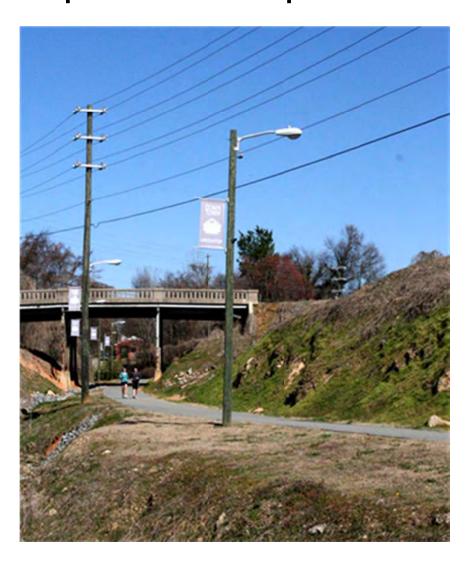




# 2013 Lincolnton Urban Area Comprehensive Transportation Plan



## 2013 Lincolnton Urban Area Comprehensive Transportation Plan

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In Cooperation with:

City of Lincolnton Lincoln County

Lake Norman Rural Planning Organization

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Transportation Planning Engineer

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### **Executive Summary**

In September of 2010, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and Lincolnton initiated a study to cooperatively develop the Lincolnton Urban Area Comprehensive Transportation Plan (CTP). This is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening, and public input, which are detailed in Chapter 1. Figure 1 shows the CTP maps, which were mutually adopted by NCDOT in 2013. Descriptive information and definitions for designations depicted on the CTP maps can be found in Appendix B. Implementation of the plan is the responsibility of Lincoln County, Lincolnton and NCDOT. Refer to Chapter 2 for information on the implementation process.

This report documents the recommendations for improvements that are included in the Lincolnton Urban Area CTP. The major recommendations for improvements are listed below. More detailed information about these and other recommendations can be found in Chapter 2.

#### **HIGHWAY**

- **US 321 Business:** Widen to a four lane divided boulevard from S Aspen Street (SR 1406) to Springs East Road (SR 1342).
- NC 27 (Riverside Drive): Widen to a four lane divided boulevard from Rock Dam Road (SR 1184) to Grove Street (SR 1008).
- NC 27 (East Main Street): Widen to a four lane divided boulevard from US 321 Business (Generals Boulevard) to NC 150 East (Mooresville Highway).
- NC 73: Widen to a four lane boulevard from Camp Creek Road (SR 1356) to Furnace Road (SR 1355).
- NC 73 Extension: Extend NC 73 as a four lane freeway on new location from Camp Creek Road (SR 1356) to west of US 321 including new interchanges at US 321, NC 27, and NC 73. Grade separations are recommended at Salem Church Road (SR 1001), Hill Road (SR 1321 and over the railroad.
- NC 150, TIP No. R-0617: Widen NC 150 to a four lane divided boulevard from the existing divided highway to east of Laboratory Road (SR 1253) and construct a freeway on new location from east of Laboratory Road (SR 1253) to US 321 with interchanges at NC 150, US 321 Business (Gastonia Highway), and US 321.
- NC 150 East (Mooresville Highway): Widen to a four lane divided boulevard from

- NC 27 to Ivey Church Road (SR 1343).
- Aspen Street (SR 1405): Widen to a three lane minor thoroughfare from Walker Branch Creek to US 321 Business (Maiden Highway).
- Motz Avenue Improvements: Widen Motz Avenue to 11 foot lanes and extend on new location west to NC 27 (Riverside Drive) and east to Laurel Street (SR 1262) at Flint Street.
- Northeast Connector: Connect Airport Road (SR 1750), Old Mill Road (SR1351), Shuford Road (SR 1339) and Car Farm Road (SR 1339) to US 321 Business (Maiden Highway) as a two lane minor thoroughfare.
- Roper Road (SR 1287) Extension: Extend Roper Road (SR 1287) from NC 27 (East Main Street) to US 321 Business (Maiden Highway) as a two lane minor thoroughfare.
- Startown Road (SR 1005) Extension: Extend Startown Road (SR 1005) from NC 27 to Reepsville Road (SR 1008) as a two lane minor thoroughfare.
- Southwest Connector: Connect NC 27 West (Riverside Drive) to NC 150 (Cherryville Highway) with a two lane major thoroughfare on new location. This proposed facility will connect NC 27 (Riverside Drive) with NC 182, Old Lincolnton-Crouse Road (SR 1228), Old Cherryville Road (SR 1407), Love Memorial School Road (SR 1416), and NC 150 (Cherryville Highway) and will include a grade separation over the railroad.
- Wilma Sigmon Road (SR 1267) Extension: Extend Wilma Sigmon Road (SR 1267) from N Aspen Street (SR 1405) to Startown Road (SR 1005) as a two lane minor thoroughfare.

#### **PUBLIC TRANSPORTATION & RAIL**

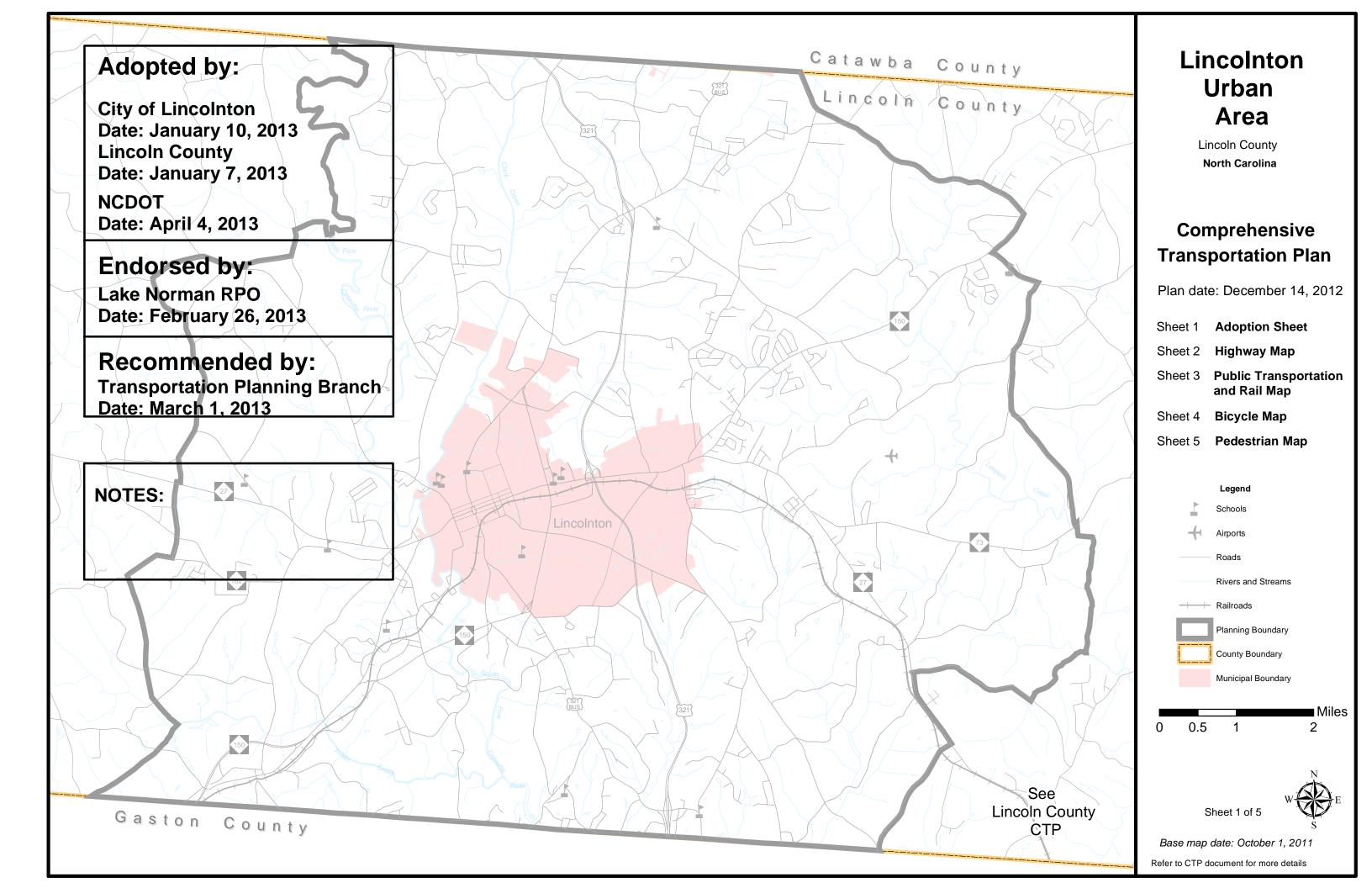
In 2009, Transportation Lincoln County (TLC) and the Lake Norman Rural Planning Organization studied the transit needs in Lincoln County and their recommendations were published in the Lake Norman RPO Coordinated Comprehensive Public Transportation Plan report in 2009. These recommendations were incorporated into the CTP and are shown on Sheet 3 of Figure 1. No additional recommendations were developed through the CTP process. There are also no rail improvements proposed in the CTP.

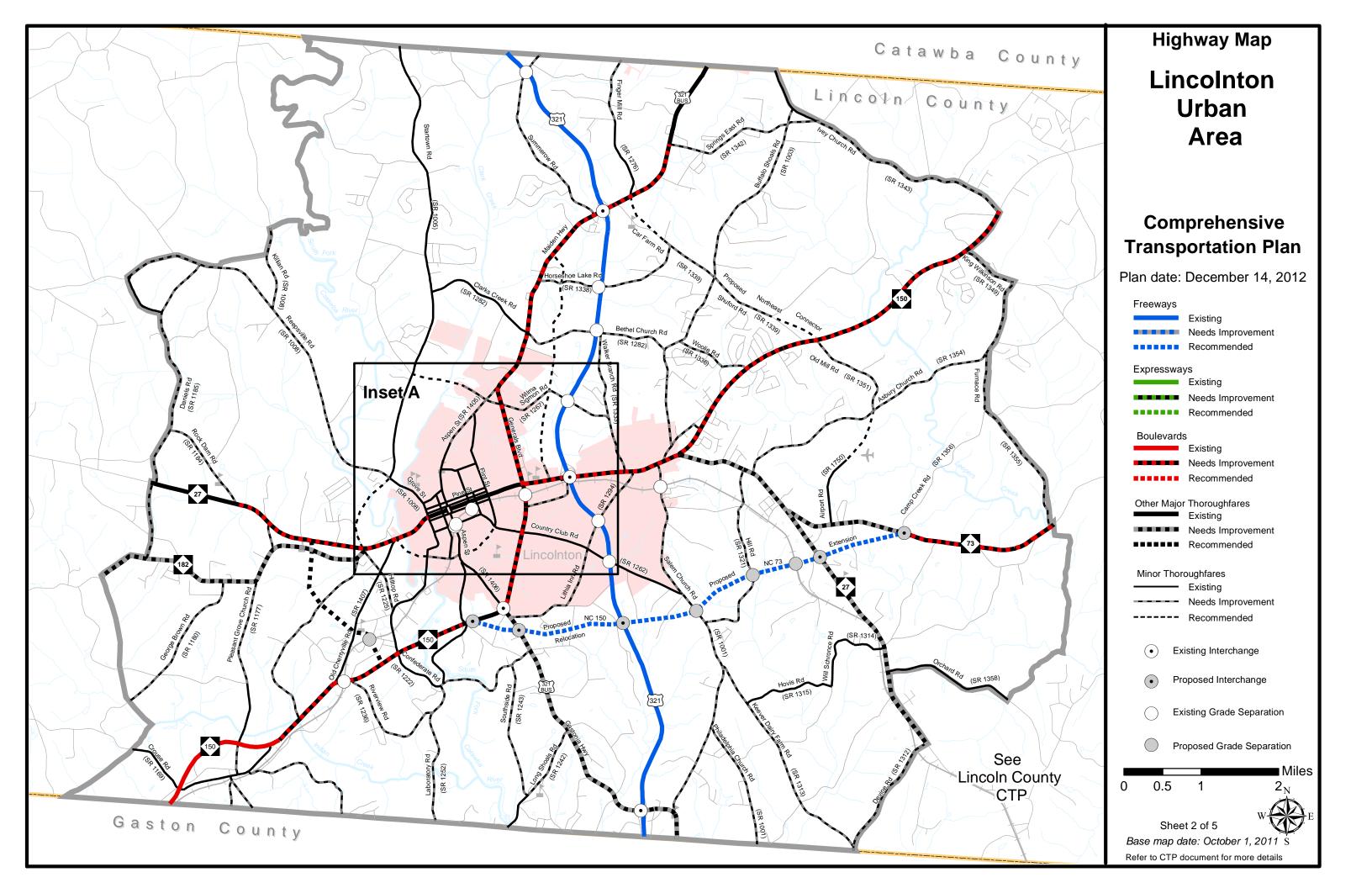
#### **BICYCLE**

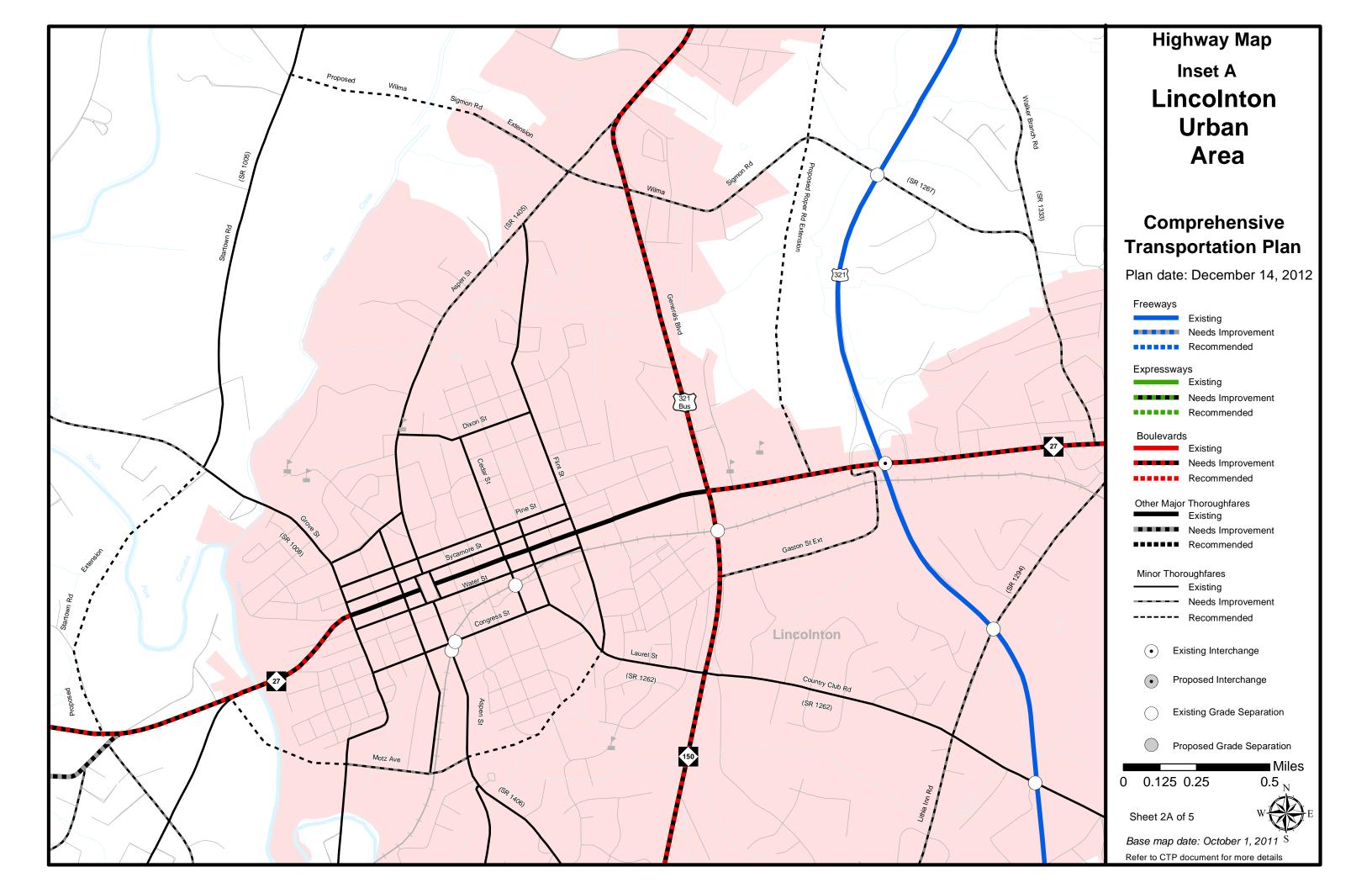
Lincoln County adopted the 2009 Carolina Thread Trail Master Plan for Lincoln County Communities to supplement the recommendations in their existing land use plans. These recommendations were incorporated into the CTP and are shown on Sheet 4 of Figure 1. No additional recommendations were developed through the CTP process.

