

## CHAPTER 10: SAFETY

### 10.1 Introduction

One of the chief components—if not the primary component—of the federal SAFETEA-LU legislation was the emphasis on safety in the transportation planning process. Safety is, and should be, a daily concern for everyone involved in transportation. The 2035 LRTP encourages all planning organizations to routinely and effectively consider safety as an explicit priority in all planning projects. The safe preservation of human life far exceeds the cost of any transportation-related improvements. The issue of safety in transportation and transportation planning is far more reaching than can be identified in this document; it involves the traveling public, the various transportation systems and those that operate and maintain those systems. In order to work towards establishing a “safer” regional transportation system, a need to expand the issue of safety in planning to those outside of the normal transportation agencies and stakeholders is paramount. Local emergency services departments (police, fire rescue) are involved in transportation decision making.

This section addresses these goals:

- Consultation
- Safety
- Mobility

As the MPO, CMCOG is responsible for introducing safety into this LRTP but all planning organizations should routinely consider safety as an explicit planning priority in all planning projects. Decision makers at all levels should be informed about the implications of safety in all planning decisions, and safety should be reflected in their decision making process.

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A proactive, not reactive, approach to safety in planning should be sought. Planning for safety should be incorporated into all land use and transportation levels, from the federal and state levels to the regional, local and site-specific levels. There should be a seamless relationship with other planning activities at each of these levels as well as a consistent set of policies and procedures.

There should not be an acceptable or threshold level of safety which planners target in developing their respective plans. Transportation safety requires that all opportunities to reduce the frequency and severity of incidents should be systematically pursued, regardless of the current level of safety.

There are various safety measures being implemented in the Midlands region by local, state and federal transportation agencies to help meet the goals of this LRTP in providing a safer transportation environment for the region.

## 10.2 Safety-related Databases in the COATS

SCDOT maintain databases of crash data for the entire state. Their databases contain varying degrees of information on contributing causes of accidents (road conditions, weather, animals, etc), location and severity (fatality, injury or property damage only). Those organizations charged with the design and construction or reconstruction of transportation facilities have access to this data and can plan accordingly to mitigate crashes and help provide for a safer transportation environment. Table 6.1 identifies crash data for jurisdictions in the Midlands region.

Data collected and maintained by SCDOT can be used to identify areas prone to accidents. CMCOG Transportation Staff work with DOT officials in forwarding this information local jurisdictions and stakeholders to use in their planning and design processes to help in mitigating crashes due to tangible causes.

**Table 10.1 Crash Data**

<b>Issue</b>	<b># of Incidences</b>
Driver failed to yield to ROW	41,595
Driving too fast for conditions/speeding	21,735
Driver inattention	21,512
Driver disregard sign/signal	10,787
Followed too closely	10,262

## 10.3 Strategic Highway Safety Plan (SHSP)

CMCOG will work with SCDOT to implement the Strategic Highway Safety Plan.. This document was developed by SCDOT in 2004 with assistance from the South Carolina Department of Public Safety (SCDPS), the South Carolina Division, Office of the Federal Highway Administration (FHWA), and numerous other local, state and federal

agencies and safety advocates. The SHSP contains a comprehensive set of transportation strategies to reduce traffic fatalities and injuries. The SHSP serves as a guidance document for directing key safety initiatives in the state. Table 6.2 highlights the three core goals of the SHSP. Policies and best practices identified by the SHSP will be incorporated into the COATS transportation planning activities and elements identified in this LRTP to provide for a safe transportation system. It is our hope that the implementation of initiatives will generate significant reductions in traffic crashes, injuries, and fatalities not just on the streets and highways of the Central Midlands region but throughout the state of South Carolina. South Carolina's goals for improving safety are summarized below.

#### **10.4 SCDOT Incident Response**

Established in 1996, SCDOT Incident Response serves motorists traveling in the state's major urbanized areas. In the Columbia urban area, Incident Response is covered along Interstates 26, 20, 126, and 77. Prepared to handle a variety of situations, the Incident Response responders make minor repairs to disabled vehicles, assist with traffic control and incident management, and provide first aid until emergency medical service arrives. In 2007, responders made over 7,300 assists in the Columbia urban area.

#### **10.5 Safe Routes to School**

The Safe Routes to School (SRTS) program was established through the SAFETEA-LU to encourage children to walk or bicycle to school. The legislation requires a fulltime coordinator be hired by the State DOT to administer the program. Here in the COATS, the CMCOG Transportation Staff works with the SCDOT Safe Routes to Schools Coordinator is providing technical assistance to area schools who are interested in applying for SRTS funding. The funding is primarily for securing funding for improvements to make the commute to school for kindergarten through 8th grade students safer and more feasible. It also will provide funding for educational programs. Examples of eligible projects are: sidewalk improvements, traffic calming efforts, bike parking, and traffic diversion programs around schools. In 2007, one of the area schools was awarded a SRTS grant; while this year, three have already applied and are awaiting a response.

