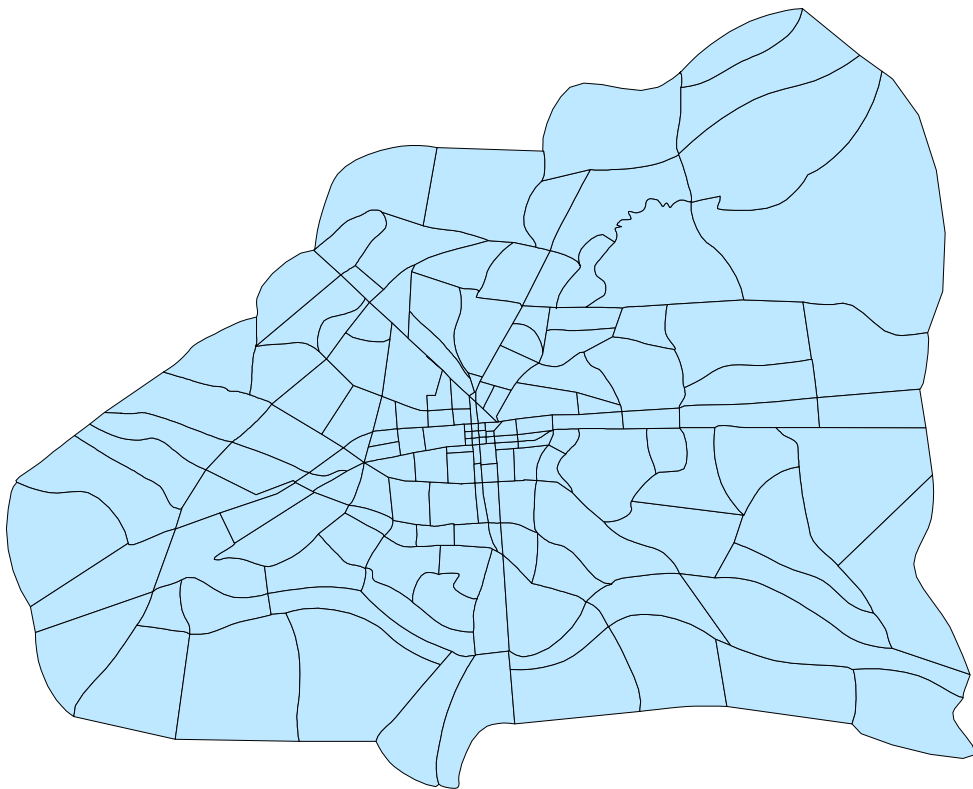


# Florence Area Transportation Study Long Range Transportation Plan



Horizon Year  
2030

# Table of Contents

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Chapter I	FLATS Area Information
Chapter II	Socioeconomic and Land Use Data  Section A. Base Year Section B. Projections
Chapter III	Public Involvement
Chapter IV	Congestion Management Strategies  Section A. Roadway Section B. Bicycle and Pedestrian Section C. Transit Section D. Freight
Chapter V	Air Quality
Chapter VI	Financial Plan
Appendixes	Land Use Map Florence Area Bikeway Master Plan City of Florence Streetscape Design Guidelines

# Chapter I

## FLATS Area Information

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As a Metropolitan Planning Organization (MPO), the Florence Area Transportation Study (FLATS) is a process by which local officials and citizens have input in the expenditure of transportation funds within the urban area of Florence, South Carolina.

The FLATS Policy Committee consists of the following representatives:

Voting Members:

Senator Hugh K. Leatherman, Sr., Chairman  
Mayor Frank E. Willis, City of Florence  
Mayor T. Ashby Gregg, Town of Quinby  
Representative Jesse E. Hines, SC House of Representatives  
Commissioner Marvin Stevenson\*, SC Highway Commissioner  
Chairman K.G. Smith, Jr., Florence County Council  
Councilman Billy D. Williams, Florence City Council  
Councilman H. Morris Anderson, Florence County Council

Non-Voting Members:

David Williams, City Manager  
Richard Starks, County Administrator  
Pearlie D. McDaniel, Interim Planning Director  
Tony Chapman, State Highway Engineer, SCDOT  
Dennis Townsend, District Highway Administrator, SCDOT  
Glynn Willis, Chairman of Planning Commission  
Janice Baroody, Interim Director of PDRTA  
Robert Brown\*, Chairman of Airport Commission  
Bob Lee, Division Administrator, FHWA

Any projects that come before the FLATS Policy Committee are first examined by the FLATS Study Team, which consists of technical representatives from various agencies and departments in the area, including:

Randall Young, SCDOT  
Pearlie D. McDaniel, Florence County Planning  
Glynn Willis, Planning Commission  
Phil Goff, PDCOG  
Kevin Sheppard, SCDOT  
Derrell Rice, SCDOT  
Michael Bethea, SCDOT  
Kelli McCormick, Florence County Planning

The recommendations provided by the FLATS Study Team are then passed on to the FLATS Policy Committee for consideration. Projects approved by the FLATS Policy Committee are then listed in the Long Range Plan and the Transportation Improvement Program (TIP).

Efforts are made to give the public an opportunity to have input in the transportation planning process. A wide range of people, including agencies, community groups, individuals, and the media, are notified of the meetings. The Florence County/Municipal Planning Department provides the staff work for FLATS and is available to assist the public with transportation questions.

Recently, the South Carolina Department of Transportation (SCDOT) developed a program that would reduce the time it took for major highway projects to be completed. Under this program, the FLATS Policy Committee was able to commit the funding available for the FLATS area over the next several years to allow for the sale of bonds to finance the construction of the projects. Three projects were added to the TIP under the bonding program in FY 2004-2005 because after the construction of the four projects that were in the initial program, there were funds left over due to cost savings. The projects that were added include a new construction project and two engineering studies for new projects.

The horizon year for this Long Range Plan is 2030 and includes information on the transportation model, public involvement efforts, congestion management strategies, air quality, and environmental factors. Many of these elements are a part of having a multimodal approach and seek to fulfill the goals set forth in Long Range Planning. Also included are a financial plan, a listing of unfunded projects that have been identified, and the Streetscape Design Guidelines from the City of Florence Downtown Design Guidelines. These guidelines pertain to streets in the downtown area and are included in the plan as an appendix and for consideration in the future.

