MEASUREMENT ANALYSIS AND KNOWLEDGE MANAGEMENT

# 4.1. How do you decide which operations, processes and systems to measure for tracking financial and operational performance, including progress relative to strategic objectives and action plans?

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 Secretary of Transportation, and the Division Directors.

# 4.2. How do you use data/information analysis to provide effective support for decision making throughout your organization?

The Secretary of Transportation identifies issues of concern and requests periodic briefings and updates. Of special interest during FY 2007, was the follow up actions to the findings and concerns of the Legislative Audit Council.

#### **Ranking of Projects**

The Office of Planning analyzes capacity needs for the interstate system, including mainlines and interchanges. Mainline capacity needs are based primarily on forecasted volume-to-capacity ratios. Interchanges are evaluated using the Interactive Interchange Management System, which considers roadway and bridge characteristics, geometric design, capacity analysis, safety analysis, financial viability, and benefit-cost analysis. Non-interstate capacity needs are determined cooperatively between SCDOT, Metropolitan Planning Organizations (MPO), and Councils of Government (COG). Project needs are identified and included in urban and regional long-range plans. They are also prioritized using criteria such as: current lane volume, forecasted volume, historical traffic growth rate, accident rate, economic development, and environmental and cultural considerations.

SCDOT provides data related to 12 performance measures of highway expenditure and system performance to the FHWA. The 12 measures include 5 financial, receipts per state controlled mile, capital and bridge disbursements, maintenance disbursements per state controlled mile, administrative disbursements per state controlled mile, and total disbursements per state controlled mile. Additionally 7 measures relate to system performance. They include rural interstate highway condition, urban interstate highway condition, rural arterial condition, urban interstate congestion, deficient bridges, fatality rates and rural narrow lanes.

# 4.3. What are your key measures, how do you review them, and how do you keep them current with organization needs and direction?

The key measures are located in Category 7 of this report and in Appendix 1. They are reviewed quarterly and are modified and updated as needed.

# 4.4. How do you select and use key comparative data and information to support operational and strategic decision making and innovation?

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.

#### 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. The South Carolina General Assembly passed proviso 72.59 that recommends all state agencies use the Best Management Practices model developed by SCDOT.

# 4.6. How do you translate organizational performance review findings into priorities for continuous improvement?

Performance review findings indicate strengths and opportunities for improvement. These opportunities may require a shifting of resources or a need for training and corrective action.

# 4.7. How do you collect, transfer, and maintain organizational and employee knowledge? How do you identify and share best practices?

SCDOT has developed a variety of mentoring and leadership development programs to ensure the transfer of employee 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 compares processes used by other transportation departments to develop a "best practice" model. The South Carolina General Assembly passed proviso 72.59 that recommends all state agencies use the Best Management Practices model developed by SCDOT.

#### Crossroads

In an effort to improve the communications loop with all employees, a video is produced on a quarterly basis regarding topics having statewide interest. All employees view this video.

#### **Video Conferencing**

SCDOT 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 costs.

#### The Connector

An employee newspaper, "The Connector," is published quarterly and distributed to all employees, retirees, and others, upon request. "The Connector" features articles of interest about what is going on at SCDOT. "The Connector" won second place in its category in the 2006 South Carolina Press Association Award Competition.



#### **CATEGORY 5: WORKFORCE FOCUS**

5.1. How do you organize and manage work: to enable employees to develop and utilize their full potential, aligned with the organization's objectives, strategies, and action plans; and to promote cooperation, initiative, empowerment, innovation and your desired organizational culture?

In an effort to maintain a vibrant and effective workforce fully capable to perform tasks there is an established organization structure with adequate resources to perform the mission and to carry out the objectives in the strategic plan. To ensure that the Department has the right person with skills necessary to accomplish tasks there has been classification reform.

One of the five 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 7.4-1** (on page 59) depicts the breakdown of the total workforce.

### 5.2. How do you evaluate and improve your organization's human resource related processes?

The Department's human resources processes are evaluated by using a customer service survey and by interaction with the South Carolina Budget and Control Board, Office of Human Resources. Results from the survey are used for process improvement. We used the recommendations of the LAC Report to improve the Department's processes.

5.3 How do you identify and address key developmental and training needs, including job skills training, performance excellence training, and diversity training management/leadership development, new employee orientation and safety training? How do you evaluate the effectiveness of this education and training and how do you encourage on the job use of the new knowledge and skills?

A goal of the Strategic Plan is to improve internal customer satisfaction by 10%. In an effort to evaluate the effectiveness of human resources and to better serve the needs of our customers, the HR Office deployed a Customer Satisfaction Survey in late 2006. The survey was designed to solicit feedback on the Headquarters HR Office, HR Coordinators in the district offices and the employees responsible for HR functions within the units. The survey also consisted of two sections - one for the general employee population and an additional section tailored to members of management.

HR is reviewing all of its internal processes in an effort to provide better service to SCDOT employees. 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 Employee Performance Management System reviews. This information will be captured to create future training plans based on identified needs. Functional/technical areas will be added as 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, business objectives will be linked to training and educational requirements will be customized to meet the needs of the employee and the organization. With Teacher and Employee Retention Incentive (TERI) and potential early and full retirements, 1,422 employees are eligible for retirement within the next five years. SCDOT is making positive strides in the area of workforce planning to address the gaps resulting from these projected retirements.

Upon request, Workforce Planning Reports are provided to management to use as a planning tool in anticipation of pending retirements. While these reports highlight positions held by TERI participants and those eligible for early and full retirement, special interest is given to positions affected by TERI participants, since their date of termination from the Department is established. Currently, there are 241 employees participating in the TERI program. In FY 2007, 22 former TERI participants were re-employed, of which five serve in a temporary capacity.

New employees with SCDOT begin their service with a one-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.

The business objectives are linked with a curriculum that includes four basic tracks: employee, supervisor, manager, and senior leadership. A website 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 staff. As part of the workforce planning for SCDOT's future staffing requirements, opportunities are available for selected staff including:

- Engineering Development Program (EDP)
- Engineering Cross Training
- Maintenance Foreman Training
- Leadership Development for Supervisors
- Strategic Training and Education Program for the 21<sup>st</sup> Century (STEP-21)
- Strategic Training for Transportation Agency Representatives (STTAR)
- Certified Public Manager Program
- Associate Public Manager Program
- Public Professional Development
- Executive Institute

During FY 2007, 135 managers and supervisors were trained in Equal Employment Opportunity/Sexual Harassment. Since 2002, a total of 1,083 managers/supervisors have been trained. In addition, supervisors and managers have been trained in basic human resource skills. The SCDOT Commission and senior leaders have also received ethics training.

#### 5.4 How does employee training contribute to the achievement of your action plans?

Employee training is a vital component of action plans. Training needs are identified by interaction with employees and observations by the supervisory chain.



# 5.5 How does your employee performance management system, including feedback to and from employees, support high performance and contribute to the achievement of action plans?

The leadership of SCDOT is committed to furnishing employees with the resources they need to do their jobs and to accomplish the mission of SCDOT. Personal and professional growth for SCDOT employees helps build skilled workers, as well as directly supports employees as they pursue opportunities for advancement and promotion.

With the implementation of career paths, SCDOT supervisors meet with their employees to identify at least three professional development activities for the employee to complete to assist the employee in strengthening his/her skill proficiencies in his/her current position and/or obtaining relevant skills in preparation for advancement within his/her respective career path. All employees receive a performance appraisal based on the Employee Performance Management System (EPMS). During the planning stage, the employee and their supervisor jointly develop a training plan. This plan is based on the mission needs of the agency and incorporates the development of the employee.

# 5.6 How do you motivate your employees to develop and utilize their full potential? Classification and Compensation Reform

SCDOT set a goal to establish career paths and identify training requirements for the workforce by January 2007. In May 2006, the established career paths were implemented. The 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. This project impacted approximately 4,195 positions. Efforts are currently underway to address other more specialized types of positions not affected at initial implementation.

SCDOT has had a turnover rate of over 13% the past two years (**Figure 7.4b**, page 60). This higher than normal rate is somewhat explained because of retirements under the Teacher and Employee Retention Incentive program leading to internal promotions so that vacancies remain over a longer than usual period.

SCDOT uses a 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 FY 2007, 48 SCDOT employees received tuition assistance. There have been 25 employees who received degrees with the help of SCDOT's Tuition Assistance Program since its inception in 1994. (See **Figure 7.4-3** on page 60– Tuition Assistance Program.)

SCDOT recognizes employees who have made significant contributions through the 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. SCDOT awarded 2,363 On-the-DOT Awards and 232 On-the-DOT EXTRA Awards in FY 2007. Governor Sanford held state Employee Recognition Week in May beginning with a Proclamation. Headquarters and the district offices were encouraged to find creative ways to recognize their employees during this special week.

# 5.7. What formal and/or informal assessment methods and measures do you use to determine employee well being, satisfaction, and motivation? How do you use other measures such as employee retention and grievances? How do you determine priorities for improvement?

The Department surveys its employees to determine employee satisfaction with their job. The most recent survey was conducted in the fall of 2006 with a participation rate of 91% of the workforce. Employee Focus Groups were held in the spring of 2007 and feedback was obtained from the participants. We evaluate employee retention and grievances and use information to improve human resource process and delivery.

# 5.8. How do you maintain a safe, secure, and healthy work environment? Emergency Management

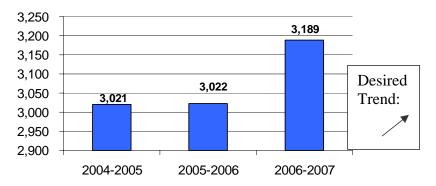
SCDOT is a key partner in public safety. Emergency Management is responsible for the coordination of all planning, training, preparedness, mitigation, response, and recovery activities to include developing, coordinating and maintaining agency plans to respond to all hazards that affect the transportation infrastructure of the State of South Carolina. A key function of the office is to train key managers and line supervisors on the use of the National Incident Management System Incident Command Structure. The office staffs the State Emergency Management Center when activated.

#### Health, Security, and Safety

SCDOT places great emphasis on health, security, and safety. The Department employs a Registered Nurse who works closely with the field offices and Headquarters to promote, protect and improve the health and wellness of its workforce. SCDOT has a Health and Wellness Program that is co-managed by the agency's nurse and the benefits coordinators. Most work locations also have a volunteer wellness coordinator. SCDOT headquarters held five blood drives, collecting 158 units of blood in FY 2007. SCDOT participates in the South Carolina Budget & Control Board sponsored Prevention Partners Wellness Walk, and accounted for 15% of the total participation this year.