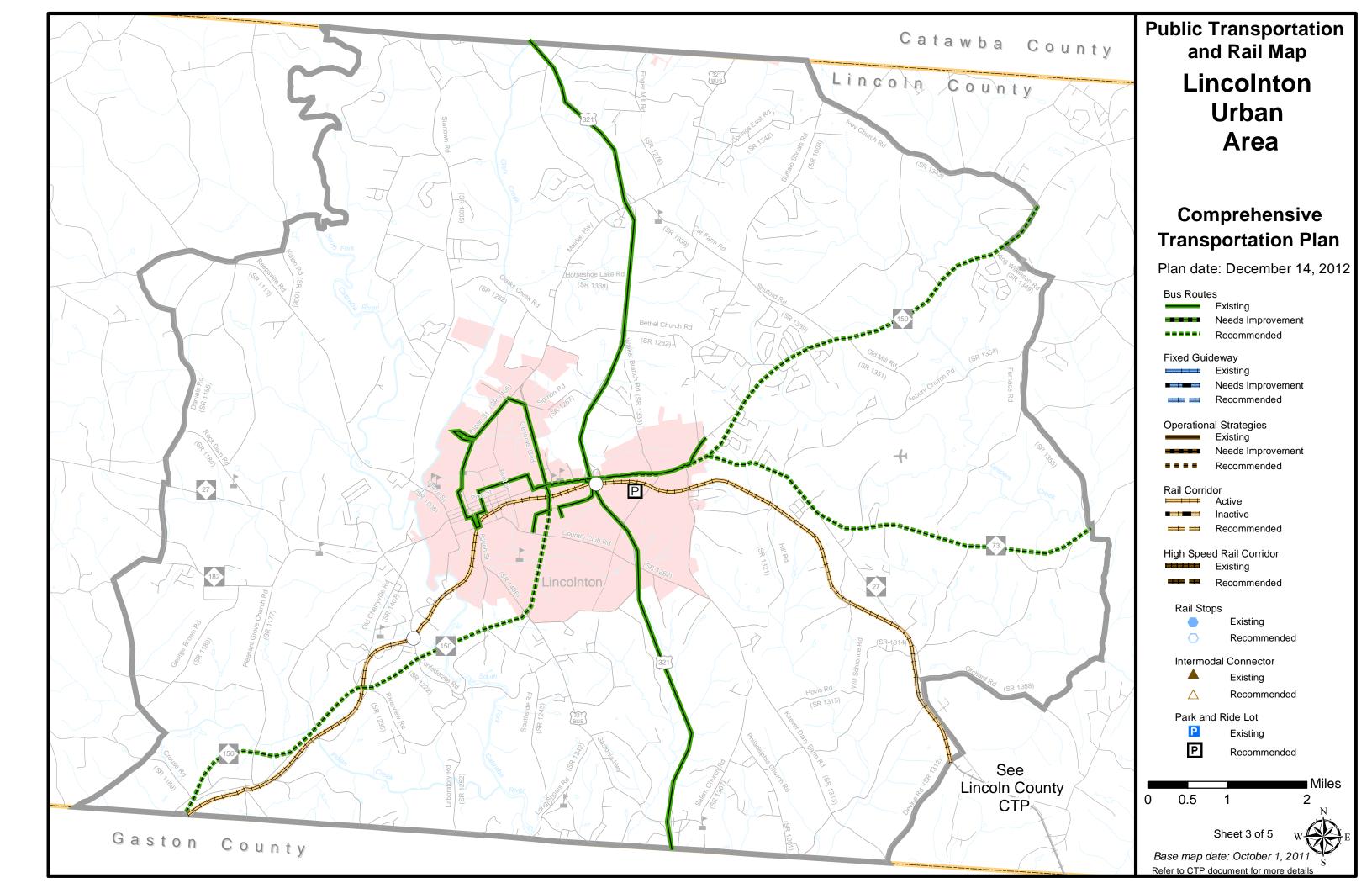
#### **PEDESTRIAN**

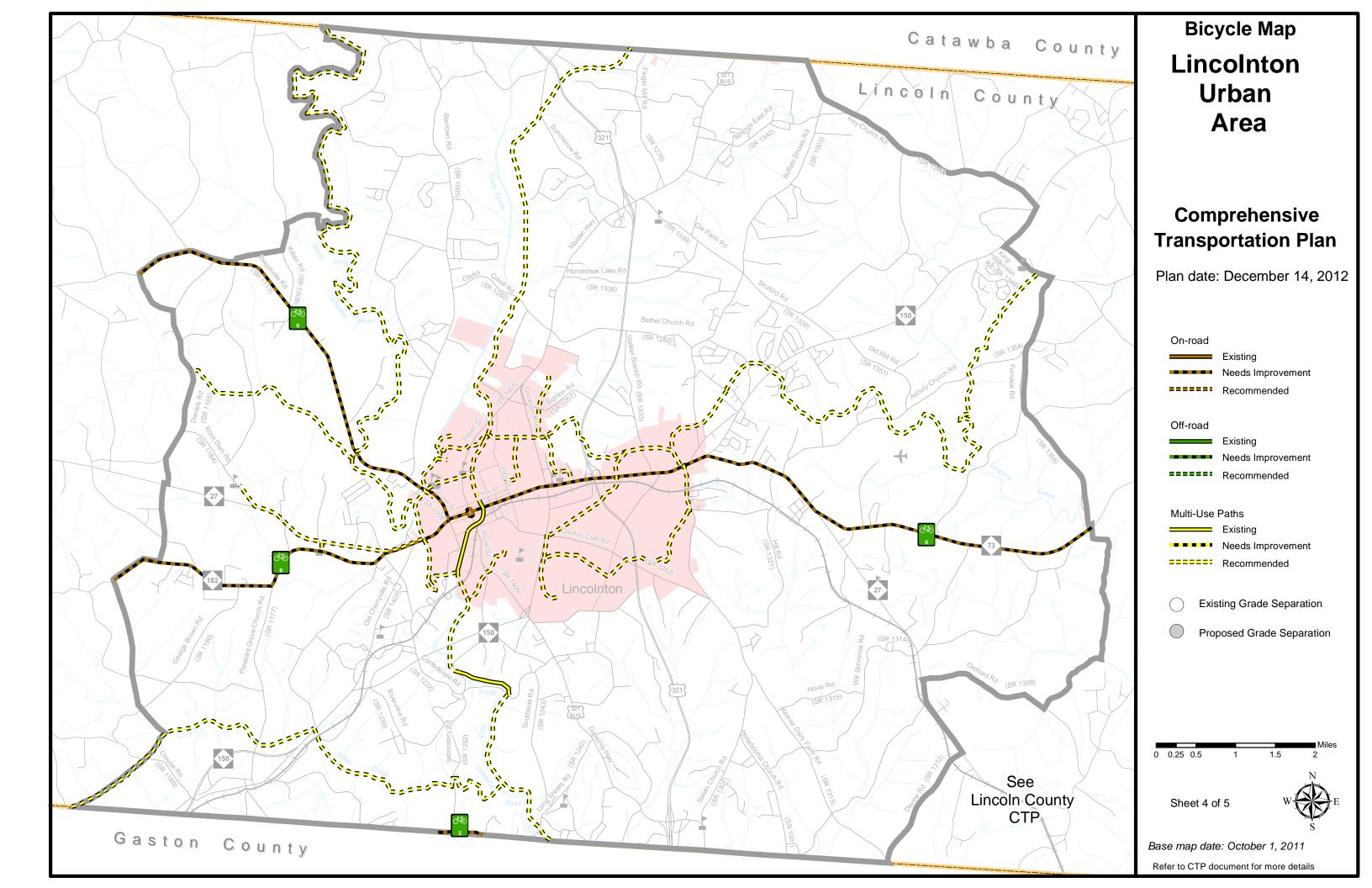
During the development of the CTP, several sidewalk recommendations were developed from the 2010 Lincolnton sidewalk inventory, which were incorporated into the CTP. These recommendations are shown on Sheet 5 of Figure 1.

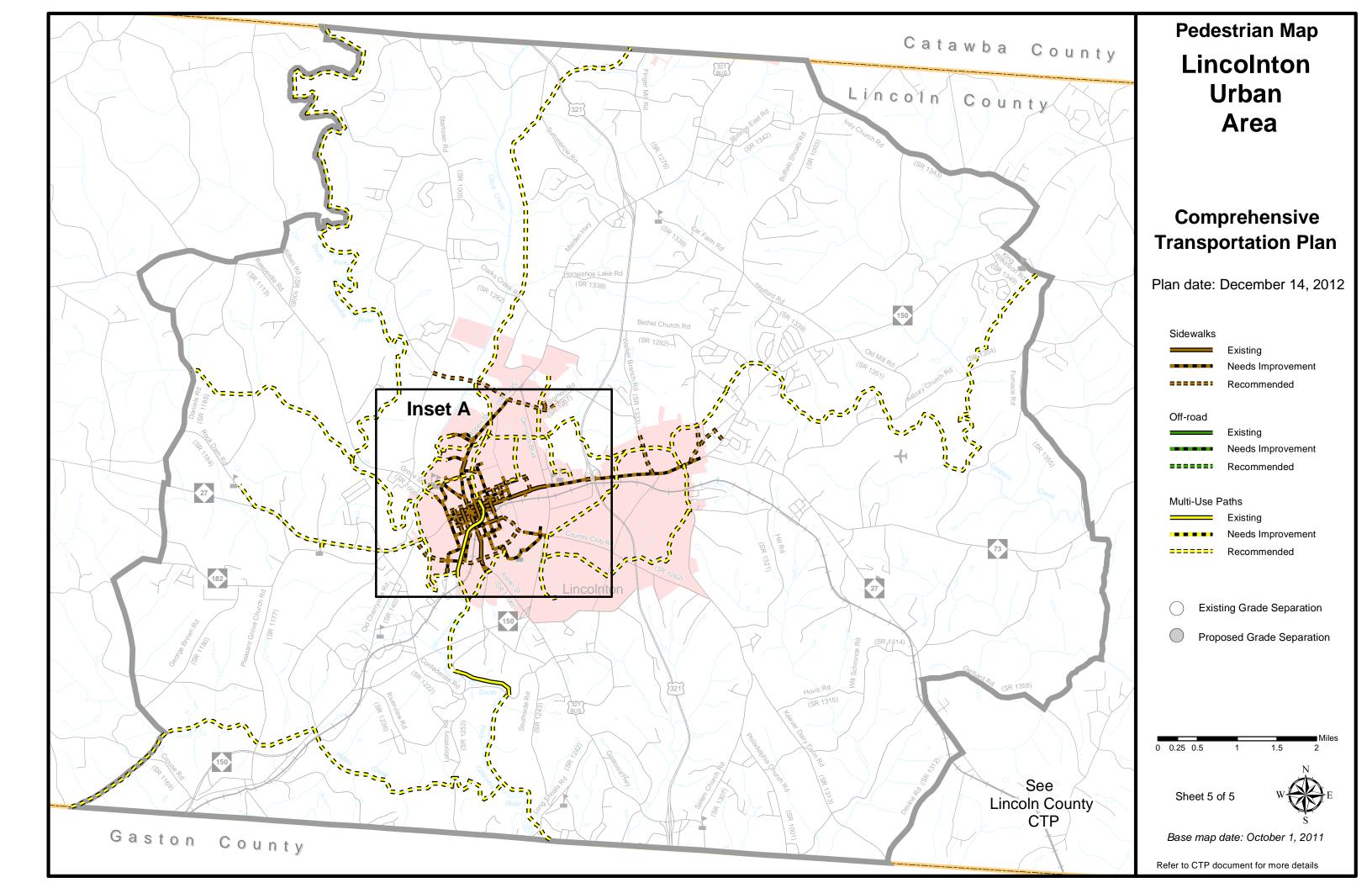


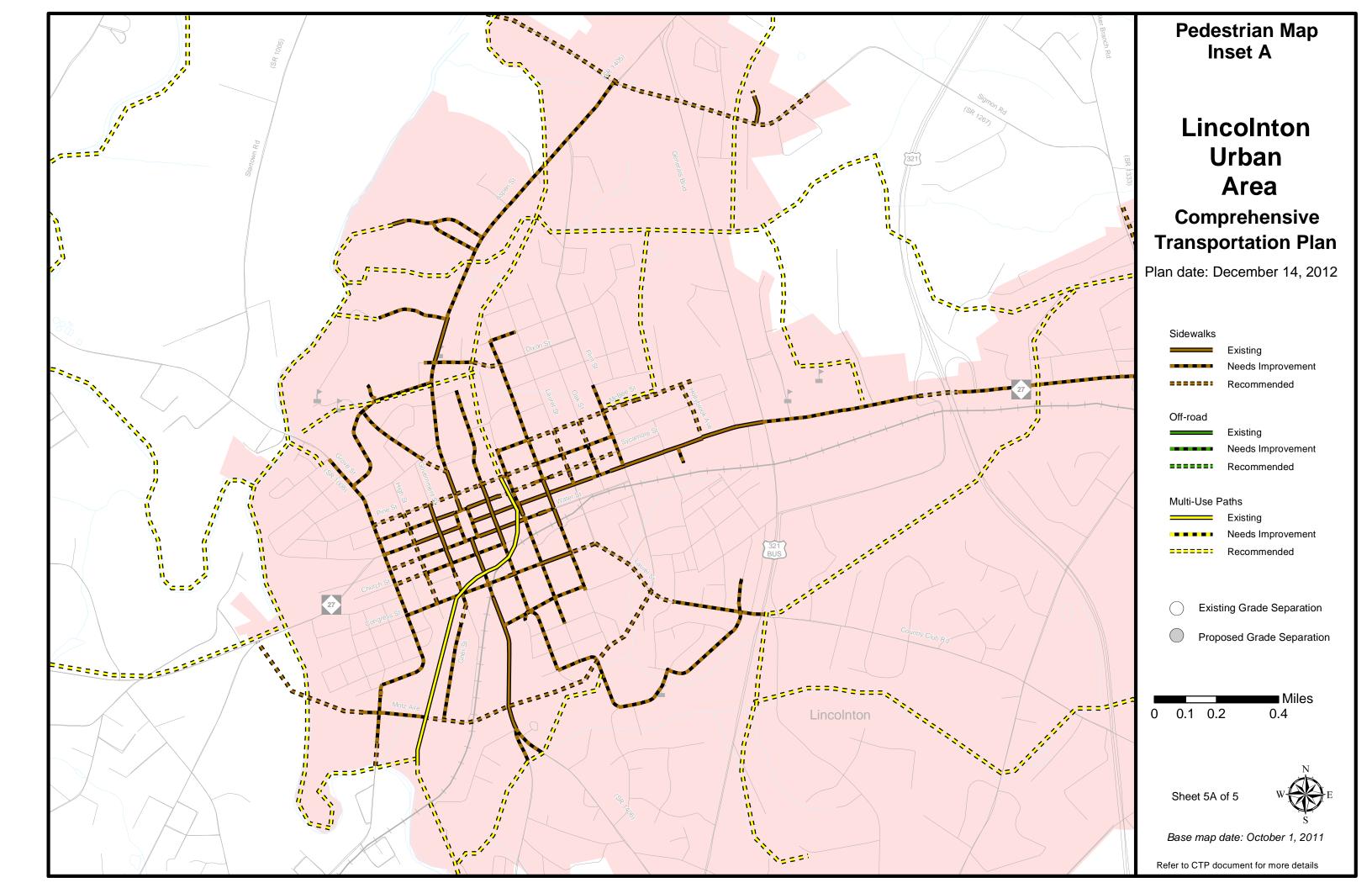












## I. Analysis of the Existing and Future Transportation System

A CTP is developed to ensure that the transportation system will meet the needs of the region until the horizon year of 2035. The CTP serves as an official guide to providing a well-coordinated, efficient, and economical transportation system for the future of the region. This document should be utilized by the local officials to ensure that planned transportation facilities reflect the needs of the public, while minimizing the disruption to local residents, businesses and environmental resources.

In order to develop a CTP, the following are considered:

- Analysis of the transportation system, including any local and statewide initiatives;
- Impacts to the natural and human environment, including natural resources, historic resources, homes, and businesses;
- Public input, including community vision and goals and objectives.

#### Analysis Methodology and Data Requirements

Reliable forecasts of future travel patterns must be estimated in order to analyze the ability of the transportation system to meet future travel demand. These forecasts depend on careful analysis of the character and intensity of existing and future land use and travel patterns.

An analysis of the transportation system looks at both current and future travel patterns and identifies existing and anticipated deficiencies. This is usually accomplished through a capacity deficiency analysis, a traffic crash analysis, and a system deficiency analysis. This information, along with population growth, economic development potential, and land use trends, is used to determine the potential impacts on the future transportation system.

#### Roadway System Analysis

An important stage in the development of a CTP is the analysis of the existing transportation system and its ability to serve the area's travel desires. Emphasis is placed not only on detecting the existing deficiencies, but also on understanding the causes of these deficiencies. Roadway deficiencies may result from inadequacies in pavement widths, intersection geometry or intersection controls. System deficiencies may result from missing travel links, bypass routes, loop facilities, radial routes or improvements to meet statewide initiatives.

One of those statewide initiatives is the Strategic Highway Corridor (SHC) Vision Plan<sup>1</sup> adopted by the Board of Transportation on September 2, 2004. The SHC Vision Plan is an initiative to protect and maximize the mobility and connectivity on a core set of transportation corridors throughout North Carolina, while promoting environmental

<sup>&</sup>lt;sup>1</sup> For more information on the SHC Vision Plan, go to: <a href="http://www.ncdot.gov/doh/preconstruct/tpb/SHC/">http://www.ncdot.gov/doh/preconstruct/tpb/SHC/</a>.

stewardship through maximizing the use of existing facilities to the extent possible, and fostering economic prosperity through the quick and efficient movement of people and goods.

The primary purpose of the SHC Vision Plan is to provide a network of high-speed, safe, reliable highways throughout North Carolina. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor – specifically towards the identification of a desired facility type (Freeway, Expressway, Boulevard, or Thoroughfare) for each corridor. Individual CTPs shall incorporate the long-term vision of each corridor. Refer to Appendix A for contact information for the SHC Vision Plan.

In the development of this plan, travel demand was projected from 2010 to 2035 using the Metrolina Regional Model (version MRM09v1.0) as adopted on March 25, 2010. The Metrolina Regional Travel Demand Model was developed as the primary tool for evaluating existing and future travel in the region that encompasses the Cabarrus-Rowan MPO, the Gaston Urban Area MPO, the Mecklenburg-Union MPO, a portion of the Lake Norman RPO, a portion of the Rocky River RPO, York County and a portion of Lancaster County in South Carolina. Lincoln County is within the Lake Norman RPO. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2035. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were endorsed by the Lake Norman RPO on February 26, 2008.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to Figures 2 and 3 for existing and future capacity deficiencies.

Capacity is the maximum number of vehicles which have a "reasonable expectation" of passing over a given section of roadway, during a given time period under prevailing roadway and traffic conditions. Many factors contribute to the capacity of a roadway including the following:

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;
- Access control, including streets and driveways, or lack thereof, along the roadway;
- Development along the road, including residential, commercial, agricultural, and industrial developments;

- Number of traffic signals along the route;
- Peaking characteristics of the traffic on the road;
- Characteristics of side-roads feeding into the road; and
- Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating conditions.

LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to experience delay. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using NCDOT's North Carolina Level of Service (NCLOS) program. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C for new facilities. Refer to Appendix E for detailed information on LOS.