\*Changes provided to FLATS staff after May 5, 2006 meeting.

# Chapter II

## Socioeconomic and Land Use Data

As previously stated, the horizon year for this Long Range Plan is 2030. This reflects the requirement that plans have no less than a 20-year horizon. In this chapter, the process of developing a transportation model that shows the demand on the transportation network in the FLATS area in the base year and in the projected year of 2030 will be discussed.

### Section A. Base Year

There are 158 Traffic Analysis Zones (TAZs) in the FLATS model. Socioeconomic data has been compiled for each of these zones, including but not limited to population, employment statistics, and dwelling units. This data is the basis for the model and has been applied to the network to produce traffic assignments for the network links.

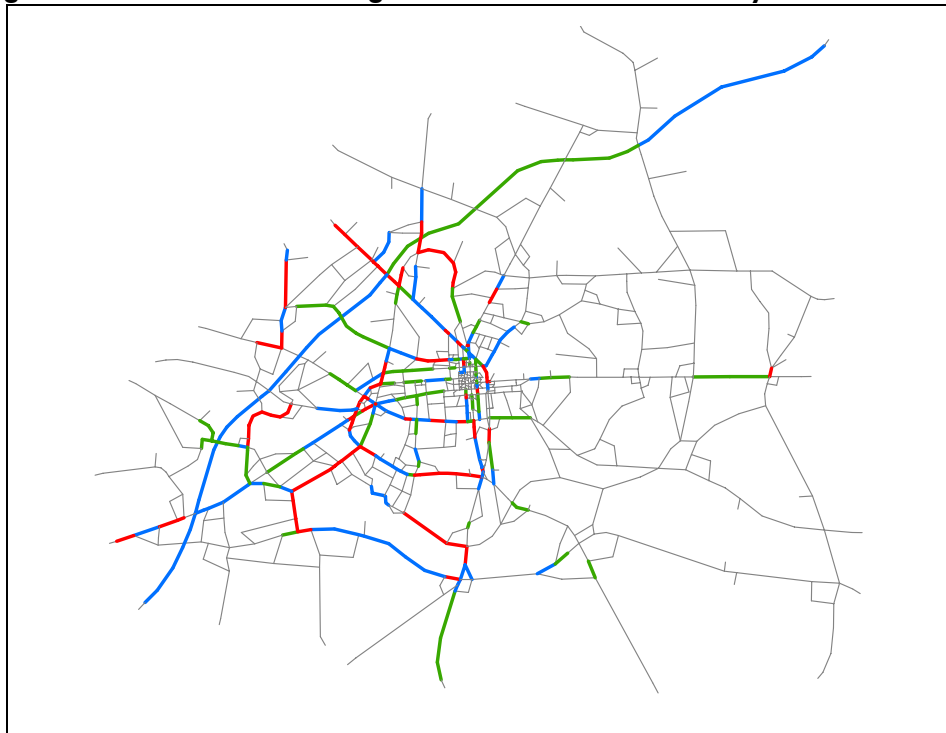
This model was updated using the existing data for the base and horizon years. In order to create the base year model, actual AADT (Average Annual Daily Traffic) counts were coded into the network and then the assignment is calibrated according to the base year counts. Upon completion of this step, the future year data can be applied to create the E+C model or the Existing Plus Committed Model. This model has all completed projects through 2000 and also includes any new projects that are committed in the TIP.

Upon completion of the traffic assignment with the future year socioeconomic and project data, the network can be created.

### Section B. Projections

The results of the future year model can be seen below in Figure 1:

**Figure 1. FLATS 2030 Existing Plus Committed Network by Level of Service**



The roads in gray on the map will have acceptable levels of congestion according to SCDOT standards in 2030.

However, the roads in green, blue, and red have the following meanings\*:

**Green (Level of Service D):**                    **Approaching unstable flow, little freedom to maneuver, conditions tolerable for short period**

**Blue (Level of Service E):**                    **Unstable flow, lower speed than Level D (or green), some momentary stoppage**

**Red (Level of Service F):**                    **Forced flow operation at low speed, acts as stoppage area, many stoppages**

The FLATS Study Team reviewed this map in detail and created a list of recommendations based on these projections showing increased demand on the transportation system.

\*According to the Highway Capacity Manual

# Chapter III

## Public Involvement

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As part of the Long Range Transportation Plan, a public involvement campaign was developed that would not only meet the required aspects of public notice, but also reach those impacted by transportation planning in the FLATS area in order to seek public input.

The following steps were taken as part of our public involvement campaign:

Before the draft of the plan was developed, a request for recommendations from the public on what should be included in plan was placed in the newspaper, featured on our website, and posted in various locations. As the plan began to take shape and after the FLATS Study Team met to discuss options for the Long Range Plan, information, including the network map, was sent to members of the FLATS Policy Committee, which includes elected officials. This information recommended projects for consideration and also included a request for feedback.

In order to prepare for the May 5, 2006 FLATS Policy Committee meeting, a public notice was placed in the paper and signs were posted detailing the appropriate information. In addition, the meeting information was featured on the website. Notices were also mailed to affected public agencies, transportation groups, private service providers, the news media, and to agencies that may be in contact with low income and minority citizens.

Notification of the 30-day public comment period, beginning on May 8, 2006 and lasting through June 7, 2006\*, will be featured on the website, placed in the newspaper, and posted at various locations. A copy of the Long Range Plan will also be available for review during business hours and in an electronic format.

On June 15, 2006\*\*, the FLATS Policy Committee will meet to approve the final version of the Long Range Transportation Plan. The same notification and mailing procedures will be followed as for the May 5, 2006 meeting.