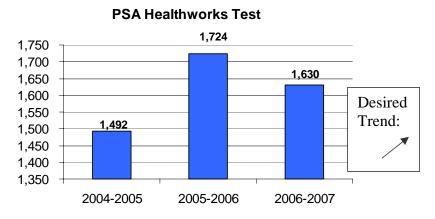
Annual health risk screenings are provided to all employees on a voluntary basis. All screenings include a consultation and referral to a personal physician, if necessary. SCDOT is proud of the increasing number of participants in this program. The Department employs an environmental company to conduct periodic tests of the headquarters building. Below is a chart (**Figure 5.8-1**) that shows the number of employees that have participated in the annual health screenings.

#### **Participants in Annual Health Screening**



**Figure 5.8-1** 

Since 2004, SCDOT has offered access to Mobile Mammography on a statewide basis. This year 134 employees participated. SCDOT also offers a Prostate Specific Antigen (PSA) testing for employees meeting the medical criteria. The following chart (**Figure 5.8-2**) shows the number of employees that participated in the PSA Healthworks test.



**Figure 5.8-2** 

Security enhancements have been initiated at headquarters, which includes the issuance of photo identification badges and the establishment of a visitor control point. Several of the district and county offices have also initiated access control measures. All SCDOT occupied buildings have evacuation plans and unannounced tests are conducted on a periodic basis. The headquarters building had an emergency evacuation exercise with over 900 employees exiting the building in less than six minutes. The Secretary of Transportation serves as a member of the Governor's Counter Terrorism Task Force.

#### **Risk Management**

A Risk Management orientation program is in development to improve employee awareness of loss exposures of SCDOT (claims and lawsuits against SCDOT, workers compensation losses, etc.) 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, RMIS provides one point of entry for all data related to employee injuries, SCDOT vehicle accidents, and documentation of fatal vehicle crash site investigations. RMIS will soon be expanded to include claims against SCDOT and against the public. This system will provide greater access to information and more timely reports to SCDOT management. The rise in insurance costs is being primarily driven by increased workers compensation costs. In fact, the increase in workers compensation costs from 2004 to 2007 amounts to \$4.6M (84%) of the \$5.5M total increase in insurance costs.

### **Occupational Safety**

There is a concerted effort to reduce lost workdays by 25% in the next five years by reducing work related injuries, accidents and illnesses. Some of the specific actions include periodic air quality testing of office and other confined work areas, frequent safety meetings and an aggressive training program. A Workplace Violence Prevention course was developed from employees this fiscal year.



Holly Hill and Bamberg Maintenance recognized for their safety record.

#### **CATEGORY 6: PROCESS MANAGEMENT**

# 6.1. How do you determine, and what are your key processes that produce, create, or add value for your customers and your organization? How do ensure these processes are used?

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:

- Highway Safety
- Planning
- Pre-Construction
- Construction
- Road and Highway Maintenance and Preservation
- Traffic Operations
- Toll Operations
- Mass Transit

#### **Highway Safety**

The paramount goal in SCDOT's Strategic Plan is to reduce the South Carolina highway fatality rate by 10% of the national average. A State Highway Safety Plan was developed and agreed to by SCDOT and SCDPS and reviewed by the FHWA, Federal Motor Carriers Safety Administration, and the National Transportation Safety Administration. The state plan leverages disciplines of engineering, law enforcement, safety education and emergency medical services to make South Carolina highways safer.

#### **Pre-Construction**

This year SCDOT undertook a reorganization of its preconstruction division. This division is responsible for the development of most of the state's significant roadway, intersection, and bridge projects. The organization was revised to align resources with customer centers, by dividing project development responsibility into four regional groups. These groups are also supported by an engineering support services staff. The reorganization involved approximately 250 of the 400+ staff within the division. The benefits of this reorganization are in three key business goal areas:

- 1) Employee Development The reorganization facilitates cross training and employee growth by providing opportunities for various types of engineering assignments within the context of project development and delivery.
- 2) Customer Service The Regional Production Groups now have a regional responsibility, and will be working consistently with the same local governments, SCDOT field personnel, resource agencies, and other stakeholders. The opportunity to build better and longer lasting relationships with key stakeholders will improve communication, facilitate resolution of project related issues and improve the understanding of the needs and desires of local stakeholders as they relate to transportation projects.
- 3) Efficiency Resources and decision-making processes have been streamlined to a lower level of responsibility. The speed at which priorities, resource allocations, and proactive, as well as corrective, measures to keep projects on schedule and on budget are improved with the reorganization.



### Methodology of Statewide Ranking of New Projects

SCDOT uses engineering, financial, and other criteria in ranking new projects. Examples include financial viability and maintenance costs, potential for economic development, traffic volume and congestion, environmental impact, alternative transportation systems, and consistency with local land use plans.

#### Construction

During FY 2007, SCDOT continued to refine its partnering activities with its contractors and implemented a new construction specification manual. There were 260 road and bridge projects totaling \$732.05M completed and accepted by SCDOT. This included 24 federal/state bridge replacement projects for 26.28 miles, totaling \$85.89M; 35 state secondary projects for 79.12 miles, totaling \$39.91M; 13 special-match projects for 47.46 miles, totaling \$31.97M; 7 interstate projects for 580.75 miles, totaling \$94.31M; 80 primary/urban projects for 340.79 miles, totaling \$406.09M; 72 maintenance projects (chip seal, full depth patching, resurfacing, shoulder paving, etc.) for 1,826.86 miles totaling \$58.41M; and 29 other projects (pavement marking, landscaping, resigning, etc.) for 13,744.34 miles, totaling \$15.47M.

### **Notable Projects Completed**

- Grace Memorial/Pearman Bridges Demolition over Cooper River in Charleston County in the amount of \$59.60M
- I-585 widening in Spartanburg County in the amount of \$34.72M
- I-85/BMW/Brockman McClimon Interchanges in Spartanburg County in the amount of \$31.90M
- US 521 widening in Clarendon County in the amount of \$23.81M
- SC 38 widening in Dillon County in the amount of \$23.05M
- SC 72 widening in Abbeville County in the amount of \$18.40M
- Statewide Design/Build Bridge Replacements in the amount of \$18.48M
- US 521 widening in Sumter County in the amount of \$16.92M
- US 378 widening in Clarendon County in the amount of \$16.18M
- US 278 widening in Beaufort County in the amount of \$16.13M
- I-26 resurfacing and rehabilitation in Spartanburg County in the amount of \$15.97M
- US 321 widening in Orangeburg County in the amount of \$15.19M
- SC 101 widening in Spartanburg County in the amount of \$12.74M
- I-95 resurfacing and rehabilitation in Clarendon County in the amount of \$12.43M
- SC 72 widening in Laurens County in the amount of \$10.70M

#### **Road and Highway Maintenance and Preservation**

According to the Federal Highway Administration, SCDOT has the responsibility for maintaining one of the largest state highway systems in the nation, and does so at the lowest funding per mile in the nation. SCDOT expends \$7,297 per mile on maintenance, which is well below the national average of \$19,615 per mile. The maintenance budget for 2007 was \$315,000,000.



### **Key Maintenance Functions**

- **Bituminous Surfacing:** This road surface treatment is 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 preventive maintenance treatment designed to prolong the life of the pavement structure.
- **Drainage Structures:** Early detection of drainage problems along state maintained routes is the byproduct of the inspection of drainage structures. Improvements to the drainage system can make the state's highways safer by enhancing water runoff and increasing the life of the roadway. It is SCDOT's goal to inspect and clean the drainage structures on 20% of the state's road mileage each year.
- **Pavement Preservation Program:** SCDOT continues 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 283, which was less than the goal of 312, due to funding limitations.
- **Secondary Resurfacing**: For the second year in a row, SCDOT was able to fund a secondary road-resurfacing program due to additional funds from Act 176 of 2005 and other sources of state funding.

### Strategic Planning and allocation of funding for the secondary road system:

It is a high priority to manage the secondary road system with an increased budget. The goal is to spend \$50M each year on resurfacing and widening of secondary roads in fair condition and/or where patching and shoulder widening has been completed the prior year. The current status is the following:

- \$30,925,458 was awarded in 2005 for the 2006 program with \$28,143,704 expended to date.
- \$57,228,890 was awarded in late 2005 and early 2006 for the 2007 program (includes County Transportation Committee (CTC) match projects) with \$48,644,649 expended to date.
- \$33,615,442 was awarded in early 2007 for the 2008 program (does not include CTC match projects) with \$4,963,008 expended to date.
- \$10,000,000 CTC matching funds have been offered to all counties.
- The Department has committed to fund the secondary road-resurfacing program at the level of \$50,000,000 for the next ten years with additional funds from Act 176 and other sources of state funding.

#### **Milestones:**

- District projects were submitted in July and August 2006, for the 2008 Maintenance Resurfacing Program.
- Maintenance staff reviewed roads submitted for resurfacing in August and September 2006.
- State secondary resurfacing projects in January and February 2007 have been awarded.

An important goal is "preservation of the secondary roads with less than 500 ADT: surface seal 1,000 miles each year." In an effort towards this, SCDOT has accomplished the following:

- 756 miles were completed this fiscal year
- 16.83 miles of micro-surfacing were completed
- Needs and multi-year development portion of this goal have been completed
- 72 secondary bridge replacements have been completed this fiscal year
- Reverse upward trend of deficient bridge deck area is ongoing



#### **Pavement Condition**

The Office of Pavement Management collects pavement condition, GPS and digital image data on all three major road systems: Interstates, Primary (US and SC routes), and Secondary routes. There are 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.

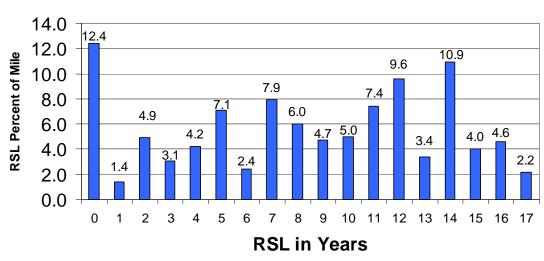
Pavement quality, or condition of pavement, is calculated using the six major distresses that are measured by the Pavement Management road rating teams. One way of describing the condition of pavement is by using the concept of remaining service life (RSL). RSL represents how many years of life are expected out of pavement before the end of its designed service life. Values for RSL usually range from zero to twenty years. An RSL of zero does not mean that the road has failed, but that its design life is equal to its fatigue life used. At zero RSL the road has essentially reached a level of deterioration determined to be the minimum operating condition for that road or network. RSL can also be used to show the overall condition of the network.