#### Traffic Crash Analysis

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Lincolnton Urban Area CTP for crashes occurring in the planning area between January 1, 2008 and December 31, 2010. During this period, a total of seventeen (17) intersections were identified as having a high number of crashes as illustrated in Figure 4. Refer to Appendix F for a detailed crash analysis.

#### **Bridge Deficiency Assessment**

Bridges are a vital element of a highway system. First, they represent the highest unit investment of all elements of the system. Second, any inadequacy or deficiency in a bridge reduces the value of the total investment. Third, a bridge presents the greatest opportunity of all potential highway failures for disruption of community welfare. Finally, and most importantly, a bridge represents the greatest opportunity of all highway failures for loss of life. For these reasons, it is imperative that bridges be constructed to the same design standards as the system of which they are a part.

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as federal and state funds become available. Twenty-three (23) deficient bridges were identified on roads evaluated as part of the CTP and are illustrated in Figure 5. Of these, three are scheduled for replacement in the Draft 2013 – 2023 Transportation Improvement Program<sup>2</sup> (TIP). Additionally, thirteen (13) others occur along roadways recommended

 $^2 \ For more \ information \ on \ the \ TIP, \ go \ to: \ \underline{https://connect.ncdot.gov/projects/planning/Pages/default.aspx}.$ 

for improvement in the CTP. As deficient bridges are replaced, every consideration should be given to proposed CTP recommendation and cross section associated with the recommendation. Table 5 in Appendix G gives a listing of the deficient bridges identified in the CTP and the ID number associated with CTP project proposal. Refer to Appendix G for more detailed information.

#### Public Transportation and Rail

Public transportation and rail are vital modes of transportation that give alternatives for transporting people and goods from one place to another.

#### **Public Transportation**

North Carolina's public transportation systems serve more than 50 million passengers each year. Five categories define North Carolina's public transportation system: community, regional community, urban, regional urban and intercity.

- Community Transportation Local transportation efforts formerly centered on assisting clients of human service agencies. Today, the vast majority of rural systems serve the general public as well as those clients.
- Regional Community Transportation Regional community transportation systems are composed of two or more contiguous counties providing coordinated / consolidated service. Although such systems are not new, NCDOT is encouraging single-county systems to consider mergers to form more regional systems.
- Urban Transportation There are currently nineteen urban transit systems operating in North Carolina, from locations such as Asheville and Hendersonville in the west to Jacksonville and Wilmington in the east. In addition, small urban systems provide services in three areas of the state. Consolidated urban-community transportation exists in five areas of the state. In those systems, one transportation system provides both urban and rural transportation within the county.
- Regional Urban Transportation Regional urban transit systems currently operate in three areas of the state. These systems connect multiple municipalities and counties.
- Intercity Transportation Intercity bus service is one of a few remaining examples
  of privately owned and operated public transportation in North Carolina. Intercity
  buses serve many cities and towns throughout the state and provide connections
  to locations in neighboring states and throughout the United States and Canada.
  Greyhound/Carolina Trailways operates in North Carolina. However, community,
  urban and regional transportation systems are providing increasing intercity service
  in North Carolina.

An inventory of existing and planned fixed public transportation routes for the planning area is presented on Sheet 3 of Figure 1. Transportation Lincoln County (TLC) offers one deviated fixed route, para-transit, and demand response service to Lincoln County and surrounding counties. Horizon Coach Lines runs a commercial regional connector

bus route between Boone and Charlotte that stops in Lincolnton allowing connections between Boone, Lenoir, Hickory, Lincolnton, Gastonia and Charlotte on a regular schedule. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information for the Public Transportation Division.

#### Rail

Today North Carolina has 3,684 miles of railroad tracks throughout the state. There are two types of trains that operate in the state, passenger trains and freight trains.

Intercity passenger service is provided by a partnership between NCDOT and Amtrak. Amtrak currently operates six passenger services daily in or through North Carolina serving 16 cities across the state. Five of the services are interstate (Crescent, Palmetto, Silver Meteor, Silver Star, and Carolinian passenger trains) and one service (Piedmont passenger train) operates exclusively within North Carolina. In addition to the six passenger services mentioned, Amtrak also operates its Auto Train service which passes through North Carolina but does not make any stops. Amtrak ridership demand has been on a rise in the state. In 2010 ridership was 840,000 and increased to 900,000 passengers in 2012.

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back every day. Combined, the Carolinian and Piedmont carry more than 445,000 passengers each year.

There are two major freight railroad companies that operate in North Carolina, CSX Transportation and Norfolk Southern Corporation. Also, there are more than 20 smaller freight railroads, known as shortlines.

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. A Class I CSX rail line carries freight in an arc through Lincolnton from Cherryville to Mount Holly. A corridor previously ran from Gastonia to Lenoir. The tracks are gone and there are now several rail-trail segments along this corridor. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information for the Rail Division.

#### **Bicycles & Pedestrians**

Bicycle and pedestrian facilities are a growing part of the transportation system in North Carolina. Many communities are working to improve mobility for both cyclists and pedestrians.

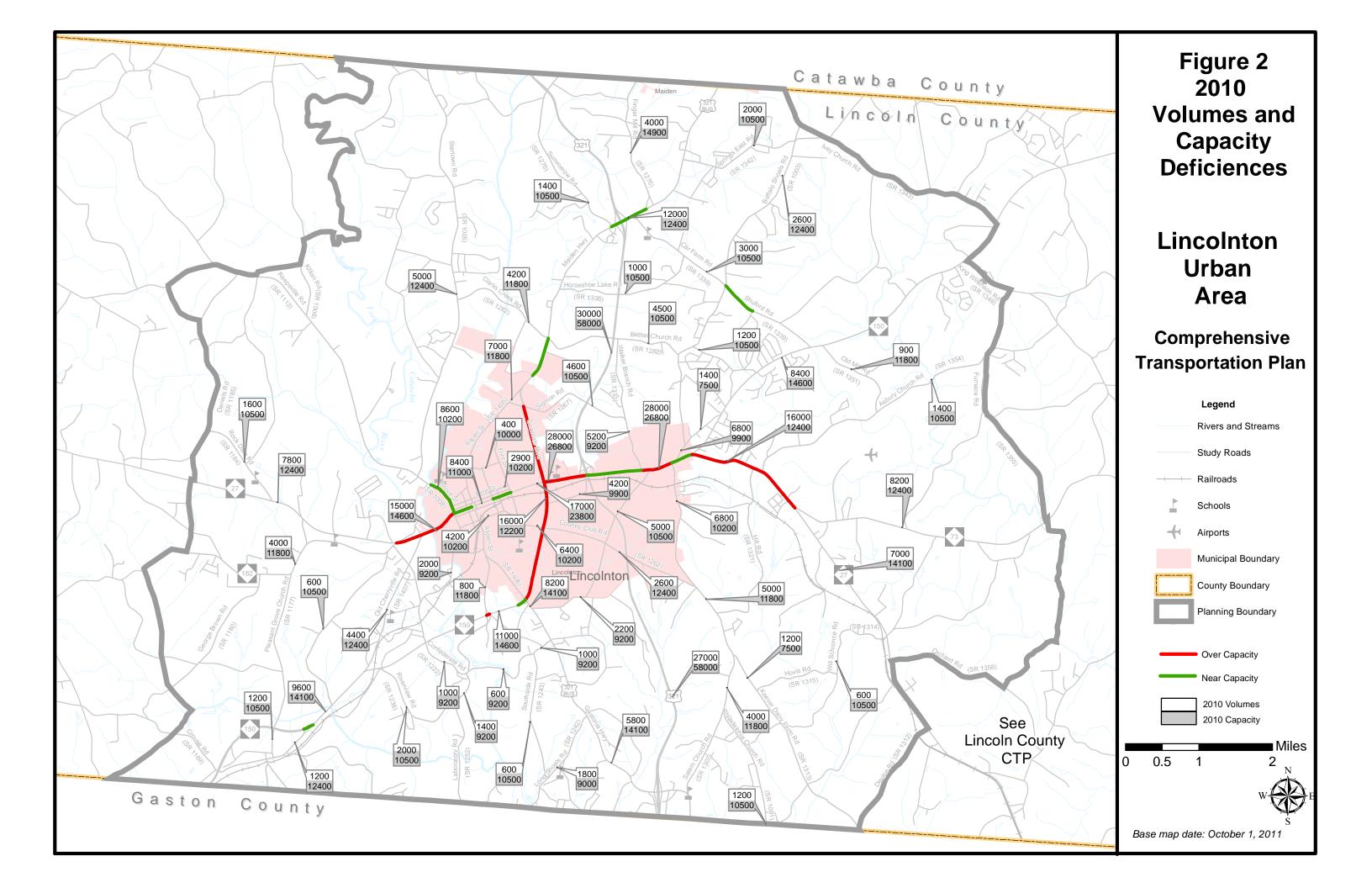
NCDOT's Bicycle Policy, updated in 1991, clarifies responsibilities regarding the provision of bicycle facilities along the 77,000-mile state-maintained highway system. The policy details guidelines for planning, design, construction, maintenance, and

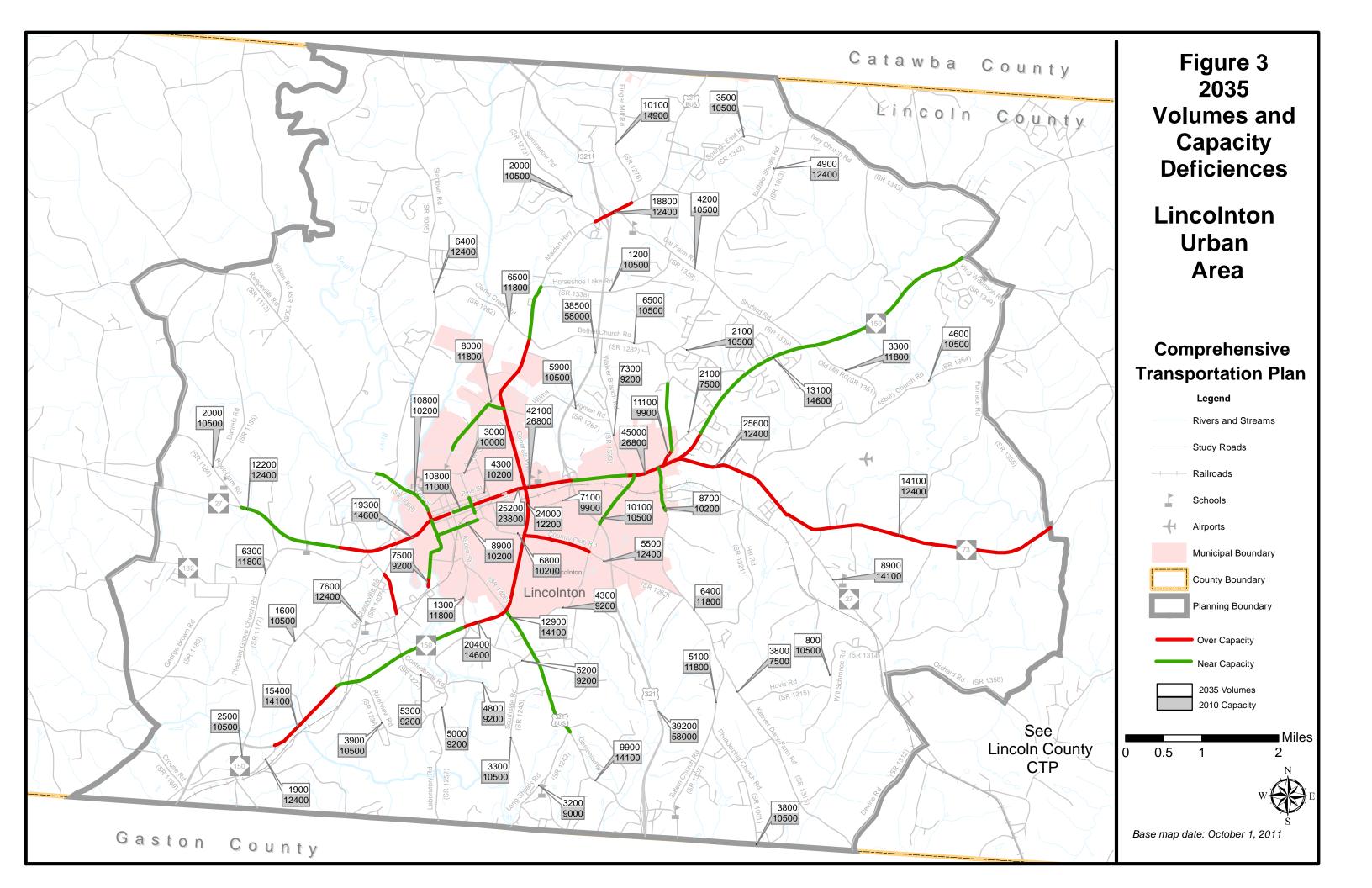
operations pertaining to bicycle facilities and accommodations. All bicycle improvements undertaken by NCDOT are based upon this policy.

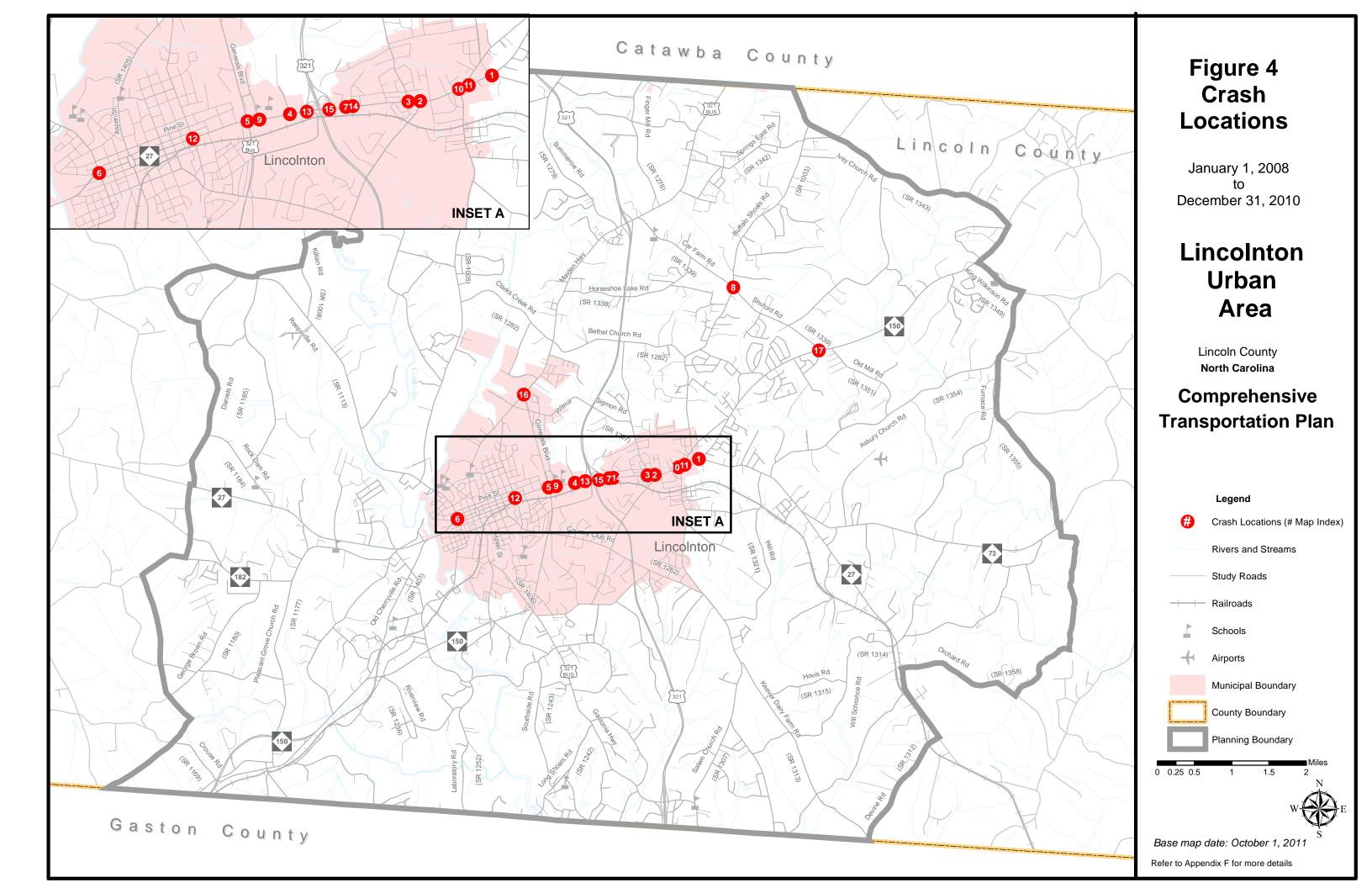
The 2000 NCDOT Pedestrian Policy Guidelines specifies that NCDOT will participate with localities in the construction of sidewalks as incidental features of highway improvement projects. At the request of a locality, state funds for a sidewalk are made available if matched by the requesting locality, using a sliding scale based on population.