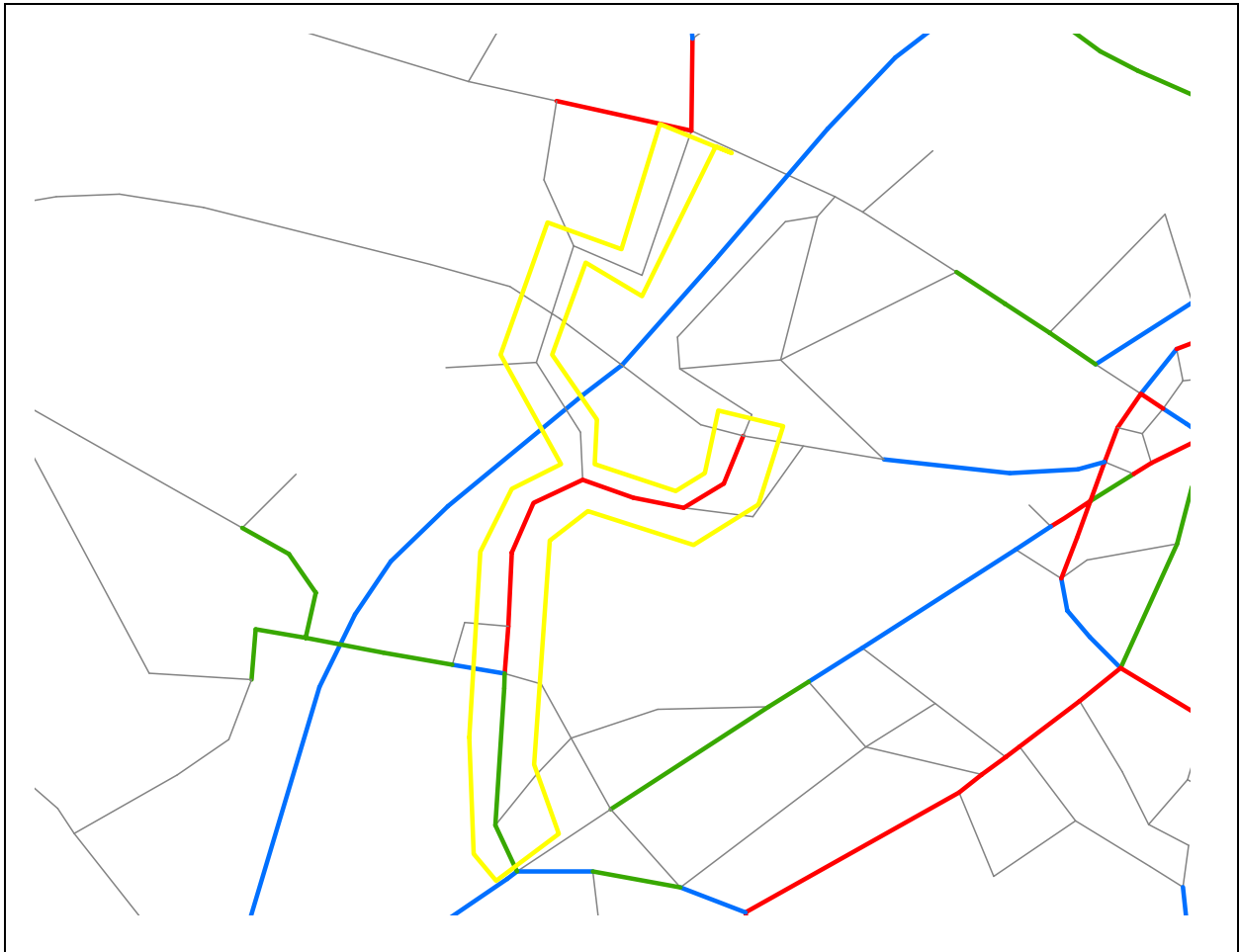
As a final step in the completion of the public involvement process, the adopted Long Range Plan will be published and made available at any time on the website, in the office, or by any person requesting a copy. Staff will also continue to be available to discuss elements and projects in the plan with citizens.

\*Originally stated as June 6, 2006.

\*\*Meeting date was changed to June 13, 2006.



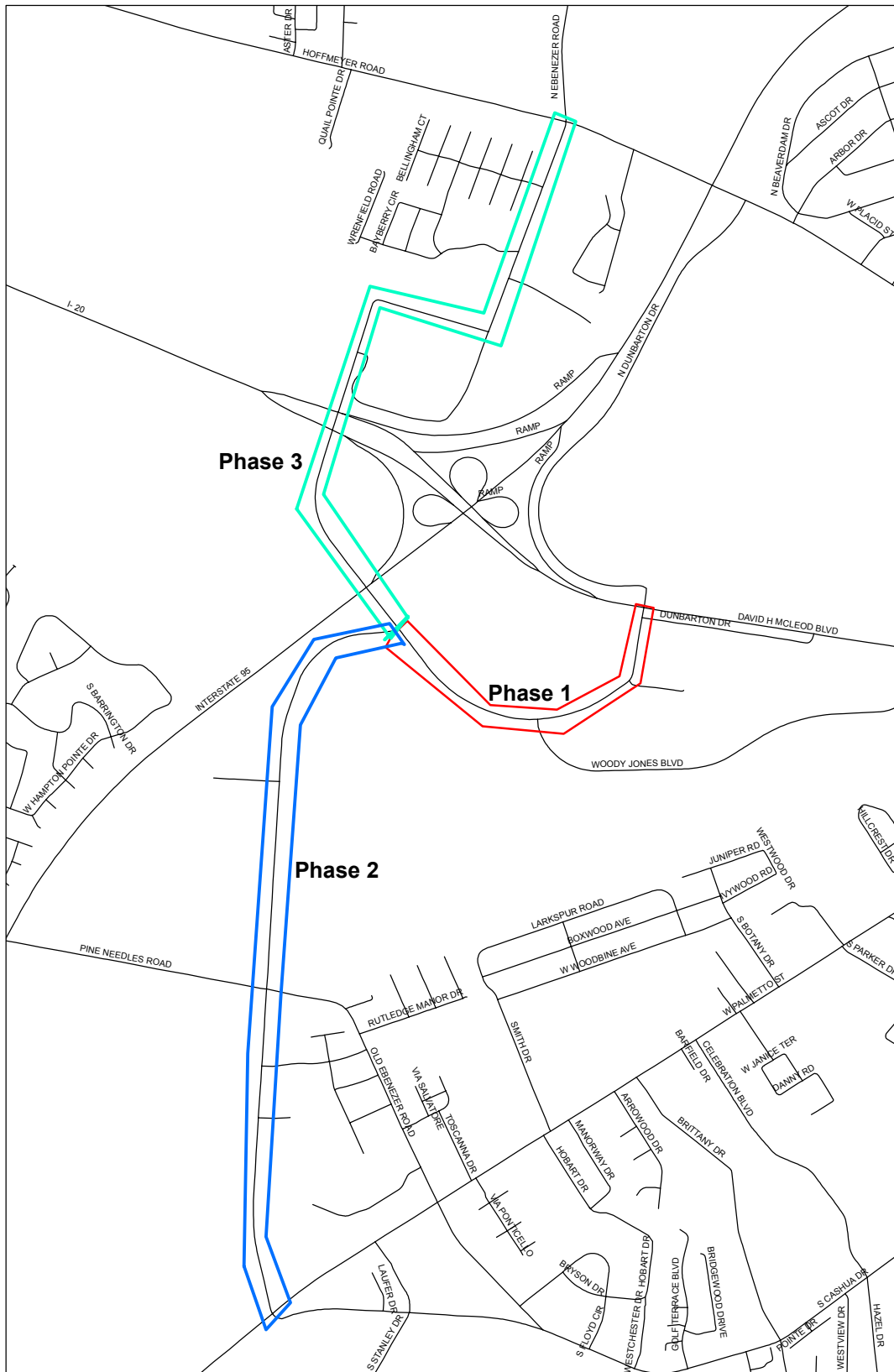
This project was selected based on the model results for traffic congestion in the area. The results for this area can be seen below:



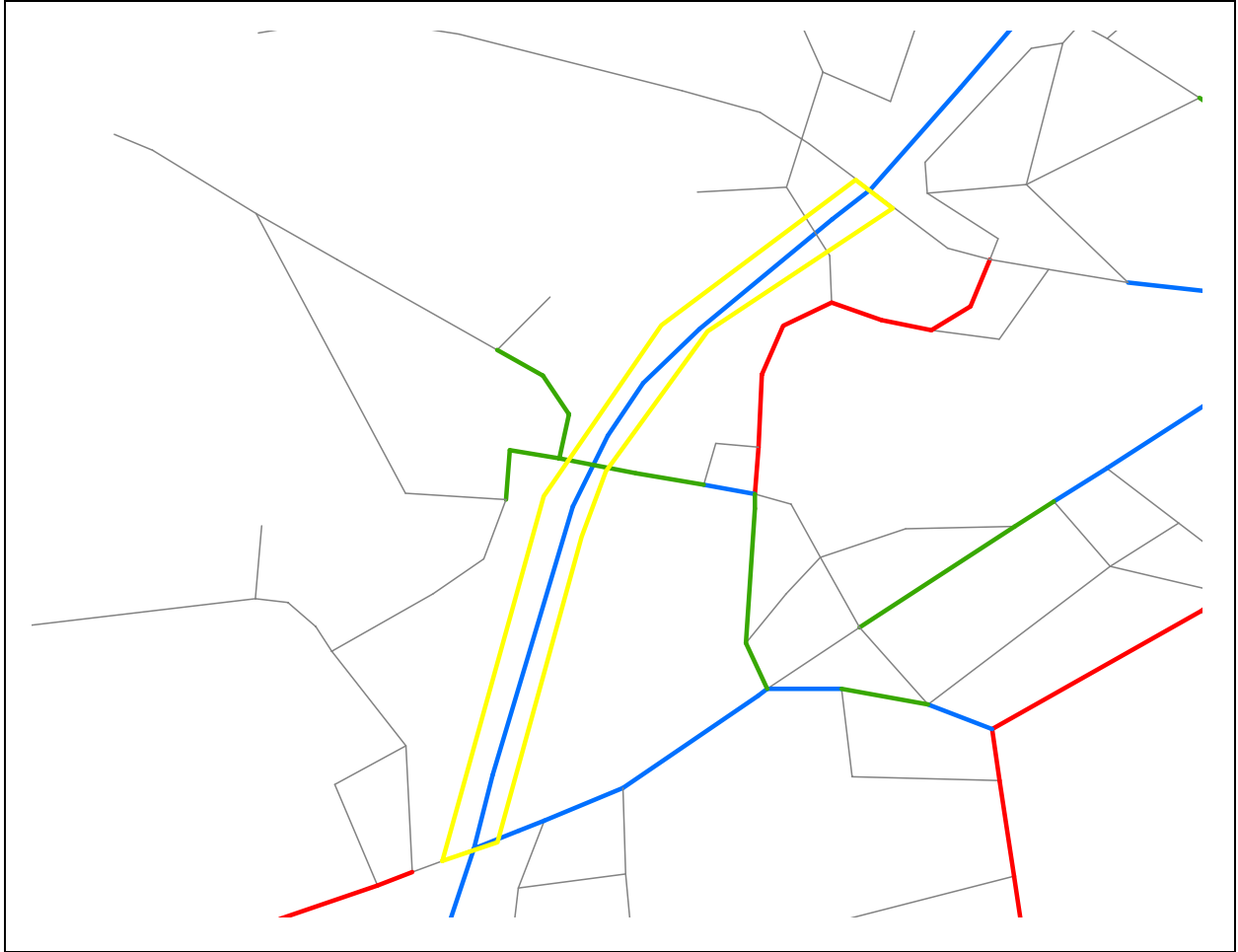
This project involves a widening of all roadway sections to five lanes and is described in three phases. Phase 1 is 0.81 miles in length, Phase 2 is 1.75 miles in length, and Phase 3\* is 1.92 miles in length. The phases can be seen below (Note: The colors noted are not meant as Level of Service descriptors):

(See Map on Next Page)

\*SCDOT is completing an additional study of Phase 3.