#### Trends in the Interstate, Primary, and Secondary Systems

The Interstate system is evaluated annually by Pavement Management. Trends for the interstate system show the average condition remained stable for the period 2005-2007. Specifically, the average remaining service life of the interstate system is 8.4 years with 12.4% of those pavements with an RSL of zero. The percentage of interstates rated in "very poor to fair" condition dropped from 42% in 2006 to 40% in 2007.

# Interstate Route RSL as Percent of System Miles

(Lane Miles = 3,749) RSL Average = 8.4

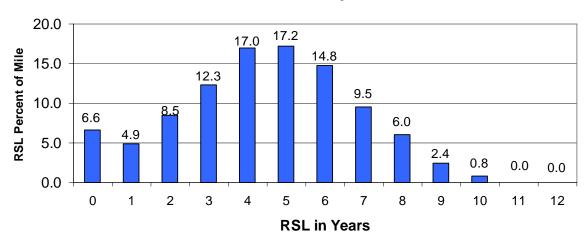


**Figure 6.1-1** 

The primary and secondary systems are evaluated on a three year cycle. The average remaining service life of the primary system is 7.9 years with 19.9% of the pavements with an RSL of zero. Overall, the primary system is in "fair" condition. The secondary system has an average remaining service life of 4.5 years with 6.4% of the pavements having reached an RSL of zero. Even though the secondary system has a lower percentage of roads with zero RSL, the average remaining life of the system is approximately half that of the interstate and primary system.

## Secondary Route RSL as Percent of System Miles

(Lane Miles = 62,905) RSL Average = 4.5



**Figure 6.1-2** 

In conclusion, network data collected by Pavement Management provides the basis for selecting roads for pavement improvement and preservation. This data is invaluable when it comes to managing the pavements on such a large system as we have here in South Carolina.

## **Bridge Maintenance**

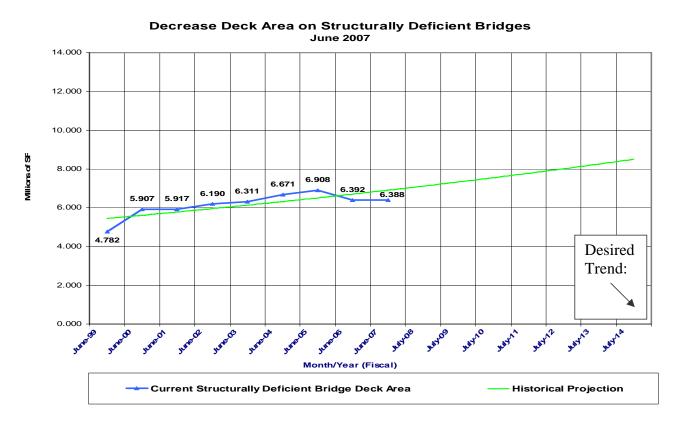
SCDOT uses a comprehensive Bridge Management System (BMS). The development, implementation, and data collection of the BMS began in the early 1990's, with full-scale operations starting in late 1998. The system provides detailed analyses of South Carolina's bridge needs and provides valuable input for making bridge project 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 6,000 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 Bridge Management System.

Strategic planning and other initiatives completed this past fiscal year included the following:

- SCDOT Bridge Management Program, in addition to contract bridges was expanded to include bridges replaced by maintenance forces
- Additional Seismic Response Training for emergency responders was given by CalTrans

Although the deck area of structurally deficient bridges is approximately the same as this time last year, the overall trend will be upward because 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 and inadequate funding levels that affect maintenance preservation, rehabilitations, and replacements. Even though SCDOT uses a systematic approach to assess bridges, the result of insufficient funding inhibits progress on reversing deficient deck structure.

There is a strategic planning goal to reverse the upward trend in deficient bridge deck area. SCDOT is attempting to reverse the trend by seeking additional funding. There were 72 new bridges completed this fiscal year. **Figure 6.1-3** depicts the historical projection based on funding levels. An increase to a funding level of \$105M should begin to reverse the upward trend in the deck area of structurally deficient bridges.



**Figure 6.1-3** 

#### **Quality Management of Maintenance Activities**

The Maintenance Assessment Program (MAP) has been developed to help determine the level of service being provided on seven key elements of highway maintenance across the state. 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 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. The information collected in the MAP is assisting in the rating of the performance of the county maintenance units.

#### **Mass Transit**

The Division of Mass Transit is the primary entity responsible for the coordination of public transportation services in the state, including the distribution of state and federal funds. In this capacity, the Division of Mass Transit, under the authority of the Commission, assists in the development of statewide and regional transit plans, develops and implements transit programs to meet statewide objectives and local needs, and provides ongoing oversight and monitoring of local transit providers and grant programs. In addition, the Division of Mass Transit provides funding for coordination of transit services and technical assistance to local transportation providers. In this role, it works closely with local transit providers to develop and fund demonstration projects and special services to enhance transit services in rural areas of the State.

Public transit services are provided by a variety of public providers across the state including urban transit systems, cities, regional transit authorities (RTAs), councils on aging, and counties. Under the umbrella of public transit services, providers deliver transportation services that support general public needs, employment, tourism, and economic development across the state. The types of service offered by local transit providers depend on size and population density of the area served, as well as geography. Some agencies provide fixed-route service that operates on a regular timed route, while others offer demand-response service that provides door-to-door transportation.

The Division of Mass Transit trend data consists of passenger boardings and operating expenses and are compiled and analyzed at the end of each fiscal year. There were 8,607,809 riders and \$34,264,787 in expenses in FY 2006. However, because of the submission cycle of relevant data to the Division of Mass Transit for the computation and analysis of the key measures, the analysis is not finalized until 8 to 10 months after the fiscal year. Therefore, available current data is FY 2006. The Division of Mass Transit has not done any comparative analysis with other peer group states, however there are several national studies that could provide valuable information namely the Transit Cooperative Research Program (TCRP).

#### **Federal and State Transit Funding Programs**

To meet the public transit needs within the state, SCDOT distributes a combination of state and federal funds to local transit providers and planning agencies. In most cases, SCDOT provides state funds that are utilized to match federal funds, thereby maximizing the state's use of its federal funds allocation. SCDOT also provides state funding (on a discretionary basis) for special projects that are undertaken by public providers. These projects must be designed and implemented in a manner that brings innovation to the State and may be replicated by other providers statewide. Each large and small urban transit provider receives grant funding directly from the Federal Transit Administration (FTA) annually. Currently, SCDOT manages a range of programs as outlined below:

- *Metropolitan Planning* provides funds for the establishment of a cooperative, continuous, and comprehensive framework for making transportation investment decisions in metropolitan areas.
- Capital Assistance Grant provides funds to be used for mass transit capital projects such as bus purchases, computers, facilities upgrades and rail projects.
- *Elderly and Disabled Transit Services* provides funds to assist private non-profit organizations in meeting the transit needs of the elderly and disabled population through vehicle purchases or purchase of service contracts with other transit providers.
- Rural Transit Services provides funds to transit agencies for administration, operations and capital in conjunction with providing rural transportation services.

- *Statewide Planning and Research* provides funds to support national and statewide public transit studies and planning.
- Rural Transportation Assistance Program provides funds to assist in implementing a training program and technical assistance tailored to meet the needs of transit agencies in rural areas.
- State Mass Transit Funds (SMTF) –provides funds to public transit providers to supplement federal funds (i.e., to assist in matching federal funds) and implement special projects that have statewide value. SCDOT receives ¼ of one cent of the state gasoline user fee (approximately \$6.0M) annually in addition to approximately \$1.3M from the state general fund in FY 07.

## **Toll Operations**

Two toll facilities currently operate in the state of South Carolina. The Upstate toll facility is known as the Southern Connector and is a public/private partnership toll facility. The Cross Island Parkway (CIP), located in Hilton Head, is a state-owned facility. Daily operations and maintenance of the toll facility in Hilton Head are privatized with monitoring and violations processing provided by SCDOT's Toll Operations Center (TOC). The CIP is a 7.5-mile toll road that provides an alternative route to the south end of the Island and serves as a designated hurricane evacuation route.

The TOC is persistent in maximizing toll violation collection efficiency, attaining a higher level of customer service, reducing expenditures, and refining contractor operations. In addressing customer service, the TOC continues to survey toll violators and Palmetto Pass customers to determine if SCDOT is meeting our customers' needs. A Customer Service Appreciation Day was held for all patrons of the CIP Customer Service Center in the summer of 2006 as a way to get feedback from walk-in customers. One of the key components of a new software package for the operations of the CIP will be the implementation of an interactive website, allowing new customers the ability to open Palmetto Pass accounts and allow existing customers to maintain their accounts, but it will also enable violators to make payments on-line. Traffic grew on the CIP at a rate of 1% with over 8.7 M vehicles passing through the facility. Revenues from toll operations on the CIP increase 8% from the prior year to total \$6.5M in FY 2007.

## Adopt-A-Highway

Litter abatement is an important facet of SCDOT's community outreach efforts. For 19 years the Adopt-A-Highway Program has provided an effective channel for cultivating public commitment to keeping our highways clean. 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 clean up roadside litter at least four 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. See **Figure 6.1-4** on the following page for Adopt-A-Highway statistics.

SCDOT Adopt-A-Highway Statistics							
	Pounds Miles Groups Volunteers						
2004	1,226,239	5,469	1,694	21,370			
2005	1,665,991	5,501	1,997	26,146			
2006	1,252,526	5,393	2,128	29,093			
TOTALS	4,144,756	16,363	5,819	76,609			

**Figure 6.1-4** 

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 inform the public of the importance of litter control 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.