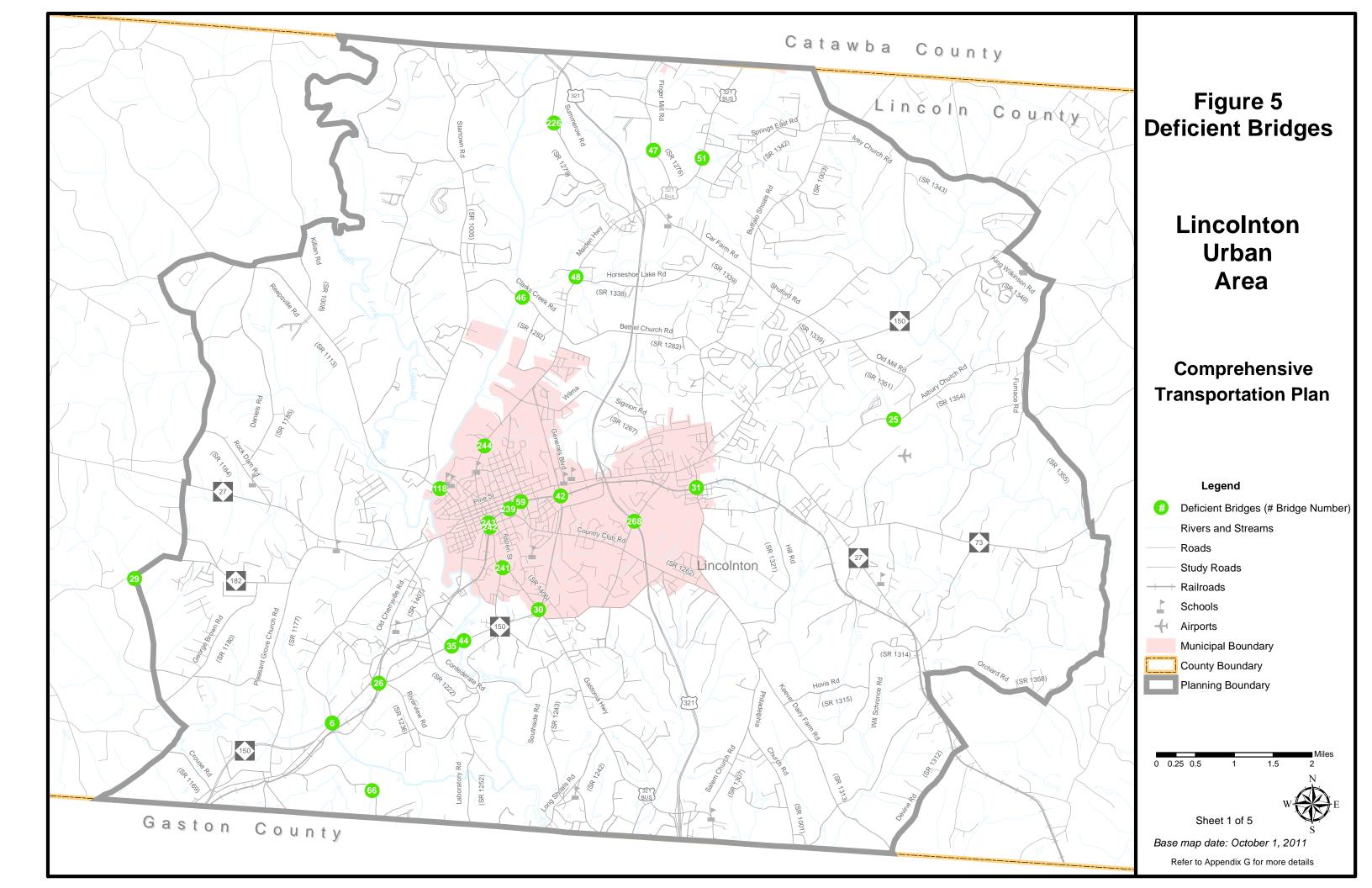
NCDOT's administrative guidelines, adopted in 1994, ensure that greenways and greenway crossings are considered during the highway planning process. This policy was incorporated so that critical corridors which have been adopted by localities for future greenways will not be severed by highway construction.

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The 2009 Carolina Thread Trail Plan for Lincoln County Communities were utilized in the development of these elements of the CTP. Both NC bike routes 6, Piedmont Spur, and 8, Southern Highlands, run through Lincolnton. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information for the Division of Bicycle and Pedestrian Transportation.









#### Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2003 Lincolnton Land Use Plan (reaffirmed in 2010) and the Lincoln County 2007 Comprehensive Land Use Plan were used to meet this requirement and are illustrated in Figures 6 and 7.

Land use refers to the physical patterns of activities and functions within an area. Traffic demand in a given area is, in part, attributed to adjacent land use. For example, a large shopping center typically generates higher traffic volumes than a residential area. The spatial distribution of different types of land uses is a predominant determinant of when, where, and to what extent traffic congestion occurs. The travel demand between different land uses and the resulting impact on traffic conditions varies depending on the size, type, intensity, and spatial separation of development. Additionally, traffic volumes have different peaks based on the time of day and the day of the week. For transportation planning purposes, land use is divided into the following categories:

- Residential: Land devoted to the housing of people, with the exception of hotels and motels which are considered commercial.
- <u>Commercial</u>: Land devoted to retail trade including consumer and business services and their offices; this may be further stratified into retail and special retail classifications. Special retail would include high-traffic establishments, such as fast food restaurants and service stations; all other commercial establishments would be considered retail.
- <u>Industrial</u>: Land devoted to the manufacturing, storage, warehousing, and transportation of products.
- <u>Public</u>: Land devoted to social, religious, educational, cultural, and political activities; this would include the office and service employment establishments.
- Agricultural: Land devoted to the use of buildings or structures for the raising of non-domestic animals and/or growing of plants for food and other production.
- Mixed Use: Land devoted to a combination of any of the categories above.

Anticipated future land development is, in general, a logical extension of the present spatial land use distribution. Locations and types of expected growth within the planning area help to determine the location and type of proposed transportation improvements.

The majority of Lincoln County is rural in nature. The county projects that the majority of the land use within the planning area will be suburban residential with the preservation of rural habitat northwest of Lincolnton along the Catawba River basin. There are several industrial islands spread out around the area. The largest are around the northern interchange of US 321 and US 321 Business (Maiden Highway) and the county airport property. Most business and residential growth is expected on the east

side of Lincolnton along the NC 27 corridor. There are also several parks and trails planned outside of the Lincolnton extraterritorial jurisdiction (ETJ).

Lincolnton has two national historic districts and at least 23 sites are on the National Register of Historic Places. Lincolnton plans to focus on redevelopment and infill of residential, commercial and industrial uses around the North Aspen Street and Generals Boulevard area, the commercial East Main Street corridor, the NC 150 and Gastonia Highway area, and the Poplar Commons neighborhood north of the central business district (CBD).

#### Consideration of Natural and Human Environment

Environmental features are a key consideration in the transportation planning process. Section 102 of the National Environmental Policy Act<sup>3</sup> (NEPA) requires consideration of impacts on wetlands, wildlife, water quality, historic properties, and public lands. While a full NEPA evaluation was not conducted as part of the CTP, efforts were made to minimize potential impacts to these features utilizing the best available data. Any potential impacts to these resources were identified as a part of the project recommendations in Chapter 2 of this report. Prior to implementing transportation recommendations of the CTP, a more detailed environmental study would need to be completed in cooperation with the appropriate environmental resource agencies.

A full listing of environmental features that are typically examined as a part of a CTP study is shown in the following tables. Environmental features occurring within the Lincolnton area are shown in Figure 8 and highlighted in Tables 1 and 2.

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<sup>&</sup>lt;sup>3</sup> For more information on NEPA, go to: <a href="http://ceq.hss.doe.gov/">http://ceq.hss.doe.gov/</a>.

#### Table 1 – Environmental Features

- Airport Boundaries
- Anadromous Fish Spawning Areas
- Beach Access Sites
- Bike Routes (NCDOT)
- Coastal Marinas
- Colleges and Universities
- Conservation Tax Credit Properties
- Emergency Operation Centers
- Federal Land Ownership
- Fisheries Nursery Areas
- Geology (including Dikes and Faults)
- Hazardous Substance Disposal Sites
- Hazardous Waste Facilities
- High Quality Water and Outstanding Resource Water Management Zones
- Hospital Locations
- Hydrography (1:24,000 scale)
- Land Trust Priority Areas
- Natural Heritage Element Occurrences
- National Wetlands Inventory

- North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)
- Paddle Trails Coastal Plain
- Railroads (1:24,000 scale)
- Recreation Projects Land and Water Conservation Fund
- Sanitary Sewer Systems –
   Discharges, Land Application Areas,
   Pipes, Pumps and Treatment
   Plants
- Schools Public and Non-Public
- Shellfish Strata
- Significant Natural Heritage Areas
- State Parks
- Submersed Rooted Vasculars
- Target Local Watersheds EEP
- Trout Streams (DWQ)
- Trout Waters (WRC)
- Water Distribution Systems Pipes, Pumps, Tanks, Treatment Plants, and Wells
- Water Supply Watersheds
- Wild and Scenic Rivers

Additionally, the following environmental features were considered but are not mapped due to restrictions associated with the sensitivity of the data.

#### **Table 2 – Restricted Environmental Features**

- Archaeological Sites
- Historic National Register
   Districts
- Historic National Register Structures
- Macrosite Boundaries
- Managed Areas
- Megasite Boundaries

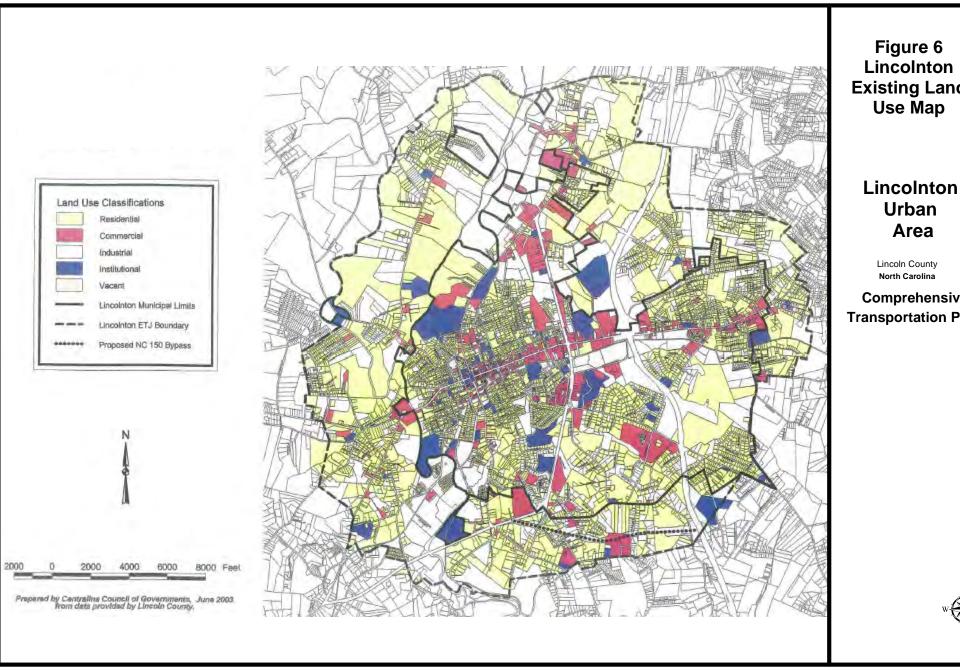
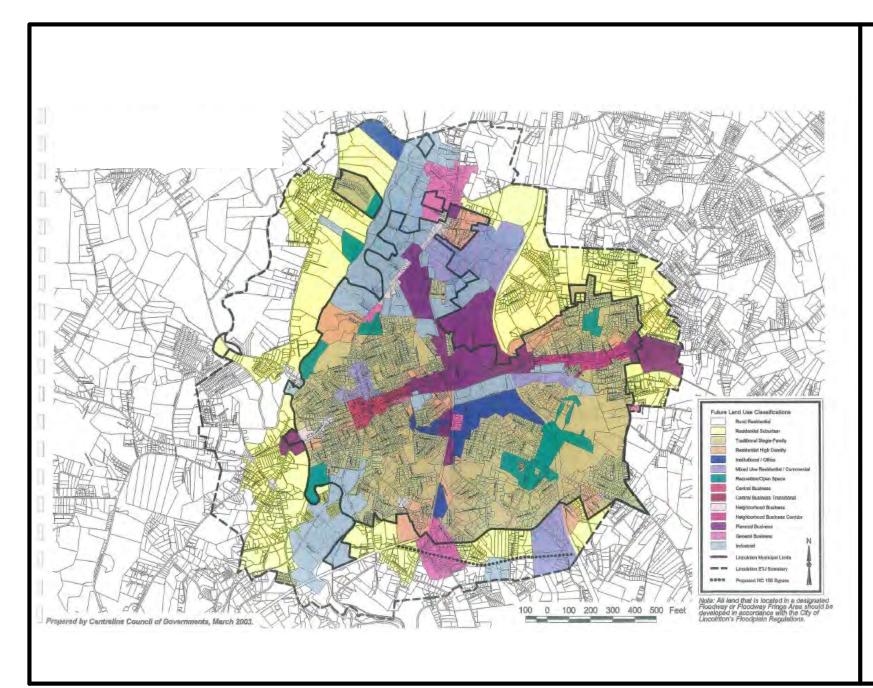