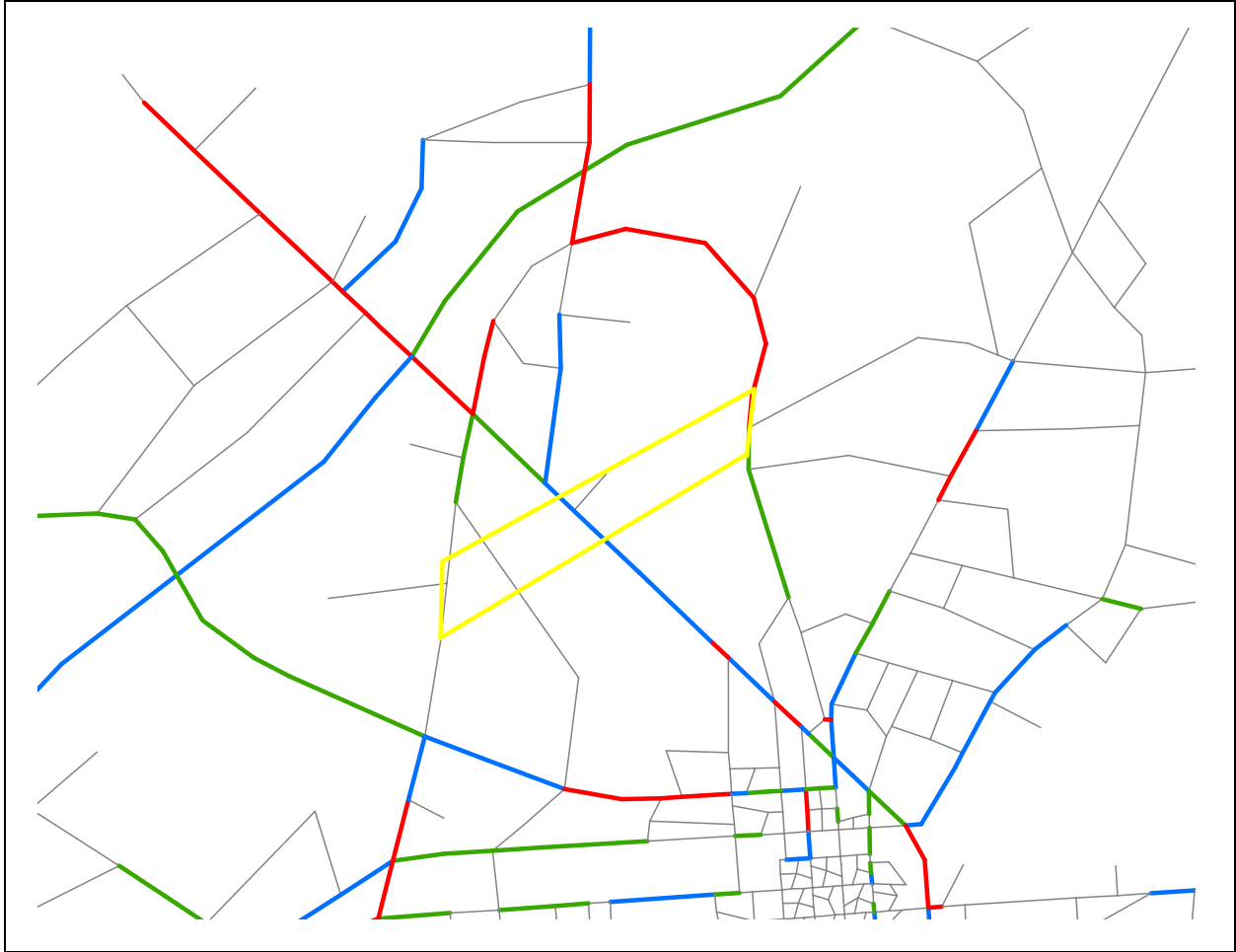
This project involves a widening of all roadway sections from 4 to 6 lanes and is 3.5 miles in length. It will also consider the interchange at I-95 and I-20.

(Continued on Next Page)









This project involves a new 2-lane section and is 1.5 miles in length.

(Continued on Next Page)

**DARLINGTON ST EXTENSION (HOFFMEYER RD TO BELTLINE DR)\***

\*The following should also be studied as part of this project: Consideration of the section of Darlington Street between N. Cashua Drive and Hoffmeyer Road. This is due to the fact that the Darlington Street extension project is 4-lanes and this previously mentioned section would be the only 2-lane section of roadway on a 4-lane roadway.

(Project information detailed on next two pages.)





**OAKLAND AVE**



This project was selected based on the model results for traffic congestion in the area. The results for this area can be seen below:

(See Map on Next Page)



This project involves a widening of all roadway sections to 3 lanes and is 1.23 miles in length.