The agency also demonstrates its commitment to a cleaner South Carolina by holding two annual weeklong cleanups conducted by the maintenance employees throughout the state. These special events provide another opportunity for the state's roadways to be cleaned, call attention to SCDOT's litter abatement efforts, and increase litter awareness among South Carolina's citizens. **Figures 6.1-5** and **6.1-6** show recent results from these annual litter pickups:

TOBUITO II O	THE CHICAGO CHILLIA	110001	maps.				
Carolina Spring Clean Results							
Year	<b>Employees</b>	Miles	Pounds				
2005	2,696	2,642	477,006				
2006	2,061	2,638	357,766				
2007	1,901	3,308	401,795				
TOTALS	4,757	5,280	834,772				

Annual Cleanup Results							
Year	<b>Employees</b>	Miles	Pounds				
2004	1,466	2,356	342,908				
2005	1,648	3,359	337,772				
2006	1,601	2,371	268,784				
TOTALS	3,114	5,715	680,680				

**Figure 6.1-5** 

**Figure 6.1-6** 

# 6.2. How do you incorporate organization knowledge, new technology, changing customer and mission related requirements, cost controls, and other efficiency and effectiveness factors such as cycle time into process design and delivery?

Organizational knowledge is enhanced by using training resources provided by National Highway Institute, AASHTO, American Public Transportation Association, and other professional organizations. SCDOT has a vibrant Materials and Research program that currently has 13 research projects in progress. The Department has state-of-the-art technology and uses current versions of AASHTO Shareware TM and an Integrated Transportation Management System. The Department has active quality teams for both construction and maintenance. The Office of Materials and Research operates an accredited laboratory that tests material samples used in road construction projects.

## 6.3. How does your day-to-day operation of these processes ensure meeting key performance requirements?

SCDOT ensures that key performance requirements are met by the development of performance measures that are incorporated in SCDOT's Strategic Plan. Accountability for the measures resides with the appropriate senior leader.

## 6.4. How do you systematically evaluate and improve your key product and service related processes?

The Office of Materials and Research (OMR) is a support element of the Director of Construction Office. Federal Regulation 23 CFR 637 requires that SCDOT maintain a fully accredited testing laboratory and adequate, qualified staff. The OMR continues to remain fully accredited through the AASHTO Materials Reference Laboratory (AMRL) Accreditation Program that was established at the National Institute of Standards.

The Accreditation Program is certified to ISO 9001-2000 standards and requires participants to maintain a high level of quality in personnel certification, equipment calibration, record keeping, and test result reporting. On-site assessments occur every 18 months and blind testing on proficiency samples for all areas of accreditation such as soils, asphalt, concrete, paint and more are performed. To ensure that SCDOT projects are constructed using proper techniques and appropriate materials, all technicians (personnel, contractor personnel, and consultant personnel) involved with quality control on projects must have SCDOT certification in the areas they are testing or inspecting. These certifications may include earthwork, base course, nuclear density gauge, concrete, foundations, aggregates, and four levels of asphalt.

Testing and reporting of materials is continually monitored in support of customer satisfaction and business results. The OMR tests between 27,000 and 33,000 samples per year, depending on the number of construction projects in progress. The OMR closely monitors the length of time required to test and report samples with weekly Processing Reports. In FY 2005, the benchmark was set at 80% of samples tested and reported within 12 days. An average of 98% of samples tested were processed within the 12 days. In FY 2006, an average of 97% of samples met this goal with a 5.6% increase in the number of samples. In FY 2007, the OMR achieved 98% efficiency. The total number of samples tested during FY 2007 fiscal year was an average of 31% lower than the previous fiscal years due to the near conclusion of the Department's accelerated construction 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 office, Director of Assets Management, and District Engineering Administrators are developing long-range plans to use SCDOT facilities more efficiently, which may include consolidation or elimination of some facilities.

SCDOT has taken an aggressive stance in disposing of surplus property. The abandoned Branchville Section Shed was sold during FY 2007. Using a private sector solution, SCDOT entered into an innovative arrangement with two commercial real estate brokers to sell surplus property. This innovation was highlighted in the recent Governmental Efficiency and Accountability Review study of the Budget and Control Board.

## 6.5. What are your key support processes, and how do you improve and update these processes to achieve better performance?

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, Employee Development, and the Office of Materials and Research. 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**

SCDOT procures highway related contracts and services through a procurement system that is consistent with federal highway rules and regulations. All other procurements are made in compliance with the SC Consolidated Procurement Code, which is administered by the SCDOT

Procurement Office. 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.

## **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 final 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 each procurement.

This system has allowed SCDOT 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 SCDOT 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.

## **Agency Certification Limits**

Pursuant to the South Carolina Consolidated Procurement Code § 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.

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 agency, 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**

The Information Technology Services support 111 software applications related to the mission of the Department. Among these applications are pal guide, web transactions, automated traffic recorders, and virtual transit enterprise program. The public accesses considerable information about SCDOT through the agency's websites. The most popular web pages on the main site, <a href="www.scdot.org">www.scdot.org</a>, are the traffic cameras (particularly Myrtle Beach, Charleston, Columbia, and Greenville), Materials and Research Lab Procedure Manual, Road Conditions, and Inside SCDOT. Visitors can access any of the other SCDOT websites from the main site. The website addresses along with the number of visits per day (as of May 2007) are listed below.



Site name	Address	Average Visits/Day
SCDOT main site	www.scdot.org	29,640
Arthur Ravenel Jr. Bridge	www.cooperriverbridge.org	528
I-73	www.i73insc.com	160
Highways or Dieways	www.highwaysordieways.org	77
Cross Island Parkway	www.crossislandparkway.com	58



In October 2006, SCDOT was chosen, along with twelve other states, to manage a Business Opportunity and Workforce Development (BOWD) Center to enhance skills and create opportunities for Disadvantaged Business Enterprises (DBEs) certified under the South Carolina Unified Certification Program. The Business Development Center (BDC) is one feature of the BOWD Initiative, a pilot program funded by the FHWA.

The BDC acts as a central information gathering hub for projects and procurement opportunities within various state agencies and local municipalities. Services are available in bid and contract proposal preparation, interpretation of plans and specifications, development of financial statements, and consultation in the development of marketing and business plans.

A "Needs Assessment" was conducted during November and December 2006, to gather data from DBEs certified with the Unified Certification Program. Six hundred and twenty-two firms were requested to complete a survey. Four focus group meetings were held in Spartanburg, Charleston, Florence and Columbia to allow DBE firms an opportunity to provide input into the BOWD. This information is being used in the development of an action plan.

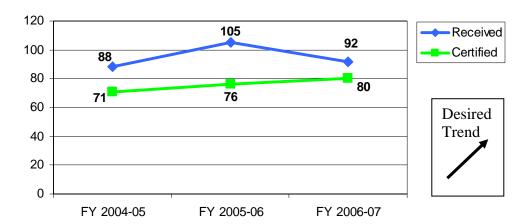
The "Focus Group" meetings and "Needs Assessment" responses enabled SCDOT to inform participants of the array of services offered by the BDC. Of the 116 firms which responded, 3% employ more than 50 employees and 57% employ fewer than ten. The remaining forty percent employ between 10 and 50 employees. In the type of services that they provide, 43% of the respondents perform construction or construction related services, and 23% perform services other than construction. Thirty-four percent of the respondents perform services not listed in the survey.

Prior to the initiation of the BDC, the Office of Business Development and Special Programs established a goal to increase the number of DBE firms participating in contracts by 10% annually. For the first reporting period in December 2005; 184 DBE's had secured contracts. In FY 2006, there was a 28% reduction in the overall number of contract awards, and the funds for federal-aid projects deceased by 44%. Nevertheless, 16 new DBE's were awarded contracts; considering the factors involved, there was a 9%

increase in new DBE firms participating in contract awards, 1% short of the proposed goal.

The chart below (**Figure 6.5-1**) illustrates the number of DBE applications received and the number of firms certified through the South Carolina Unified Certification Program.

## **Certified Disadvantaged Business Enterprise**



**Figure 6.5-1** 

### **Capital Improvements**

SCDOT owns and manages 800 structures across the state comprised of headquarters, district offices, county maintenance complexes, construction offices, rest areas, welcome centers, section sheds, warehouses, picnic shelters, and small storage buildings. Many of these structures, are old and outdated. Through a rehabilitation program, SCDOT has enhanced many of the older structures although there are certain aspects of the older buildings that cannot practically be improved, such as building height for vehicle access, deteriorated infrastructure, etc.

Additionally, SCDOT is selling and demolishing structures no longer in use. The agency is improving its necessary facilities and eliminating its unnecessary facilities. With its limited funding, SCDOT cannot replace the necessary buildings to improve the working environment for its employees at a rate needed. Fourteen percent of all structures are over 50 years old. SCDOT is devoting its efforts to reducing the number of buildings in the inventory. The York County Engineering Complex was completed this fiscal year, replacing an antiquated facility located in Rock Hill.

Many persons traveling through South Carolina depend on Rest Areas and Welcome Centers as a place to rest and reenergize. SCDOT strives to provide safe, clean, and convenient facilities in the 9 Welcome Centers and 24 Rest Areas across the state. The Welcome Centers are staffed by employees of the South Carolina Department of Parks, Recreation, and Tourism, and each Welcome Center and Rest Area has a vending building operated by a vendor from the South Carolina Commission for the Blind. Rest Area improvements have been made at the Santee Rest Areas on I-95, and new Rest Areas on I-20 near Camden are nearing completion.





### **Outdoor Advertising**

SCDOT administers the Outdoor Advertising (ODA) Program for the state. The mission of the ODA office is to coordinate the ODA program, which includes administering the Highway Advertising Control Act, Junkyard Control Act, and Vegetation Maintenance Program along federal-aid primary highways and National Highway System routes through review and inventory. Permits are required for the erection of ODA signs under the Highway Beautification Act (HBA) of 1965, which mandates that ODA signs visible from National Highway System routes and federal aid primary routes be issued a permit from SCDOT.

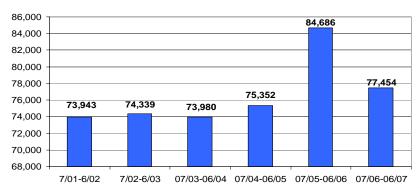
ODA customers are the billboard industry, property owners, and the business community. These customers may reside within or be located outside the state. The office manages 6,397 active billboard permits, 3,100+ inactive billboard permits, and more than 1,425 active vegetation maintenance permits. The National Alliance of Highway Beautification Agencies (NAHBA) is an advocate for developing and promoting innovative ideas and consistent business practices for the control of ODA nationwide, through improved communication, and dissemination of information to members, and by encouraging integration of competing interests that serve the motoring public. NAHBA recognized SCDOT's ODA office for its leadership in solving the challenges associated with implementing the HBA. In 2006, SCDOT received NAHBA awards for "Innovations in Outdoor Advertising" and "Streamlining and Integration in Outdoor Advertising."