Figure 6 Lincolnton **Existing Land** Use Map

Comprehensive **Transportation Plan** 





### Figure 7 Lincolnton Future Land Use Map

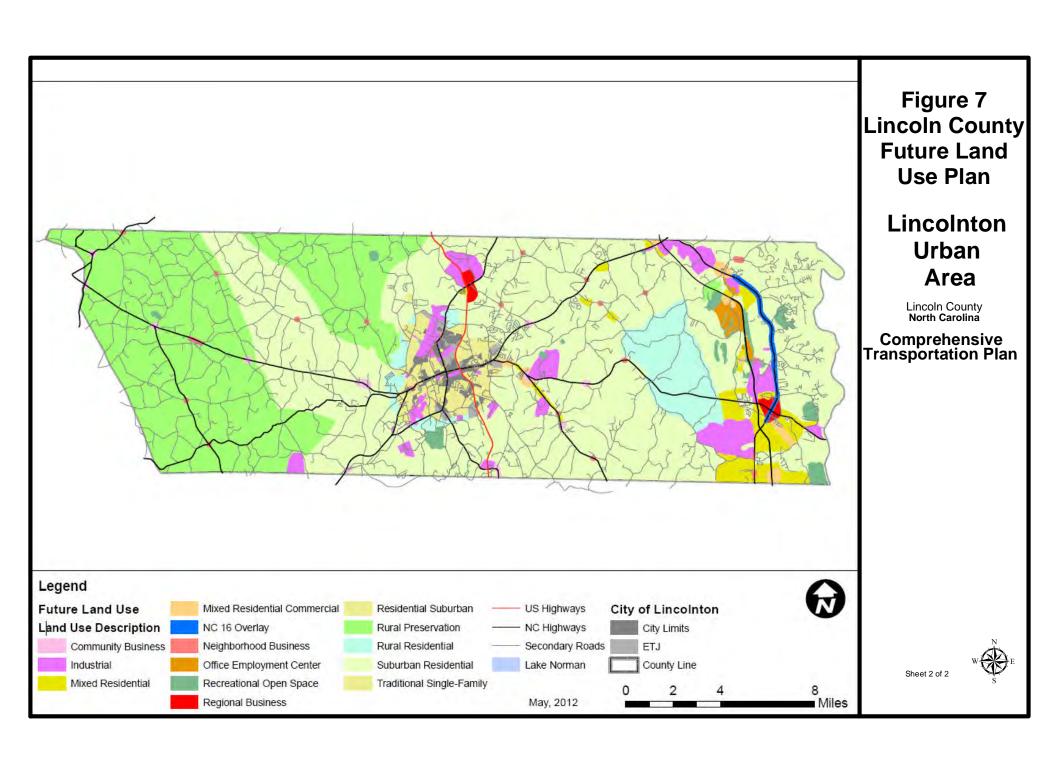
### Lincolnton Urban Area

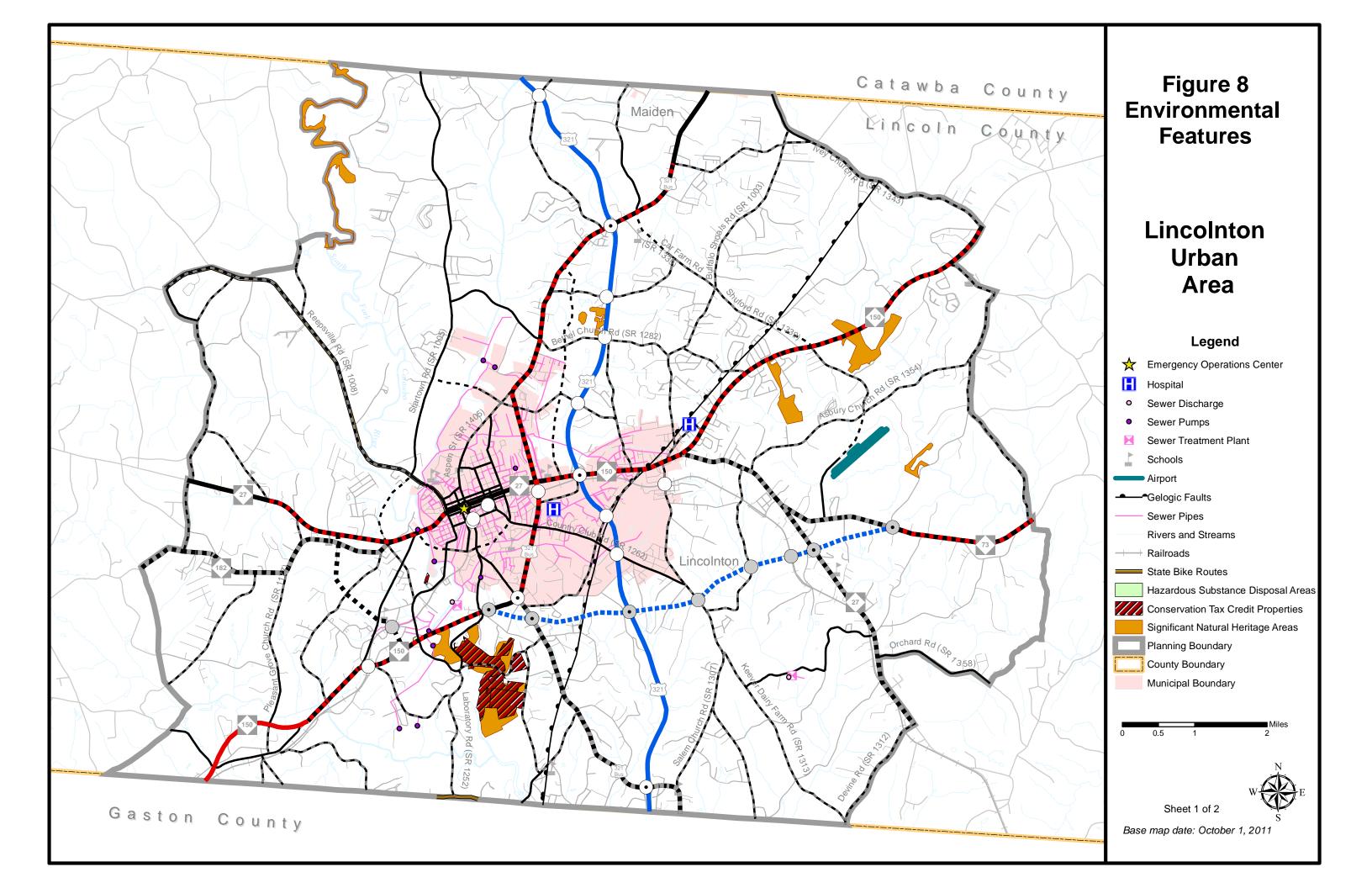
Lincoln County
North Carolina

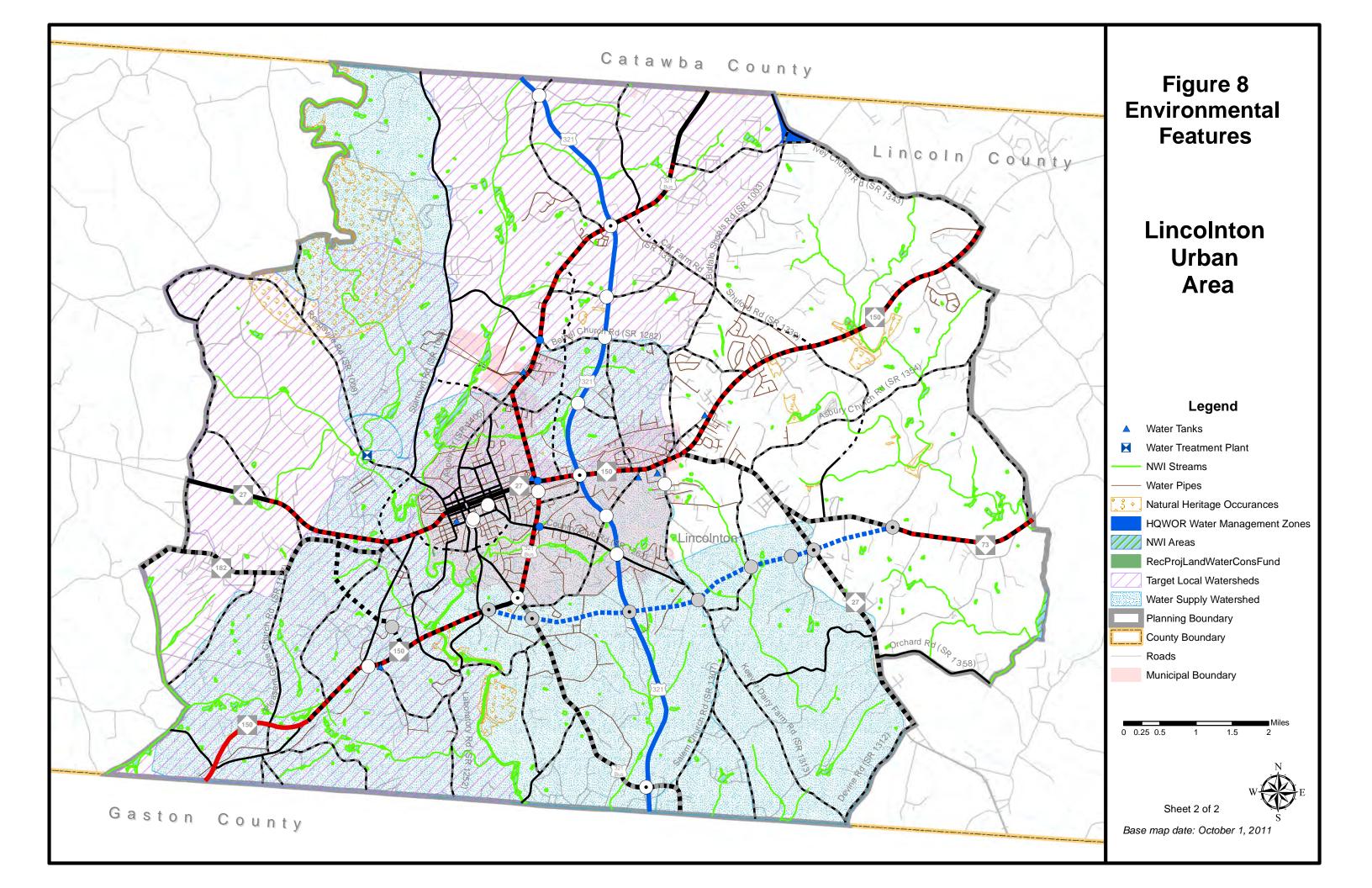
Comprehensive Transportation Plan



Sheet 1 of 2







#### Public Involvement

Public involvement is a key element in the transportation planning process. Adequate documentation of this process is essential for a seamless transfer of information from systems planning to project planning and design. Refer to Appendix H for detailed information on the vision statement, the goals and objectives survey and a listing of committee members.

A meeting was held with the Lincolnton CTP Coordinating Committee in November 2010 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

Throughout the course of the study, the Transportation Planning Branch of NCDOT cooperatively worked with the Lincolnton CTP Coordinating Committee, which included a representative from Lincolnton, county staff, the RPO and others. The committee provided information on current local plans, developed transportation vision and goals, discussed population and employment projections, and developed proposed CTP recommendations.

The public involvement process included holding a public drop-in session in the Lincolnton area to present the proposed CTP to the public and solicit comments. The meeting was held on November 13, 2012 at the Charles R. Jonas Public Library. The session was publicized in the local newspaper and was held from 4:00 pm to 6:00 pm. Five citizens attended the session, but no comment forms were submitted during the session.

Public hearings were held on January 7, 2013 during the Lincoln County Commissioners meeting and on January 10, 2013 during the Lincolnton City Council meeting. The purpose of these meetings was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during the meetings.

The Lake Norman RPO endorsed the CTP on February 26, 2013. The North Carolina Department of Transportation mutually adopted the Lincolnton Urban Area CTP on April 4, 2013.

#### II. Recommendations

This chapter presents recommendations for each mode of transportation in the 2013 Lincolnton Urban Area CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C. For information on areas in the county that were not included as a part of the CTP, refer to the Lincoln County CTP<sup>1</sup>.

#### **Implementation**

The CTP is based on the projected growth for the planning area. It is possible that actual growth patterns will differ from those logically anticipated. As a result, it may be necessary to accelerate or delay the implementation of some recommendations found within this plan. Some portions of the plan may require revisions in order to accommodate unexpected changes in development. Therefore, any changes made to one element of the CTP should be consistent with the other elements.

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the Lincolnton urban area. As transportation needs throughout the state exceed available funding, it is imperative that the local planning area aggressively pursue funding for priority projects. Projects should be prioritized locally and submitted to the Lake Norman RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information for regional prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local government coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and the North Carolina Department of Transportation share the responsibility for access management and the planning, design and construction of the recommended projects.

Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act<sup>2</sup> (SEPA). This CTP may be used to provide information in the NEPA/SEPA process.

#### **Problem Statements**

The following pages contain problem statements for each recommendation, organized by CTP modal element. The information provided in the problem statement is intended to help support decisions made in the NEPA/SEPA process. A full, minimum or reference problem statement is presented for each recommendation, with full problem statements occurring first in each section. Full problem statements are denoted by a

.

<sup>&</sup>lt;sup>1</sup> To view the Lincoln County CTP, go to: <a href="http://digital.ncdcr.gov/cdm/ref/collection/p249901coll22/id/185935">http://digital.ncdcr.gov/cdm/ref/collection/p249901coll22/id/185935</a>

<sup>&</sup>lt;sup>2</sup> For more information on SEPA, go to: <u>http://www.doa.nc.gov/clearing/faq.aspx.</u>

gray shaded box containing project information. Minimum problem statements are more concise and less detailed than full problem statements, but include all known or readily available information. Reference problem statements are developed for TIP projects where the purpose and need for the project has already been established.

#### **HIGHWAY**

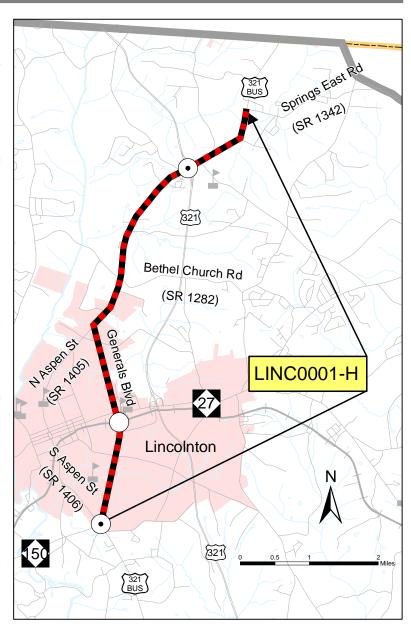
US 321 Business Proposed Widening from South Aspen Street (SR 1406) to Springs East Road (SR 1342)

#### **Identified Problem**

The majority of US 321 Business is projected to be near or over capacity by 2035 from South Aspen Street (SR 1406) to Springs East Road (SR 1342). The primary purpose of this project is to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

#### **Justification of Need**

US 321 Business is a major northsouth corridor through Lincoln connecting downtown County, Lincolnton with rural areas in the county. The facility is a vital artery for moving people and goods into and out of Lincolnton and serving as an alternative local route to US 321. US 321 Business is part of both the statewide and regional the NC Multimodal tiers of Investment Network<sup>3</sup> (NCMIN). Statewide tier facilities serve longdistance trips, connect regional centers, have the highest usage, and mostly serve a mobility need. Regional tier facilities can serve statewide transportation, but they usually connect major population centers and provide a more localized function including land access.



Local ID: LINC0001-H

**Last Updated: 12/1/12** 

US 321 Business is currently a two lane major thoroughfare with 12 foot lanes from South Aspen Street (SR 1406) to NC 27, a three lane facility from NC 27 to Bethel Church Road (SR 1282), and a two lane facility from Bethel Church Road (SR 1282) to Springs East Road (SR 1342). By 2035 the majority of this facility is projected to be near or over

<sup>3</sup> For more information on NCMIN, go to: <u>http://www.ncdot.gov/performance/reform/NCMINmaps/</u>.

capacity from South Aspen Street (SR 1406) to Springs East Road (SR 1342) based on providing a LOS D. Traffic is projected to increase from a range of 5,800 to 16,000 vehicles per day (vpd) in 2010 to a range of 8,900 to 24,500 vpd in 2035, compared to a LOS D capacity of 12,200 to 13,300 vpd.

#### **Community Vision and Problem History**

Lincolnton is the county seat of Lincoln County and is the center of activity for the county. Several major regional roads converge in Lincolnton bringing traffic from all directions. Lincolnton has historically tried to maintain the look and feel of its downtown, despite the increase in activity.

The Generals Boulevard section of US 321 Business, from South Aspen Street (SR 1406) to North Aspen Street (SR 1405), was built in the early 1950s as the first "bypass" around downtown Lincolnton to move traffic off of Aspen Street which goes around Court Square. Although the construction of the present US 321 was completed in the 1990s, US 321 Business still carries a considerable amount of local traffic in and out of Lincolnton.

The 1996 Lincolnton Thoroughfare Pan identified US 321 Business north of NC 27 (East Main Street) as being over capacity in the future year 2020.

#### **CTP Project Proposal**

#### **Project Description and Overview**

The recommended improvement is to widen US 321 Business from a two and three lane facility to a four lane divided boulevard from South Aspen Street (SR 1406) to Springs East Road (SR 1342). Additionally, a portion of this recommendation along Generals Boulevard includes a multi-use path. The proposed improvements to US 321 Business will help to reduce congestion in the corridor.

Additionally, during the most recent three year period, the intersection of US 321 Business and NC 27 experienced 24 crashes and the intersection of US 321 Business and North Aspen Street (SR 1405) experienced 12 crashes. The average severity indexes at these locations were 4.39 and 2.85 respectively, compared to the state's 4.37 average index for the same period.

#### **Natural & Human Environmental Context**

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed and/or the targeted local watershed. Wetlands have been identified as being within 200 feet of US 321 Business near Country Club Road (SR 1262), Tait Mill Road, Horseshoe Lake Road (SR 1338) and Springs East Road (SR 1342). The proposed project also crosses several streams and water and sewer pipes. There are several water tanks and pumps adjacent to this facility. Additionally, NCDOT's Structures Management Unit identified bridge #30 over NC 150; bridge #42 over Seaboard Coastline Railroad; bridge #48 over Carpenters Creek; and bridge #51 over Lockards Creek as functionally obsolete.

#### **Relationship to Land Use Plans**

Existing land use along the corridor is mostly business within the city and residential north of the city. There are several industrial islands spread out around the area. One of the largest is around the northern interchange of US 321 and US 321 Business (Maiden Highway).

The 2003 Lincolnton Land Use Plan (reaffirmed in 2010) indicates that Lincolnton plans to focus on redevelopment and infill of residential, commercial and industrial uses around the North Aspen Street and US 321 (Generals Blvd) area north of the Central Business District (CBD). Property along US 321 Business will be suburban residential, regional business and industrial outside of the city with an increased mix of residential and business development within the city.

# **Linkages to Other Plans and Proposed Project History**

The 1996 Lincolnton Thoroughfare Plan recommended widening US 321 Business to a five lane facility from Hoffman Road (SR 1526) to Bethel Church Road (SR 1282).

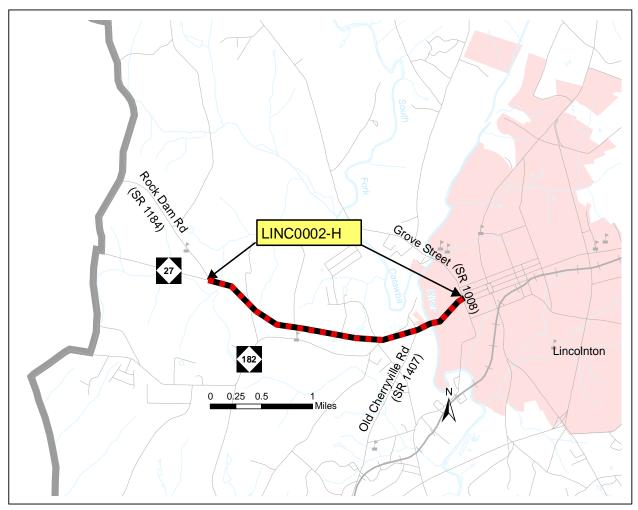
#### **Multi-modal Considerations**

The CTP includes recommendations for public transportation, bicycle and pedestrian facilities in the Lincolnton urban area. There are specific recommendations for adding a multi-use path along US 321 Business (Generals Boulevard) north of S Aspen Street (SR 1406). Also, the current Transportation Lincoln County (TLC) bus route runs along US 321 Business (Generals Boulevard) from their offices on Gaston Street Extension (SR 1419) to N Aspen Street (SR 1405). A deviated fixed route service between Lincolnton and Shelby will also use US 321 Business (Generals Boulevard).

#### **Public/ Stakeholder Involvement**

Respondents to the goals and objectives survey conducted for the CTP identified safety as a concern at the intersection of US 321 Business (Generals Boulevard) and Country Club Road/Laurel Street and the US 321 Business (Maiden Highway) and Car Farm Road (SR 1339) intersection.





#### **Identified Problem**

NC 27 (Riverside Drive) is projected to be near or over capacity by 2035 from Rock Dam Road (SR 1184) to Grove Street (SR 1008). The primary purpose of this project is to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

#### **Justification of Need**

NC 27 is the only major east-west corridor through Lincoln County, connecting downtown Lincolnton with the rural areas of the county and to the greater Charlotte area. The facility is part of the regional tier of the NC Multimodal Investment Network (NCMIN), connecting major population centers and providing local land access.

This segment of NC 27 (Riverside Drive) is currently a two lane major thoroughfare with 12 foot lanes from Rock Dam Road (SR 1184) to Grove Street (SR 1008). By 2035 the facility is projected to be near or over capacity from Rock Dam Road (SR 1184) to

Grove Street (SR 1008) based on providing a LOS D. Traffic is projected to increase from a range of 7,800 to15,000 vpd in 2010 to a range of 12,200 to 19,300 vpd in 2035, compared to a LOS D capacity of 12,400 to 14,600 vpd.

## **Community Vision and Problem History**

Several major regional roads converge in the city bringing traffic from all directions. NC 27 brings traffic into Lincolnton from the rural areas on the west side of the county.

The 1996 Lincolnton Thoroughfare Plan identified this section of NC 27 (Riverside Drive) as being over capacity in the future year 2020.

#### **CTP Project Proposal**

# **Project Description**

The recommended improvement is to widen NC 27 (Riverside Drive) from a two lane facility to a four lane divided boulevard from Rock Dam Road (SR 1184) to Grove Street (SR 1008) with provisions for bicycles from NC 182 to Grove Street (SR 1008). The proposed improvements will help reduce congestion on the facility. Additionally, a multiuse path is recommended along this facility from NC 182 to Rock Dam Road (SR 1184).

During the most recent three year period, the intersection of NC 27 (Riverside Drive) and Grove Street (SR 1008) experienced 11 crashes with an average severity index of 4.36, which was less than the state's 4.37 average index for the same period.

# **Relationship to Land Use Plans**

Existing land use in this area is commercial between Grove Street (SR 1008) and NC 182 with a mix of suburban and rural commercial and residential to the west. The 2003 Lincolnton Land Use Plan (reaffirmed in 2010) indicates that Lincolnton plans to transition the land use from traditional residential to commercial and suburban residential around the Rock Dam Road (SR 1184) intersection.

#### **Linkages to Other Plans and Proposed Project History**

The 1996 Lincolnton Thoroughfare Plan recommended widening this section of NC 27 (Riverside Drive) to a five lane cross section from NC 182 to Gainsville Church Road (SR 1181). The 2005 Lincoln County Plan did not recommend any improvements.

#### **Natural & Human Environmental Context**

Based on a planning level environmental assessment using available GIS data, the project area is within the target watershed and water supply watershed area. This section of NC 27 (Riverside Drive) crosses the South Fork Catawba River, several streams on the National Wetlands Inventory, and water and sewer lines. There is also a sewer pump located along this facility near Old Cherryville Road (SR 1407).