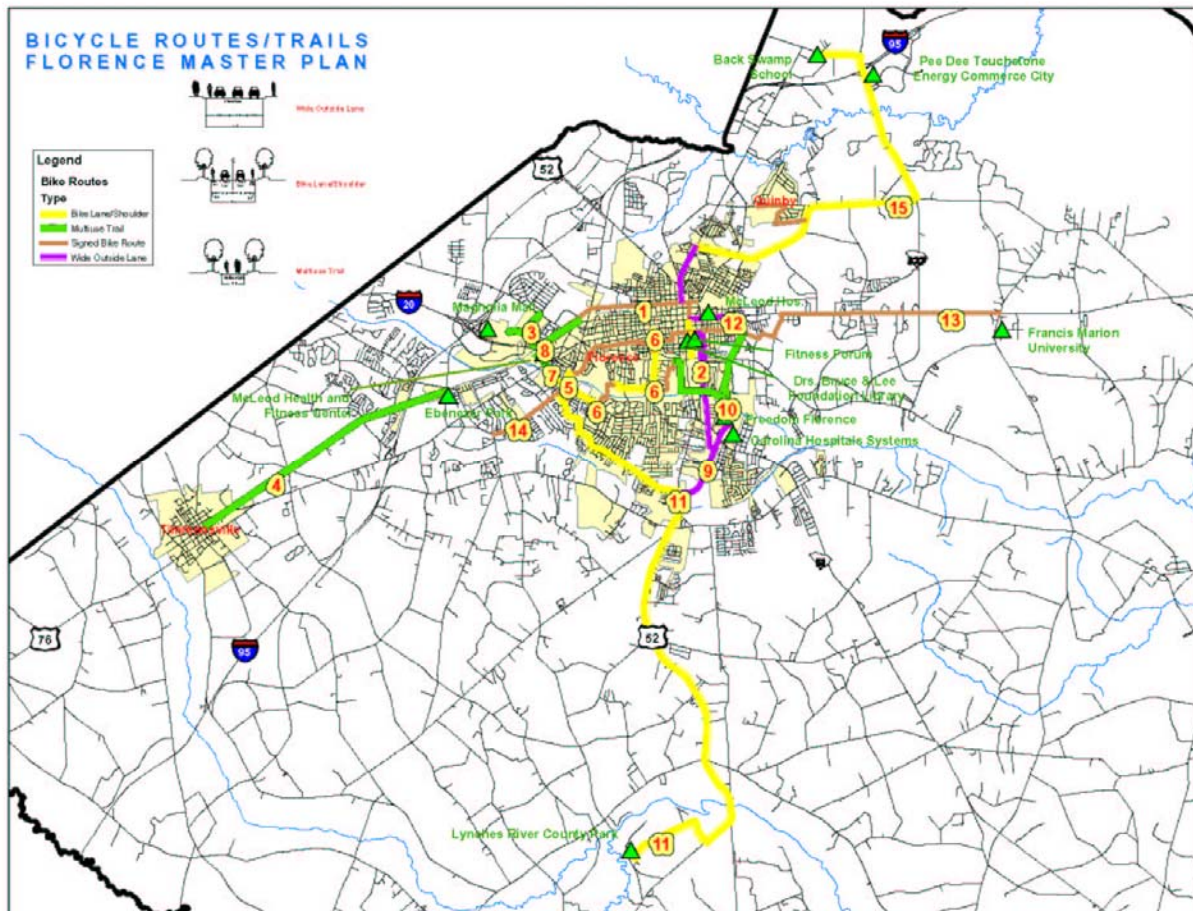
\*Required Note by FHWA: The complete design concept and scope (mode and alignment) for all projects has not been fully determined and will require further analysis by FLATS and SCDOT.

## Section B. Bicycle and Pedestrian

As stated on the Florence County website, in December 2002, Florence County received a grant from the Florence Area Transportation Study (FLATS) Policy Committee to develop a Master Plan for Bicycle Routes and Trails in Florence County.

Wilbur Smith Associates conducted the study and there is now a Master Plan for a bicycle network in Florence County. The purpose of this plan is to serve as the blue print to construct routes and trails in Florence County, while making the most efficient use of the resources available for construction.

The plan identifies specific routes and trails and provides a cost estimate and the likely usage of each route (see Appendixes). A map of the proposed projects can be seen below:



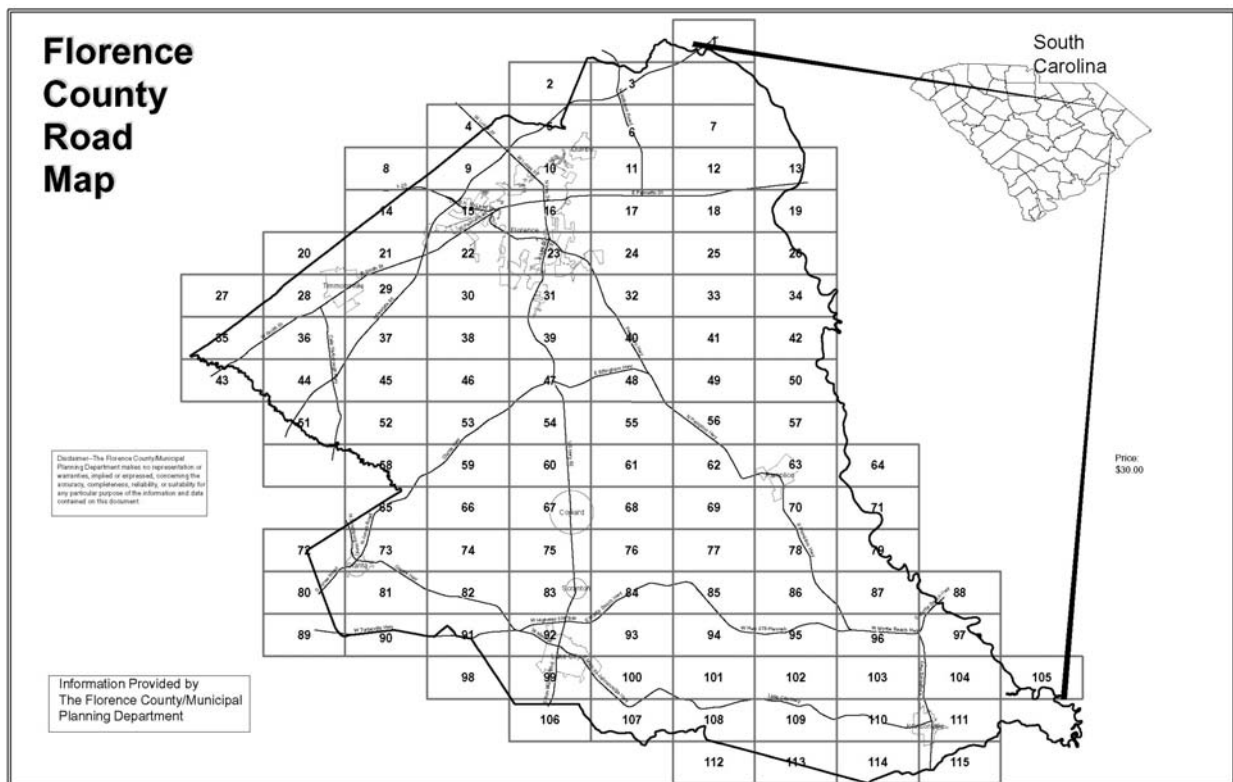
Construction projects within this plan may utilize enhancement funding if awarded by the FLATS Policy Committee.

## Section C. Transit

In order to maintain a multi-modal approach to transportation planning, FLATS has applied for funding under Section 5303. This application will be made each year throughout this plan to continue and further develop the efforts currently being made towards transit planning.