## Oversize/Overweight Permit Office

The SC Oversize/Overweight (OSOW) Permit Office is an office within SCDOT that issues route specific permits to allow the safe transportation of commodities that exceed the legal weight and dimensions set by federal and state law. Movers of cargo across or through the state of South Carolina are required by state law to obtain a permit to move such goods.

Due to South Carolina's growing economy, transit operations across the state have multiplied. There are approximately 320 permits are issued daily. With a staff of seven, the average turn-around for a single trip permit is two hours. The Permit Office's updated phone system provides a toll-free number for customers use, additional phones lines, and affords the capability to monitor customer efficiency and update informative messages. **Figure 6.5-2** depicts the number of permits issued annually. The drop in numbers from 2006 to 2007 is indicative of the number of "permission permits" that were free prior to September 1, 2006, when a small administrative fee was added by the General Assembly. The incorporation of the administrative fee encouraged permit users to only apply for permits actually needed, and not those based on speculation.

## OVERSIZE/OVERWEIGHT PERMITS ISSUED BY FISCAL YEARS



**Figure 6.5-2** 



### Safe Routes to School

The Safe Routes to School (SRTS) Program is a federally funded program administered by SCDOT, with guidelines set forth by the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The program enables and encourages children to walk and bicycle to school safely. It promotes good health and reduces traffic congestion. SCDOT has a coordinator

who established and coordinates the program. A SRTS Steering Committee was formed to advise the coordinator in the design and implementation of the program. Schools, government or non-profit entities apply for \$200,000 in reimbursable funding amounts, where no local match is required. SRTS funding can be used to improve the pedestrian and cycling conditions around schools and communities and for infrastructure improvements and education, encouragement, and enforcement programs. SRTS has also assisted with regional public service announcements through a partnership with Palmetto Cycling Coalition and local television stations. In October 2006, SRTS sponsored a Walk to School Day statewide with 58,000 students and 140 schools participating -the highest percentage nationwide.

## 6.6 How does your organization determine the resources needed to meet current budget and financial obligations?

A bottoms-up approach is used in developing the annual operating budget. The budget is developed based on available funding from a variety of state and federal sources. The budget is sent to the Governor for approval.

The Statewide Transportation Improvement Program (STIP) is a comprehensive document report detailing planned federal obligations covering a six-year period, as well as the prior year project information for reference purposes. The STIP is updated every three years and normal program amendments and corrections occur as necessary to keep the document current. The STIP reflects the collaborative efforts of MPOs, COGs, and Regional Transportation Authorities (RTA). The STIP is approved by the Commission.

#### **CATEGORY 7 – BUSINESS RESULTS**

## 7.1 Key Measures of Mission Accomplishments and Organizational Effectiveness

The key measures depicted in this section include an extract of the Reason Foundation Report, the Incident Response Program, the Highway Mileage Death Rate, Run-off-the-Road Fatalities, Intersection Crash Fatalities, Condemnation Rate, and Maintenance Work Requests completed after 60 days. The 16<sup>th</sup> Annual Report on Performance, sponsored by the Reason Foundation completed its annual review of state DOTs across the nation. Below is information extracted from the report regarding South Carolina. This nationwide review shows that South Carolina DOT has "consistently solid performance with a relatively thin budget."



"South Carolina, with a total of 41,582 miles of state-owned highway, stood 2nd in the overall performance rankings in 2005. This compares to 3rd in 2000. South Carolina scored best on receipts per mile of responsibility (1st), capital/bridge disbursements per mile of responsibility (1st), total disbursements per mile of responsibility (1st), rural interstate condition (1st), administrative disbursements per mile of responsibility (4th) and maintenance per mile of responsibility (5th). The state also rated high (1st) for rural interstate pavement condition, (12th) for urban interstate condition, and (14th) for rural primary condition. Its lowest rankings were for fatality rate (48th) and urban interstate congestion (33rd). South Carolina has consistently solid performance with a relatively thin budget."

## **SCDOT Incident Response Program**

This program uses specially equipped blue trucks with SCDOT's logo that 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. SCDOT continues to build on the program as part of the Intelligent Transportation System. **Figure 7.1-1** depicts the number of motorists SCDOT's Incident Response Program has assisted in the past three fiscal years

AREAS	FY 2005	FY 2006	FY 2007
Columbia	7,693	5,108	6,183
Upstate (Greenville and Spartanburg)	15,152	6,935	7,776
Rock Hill	3,522	3,121	2,958
Charleston	18,035	11,425	12,788
Anderson	6,440	2,429	2,193
Myrtle Beach	9,110	5,118	5,829
Beaufort	6,770	3,236	2,337
Florence	9,056	4,525	4,258
Cherokee	2,017	1,698	1,748
Total Reponses	77,795	43,595*	46,070

**Figure 7.1-1** 

<sup>\*</sup>The decrease in total responses for 2006 is attributed to stationery versus constantly roaming Incident Response Units. To conserve fuel, Incident Response vehicles remain in strategic locations until they are dispatched for service calls.



SCDOT has a goal to "reduce the SC highway fatality rate to within 10% of the national average." The baseline year to establish this reduction is 2004. Prior years are shown in Figure 7.1-2 depicting the need for this goal. Mileage Death Rates (MDR) are measured by the number of fatalities for every million miles driven. After a slight increase in the national Mileage Death Rate (MDR) in 2005, the first in 24 years, the national MDR has decreased again. South Carolina's death rate decreased by 0.4%, from 2.11 in 2004 to 2.10 in 2006. South Carolina's highway death rate in 2006 is 45.8% higher than the national average (2.10 vs. 1.44).

## Mileage Death Rate

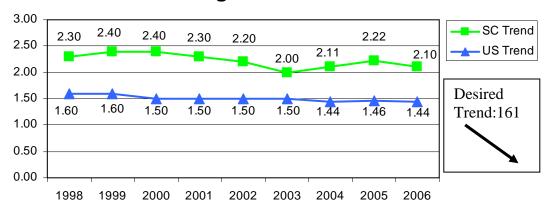


Figure 7.1-2 (calendar year)

The chart below shows numbers of fatalities from "Run-off-the-Road" crashes. The trend over the last five years demonstrates an overall decrease of 0.6%. The goal is to reduce these fatalities by 20% (to 388) by June 2008. **Figures 7.1-3** below indicates the trend data.

## **Run Off the Road Fatalities**

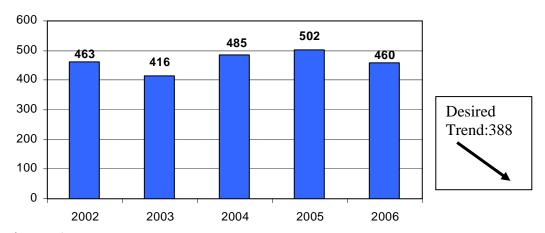


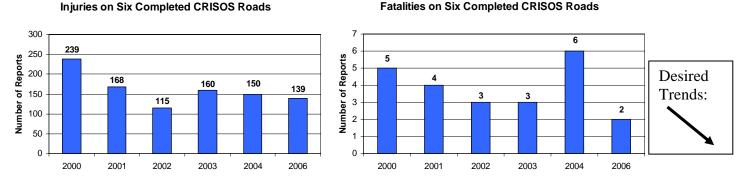
Figure 7.1-3 (calendar year)

## **CRISOS Program**

SCDOT has a goal to "Reduce 20% of Run-Off-The-Road Crash Fatalities by June 2008. Because of the significant fatality problem on the state's secondary roads, SCDOT in coordination with the FHWA Division Office, created the Crash Reduction by Improving Safety on Secondaries (CRISOS) Program. SCDOT committed \$80M for low-cost, secondary road safety improvements for the first time in the agency's history. Approximately \$16M was designated annually for

CRISOS roads. Extensive media reports about the state's secondary road problems were generated, urging motorists to use extra caution on these roads. SCDOT met with state EMS public information and education specialists and gained their support to conduct educational efforts, and both the SC Highway Patrol and the SC Sheriff's Association agreed to target additional enforcement on CRISOS roads. Both enforcement groups were provided with listings of the CRISOS roads.

Since June 2006 to date, over 2,000 citations have been issued on CRISOS roads. Preliminary results from six completed CRISOS roads show a 47.6% decrease in fatalities and a 16.5% decrease in injuries, from a five-year average. Strategies include flattening side slopes; obstacle removal; installing guardrail; adding additional warning signs; adding pavement markings at rural intersections; use of oversized signs; etc. In the area of Operational Improvements, Road Safety Audits and multi-disciplinary teams were used to select projects and to determine safety improvements needed.

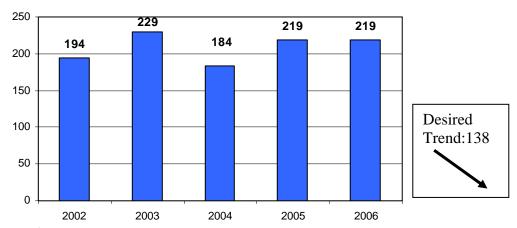


<sup>\* 2005</sup> was not included in analysis since implementation of improvements was underway.

Figure 7.1-4 (calendar years)

While there was no change in the number of intersection fatalities in 2006, the overall trend of the last five years demonstrates an overall increase of 13.9% since 2002 and a 19.0% increase since the 2004 baseline year. The overall goal is to reduce these fatalities by 25% (or to 138) by June 2008. **Figures 7.1-5** below indicates the trend data.

## **Intersection Crash Fatalities**

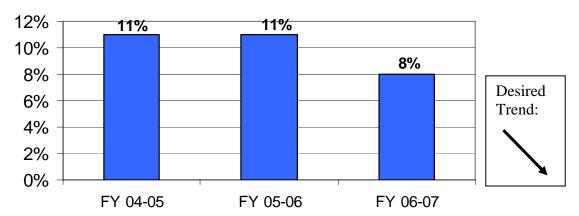


**Figure 7.1-5** (calendar year)

### **Condemnation Rate**

The objective is to improve customer satisfaction in right-of-way transactions. The chart below (as **Figure 7.1-6**) depicts the condemnation rate.