#### **Multi-modal Considerations**

The CTP includes recommendations for bicycle and pedestrian facilities in the Lincolnton urban area. There are specific recommendations for bicycle improvements

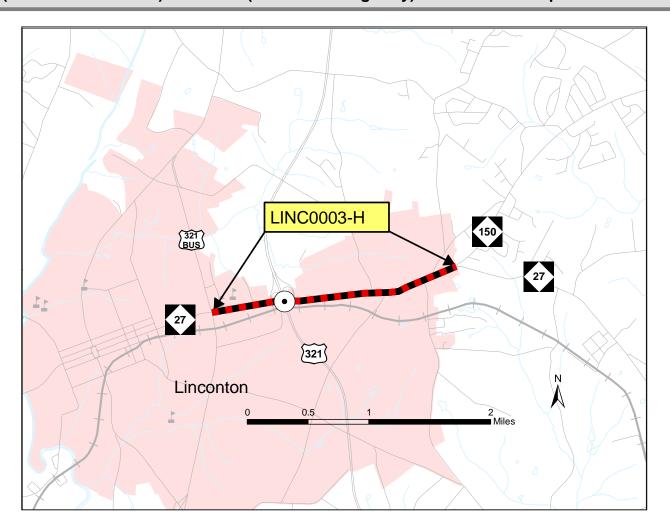
since NC Bicycle Route 8 follows NC 27 (Riverside Drive) from NC 182 to Grove Street (SR 1008). Additionally, a multi-use path is recommended along this facility from NC 182 to Rock Dam Road (SR 1184).

#### **Public/ Stakeholder Involvement**

Respondents to the goals and objectives survey conducted for the CTP identified safety of the signalization at the NC 27 and Grove Street (SR 1008) intersection as a concern.

NC 27 (E. Main Street) Proposed Widening from US 321 Business Local ID: LINC0003-H (Generals Boulevard) to NC 150 (Mooresville Highway)

Last Updated: 12/1/12



#### **Identified Problem**

NC 27 (E. Main Street) is currently near or over capacity from US 321 Business (Generals Boulevard) to NC 150 (Mooresville Highway). The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

#### **Justification of Need**

NC 27 is the only major east-west corridor through Lincoln County, connecting downtown Lincolnton with rural areas in the county and the greater Charlotte area. This section of NC 27 (E. Main Street) is concurrent with NC 150 and is part of the statewide tier of the NC Multimodal Investment Network (NCMIN). Statewide tier facilities serve long-distance trips, connect regional centers, have the highest usage, and mostly serve a mobility need.

NC 27 (E. Main Street) is currently a five lane major thoroughfare with 12 foot lanes from US 321 Business (Generals Boulevard) to NC 150 (Mooresville Highway). Traffic is projected to increase from a range of 23,000 to 28,000 vpd in 2010 to a range of 25,800 to 45,000 vpd in 2035, compared to a LOS D capacity of 26,800 vpd. Even with implementation of the proposed parallel routes south of the Lincolnton city limits, NC 150 Relocation (R-0617C) and NC 73 Extension (LINC0005-H), several sections of this stretch of NC 27 (E. Main Street) will be approaching capacity.

# **Community Vision and Problem History**

Lincolnton is the county seat of Lincoln County and is the center of activity for the county. Several major regional roads converge in the city bringing traffic from all directions. This section of East Main Street is signed as both NC 27 and NC 150. Lincolnton would like to maintain the vitality of the commercial development along the length of NC 27 and maintain the movement of traffic through town.

The 1996 Lincolnton Thoroughfare Plan identified several sections of NC 27 (E Main Street) as being over capacity in the future year 2020.

#### **CTP Project Proposal**

#### **Project Description**

The recommended improvement is to widen NC 27 (E. Main Street) from a five lane facility to a four lane divided boulevard from US 321 Business (Generals Boulevard) to NC 150 (Mooresville Highway) with provisions for bicycles and pedestrians.

Additionally, during the most recent three year period, twelve intersections along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's 4.37 average for the same period. Those intersections included: NC 150 (Mooresville Highway), Buffalo Shoals Road (SR 1003), Salem Church Road (SR 1001), Lithia Inn Road (SR 1294), Walker Branch Road (SR 1267), Hubbard Street, Stanford Road, US 321, Gaston Street Extension (SR 1419), Roper Road (SR 1287), Newbold Street (SR 1286), and US 321 Business (Generals Boulevard). Refer to Appendix F for more detailed information on these locations.

The proposed improvements will help reduce congestion and improve mobility on the facility.

#### **Relationship to Land Use Plans**

The existing land uses along NC 27 (E. Main Street) is dense commercial. The 2003 Lincolnton Land Use Plan (reaffirmed in 2010) shows future land use along this section of NC 27 (E. Main Street) as commercial.

#### **Linkages to Other Plans and Proposed Project History**

The 1996 Lincolnton Thoroughfare Plan recommended widening this stretch of NC 27 (East Main Street) to a five lane urban section from US 321 to NC 150. Also, this

section of NC 27 (East Main Street) is designated as a boulevard on NCDOT's Strategic Highway Corridor Vision Plan that was adopted on September 2, 2004.

#### **Natural & Human Environmental Context**

Based on planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed area and crosses water and sewer lines. The proposed project also crossed a geologic fault line east of Lithia Inn Road (SR 1294) and has water pumps and tanks located in the vicinity of the US 321 Business (Generals Boulevard) intersection.

#### **Multi-modal Considerations**

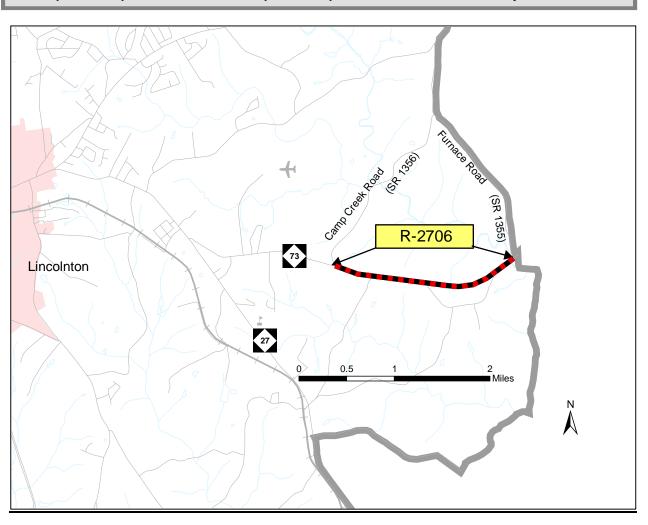
The CTP includes recommendations for transit, bicycle and pedestrian facilities in the Lincolnton urban area. Transportation Lincoln County operates a bus route along this stretch of NC 27 (E. Main Street), but does not make any stops. NC Bicycle Route 6 also runs along this stretch of NC 27 (E. Main Street) and bicycle accommodations are recommended. There are intermittent sections of sidewalk along this stretch of NC 27 (E. Main Street) and improvements are recommended to fill the gaps. There are also recommendations for adding multi-use paths that will cross this section of NC 27 (E. Main Street).

#### **Public/ Stakeholder Involvement**

Respondents to the goals and objectives survey conducted for the CTP made general comments about the following:

- Better synchronization or reduction of signals on NC 27 (E. Main Street) between US 321 Business (Generals Boulevard) and NC 150 (Mooresville Highway);
- Turning traffic on Main Street between Generals Boulevard and NC 150 E;
- Restricting multiple driveway access along NC 27 (E. Main Street); and
- Safety at the intersection of Buffalo Shoals Road (SR 1003) and NC 27.

NC 73 Proposed Widening from Camp Creek Road (SR 1356) to Furnace Road (SR 1355)



Local ID: R-2706

**Last Updated: 12/1/12** 

#### **Identified Problem**

NC 73 is projected to be over capacity by 2035 from Camp Creek Road (SR 1356) to Furnace Road (SR 1355). The primary purpose of this project is to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

#### **Justification of Need**

NC 73 connects the Lincolnton urban area with northern Mecklenburg County. The facility is a vital artery for moving people and goods into and out of Lincoln County. NC 73 is part of the statewide tier of the NC Multimodal Investment Network (NCMIN), serving long-distance trips, connecting regional centers, having the highest usage, and serving a mobility need.

NC 73 is currently a two lane major thoroughfare with 11 foot lanes from Camp Creek Road (SR 1356) to Furnace Road (SR 1355). Traffic is projected to increase from 8,400 vpd in 2010 to 14,300 vpd in 2035, compared to a LOS D capacity of 14,100 vpd.

#### **Community Vision and Problem History**

Lincolnton is the county seat of Lincoln County and is the center of activity for the county. NC 16, which parallels Lake Norman in eastern Lincoln County, is a major development center. NC 73 is seen as an important gateway into Lincoln County and Lincolnton from the east and is one of the few major facilities that connect to NC 16. Additionally, NC 73 is the only facility that currently provides access to the Lincolnton-Lincoln County Regional Airport.

The 2005 Lincoln County CTP identified this section of NC 73 as being over capacity in the future year 2030.

#### **CTP Project Proposal**

# **Project Description**

The recommended improvement is to widen NC 73 from a two lane facility to a four lane divided boulevard from Camp Creek Road (SR 1356) to Furnace Road (SR 1355) with provisions for bicycles. The proposed improvements will help reduce congestion on the facility.

#### **Relationship to Land Use Plans**

The existing land use along this section of NC 73 is suburban residential. The 2007 Lincoln County Land Use Plan indicates that along NC 73 east of NC 27 the land use will be mostly rural residential. The county airport and a future industrial park lie just to the west of the proposed project. The land use plan also shows a need for a community park north of NC 73 along Camp Creek Road (SR 1356).

#### **Linkages to Other Plans and Proposed Project History**

The 2005 Lincoln County Comprehensive Transportation Plan recommends widening this stretch of NC 73 to a four lane divided facility with provisions for bicycles from the planning area boundary to Mecklenburg County. The 2004 NC 73 Transportation and Land Use Corridor Plan<sup>4</sup> (NCDOT) also recommended multi-laning this section of NC 73. This study evaluated the NC 73 corridor from US 321 in Lincoln County to I-85 in Cabarrus County.

The proposed project will have a direct connection to the proposed NC 73 Extension (LINC0005-H) via an interchange at Camp Creek Road (SR 1256).

#### **Natural & Human Environmental Context**

Based on an environmental assessment using available GIS data, one National Wetland Inventory stream will be crossed near Furnace Road (SR 1355).

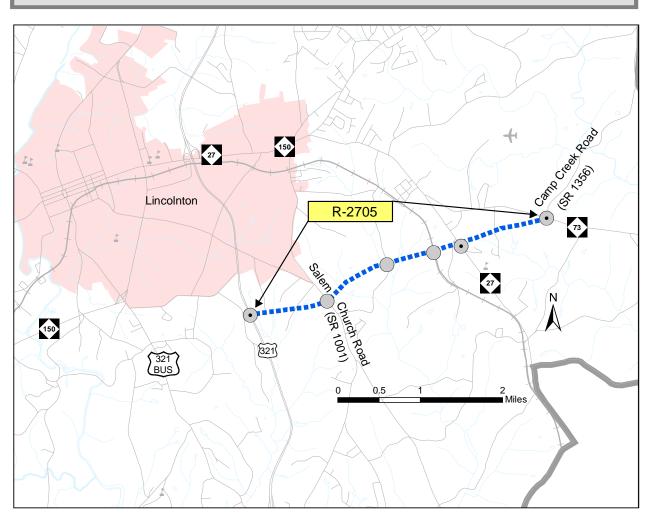
#### **Multi-modal Considerations**

There is a recommendation for an express bus route along NC 73 that will connect Lincolnton to northern Mecklenburg County. Also, NC Bicycle Route 6 runs along NC 73 and bicycle accommodations are recommended.

<sup>&</sup>lt;sup>4</sup> To view the 2004 NC 73 Transportation and Land Use Corridor Plan, go to: <a href="http://www.ncdot.gov/projects/NC73/">http://www.ncdot.gov/projects/NC73/</a>.

# **Public/ Stakeholder Involvement**

No significant issues associated with this project were identified during the public/stakeholder involvement process.



Local ID: R-2705

**Last Updated: 12/1/12** 

#### **Identified Problem**

NC 27 is the only major east-west corridor through Lincoln County, connecting downtown Lincolnton with areas east and west. Even with the implementation of proposed improvements to NC 27 (LINC0002-H and LINC0003-H), sections of NC 27 are projected to be near or over capacity by 2035 from US 321 to NC 73. The primary purpose of this project is to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

#### **Justification of Need**

NC 27 is a vital artery for moving people and goods into and out of Lincolnton. Several major regional roads converge in the city bringing traffic from all directions. NC 150 runs southwest to northeast through Lincoln County connecting downtown Lincolnton with the Lake Norman area and other municipalities in the region. NC 150 is concurrent with NC 27 (E. Main Street) between US 321 Business (Generals Boulevard) and NC 150 (Mooresville Highway). NC 73 ends at NC 27 on the east side of Lincolnton. NC

73 also connects Lincolnton with the Lake Norman area and Mecklenburg County. NC 27, NC 73 and NC 150 are part of the statewide tier of the NC Multimodal Investment Network (NCMIN). Statewide tier facilities serve long-distance trips, connect regional centers, have the highest usage, and mostly serve a mobility need. NC 73 and NC 150 are also designated as boulevards on NCDOT's Strategic Highway Corridor (SHC) Vision Plan that was adopted on September 2, 2004.

NC 27 is currently a five lane major thoroughfare with 12 foot lanes from US 321 to NC 150 (Mooresville Highway). From NC 150 (Mooresville Highway) to NC 73 it is a two lane facility with 11 foot lanes. Traffic is projected to increase from a range of 15,000 to 28,000 vpd in 2010 to a range of 24,000 to 45,000 vpd in 2035, compared to a LOS D capacity of 12,400 to 26,800 vpd. CTP project proposal LINC0003-H recommends widening NC 27 (E. Main Street) to a four lane boulevard from US 321 Business (Generals Boulevard) to NC 150 (Mooresville Highway). Upon implementing this project, this section of NC 27 (E. Main Street) would have a LOS D capacity of 35,100 vpd. Even with the implementation of this recommendation (LINC0003-H), NC 27 (E. Main Street) will not have enough available capacity to handle the projected traffic.

#### **Community Vision and Problem History**

Lincolnton is the county seat of Lincoln County and is the center of activity for the county. Several major regional roads converge in the city bringing traffic from all directions. The section of NC 27 (East Main Street) between US 321 Business (Generals Boulevard) and NC 150 (Mooresville Highway) is signed as both NC 27 and NC 150. Lincolnton would like to maintain the vitality of the commercial development along the length of NC 27 and maintain the movement of traffic through town despite the increase in activity along the corridor.

The 1996 Lincolnton Thoroughfare Plan identified NC 27 as being over capacity in the future year 2020.

#### **CTP Project Proposal**

#### **Project Description**

The recommended improvement is to extend NC 73 on new location from Camp Creek Road (SR 1356) west to US 321. The proposed facility will be a four lane freeway that will parallel NC 27 (E. Main Street). Interchanges are recommended at US 321, NC 27, and at the existing NC 73. Grade separations are recommended at Salem Church Road (SR 1001), Hill Road (SR 1321 and over the railroad. The proposed improvements will help reduce congestion on NC 27.

#### Relationship to Land Use Plans

The existing land use in the area of the proposed project is rural in nature. The 2007 Lincoln County Land Use Plan indicates that the area south of Lincolnton and NC 27 (East Main Street) will be suburban residential with sporadic locations for businesses.

# **Linkages to Other Plans and Proposed Project History**

The 1996 Lincolnton Thoroughfare Plan recommended both widening of the existing facility and a bypass facility on the south side of Lincolnton. The ability to widen the existing facility outside the current right of way is limited because of the numerous existing businesses with buildings or parking close to the current right of way. The plan recommended the extension of NC 73 as a multi-lane facility.

The 2004 NC 73 Transportation and Land Use Study<sup>5</sup> (NCDOT) also recommended extending NC 73 to US 321. Additionally, the extension of NC 73 as a freeway on new location is part of NCDOT's SHC Vision Plan. The proposed project will connect to the NC 150 Relocation (R-0617C) recommendation at US 321. The relocation of NC 150 (R-0617C) west of US 321 as a freeway on new location is also part of the NCDOT's SHC Vision Plan.

#### **Natural & Human Environmental Context**

Based on an environmental assessment using available GIS data, the majority of the proposed project is within the water supply watershed. The proposed alignment crosses water pipes, an active railroad, and at least two streams on the National Wetlands Inventory.

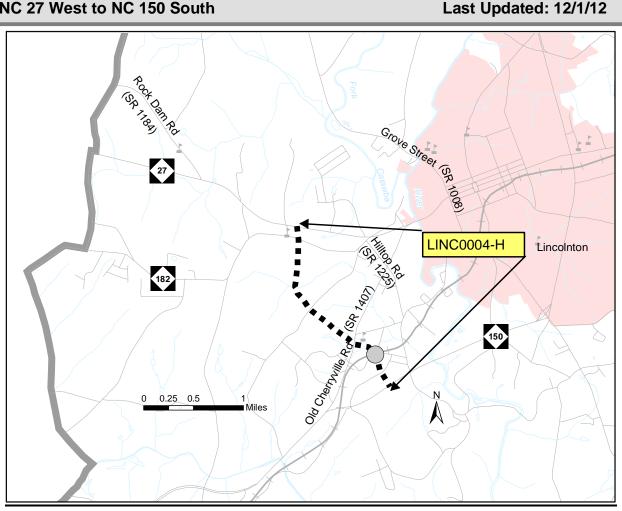
#### **Multi-modal Considerations**

There are no other modes of transportation recommended along the proposed project. However, the CTP includes recommendations for bicycle and pedestrian facilities in the Lincolnton urban area. An existing Transportation Lincoln County bus route travels along NC 27 (E. Main Street), but does not make any stops. There are also recommendations for adding provisions for bicycles and/or sidewalks facilities along NC 27 and NC 73. Mobility and safety for pedestrians would be improved if there were fewer vehicles on NC 27 (E. Main Street).

#### **Public/ Stakeholder Involvement**

Respondents to the goals and objectives survey conducted for the CTP made general comments about the fact that there is only one major east-west facility through the entire urban area. Respondents also expressed concerns about the dangerous curve at NC 27 and Sunny Hill Drive.

<sup>&</sup>lt;sup>5</sup> To view the 2004 NC 73 Transportation and Land Use Corridor Plan, go to: http://www.ncdot.gov/projects/NC73/.



Local ID: LINC0004-H

#### **Identified Problem**

NC 27, NC 150 and NC 182 are major east-west corridors leading into downtown Lincolnton. There are currently no major north-south facilities west of Lincolnton connecting these major corridors. Improvements are needed to improve system linkage and mobility in this area of the county.