As a way to assist the Pee Dee Regional Transportation Authority (PDRTA) with information and details about their ridership and with ways to improve their current and future services, FLATS provides PDRTA with GIS services. Detailed, complete mapping and the GIS provide PDRTA with a way to locate ridership, plan their service routes, and ultimately improve their existing services to the people of the Florence area.

The following is a depiction of the cover of a map book, one of the many tools that we can utilize to support PDRTA:

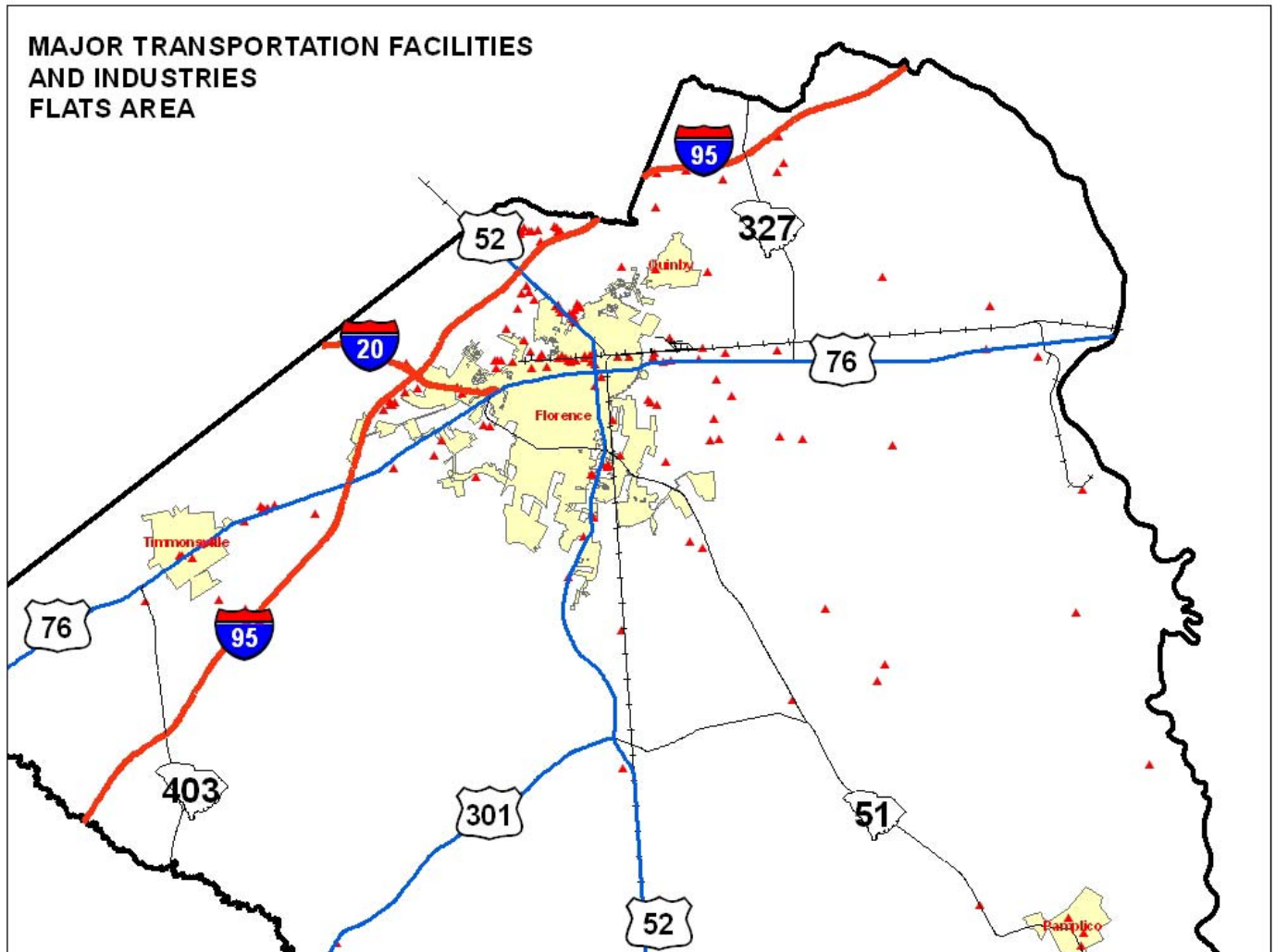


Providing planning assistance to the major mass transit provider in the FLATS area helps the efficiency of the current transportation network by potentially removing traffic from the roadway. One of the ways FLATS maintains this assistance is by providing the above map books to PDRTA, but also by continuously updating demographic information to the GIS.

As PDRTA moves towards the future, FLATS will assist them with new programs, including working with them to coordinate use of AVL (Automatic Vehicle Locator) systems, planning new and future routes and stop locations to encourage multimodal travel, and provide an update to the 1994 Transit Study.

## Section D. Freight

As the FLATS area grows, including industrial and service sector growth, freight movement within our area will undoubtedly increase. The map below shows the location of major transportation facilities, including interstate highways and railways, in the area.



Many of these routes have traffic congestion created from the industries noted. In turn, while portions of I-95 in the FLATS area were improved recently, an additional section of I-95, as previously described in this Long Range Transportation Plan for improvements, has been noted as a need. This widening will not only alleviate congestion and provide an additional freight movement option in our area. A map and information about these noted freight routes will be provided to industries as a way to highlight routes for such movement.

In addition, as the South Carolina Department of Transportation develops a statewide freight plan, FLATS plans to be an active participant in this process.

# Chapter V

## Air Quality

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Although the Florence area is currently in attainment for air quality and the County has an 8-Hour Ozone Early Action Compact with the South Carolina Department of Health and Environmental Control, FLATS is working with other county staff to continue air quality efforts in our area through planning programs for employees and working with the Early Action Committee Chairman. FLATS will continue to develop programs that promote air quality, attend meetings that discuss current issues, such as the 2006 Early Action Compact Summit, and be an active part of the Early Action Committee.

These efforts will not only enhance the FLATS area, but will also provide an opportunity for air quality programming in transportation planning. Through the bicycle and pedestrian efforts previously described and as the Florence Area Bikeway Master Plan begins to take shape, the bicycle may truly become an alternative means of transportation for the FLATS area.

# Chapter VI

## Financial Plan

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To review the FLATS Financial Plan, please see the next page.