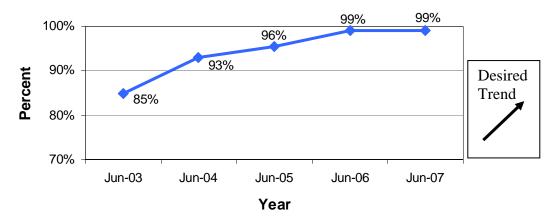
## Condemnation Rate in South Carolina



**Figure 7.1-6** 

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 99% of work requests within 60 days. **Figure 7.1-7** below shows the percentage of work requests completed within 60 days.

## % Work Requests Completed Within 60 Days



**Figure 7.1-7** 

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

The following measures are depicted:

- Overall Rating of SCDOT (identified in the Moore School of Business surveys in 2001 and 2005)
- Work Zone Fatalities
- SmartRide Boardings
- Maintenance Customer Service Survey
- Landowner Survey Results

The chart below reflects survey results from 2001 compared to 2005. This "Customer Perception Survey" was compiled from the Moore School of Business at the University of South Carolina.

#### 70.0% 61.5% --<u>59.2%</u> **2001** 60.0% **2005** 50.0% 40.0% 30.0% 21.5% 16.9% 18.0% 20.0% 9.2% 6.4% 10.0% 1.3% 4.1% 0.0% Failing Below About Above Superior

Average

Average

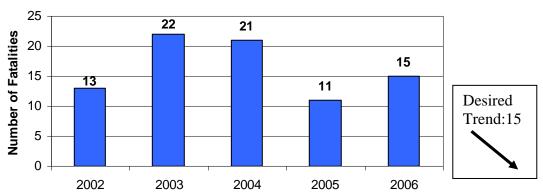
**Overall Rating of SCDOT** 

**Figure 7.2-1** 

#### **Work Zone Fatalities**

Work Zone Collision Statistics and High Visibility Enforcement has a goal to "**reduce 25% of work zone fatalities by June 2008**." Work zone fatalities have decreased by 28.6% since the 2004 baseline year. Research shows speeding is a leading cause of work zone collisions and fatalities, and that education is effective in improving safety when coupled with enforcement. **Figure 7.2-2** below shows the trend of work zone fatalities.

#### **SC Work Zone Fatalities**



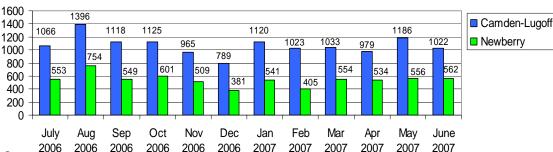
Average

Figure 7.2-2 (calendar year)



**SMARTRIDE-** The SCDOT sponsored commuter express bus service "SmartRide" began as a pilot project in 2004. It focused on weekday commuter services to the Columbia metropolitan area from the communities of Camden-Lugoff and Newberry. During FY 2007, the overall ridership level for the two routes was 19,321 passenger boardings. (See **Figure 7.2-3**)

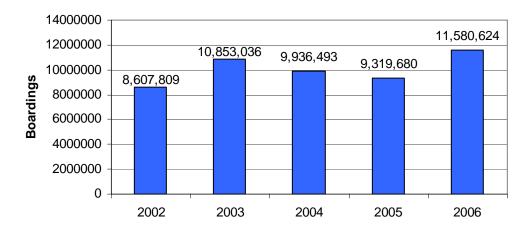
## **SmartRide Boardings**



**Figure 7.2-3** 

The Division of Mass Transit key measures are total passenger boardings (ridership) and total operational expenses. The annual passenger boarding data in **Figure 7.2-4** provides information showing the number of people who actually used the transit service.

## **Annual Statewide Transit Passenger Boardings**



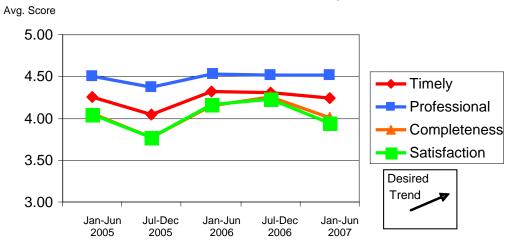
**Figure 7.2-4** 

#### **Maintenance Customer Service Surveys**

To evaluate customer service performance, the Director of Maintenance Office has implemented a customer survey program. Feedback from this survey program helps gauge our performance and identify areas of opportunity for improvement. All negative responses are sent to the appropriate district with a request that the unsatisfied customer be contacted and additional effort made to improve service. Several districts and counties have also developed programs to improve their customer service performance. The results of this follow-up contact are then reported back to the Director of Maintenance Office. Results are seen in **Figure 7.2-5** below.



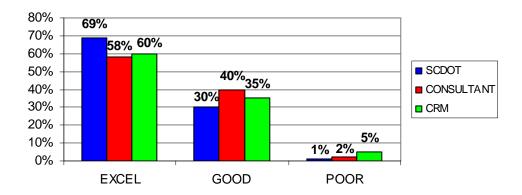
## **Maintenance Customer Survey Trend**



**Figure 7.2-5** 

Another goal within SCDOT is to "conduct survey(s) of the public to establish a benchmark for external satisfaction & understanding of SCDOT's mission & functions." Figure 7.2-6 section shows the results of a landowner opinion survey that was initiated in July 2006 and continued through May 2007 by the Right-of-Way. This information ensures SCDOT considers the emotional factors of land acquisition. This has the potential to reduce the overall condemnation rate.

## Landowner Opinion Survey Results July 2006-June 2007



**Figure 7.2-6** 

## 7.3 Key Measures of Financial Performance

The key measures of financial performance depicted in this section include Vehicles Purchased for Transportation Providers, Federal Funds Released from Project Closure, Value of SCDOT Assets, Travel/Training Expenditures, Equipment Utilization, and Fuel usage and Costs. SCDOT has made concerted efforts to contain costs in the following areas:

- Decrease in "In and Out-of-State" Travel
- Sale of Surplus Land
- Deferred Maintenance on Buildings
- Reduction of Administrative Vehicle Fleet

SCDOT is one of the largest agencies of state government, which includes transportation and transit. The Mass Transit office works with transportation providers to determine vehicle needs, respective of their area. **Figure 7.3-1** shows the types of vehicles purchased in FY 2007. Depicted in **Figure 7.3-2** is the Strategic Plan goal to "**increase transit vehicle replacement to 70%**."

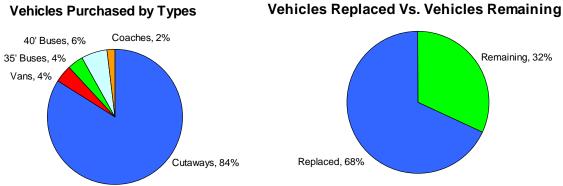
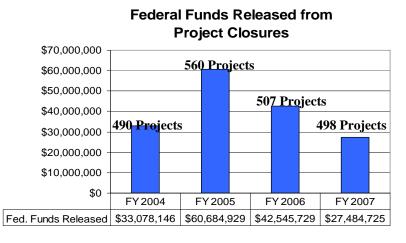


Figure 7.3-1 Figure 7.3-2

#### **Financial Management**

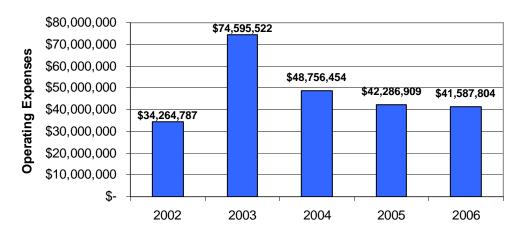
The implementation of a management cash flow system is important in managing capital infrastructure projects. Key to this is project management. SCDOT has taken action to identify funds not used for previously identified projects. **Figure 7.3-3** depicts projects that have been closed allowing federal funds to be released making them available for other projects.



**Figure 7.3-3** 

**Figure 7.3-4** depicts annual operating expenses data showing the cost associated with the actual transit service delivery.

## **Annual Statewide Transit Operating Expenses**

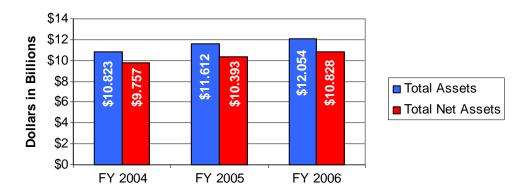


**Figure 7.3-4** 

#### **Assets**

The largest portion of SCDOT's net assets reflects its investment in infrastructure and other capital assets such as land, buildings, and equipment, less any related debt used to acquire those assets that are still outstanding. SCDOT uses these capital assets to fulfill its primary mission to provide a safe and efficient transportation system for the State of South Carolina. These assets are not available for future spending. Although the Department's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. (See **Figure 7.3-5**)

#### **SCDOT Assets**

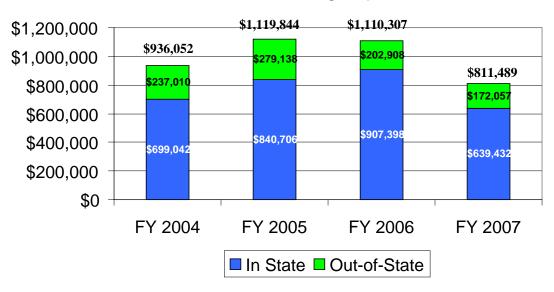


**Figure 7.3-5** 

#### **Constraints on Travel**

SCDOT has placed constraints on in and out-of-state travel. The agency was identified in a recent LAC follow-up audit of not reimbursing employees for in-state meals for one day trips. **Figure 7.3-6** depicts trend data for in and out of state travel and training showing a decrease of 26.9% in FY 2007 from prior year.

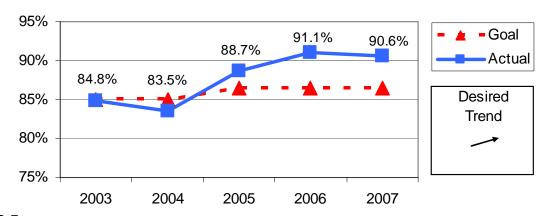
## SCDOT Travel/Training Expenditures



**Figure 7.3-6** 

**Equipment Utilization** SCDOT has a goal of having a statewide equipment utilization rate of 86.5% beginning in 2005. **Figure 7.3-7** below shows the utilization for the state.