#### **Justification of Need**

NC 27, NC 150 and NC 182 are major regional roads that converge in the Lincolnton bringing traffic from all directions. NC 27 and NC 182 bring traffic into Lincolnton from the rural areas on the west side of the county while NC 150 also brings traffic into Lincolnton from the south. NC 27 is the only major east-west corridor through Lincoln County, connecting downtown Lincolnton with the rural areas of the county and to the greater Charlotte area. On the west side of Lincolnton it also provides local land access. Currently, there are no major north-south facilities on the west side of Lincolnton linking these major facilities. Traffic must come all the way into town to travel west or south. Additionally, by 2035 both NC 27 and NC 150 are projected to be over capacity.

#### **Community Vision and Problem History**

Lincolnton would like to maintain the vitality of the downtown area and the movement of traffic through town despite the increase in activity along these corridors.

The 1996 Lincolnton Thoroughfare Plan identified the aforementioned capacity deficiencies along NC 27 and NC 150 as well as the system linkage deficiency.

#### CTP Project Proposal

#### **Project Description**

The recommended improvement is to connect NC 27 (Riverside Drive) to NC 150 (Cherryville Highway) with a two lane major thoroughfare on new location. This proposed facility will connect NC 27 (Riverside Drive) with NC 182, Old Lincolnton-Crouse Road (SR 1228), Old Cherryville Road (SR 1407), Love Memorial School Road (SR 1416), and NC 150 (Cherryville Highway) and will include a grade separation over the railroad. The proposed improvements will improve mobility in this area and will help reduce congestion on NC 27, NC 150 and Hilltop Road (SR 1225), which is parallel to the proposed corridor.

#### **Relationship to Land Use Plans**

Existing land use in this area is commercial between Grove Street (SR 1008) and NC 150 with a mix of suburban and rural residential to the west. The 2003 Lincolnton Land Use Plan (reaffirmed in 2010) indicates that Lincolnton plans to transition the land use north of NC 150 from traditional residential to industrial.

#### **Linkages to Other Plans and Proposed Project History**

The 1996 Lincolnton Thoroughfare Plan recommended a linkage between this section of NC 27 (Riverside Drive) and NC 150 (Cherryville Highway) as part of a four lane loop around Lincolnton.

#### Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, the project area is within a water supply watershed area. There are several streams on the National Wetlands Inventory, and water and sewer lines. There are also two schools, Love Memorial Elementary School and Lincoln Charter School, in the vicinity of the proposed corridor.

#### **Multi-modal Considerations**

There are no other modes of transportation associated with the proposed project.

#### **Public/ Stakeholder Involvement**

In discussions with the Lincolnton Planning Board during the public involvement process, concerns were raised about the amount of traffic entering the downtown area to travel south and west and the lack of a north-south connection west of Lincolnton.

#### NC 150 (Mooresville Highway), Local ID: LINC0005-H

NC 150 (Mooresville Highway) is projected to be near capacity by 2035 from NC 27 (E. Main Street) to Ivey Church Road (SR 1343), with a short segment projected to be over capacity. The primary purpose of this project is to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

NC 150 is part of the statewide tier of the NC Multimodal Investment Network (NCMIN), serving long-distance trips, connecting regional centers, having the highest usage, and serving a mobility need. NC 150 is currently a two lane major thoroughfare with 12 foot lanes from NC 27 (E. Main Street) to Ivey Church Road (SR 1343). Traffic is projected to increase from a range of 8,200 to 9,800 vpd in 2010 to a range of 11,800 vpd to 15,600 vpd in 2035, compared to a LOS D capacity of 14,600 to 15,100 vpd. The recommended improvement is to widen NC 150 (Mooresville Highway) from a two lane facility to a four lane divided boulevard from NC 27 (E. Main Street) to Ivey Church Road (SR 1343). The proposed improvements will help reduce congestion on the facility. The CTP also includes a recommendation for an express bus route along this facility to connect Lincolnton with Mooresville.

Based on an environmental assessment using available GIS data, the proposed project may potentially impact significant natural heritage areas located east and west of Shuford Road (SR 1330). NC 150 also crosses water pipes and at least one stream on the National Wetlands Inventory. A regional hospital is located in Lincolnton at the NC 27 end of the corridor.

The 1996 Lincolnton Thoroughfare Plan recommended the improvement of NC 150 (Mooresville Highway) to a multi-lane facility. This section of NC 150 is designated as a boulevard on NCDOT's Strategic Highway Corridor Vision Plan adopted by NCDOT on September 2, 2004. Additionally, this section of NC 150 (Mooresville Highway) was originally part of TIP No. R-2307, but due to funding and scheduling constraints, was removed from the TIP project to stand on its own.

#### NC 150, TIP No. R-0617

NC 150 is projected to be near or over capacity by 2035 from North Main Street (SR 2098) in Crouse to east of Laboratory Road (SR 1253). Additionally, NCDOT's Strategic Highway Vision Plan designates NC 150 as a boulevard from Gaston County to east of Laboratory Road (SR 1253) and as a freeway on new location from east of Laboratory Road (SR 1253) to US 321. TIP project R-0617 is intended to address this problem.

Within Lincoln County, TIP project R-0617 includes widening NC 150 to a multi-lane boulevard from Gaston County to east of Laboratory Road (SR 1253) and constructing a freeway on new location from east of Laboratory Road (SR 1253) to US 321 with interchanges at NC 150, US 321 Business (Gastonia Highway), and US 321. The interchange at US 321 will connect to the proposed NC 73 Extension (R-2705). NC 150 has already been improved to a four lane boulevard standard from Gaston County to North Main Street (SR 2098) in Crouse. Right of way has been purchased for the new

location section, but construction is currently unfunded. For additional information about this project, including purpose and need, contact the NCDOT Project Development and Environmental Analysis Branch.

## Aspen Street (SR 1405), Local ID: LINC0006-H

North Aspen Street (SR 1405) is expected to be near capacity by 2035 from Dixon Street to US 321 Business (Maiden Highway). Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

This section of North Aspen Street (SR 1405) is currently a two and three lane facility with 11 foot lanes. Traffic is projected to increase from a range of 5,400 to 7,000 vpd in 2010 to a range of 7,600 to 10,000 vpd in 2035, compared to LOS D capacity of 11,500 to 12,300 vpd. Additionally, during the most recent three year period, the intersection of US 321 Business (Maiden Highway) and North Aspen Street (SR 1405) experienced 12 crashes with an average severity index of 2.85, which was lower than the state's 4.37 average for the same period. The facility is recommended to be widened to a three lane minor thoroughfare with 12 foot lanes from Dixon Street to US 321 Business (Maiden Highway).

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed area. It also crosses water and sewer pipes and a wetland area. Additionally, NCDOT's Structures Management Unit has identified bridge #244 over Walkers Branch as functionally obsolete.

The 1996 Lincolnton Thoroughfare Plan recommended widening this section of North Aspen Street (SR 1405) to a four lane urban cross section.

#### Motz Avenue, Local ID: LINC0007-H

NC 27 between S. Grove Street (SR 1222) and US 321 (Generals Boulevard) is expected to be over capacity by 2035. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

Traffic is projected to increase from a range of 9,000 to 17,000 vpd in 2010 to a range of 6,900 to 25,200 vpd in 2035, compared to a LOS D capacity of 11,000 to 23,800 vpd. Lincolnton has historically tried to preserve the look and feel of its downtown, despite the increase in activity; therefore, making capacity improvements on the existing facility was not recommended.

Motz Avenue is currently a two lane minor thoroughfare with 9 foot lanes from S. Grove Street (SR 1222) to S. Aspen Street (SR 1406). Motz Avenue is recommended to be widened to 11 foot lanes and extended on new location west to NC 27 (Riverside Drive) and east to Laurel Street (SR 1262) at Flint Street. The extensions are recommended to be two lane minor thoroughfares with 11 foot lanes. The proposed improvements will form a southern radial loop around Lincolnton and help reduce congestion on NC 27 through the downtown area.

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed and/or the target watershed area. It also crosses water and sewer pipes as well as the South Fork Catawba River, which on the National Wetland Inventory.

The 1996 Lincolnton Thoroughfare Plan recommended the east and west extensions with no improvements to the existing facility.

#### Northeast Connector, Local ID: LINC0008-H

During the development of this CTP, several major facilities were projected to be over capacity on the east side of the planning area in the future year. They are NC 73, NC 150 (Mooresville Highway), Buffalo Shoals Road (SR 1003), and US 321 Business (Maiden Highway). Also, based on the 2007 Lincoln County Land Use Plan, future business land uses are identified near the Lincoln County Airport and the intersection of US 321 Business (Maiden Highway) and US 321. Improvements are needed to improve connectivity and mobility in this area of the county.

The 1996 Lincolnton Thoroughfare Plan also identified several radial facilities on the east side of Lincolnton as over capacity in the future year 2020. To solve that problem the plan recommended the construction of a four lane divided loop around the city to divert some of that traffic off of NC 27. During the development of this CTP, it was determined that this concept was no longer a viable option for the local community, nor did the 2035 volumes warrant those improvements. A more practical and streamlined solution was found to improve the connectivity and route continuity between the radial facilities on the east side of the planning area.

The proposed Northeast Connector connects NC 73 to US 321 Business (Maiden Highway) using a series of existing facilities connected by three short connectors. The existing facilities utilized in the proposed project include: Airport Road (SR 1750), Old Mill Road (SR 1351), Shuford Road (SR 1339), and Car Farm Road (SR 1339). The new connectors are recommended between Airport Road (SR 1750) and Old Mill Road (SR 1351); Old Mill Road (SR 1351) and Shuford Road (SR 1339); and Car Farm Road (SR 1339) and US 321 Business at Finger Mill Road (SR 1276). The entire facility is recommended as a two lane minor thoroughfare with 12 foot lanes.

Based on a planning level environmental assessment using available GIS data, the northern portion of the proposed project is within the target watershed area. It also crosses water pipes and a geologic fault line. The proposed project is also adjacent to the Lincolnton-Lincoln County Regional Airport, which is located on Airport Road (SR 1750).

#### Roper Road (SR 1287) Extension, Local ID: LINC0009-H

Roper Road currently serves commercial development along NC 27 (E. Main Street), the NC Department of Corrections county prison and the NCDOT county maintenance yard. Other land uses in the proposed corridor include the Lincoln County Sheriff's Department, Emergency Management, and Animal Control and suburban residential

development. The 2003 Lincolnton Land Use Plan (reaffirmed in 2010) indicates that future land uses between the eastern side of US 321 Business (Generals Boulevard) and the western side of US 321 will be dense mixed use residential, commercial, industrial, and government development. There is no access to these properties from US 321. The only other available facility is US 321 Business (Generals Blvd). US 321 Business (Maiden Highway) is expected to be near or over capacity by 2035. The CTP includes a recommendation for improving this section of US 321 Business (LINC0001-H) to a four lane boulevard. The recommended improvement on US 321 Business (LINC0001-H) also reduces access to those properties. Additionally, during the most recent three year period, the intersection of NC 27 and Roper Road (SR 1287) experienced 10 crashes with an average severity index of 4.70, which was higher than the state's 4.37 average for the same period. Improvements are needed to maintain access and improve mobility in this area.

The recommendation is to extend existing Roper Road (SR 1287) to US 321 Business (Maiden Highway). The entire facility is recommended as a two lane minor thoroughfare with 11 foot lanes.

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed and/or the target watershed area. It also crosses water and sewer pipes as well as well as wetland areas.

The 1996 Lincolnton Thoroughfare Plan did not recommended any improvements in this location.

#### Startown Road (SR 1005) Extension, Local ID: LINC0010-H

The road network on the western side of the planning area has several radial facilities that connect to NC 27 (Riverside Drive), which funnels traffic into Lincolnton and will lead NC 27 to be over capacity by 2035. Improvements are needed to improve mobility in this area.

The CTP includes a recommendation (LINC0002-H) to improve NC 27 (Riverside Drive). To help disperse the traffic on NC 27 (Riverside Drive) and in downtown Lincolnton, it is recommended that Startown Road (SR 1005) be extended to NC 27 at the intersection of NC 182 and Hilltop Road (SR 1225) as a two lane minor thoroughfare with 11 foot lanes.

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply and target watershed areas. It also crosses water and sewer pipes as well as the South Fork Catawba River, which on the National Wetland Inventory.

The 1996 Lincolnton Thoroughfare Plan recommended extending Startown Road (SR 1005) to NC 27 (Riverside Drive) as a two lane major thoroughfare.

# Wilma Sigmon Road (SR 1267) Extension, Local ID: LINC0011-H

The road network on the western side of the planning area has several radial facilities that connect to NC 27 (Riverside Drive), which funnels traffic into Lincolnton. Startown Road (SR 1005) parallels Clark Creek and is recommended to be extended (LINC0011-H) to NC 27. There are very few facilities that cross Clark Creek north of Lincolnton. Improvements are needed to improve mobility and connectivity in this area.

To help disperse the traffic on NC 27 and downtown Lincolnton, it is recommended that Wilma Sigmon Road (SR 1267) be widened and extended from Aspen Street (SR 1405) to Startown Road (SR 1005) as a two lane minor thoroughfare with 11 foot lanes.

Based on a planning level environmental assessment using available GIS data, the proposed project is within the water supply watershed and/or target watershed areas. It also crosses the South Fork Catawba River, which is on the National Wetland Inventory.

The 1996 Lincolnton Thoroughfare Plan recommended an extension of Wilma Sigmon Road (SR 1267) as a two lane major thoroughfare.

#### Minor Widening Improvements

The following routes are recommended to be upgraded to improve mobility, safety and/or to accommodate bicycles.

- US 321 Business (Gastonia Highway), Local ID LINC0012-H: Widen to 12 foot lanes from Gaston County to Aspen Street (SR 1406).
- NC 27, Local ID LINC0013-H: Widen to three lanes with provisions for bicycles from NC 150 (Mooresville Highway) to Asbury Church Road (SR 1354).
- NC 27, Local ID LINC0014-H: Widen to 12 foot lanes from Asbury Church Road (SR 1354) to Devine Road (SR 1355).
- NC 73, Local ID LINC0015-H: Widen to 12 foot lanes with provisions for bicycles from NC 27 to Camp Creek Road (SR 1356).
- NC 182, Local ID LINC0016-H: Widen to 12 foot lanes with provisions for bicycles from NC 27 to Howards Creek School Road (SR 1186).
- Asbury Church Road (SR 1354), Local ID LINC0017-H: Widen to 12 foot lanes from NC 27 to Furnace Road (SR 1355).
- Bethel Church Road (SR 1282), Local ID LINC0018-H: Widen to 12 foot lanes from US 321 Business (Maiden Highway) to Buffalo Shoals Road (SR 1003).
- Boy Scout Road (SR 1175), Local ID LINC0019-H: Widen to 12 foot lanes from Main Street (SR 2098) to Landers Church Road (SR 1176).
- Buffalo Shoals Road (SR 1003), Local ID LINC0020-H: Widen to 12 foot lanes from NC 27 (E Main Street) to Ivey Church Road (SR 1343).
- Curve View Road (SR 1335), Local ID LINC0021-H: Widen to 12 foot lanes from NC 150 (Mooresville Highway) to Woolie Road (SR 1336).

- Daniels Road (SR 1185), Local ID LINC0022-H: Widen to 12 foot lanes from NC 27 to Reepsville Road (SR 1113).
- Devine Road (SR 1312), Local ID LINC0023-H: Widen to 12 foot lanes from Gaston County to NC 27.
- Finger Mill Road (SR 1355), Local ID LINC0024-H: Widen to 12 foot lanes from Lincoln County Parkway (SR 1277) to Catawba County.
- Furnace Road (SR 1355), Local ID LINC0025-H: Widen to 12 foot lanes from NC 73 to King Wilkinson Road (SR 1349).
- Gainsville Church Road (SR 1181), Local ID LINC0026-H: Widen to 12 foot lanes from NC 182 to NC 27.
- Gaston Street Extension (SR 1419), Local ID LINC0027-H: Widen to full 12 foot lanes from US 321 Business (Generals Boulevard) to NC 27 (E Main Street).
- Gaston-Webbs Chapel Road (SR 1335), Local ID LINC0028-H: Widen to 12 foot lanes from Gaston County to St Marks Church Road (SR 1172).
- George Brown Road (SR 1180), Local ID LINC0029-H: Widen to 12 foot lanes from Leonard Fork Creek to NC 182.
- Hill Road (SR 1321), Local ID LINC0030-H: Widen to 12 foot lanes from Salem Church Road (SR 1323) to NC 27(E Main Street).
- Hilltop Road (SR 1225), Local ID LINC0031-H: Widen to 12 foot lanes from Grove Street (SR 1222) to NC 182.
- Horseshoe Lake Road (SR 1338), Local ID LINC0032-H: Widen to 12 foot lanes from US 321 Business (Maiden Highway) to Car Farm Road (SR 1339).
- Howards Creek School Road (SR 1186), Local ID LINC0033-H: Widen to 12 foot lanes from NC 182 to NC 27.
- Ivey Church Road (SR 1343), Local ID LINC0034-H: Widen to 12 foot lanes from Buffalo Shoals Road (SR 1003) to NC 150 (Mooresville Highway).
- Keever Dairy Farm Road (SR 1313), Local ID LINC0035-H: Widen to full 12 foot lanes from Devine Road (SR 1312) to Salem Church Road (SR 1001).
- Killian Road (SR 1008), Local ID LINC0036-H: Widen to full 12 foot lanes from Reepsville Road (SR 1008) to Potts Creek.
- King Wilkinson Road (SR 1349), Local ID LINC0037-H: Widen to full 12 foot lanes from NC 150 (Mooresville Highway) to Furnace Road (SR 1355).
- Laboratory Road (SR 1252), Local ID LINC0038-H: Widen to full 12 foot lanes from Gaston County to South Fork Road (SR 1248).
- Landers Church Road (SR 1176), Local ID LINC0039-H: Widen to full 12 foot lanes from Boy Scout Road (SR 1175) to Gaston County.
- Lithia Inn Rad (SR 1294), Local ID LINC0040-H: Widen to full 12 foot lanes from Victory Grove Church Road (SR 1298) to NC 27(E Main Street).
- Long Shoals Road (SR 1242), Local ID LINC0041-H: Widen to full 12 foot lanes from Southside Road (SR 1243) to US 321 Business (Gastonia Highway).

