



TRANSPORTATION

The most visible consequence of southern Beaufort County's fast rate of growth is the demand it places on the region's roads. The rapid rate of growth has already caused portions of U.S. 278, the region's primary east-west arterial, to fail with traffic volumes far exceeding capacity between S.C. 46 and the bridges to Hilton Head Island. It has been estimated that over \$31 million worth of capital improvement projects are needed simply to address existing needs.

This situation will be far worse at buildout, when it is estimated the entire stretch of U.S. 278 from the Cross Island Parkway to the Jasper County line will be over capacity. Various plans and studies have recommended an additional \$222.9 million in road improvements to accommodate population at buildout. Yet even with the implementation of this extensive list of improvements, it is estimated that 20 miles of roads will still be failing (due to local policies that discourage road widenings on certain roads).

While the needs are substantial (over \$250 million), if current fiscal conditions do not change, it appears that over the next 15 years only \$95.5 million is anticipated in revenues for road capital improvements from SCDOT and local road impact fees, leaving an estimated funding shortfall for the planned facilities of over \$158.4 million.

Addressing this significant funding shortfall as well as planning for and developing management strategies to



congestion occur, the county may notify SCDOT to send incident management vehicles to remove wrecked or stranded vehicles, dispatch law enforcement officials, update electronic message boards to notify drivers of detours, or broadcast traffic information over designated AM radio stations. Images from the cameras are also placed on the county's web site allowing motorists the ability to assess traffic situations before leaving home.

The ability of safety officials to respond quickly to congestion issues is important to minimize delays on major roads such as US 278. For this reason, the County's ITS system should be expanded to targeted road on the Regional Road Network throughout the region.

Removing Land from Potential Development

Significant efforts have been made by local governments in southern Beaufort County to reduce potential vehicle miles traveled on the Regional Road Network by purchasing land to prevent potential future development. The Town of Hilton Head Island, using Real Estate Transfer Fee funds, has acquired over 1,100 acres in the last 15 years and has calculated that these acquisitions have prevented the construction of 4.5 million square feet of commercial space, 1,365 motel rooms, 3,266 multi-family and time-share units, and 26,216 peak hour trips.

Beaufort County's Rural and Critical Land Preservation Program has also been used to remove land from potential development. These efforts should continue into the future.

Traffic Impact Analysis Ordinances

Traffic Impact Analysis Ordinances require a developer to determine the impact of their proposed development on the road network and provide mitigation, if necessary. The performance standard to determine whether mitigation is needed is LOS "D" along affected roadways and intersections. Typical improvements recommended by a traffic impact analysis to mitigate the impacts of development include the provision of turning and deceleration lanes, the installation of traffic signals, and sharing access with adjoining developments.

TRANPLAN Model

The primary purpose of the TRANPLAN model, used both by Beaufort County and Hilton Head Island, is to estimate future traffic volumes on the road network. This enables the Town and County to plan for road projects in a timely manner to provide sufficient growth capacity to

Implementation Action: Coordinate planning and funding for a system of non-motorized transportation alternatives.

Description:

- Evaluate existing plans in light of reducing VMT's on the Regional Road Network and identifying where pathways are needed to connect activity points.
- Take advantage of road widenings and new development proposals to construct segments of the planned multi-use pathway system.
- Strategize additional funding sources.

Responsibility: Southern Beaufort County Transportation Planning Team

Objective 3.4 Intelligent Transportation Systems. The Participating Local Governments will adopt a program to ensure the establishment of an Intelligent Transportation System for the entire Regional Road Network.

Implementation Action: Develop a plan for the ITS system to enable its extension throughout the Regional Road Network.

Description:

- Explore where the current ITS system should extend
- Pursue funding and operation of system extension through an intergovernmental agreement.

Responsibility: Southern Beaufort County Transportation Planning Team

Objective 3.5 Land Use Policies. The Participating Local Governments, where appropriate, will adopt land use policies, such as regulations to encourage mixed use development at higher intensity nodes that result in reduced VMT's on the Regional Road Network, more pronounced connectivity standards, and adequate public facility standards. In addition, the Participating Local Governments will further evaluate and consider, where appropriate, rate of growth regulations.

See Land Use Objective 3.1

Objective 3.6 Land Acquisition. The Participating Local Governments will coordinate their efforts to identify and purchase land in order to remove it from potential development. This is a growth management tool that can reduce future transportation demand and be coordinated with other goals and objectives to

See Land Use Objective 8.3