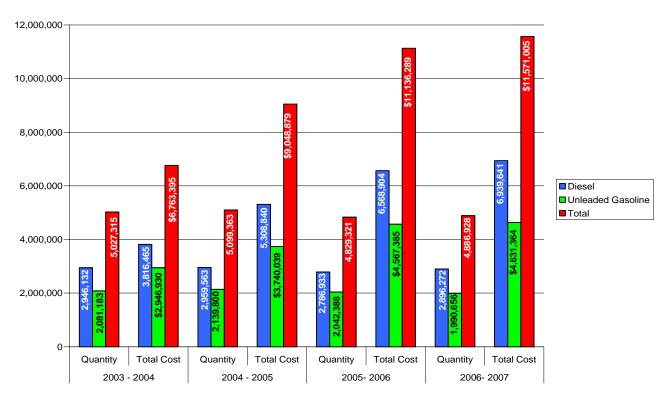
## **Average Equipment Utilization**



**Figure 7.3-7** 

SCDOT has reduced its fleet (sedans, SUV's, and pick-up) from 1,846 vehicles to 1,760 vehicles. The costs of operations continue to escalate because of volatility in the energy sector. Although SCDOT reduced its consumption of fuel, costs have continued to escalate.

#### **SCDOT Fuel Usage and Cost**



**Figure 7.3-8** 

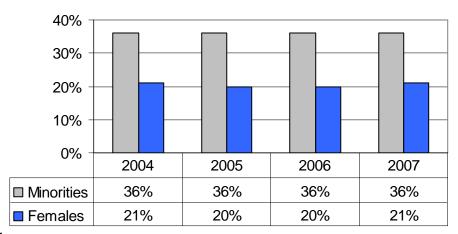
## 7.4 Key Measures of Human Resources

The following measures are depicted:

- Composition of the Total Workforce
- Employee Turnover Rate
- Tuition Assistance Program
- First Report of Injury, Accident, or Illness

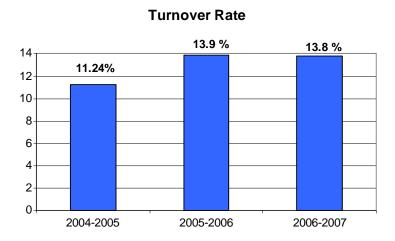
One of the five key strategic goals of SCDOT is employee development. The Human Resources Division's initiatives support that goal and the agency's mission by focusing on programs, measurements, processes and systems that recruit, retain, and train employees to have the necessary skills and competencies to meet future challenges. **Figure 7.4-1** reflects the Department's efforts to have a diverse work force.

## **SCDOT Total Workforce**



**Figure 7.4-1** 

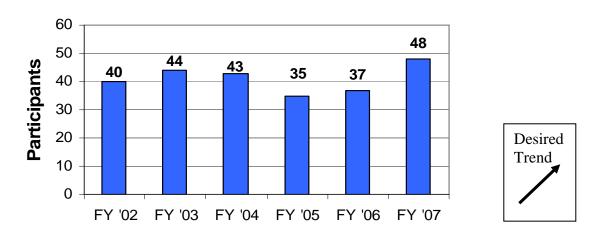
SCDOT looks at turnover in a variety of ways in order to develop strategies to retain its valuable employees. Turnover is analyzed by termination reason code, EPMS evaluation, job classification, geographic location, and by probationary status. Analysis of the FY 2007 data shows that the primary reasons for termination of employment are resignation, retirement, misconduct (disciplinary reasons), and acceptance of another job in private industry. Turnover by job classification shows that most of the SCDOT's turnover exists in the job classification of Trades Specialist II. **Figure 7.4-2** below provides information of trend data for employee turnover for the past three years.



**Figure 7.4-2** 

**Figure 7.4-3** below reflects the amount of tuition assistance expended for SCDOT employees to further their formal education. SCDOT utilizes and emphasizes a Tuition Assistance Program, which allows employees to be reimbursed for classes that are related to their current job or in order to prepare them for other positions within SCDOT. During FY 2007, forty-eight SCDOT employees received tuition assistance. SCDOT provided \$60,964 in Tuition Assistance. One (1) Tuition Assistance recipient received a Master's Degree, and one (1) received a Bachelor's Degree during the fiscal year. In total, 25 employees have received degrees through SCDOT's Tuition Assistance program since its inception in 1994.

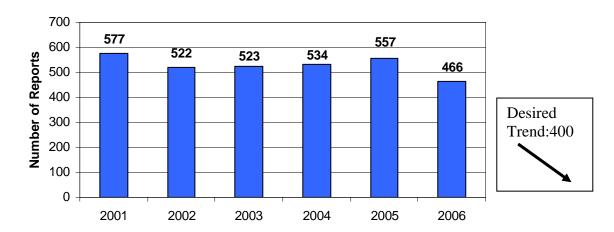
## **Tuition Assistance Program**



**Figure 7.4-3** 

Another agency goal is to "**reduce 25% of work related injury, accidents, and illnesses by June 2008.**" **Figure 7.4-4** shows a decrease in injuries, accidents, and illnesses of 14.6% from 534 in the baseline year of 2004, to a low of 466 in 2006.

## SCDOT First Report of Injury, Accident, or Illness



**Figure 7.4-4** 

## 7.5 Key Measures of Regulatory/Legal Compliance and Community Support

The key measures in this section include Ethics Training, External Audit, Agency Certification Limits, Risk Management, Claims and Lawsuits, and Total Premium, Workers Compensation, General Liability, and All Other in Insurance.

### **Ethics Training**

A representative of the State Ethics Commission presented a workshop to the SCDOT Commission in February 2007, followed by a workshop with senior staff. Ethics training is being developed for presentation to all SCDOT employees on a biennial basis.

#### **External Audit**

SCDOT is audited yearly by an external CPA firm engaged by the Office of the State Auditor. The Department's yearly financial statements are deemed to present fairly the financial position of the governmental activities. Also a Comprehensive Annual Financial Report (CAFR) was prepared for the fiscal years ending June 30, 2005 and June 30, 2006. Both of these CAFRs received the Certificate of Achievement for Excellence in Financial Reporting. SCDOT is one of six state Departments of Transportation to prepare the CAFR and receive the achievement award.

As with any audit, there are areas that are noted as reportable conditions or weaknesses that need to be addressed. These areas deal with properly documenting and recording funds contributed by external entities to projects; proper review and classification of construction in progress, capitalization of infrastructure assets, and maintenance expenditures; improved controls on balance sheet account reconciliations; proper explanation of supporting documentation for travel; and development of a risk fraud management program.

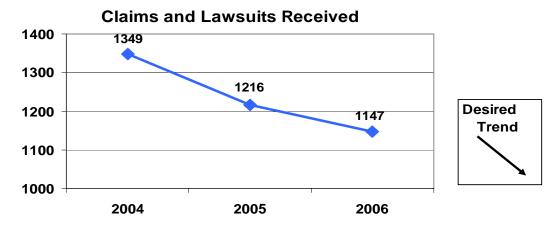
SCDOT has fostered communications, implemented procedures, and changed finance policy to deal with these issues. One area that the agency will continue to develop is the fraud and risk management area. This will be a major undertaking of the agency and will require an extensive, comprehensive review of the agency's policies, standard operating procedures, and internal controls to evaluate the potential for fraud or misappropriation of the agency's resources.

### **Risk Management**

During FY 2007, SCDOT completed development of and implemented a Risk Management Information System (RMIS) that integrates functionality from several subsystems into one automated model. This is a joint project of the Risk Management, Claims, Safety, Legal Services, and Information Technology Services units. This web-based system tracks claims against the agency, claims against the public, first report of on-the-job injury, OSHA reporting, FOIA requests, and accident scene analysis.



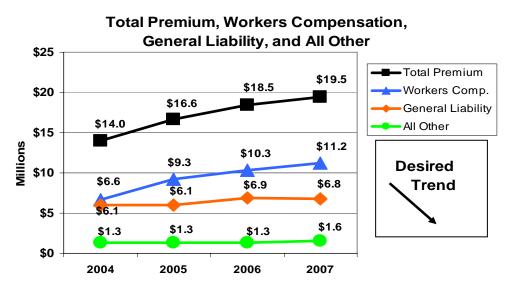
RMIS provides a consistent Intranet data entry point for all employee injuries, vehicle accidents, claims against SCDOT, claims against the public, fatal crash location surveys, and freedom of information (FOI) requests. Before the development of the RMIS, data was entered and maintained as a mainframe, Visual dBase, or Access database application. Using a single entry screen and central database for the above allows for more consistent and faster data entry, greater data security and support from Information Technology Services (ITS), and more in-depth and timely trend analysis and reports. Also, the new system meets a number of new recordkeeping requirements and allows management to be quickly notified of all injuries and vehicle accidents. **Figure 7.5-1** depicts the number of claims and lawsuits received over the past three calendar years.



**Figure 7.5-1**The rise in insurance costs is being primarily driven by increased workers compensation costs. In fact, the increase in workers compensation costs from 2004 to 2007 amounts to \$4.6M (84%) of the \$5.5M total increase in insurance costs. Workers compensation premiums have been increasing significantly nationwide and statewide for several years. The South Carolina General Assembly passed legislation in June 2007 to address this situation.

In addition to the overall increase in workers compensation premiums that affect all South Carolina employers, the Department's workers compensation premiums have also increased due to the lack of a

coordinated return-to-work program. The result of this lack of coordination is seen in the increasing numbers of lost workdays which translates into a higher loss history and higher premiums. To address this situation, management currently considering organizational changes that will positively workdays, impact lost compensation workers premiums, and total insurance costs.



**Figure 7.5-2** 

Attachments following for Section II – Expenditures/Appropriations Chart and the Major Program Areas Chart.

## Appendix 1

SCDOT's Strategic Plan contains the agency's goals, objectives, and performance measures. Progress is measured by the review of data submitted by the senior staff member who is accountable for the process. Quarterly Reports are submitted by the process owners on each objective and the data is analyzed during In-Progress Reviews.