# FINANCIAL PLAN: FLATS LONG RANGE PLAN THROUGH 2030

**NOTE: This plan is subject to amendment. These are preliminary cost estimates based on 2006 dollar figures. The LRP and estimates will be updated after the plan is approved.**

GUIDESHARES =	\$2,294,000 X 26* =	\$59,644,000	
GUIDESHARE USE THROUGH FY 2009** =		\$11,470,000	
TOTAL GUIDESHARE FUNDING =		\$48,174,000	
TOTAL REMAINING BOND DEBT (2010-2022) =		\$12,934,304	
TOTAL GUIDESHARE FUNDING =		\$35,239,696	
<b>TOTAL GUIDESHARE W/ 2009 CARRYOVER*** =</b>		<b>\$34,466,696</b>	

### GUIDESHARE PROJECTS

<b>TOTAL PROGRAM FUNDS**</b>					\$4,457,000		
<b>TIP PROJECTS (2007-2012)**</b>		PE	R/W	CONST.	TOTAL	LENGTH	DESCRIPTION
W. RADIO DR / S. EBENEZER RD / N. EBENEZER RD (PHASE 1)		\$405,000	\$810,000		\$1,215,000	0.81 Mi	WIDEN TO 5 LANES
CONTINGENCIES / OVERRUNS****							
<b>TIP SUBTOTAL</b>		\$405,000	\$810,000		\$1,215,000		
<b>CARRYOVER FROM TIP</b>					\$3,242,000		
<b>TOTAL GUIDESHARES (2013-2030)</b>					\$31,846,293		
<b>TOTAL PROGRAM FUNDS</b>					\$35,088,293		
<b>SUBMITTED LONG RANGE PLAN PROJECTS</b>		PE	R/W	CONST.	TOTAL	LENGTH	DESCRIPTION
W. RADIO DR / S. EBENEZER RD / N. EBENEZER RD (PHASE 1)				\$4,050,000	\$4,050,000	0.81 Mi	WIDEN TO 5 LANES
W. RADIO DR / S. EBENEZER RD / N. EBENEZER RD (PHASE 2)		\$875,000	\$1,750,000	\$8,750,000	\$11,375,000	1.75 Mi	WIDEN TO 5 LANES
W. RADIO DR / S. EBENEZER RD / N. EBENEZER RD (PHASE 3)		\$960,000	\$1,920,000	\$9,600,000	\$12,480,000	1.92 Mi	WIDEN TO 5 LANES
OPERATIONAL / INTERSECTION / SIGNAL IMPROVEMENTS*****							
CONTINGENCIES / OVERRUNS****					\$2,104,696		
<b>SUBMITTED LONG RANGE PLAN SUBTOTAL</b>		\$960,000	\$3,670,000	\$18,350,000	\$30,009,696		
<b>GUIDESHARE TOTAL</b>					\$34,466,696		

### NONGUIDESHARE PROJECTS

<b>INTERSTATE PROJECTS</b>		PE	R/W	CONST.	TOTAL	LENGTH	DESCRIPTION
I-95 (US 76 TO I-20)		\$2,500,000	\$1,000,000	\$25,000,000	\$28,500,000	3.5 Mi	WIDEN FROM 4 TO 6 LANES (INCLUDES I-20 INTERCHANGE)
<b>INTERSTATE SUBTOTAL</b>		\$2,500,000	\$1,000,000	\$25,000,000	\$28,500,000	3.5 Mi	
<b>INNOVATIVE FINANCING PROJECTS</b>		PE	R/W	CONST.	TOTAL	LENGTH	DESCRIPTION
S. CASHUA DR (SECOND LOOP RD TO US 76)			\$2,710,000	\$13,550,000	\$16,260,000	2.71 Mi	WIDEN TO 5 LANES
ASHBY RD EXTENSION (N CASHUA DR TO DOUGLAS ST)		\$690,000	\$4,312,500	\$6,900,000	\$11,902,500	1.50 Mi	NEW 2 LANES
DARLINGTON ST EXTENSION (HOFFMEYER RD TO BELTLINE DR)		\$672,750	\$3,450,000	\$6,727,500	\$10,850,250	0.65 Mi	NEW 4 LANES
OAKLAND AVE		\$615,000	\$1,230,000	\$6,150,000	\$7,995,000	1.23 Mi	WIDEN FROM 2 TO 3 LANES
<b>INNOVATIVE FINANCING SUBTOTAL</b>		\$1,977,750	\$11,702,500	\$33,327,500	\$47,007,750		
<b>ENHANCEMENT PROJECTS</b>		PE	R/W	CONST.	TOTAL	LENGTH	DESCRIPTION
CITY OF FLORENCE US 52 BEAUTIFICATION (LUCAS ST)					\$155,308		
FUTURE YEARS ENHANCEMENT FUNDS					\$3,882,700		
<b>ENHANCEMENT PROJECTS TOTAL</b>					\$4,038,008		
<b>NONGUIDESHARE TOTAL</b>					\$79,545,758		
<b>GRAND TOTAL</b>					\$114,012,454		

\*FY 2005 THROUGH FY 2030

\*\*INCLUDES REMAINING COSTS FOR 301 BYPASS (FROM NATIONAL CEMETERY ROAD TO JEFFERIES CREEK) AND BONDING PROGRAM CONSTRAINTS THROUGH FY 2009. FUNDING FOR PROJECTS WILL NOT BE AVAILABLE UNTIL FY 2010. THIS PLAN WAS DEVELOPED THIS WAY TO BE FINANCIALLY CONSTRAINED WITH ACTUAL MONEY FOR PROGRAMMING FROM 2005 THROUGH 2030. SEE ATTACHED 2007-2012 TIP FOR MORE INFORMATION.

\*\*\*NEGATIVE CARRYOVER FROM FY 2009 OF \$773,000.

\*\*\*\*SUBJECT TO CHANGE ONCE FINAL COST ESTIMATES ARE RECEIVED.

\*\*\*\*\*ADDITIONAL FUNDING FROM SAFETEA-LU WILL BE PLACED IN THIS CATEGORY

# Appendix: Land Use Map