## 10.6 Access Management

Access management is a practice of improving the design and placement of driveways and medians. The goal of access management is to limit traffic conflicts. By reducing conflicts, safety is enhanced and traffic flow is improved. Access management provides reasonable access to property and provides a safer environment for vehicular and pedestrian traffic. It provides coordination between existing land uses and lessens the cut-through traffic in residential neighborhoods.

The COATS MPO will encourage state and local governments to actively consider access management in their overall planning processes, planning policies and codes.

## 10.7 Older Drivers

Over the next two decades, the numbers of older drivers on our nation's roadways will drastically increase. After driving, transitioning to riding as a passenger is the next most common way of getting around, so as the number of older drivers increases, so will the number of older passengers. In a study on elderly drivers involved in traffic crashes between 2000 - 2004, Table 10.3 identifies what SCDOT found as the top five probable causes for incidents involving elderly drivers.

As the aging population grows, transportation officials must make every effort to ensure the safe mobility of their residents. One of the best ways for doing so is to undertake various measures to accommodate elderly drivers, such as:

- Enhancement of driver capabilities
- Roadway design
- Advanced technology

While some of these strategies are within the purview of this LRTP, others may be undertaken through other transportation and government entities. Ideally, the nexus of all activities will provide options that will continue to allow older drivers the quality of life offered by mobility.

Programs aimed at enhancing one's driving skills, increased use of safety belts, educational and training opportunities for the older driving population and other proactive, preemptive safety measures can provide for the safety of older drivers and the driving public as well. Such training can include:

**It is estimated that by the year 2030, one of every four drivers will be over the age of 65, and the number of drivers over the age of 85 years will be four to five times greater than it is today.**

*2004 National Association of Area Agencies on Aging (N4A) Report to NHTSA*

- Training courses (AARP & AAA Drivers 55+)
- Skill Assessments (self-assessment)
- USAA Lifeguide Series “Driving safely while aging gracefully”
- Physical Fitness Courses for Seniors
- Educational materials on New Safety Issues/Laws
- News Conferences/New Press releases
- Safety fairs
- Media interviews
- Presentations

### **10.8 Roadway design**

Transportation planning to improve the roadway/driving environment can be extended to include such amenities as:

- Advance guide/warning signs and street name signs
- Removal of oversized signs
- Improved lighting
- Retro-reflective strips in the channelization posts
- High intensity sheeting on all signs to increase sign visibility
- Raised pavement markers spaced at 40’ rather 80’
- 2’ paved shoulders
- Guardrails near hazardous locations
- Center turn lanes/left-turn lanes

### **10.9 Advanced technology**

Although Intelligent Transportation Systems and vehicle adaptation technology exist in today’s environment, it is expensive for both the elderly drive and departments of transportation to implement. This LRTP does not dismiss such technology solutions but presents them for consideration as the need for such options and the funding available to implement them become more defined.

### **10.10 Transportation Options**

The ability to reach destinations without having to depend solely upon the use of an automobile is the ideal end for any transportation system. With fewer cars on the road, the propensity to be involved in a crash or injury is diminished. The availability of efficient and affordable transportation choices not only helps to ensure the safe mobility of all transportation users, but also helps to enhance the quality of life for

everyone in the region through the enjoyment of better air quality, green spaces, and healthier lives. Some recommended transportation options include:

- Support transit (Smart Ride, CMRTA, paratransit (DART))
- Support commuter rail initiatives
- Encourage taxies, community transportation
- Walking and biking
- Ridesharing/carpooling with family, friends, neighbors

### **10.11 Objectives & Strategies**

#### **1. Minimize accidents and fatalities on our roadways for all motorized and nonmotorized users.**

- Work with SCDOT in identifying hazardous intersections and hazardous feature along key roadways.
- Promote multi-modal travel choices (bus, biking, walking) in order to reduce the number drivers on roads.
- Encourage transportation officials and local governments to reflect the increase in elderly drivers on roads in their policies and codes.
- Work with stakeholder groups in finding more funding for safety personnel (traffic law enforcement, fire, EMS) and other safety programs, such as the SCDOT Incident Response.

#### **2. Work with transportation partners and entities that provide guidance and input into the transportation planning process, identify critical transportation issues, and determine the principles for implementation**

- Work with SCDOT's Safe Routes to School Coordinator in education and outreach on the advantages of having kids commute to school via bicycling and walking and encouraging area schools to seek SRTS funding.
- Continue efforts with non-traditional stakeholders (public safety, law enforcement, emergency services, etc.) and use the expertise and experience of these stakeholders to provide a safer transportation environment.