## SCDOT/FHWA Strategic Plan

FY 2006-2008

Ctrotogic Dealer	End State	FY 2006-2008				
Strategic Rocks	End State	Goals				
		Reduce 20% of Run-off-Road crash fatalities by June 2008				
		Reduce 25% of Intersection crash fatalities by June 2008				
	Reduce SC fatality rate to within 10% of	Reduce 20% of Bicycle and Pedestrian fatalities by June 2008				
	national average	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				
		Develop and Implement a Comprehensive State Strategic Highway Safety Plan by June 2006				
	Improve driver	Reduce 20% of DUI related fatalities by June 2008				
	behavior through expanded	Increase seatbelt usage to 80% by June 2008				
	partnerships	Decrease 20% of speed related fatalities by June 2008				
SAFETY		Decrease 20% of motorcyclist fatalities by June 2008				
SAFETT		Develop a program to manage Interstate and Primary highway capacity by June 2006				
		Increase 30% of ITS coverage Statewide by June 2008				
	Reduce Crashes in Congested Areas by	Begin 24/7 ITS Operations by December 2005, and open the Traffic Management Center by June 2007				
	25%	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				
	Dadwa last wal	Reduce 25% of work related Injury Accidents and illness by June 2008				
	Reduce lost work days by 25% in 5 years	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				
1	Be Ready for	Complete alternate routing system for critical infrastructure by December 2006				
	Disaster Response and Recovery	Develop contingency plans to restore traffic and emergency plans to repair/replace critical infrastructure following a catastrophic event by December 2006				
		Conduct survey of public to establish a benchmark for external satisfaction and understanding of SCDOT's mission and functions by December 2005				
	Improve external	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				
CUCTOMER	customer satisfaction by 10%	Establish customer service office (in HQ) and a hotline number (# 511) by June 2006				
CUSTOMER SERVICE	, , , , , ,	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	Develop and conduct internal surveys of two units to assess customer service provided by support areas each year				
	customer satisfaction by 10%	Implement programs to address concerns identified in surveys of support areas within one year of receiving survey results				
		Table 1988. St. 1990ffing Surrey Tooding				



Strategic Rocks	End State	Goals
	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
RESOURCES		Maintain average annual cash balance at less than \$80 million per year  Develop and implement a \$1 billion innovative finance program to fund critical capacity improvements in congested areas, including transit considerations and primary/interstate preservation by October 2005
	Improve program delivery such that 90% of all projects	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
	are delivered on time and within budget	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



Annual Accountability Report 200				
Strategic Rocks	End State	Goals		
		Revise/update secondary road standards to include PQI and ride-ability by December 2005		
		Optimize funding improvements through use of the pavement management system		
	road system with an	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		
MAINTENANCE/ PRESERVATION	Reverse the upward	Identify needs and develop a multi-year bridge replacement program to reverse trend; dedicate additional funding by October 2005		
PRESERVATION	trend in deficient bridge deck area	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 Upgrade all traffic	Identify needs and develop a multi-year comprehensive work plan by December 2005		
		Dedicate additional federal funds for multi-year budget by December 2005		
		Complete 30% of remaining signal replacement by June 2007; dedicate funding to continue 12-year replacement cycle		
	control devices	Continue District/County marking, signing and guardrail upgrade and replacement programs; dedicate \$10 million each year		
		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		
	qualified workforce able to carry out the	Reduce agency vacancy rate to 5% by June 2008		
EMPLOYEE DEVELOPMENT	mission of SCDOT	Establish an agency wide workforce plan by December 2006		
		All EPMS will include annual business unit goals by December 2005		
	Increase Employee	Address the top 5 issues identified in Employee Satisfaction Survey by December 2005		
	Satisfaction by 20%	Continue employee satisfaction survey every two years, and address the top 5 issues identified from each survey		



## Appendix 2

## Accountability Report Appropriations/Expenditures Chart

## **Base Budget Expenditures and Appropriations**

	FY 05-06 Actual Expenditures		FY 06-07 Actual Expenditures			FY 07-08 Appropriations Act			
Major Budget Categories	Total Funds		General Funds	Total Funds		General Funds	Total Funds		General Funds
Personal Service	\$ 172,913,666			\$ 172,245,175			\$ 179,401,457		
Other Operating	\$ 364,208,322			\$ 331,399,000	\$	196	\$ 345,119,008		
Special Items		\$	1,300,000					\$	85,600
Permanent Improvements	\$ 594,340,945	\$	100,000	\$ 344,597,072	\$	300,000	\$ 369,324,397		
Case Services	\$ 102,600				\$	110,000			
Distributions to Subdivisions	\$ 29,068,691	\$	100,990	\$ 24,654,291	\$	800,793	\$ 40,316,979	\$	100,990
Fringe Benefits	\$ 58,497,067			\$ 60,121,032			\$ 64,737,169		
Non-recurring									
Total	\$ 1,219,131,291	\$	1,500,990	\$ 933,016,569	\$	1,210,989	\$ 998,899,010	\$	186,590

#### Other Expenditures

Sources of Funds	 05-06 Actual xpenditures	FY 06-07 Actual Expenditures		
Supplemental Bills				
Capital Reserve Funds				
Bonds	\$ 95.594.045	\$	80,290,394	



## Appendix 3

## **Strategic Planning**

Program Number and Title	Supported Organization Strategic Planning Goal/Objective	Related FY 06-07 Key Action Plan/Initiative(s)	Key Cross References for Performance Measures*
	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 20% of Work Zone fatalities by June 2008.	Page 49 - Figures 7.1-2,3, Page 50 - Figures 7.1-4,5, Page 52 - Figure 7.2-2
		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.	Page 32
SAFETY		Decrease 20% of motorcyclist fatalities by June 2008.	
SAFETY	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.	Pages 22-23
	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.	Page 60 - Figure 7.4-4 Page 62 - Figure 7.5-2
	Be Ready for Disaster Response and Recovery	Pages 20,22, 23 & 29	
	Improve external customer satisfaction by 10%	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.	Pages 19, 20, 21, 22, & 23, Page 51 - Figure 7.1-7, Page 52 - Figure 7.2-1 Page 54 - Figures 7.2-5,6
CUSTOMER SERVICE		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.	Page 18
	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.	Pages 20 & 26
	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.	Page 35 - Figure 6.1-1
		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.	Page 34
		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.	Page 34
	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.	Page 36 Page 37 - Figure 6.1-3
	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.	
	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.	Page 34

## **Strategic Planning**

Program Number and Title	Supported Organization Strategic Planning Goal/Objective	Related FY 06-07 Key Action Plan/Initiative(s)	Key Cross References for Performance Measures*
	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.	Page 28
EMPLOYEE DEVELOPMENT		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 Surveys by December 2005. Continue employee satisfaction survey every two years, and address the top 5 issues identified from each survey.	Pages 20 & 29
	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 protege/mentor programs by June 2007 4) Reduce the number of contracts more than 25% behind schedule to 15% by June 2007.	Page 55 -Figure 7.3-3
	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	Page 41 Page 56 - Figutr 7.3-5 Page 57 - Figure 7.3-7
	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. Develop and implement a \$1 billion innovative finance program to fund critical capacity improvements in congested areas, including transit considerations and primary/interstate preservation by October 2005.	
	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)	Pages 22-23
		Increase accuracy of original STIP project schedules and budgets to with in 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 the project. Meet transportation planning and air quality requirements such that no projects are delayed. Increase transit vehicle replacement to 70% by July 2007.	Page 51 - Figure 7.1-6

## Appendix 4

## **Major Program Areas**

Program	Major Program Area	FY 05-06 Budget Expenditures		FY 06-07 Budget Expenditures			Key Cross References for Financial Results*	
Number	Purpose							
and Title	(Brief)							
		State:		State:			ES-1 page 6	
05010000 - General Administration	General Administration is the	Federal:		Federal:			ES-2 page 7	
	agency wide executive management	Other: 37,015	5,273.59	Other:	39,685,787.60		ES-3 page 8	
	and support service function.	Total: 37,015	5,273.59	Total:	39,685,787.60		Figure 7.3-1 thru 7.3-8 pages 55-58	
		% of Total Budget: 3%		% of Total Budget: 4%				
20010000 - Engineering Administration	This program funds the core management to support the delivery of the highway construction	State:		State:			ES-2 page 7	
		Federal:		Federal:				
		Other: 78,450	0,557.84	Other:	76,057,793.82			
		Total: 78,450	0,557.84	Total:	76,057,793.82			
		% of Total Budge	et: 6%	% of Tot	al Budget:	7%		
20030000 - Engineering Construction	This program is the construction of roads, bridges, and rest areas.	State:		State:			ES-1 page 6	
		Federal:		Federal:			ES-2 page 7	
		Other: 705,142	2,590.01	Other:	463,366,151.96			
		Total: 705,142	2,590.01	Total:	463,366,151.96			
		% of Total Budge	et: 54%	% of Tot	al Budget:	46%		
20050000 - Highway Maintenance	This program maintains 41,468 road miles, 8329 bridges, 800 buildings, 24 rest areas, and 9 welcome centers.	State:		State:			ES-1 page 6	
		Federal:		Federal:			ES-2 page 7	
		Other: 304,182	2,685.37	Other:	252,738,595.16			
		Total: 304,182	2,685.37	Total:	252,738,595.16			
		% of Total Budget: 23%		% of Total Budget: 25%				
99000000 - Capital Projects	Permanent Improvements financed by bonds. Bonds are used to construct roads, bridges, and rest areas.	State:		State:			ES-1 page 6	
		Federal:		Federal:			ES-2 page 7	
		Other: 95,594	4,045.46	Other:	80,290,394.19			
		Total: 95,594	4,045.46	Total:	80,290,394.19			
	u1043.	% of Total Budge	et: 7%	% of Tot	al Budget:	8%		

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, 35000000 - Non-Federal Aid

Remainder of Expenditures:	State:			State:		
	Federal:			Federal:		
	Other:	96,543,864.63		Other:	102,379,229.00	
	Total:	96,543,864.63		Total:	102,379,229.00	
	% of Total Budget:		8%	8% % of Total Budget:		10%

<sup>\*</sup> 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.



## Glossary

ADT Average Daily Traffic

AASHTO American Society for State Highway and Transportation Officials

AGC Associated General Contractors
AMRL AASHTO Materials Reference Lab

ARTBA American Road Transportation Builders Association

BDC Business Development Center

BOWD Business Opportunity and Workforce Development

BMS Bridge Management System
CIP Cross Island Parkway

COG Councils of Government
CRISOS Crash Reduction by Improving Safety on Secondaries

CRM Construction Resource Managers
CTC County Transportation Committee
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

LAC Legislative Audit Council

MAP Maintenance Assessment Program
MPO Metropolitan Planning Organizations

NAHBA National Alliance of Highway Beautification Agencies

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<sup>st</sup> Century

STIP State Transportation Improvement Program

STTAR Strategic Training for Transportation Agency Representatives

TRB Transportation Research Board