- McAlister Road (SR 1334), Local ID LINC0042-H: Widen to full 12 foot lanes from Buffalo Shoals Road (SR 1003) to NC 150 (Mooresville Highway).
- Old Lincolnton-Crouse Road (SR 1228), Local ID LINC0043-H: Widen to full 12 foot lanes from NC 182 to NC 150 (Mooresville Highway).
- Philadelphia Church Road (SR 1001), Local ID LINC0044-H: Widen to full 12 foot lanes from Gaston County to Salem Church Road (SR 1307).
- Pleasant Grove Church Road (SR 1177), Local ID LINC0045-H: Widen to 12 foot lanes from Main Street (SR 2098) to NC 150 and from Dave Heafner Road (SR 1178) to NC 182.
- Reepsville Road (SR 1113, 1008), Local ID LINC0046-H: Widen to full 12 foot lanes from Lewis Road (SR 1185) to Startown Road (SR 1005).
- Riverview Road (SR 1236), Local ID LINC0047-H: Widen to 12 foot lanes from Laboratory Road (SR 1252) to NC 150.
- Rock Dam Road (SR 1184), Local ID LINC0048-H: Widen to 12 foot lanes from NC 27 to Daniels Road (SR 1185).
- Salem Church Road (SR 1307, 1001), Local ID LINC0049-H: Widen to 12 foot lanes from US 321 Business (Gastonia Highway) to NC 27 (E Main Street).
- Short Cut Road (SR 1409), Local ID LINC0050-H: Widen to 12 foot lanes from Buffalo Shoals Road (SR 1003) to Ivey Church Road (SR 1343).
- South Fork Road (SR 1248, 1243), Local ID LINC0051-H: Widen to 12 foot lanes from Laboratory Road (SR 1252) to US 321 Business (Gastonia Highway).
- Southside Road (SR 1243), Local ID LINC0052-H: Widen to full 12 foot lanes from Long Shoals Road (SR 1242) to South Fork Road (SR 1248).
- Springs East Road (SR 1342), Local ID LINC0053-H: Widen to 12 foot lanes from US 321 Business (Maiden Highway) to Buffalo Shoals Road (SR 1003).
- St Marks Church Road (SR 1172), Local ID LINC0054-H: Widen to 12 foot lanes from Gaston County to Gaston-Webbs Chapel Road (SR 1173).
- Summerow Road (SR 1279), Local ID LINC0055-H: Widen to full 12 foot lanes from US 321 Business (Maiden Highway) to Catawba County.
- Victory Grove Church Road (SR 1298), Local ID LINC0056-H: Widen to 12 foot lanes from US 321 Business (Gastonia Highway) to Lithia Inn Road (SR 1294).
- Walker Branch Road (SR 1267, 1333), Local ID LINC0057-H: Widen to 12 foot lanes from NC 27 (E Main Street) to Bethel Church Road (SR 1282).
- Wilma Sigmon Road (SR 1267), Local ID LINC0058-H: Widen to 12 foot lanes from Aspen Street (SR 1405) to Walker Branch Road (SR 1267).
- Woolie Road (SR 1336), Local ID LINC0059-H: Widen to 12 foot lanes from Buffalo Shoals Road (SR 1003) to Curve View Road (SR 1335).

# **PUBLIC TRANSPORTATION & RAIL**

A public transportation and rail assessment was completed during the development of the CTP. Transportation Lincoln County (TLC) and the Lake Norman Rural Planning Organization (RPO) studied the transit needs in Lincoln County and their recommendations were published in the Lake Norman RPO Coordinated Comprehensive Public Transportation Plan report in 2009. Those recommendations were incorporated into the CTP. No additional transit recommendations were made during the development of the CTP. There are also no rail improvements proposed in the CTP.

# **BICYCLE**

The city and the county adopted the 2009 Carolina Thread Trail Master Plan for Lincoln County Communities to supplement the recommendations in their existing land use plans. On-road bicycle facilities that have been identified as needing improvement as well as recommended multi-use paths are shown on the Bicycle Map.

In accordance with American Association of State Highway and Transportation Officials (AASHTO), roadways identified as bicycle routes should incorporate the following standards as roadway improvements are made and funding is available:

- Curb & gutter sections require at minimum 4-ft bike lanes or 14-ft wide outside lanes.
- Shoulder sections require a minimum 4-ft paved shoulder.
- All bridges along roadways where bike facilities are recommended shall be equipped with 54" railings.

# **PEDESTRIAN**

The Lake Norman Rural Planning Organization completed the 2010 Sidewalk Inventory for Lincolnton as a supplement to their 2003 Comprehensive Land Use Plan (reaffirmed in 2010). Pedestrian features from these plans that were incorporated into the CTP are shown on the Pedestrian Map as existing sidewalks or sidewalks that need improvement. Additionally, the 2009 Carolina Thread Trail Master Plan for Lincoln County Communities identified recommended multi-use paths.

Additional sidewalk goals and policies are outlined in the City of Lincolnton Land Use Plan and Unified Development Ordinances. During the development of the CTP, several sidewalk recommendations were developed from the Lincolnton sidewalk inventory, and were incorporated into the CTP. They include:

 Battleground Road LINC0001-P: Bonview Avenue to N. Aspen Street (SR 1405) – sidewalks on both sides

- Church Street LINC0002-P: Grove Street to Academy Street sidewalks on both sides
- **Dixon Street LINC0003-P:** End of sidewalk to Cedar Street sidewalks on both sides
- **Grove Street (SR 1222) LINC0004-P:** Motz Avenue to the proposed South Fork Catawba River greenway sidewalks on both sides
- **High Street LINC0005-P:** Pine Street to Congress Street sidewalks on both sides
- Hollybroook Avenue LINC0006-P: McBee Street to NC 27 (East Main Street) sidewalks on both sides
- Laurel Street LINC0007-P: Congress Street to Tait Street and from McBee Street to NC 27 (East Main Street) – sidewalks on both sides
- McBee Street LINC0008-P: Cedar Street to Hollybrook Avenue sidewalks on both sides
- Motz Avenue LINC0007-H: NC 27 (Riverside Drive) to Laurel Street (SR 1262) sidewalks on both sides
- Oak Street LINC0009-P: McBee Street to NC 27 (E Main Street) sidewalks on both sides
- Pine Street LINC0010-P: Grove Street to Flint Street sidewalks on both sides
- Sycamore Street LINC0011-P: Grove Street to Flint Street sidewalks on both sides
- Water Street LINC0012-P: Grove Street to Cedar Street sidewalks on both sides
- Wilma Sigmon Road (SR 1267) LINC0013-P: N. Aspen Street (SR 1405) to eastern city limits sidewalks on both sides
- Wilma Sigmon Road Extension LINC0011-H: N. Aspen Street (SR 1405) to Startown Road (SR 1005) sidewalks on both sides
- NC 27 (Riverside Drive) and Rock Dam Road (SR 1184) LINC0001-M: North side
  of NC 27 (Riverside Drive) and east side of Rock Dam Road (SR 1184), from the
  proposed South Fork Catawba River greenway to Childers Elementary School
- Eagle Nest Road (SR 1182) LINC0002-M: East side of Eagle Nest Road (SR 1182), from NC 27 (Riverside Drive) to NC 182

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# Appendix A Resources and Contacts

# North Carolina Department of Transportation

# Customer Service Office

Contact information for other units within the NCDOT that are not listed in this appendix is available by calling the Customer Service Office or by visiting the NCDOT directory:

1-877-DOT-4YOU (1-877-368-4968)

https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx

# Secretary of Transportation

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2800

http://www.ncdot.org/about/leadership/secretary.html

#### **Board of Transportation**

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2820

http://www.ncdot.gov/about/board/

#### Highway Division

1710 E. Marion St. Shelby, NC 28151 (704) 480-9020 https://apps.dot.state.nc.us/dot/directory/authenticated/UnitPage.aspx?id=651

#### Contact the:

- Division Engineer with general questions concerning NCDOT activities within each Division and for information on Small Urban Funds.
- Division Construction Engineer for information concerning major roadway improvements under construction.
- Division Traffic Engineer for information concerning traffic signals, highway signs, pavement markings, and crash history.
- Division Operations Engineer for information concerning facility operations.
- Division Maintenance Engineer information regarding maintenance of all state roadways, improvement of secondary roads and other small improvement projects. The Division Maintenance Engineer also oversees the District Offices, the Bridge Maintenance Unit and the Equipment Unit.
- District Engineer for information on outdoor advertising, junkyard control, driveway permits, road additions, subdivision review and approval, Adopt-A-Highway program, encroachments on highway right of way, issuance of oversize/overwidth permits, paving priorities, secondary road construction program and road maintenance.

1031 E Gaston St. Lincolnton, NC 28092 (704) 748-2400

# Transportation Planning Branch (TPB)

Contact the Transportation Planning Branch for information on long-range multi-modal planning services.

1554 Mail Service Center Raleigh, NC 27699-1554 (919) 707-0900 http://www.ncdot.gov/doh/preconstruct/tpb/

# Lake Norman Rural Planning Organization (RPO)

Contact the RPO for information on long-range multi-modal planning services.

525 North Tryon Street, 12<sup>th</sup> Floor Charlotte, NC 28202 (704) 372-2416 www.lakenormanrpo.org/

# Strategic Planning Office

Contact the Strategic Planning Office for information concerning prioritization of transportation projects.

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-4740 http://www.ncdot.gov/performance/reform/prioritization/

# <u>Project Development & Environmental Analysis (PDEA)</u>

Contact PDEA for information on environmental studies for projects that are included in the TIP.

1548 Mail Service Center Raleigh, NC 27699-1548 (919) 707-6000 https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx

# Secondary Roads Unit

Contact the Secondary Roads Unit for information regarding the status for unpaved roads to be paved, additions and deletions of roads to the State maintained system and the Industrial Access Funds program.

1535 Mail Service Center Raleigh, NC 27699-1535 (919) 707-2500 https://connect.ncdot.gov/resources/stateroads/Pages/default.aspx

#### Program Development Branch

Contact the Program Development Branch for information concerning Roadway Official Corridor Maps, Feasibility Studies and the Transportation Improvement Program (TIP).

1534 Mail Service Center Raleigh, NC 27699-1534 (919) 707-4610 https://connect.ncdot.gov/projects/planning/Pages/default.aspx

#### Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

1550 Mail Service Center Raleigh, NC 27699-1550 (919) 707-4670 http://www.ncdot.org/transit/nctransit/

#### Rail Division

Contact the Rail Division for rail information throughout the state.

1553 Mail Service Center http://www.bytrain.org/

Raleigh, NC 27699-1553

(919) 707-4700

Division of Bicycle and Pedestrian Transportation

Contact this Division for bicycle and pedestrian transportation information throughout the state.

1552 Mail Service Center

Raleigh, NC 27699-1552

(919) 707-2600

http://www.ncdot.gov/bikeped/

Structures Management Unit

Contact the Structures Management Unit for information on bridge management throughout the state.

1581 Mail Service Center

Raleigh, NC 27699-1581

(919) 707-6400

http://www.ncdot.gov/doh/operations/dp\_chief\_eng/maintenance/bridge/

Roadway Design Unit

Contact the Roadway Design Unit for information regarding design plans and proposals for road and bridge projects throughout the state.

1582 Mail Service Center

Raleigh, NC 27699-1582

(919) 707-6200

https://connect.ncdot.gov/projects/Roadway/Pages/default.aspx

Transportation Mobility and Safety Division

Contact the Traffic Safety Unit for information regarding crash data throughout the state.

1561 Mail Service Center

Raleigh, NC 27699-1561

(919) 773-2800

https://connect.ncdot.gov/resources/safety/Pages/default.aspx

Other State Government Offices

<u>Department of Commerce – Division of Community Assistance</u>

Contact the Department of Commerce for resources and services to help realize economic prosperity, plan for new growth and address community needs.

http://www.nccommerce.com/cd

# Appendix B Comprehensive Transportation Plan Definitions

This appendix contains descriptive information and definitions for the designations depicted on the CTP maps shown in Figure 1.

# Highway Map

For visual depiction of facility types for the following CTP classification, visit http://www.ncdot.gov/doh/preconstruct/tpb/SHC/facility/.

#### **Facility Type Definitions**

#### Freeways

- Functional purpose high mobility, high volume, high speed
- Posted speed 55 mph or greater
- Cross section minimum four lanes with continuous median
- Multi-modal elements High Occupancy Vehicles (HOV)/High Occupancy Transit (HOT) lanes, busways, truck lanes, park-and-ride facilities at/near interchanges, adjacent shared use paths (separate from roadway and outside ROW)
- Type of access control full control of access
- Access management interchange spacing (urban one mile; non-urban three miles); at interchanges on the intersecting roadway, full control of access for 1,000ft or for 350ft plus 650ft island or median; use of frontage roads, rear service roads
- Intersecting facilities interchange or grade separation (no signals or at-grade intersections)
- Driveways not allowed

#### Expresswavs

- Functional purpose high mobility, high volume, medium-high speed
- Posted speed 45 to 60 mph
- Cross section minimum four lanes with median
- Multi-modal elements HOV lanes, busways, very wide paved shoulders (rural), shared use paths (separate from roadway but within ROW)
- Type of access control limited or partial control of access;
- Access management minimum interchange/intersection spacing 2,000ft; median breaks only at intersections with minor roadways or to permit U-turns; use of frontage roads, rear service roads; driveways limited in location and number; use of acceleration/deceleration or right turning lanes
- Intersecting facilities interchange; at-grade intersection for minor roadways; right-in/right-out and/or left-over or grade separation (no signalization for through traffic)
- Driveways right-in/right-out only; direct driveway access via service roads or other alternate connections

#### ❖ Boulevards

- Functional purpose moderate mobility; moderate access, moderate volume, medium speed
- Posted speed 30 to 55 mph
- Cross section two or more lanes with median (median breaks allowed for Uturns per current NCDOT Driveway Manual
- Multi-modal elements bus stops, bike lanes (urban) or wide paved shoulders (rural), sidewalks (urban - local government option)
- Type of access control limited control of access, partial control of access, or no control of access
- Access management two lane facilities may have medians with crossovers, medians with turning pockets or turning lanes; use of acceleration/deceleration or right turning lanes is optional; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities at grade intersections and driveways; interchanges at special locations with high volumes
- Driveways primarily right-in/right-out, some right-in/right-out in combination with median leftovers; major driveways may be full movement when access is not possible using an alternate roadway

#### Other Major Thoroughfares

- Functional purpose balanced mobility and access, moderate volume, low to medium speed
- Posted speed 25 to 55 mph
- Cross section four or more lanes without median (US and NC routes may have less than four lanes)
- Multi-modal elements bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban)
- Type of access control no control of access
- Access management continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities intersections and driveways
- Driveways full movement on two lane roadway with center turn lane as permitted by the current NCDOT Driveway Manual

#### Minor Thoroughfares

- Functional purpose balanced mobility and access, moderate volume, low to medium speed
- Posted speed 25 to 55 mph
- Cross section ultimately three lanes (no more than one lane per direction) or less without median
- Multi-modal elements bus stops, bike lanes/wide outer lane (urban) or wide paved shoulder (rural), sidewalks (urban)
- ROW no control of access

- Access management continuous left turn lanes; for abutting properties, use of shared driveways, internal out parcel access and cross-connectivity between adjacent properties is strongly encouraged
- Intersecting facilities intersections and driveways
- Driveways full movement on two lane with center turn lane as permitted by the current NCDOT *Driveway Manual*

#### Other Highway Map Definitions

- **Existing** Roadway facilities that are not recommended to be improved.
- ❖ Needs Improvement Roadway facilities that need to be improved for capacity, safety, operations, or system continuity. The improvement to the facility may be widening, increasing the level of access control along the facility, operational strategies (including but not limited to traffic control and enforcement, incident and emergency management, and deployment of Intelligent Transportation Systems (ITS) technologies), or a combination of improvements and strategies. "Needs improvement" does not refer to the maintenance needs of existing facilities or the replacement or rehab of structures.
- ❖ Recommended Roadway facilities on new location that are needed in the future.
- Interchange Through movement on intersecting roads is separated by a structure. Turning movement area accommodated by on/off ramps and loops.
- ❖ Grade Separation Through movement on intersecting roads is separated by a structure. There is no direct access between the facilities.
- ❖ Full Control of Access Connections to a facility provided only via ramps at interchanges. No private driveway connections allowed.
- ❖ Limited Control of Access Connections to a facility provided only via ramps at interchanges (major crossings) and at-grade intersections (minor crossings and service roads). No private driveway connections allowed.
- ❖ Partial Control of Access Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. Private driveway connections shall be defined as a maximum of one connection per parcel. One connection is defined as one ingress and one egress point. These may be combined to form a two-way driveway (most common) or separated to allow for better traffic flow through the parcel. The use of shared or consolidated connections is highly encouraged.
- ❖ No Control of Access Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways.

# Public Transportation and Rail Map

- ❖ Bus Routes The primary fixed route bus system for the area. Does not include demand response systems.
- ❖ Fixed Guideway Any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail,

- monorail, trolleybus, aerial tramway, included plane, cable car, automated guideway transit, and ferryboats.
- ❖ Operational Strategies Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- ❖ Rail Corridor Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
  - Active rail service is currently provided in the corridor; may include freight and/or passenger service
  - Inactive right of way exists; however, there is no service currently provided; tracks may or may not exist
  - Recommended It is desirable for future rail to be considered to serve an area.
- ❖ High Speed Rail Corridor Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
  - Existing Corridor where high speed rail service is provided (there are currently no existing high speed corridor in North Carolina).
  - Recommended Proposed corridor for high speed rail service.
- ❖ Rail Stop A railroad station or stop along the railroad tracks.
- ❖ Intermodal Connector A location where more than one mode of transportation meet such as where light rail and a bus route come together in one location or a bus station.
- ❖ Park and Ride Lot A strategically located parking lot that is free of charge to anyone who parks a vehicle and commutes by transit or in a carpool.
- ❖ Existing Grade Separation Locations where existing rail facilities and are physically separated from existing highways or other transportation facilities. These may be bridges, culverts, or other structures.
- ❖ Proposed Grade Separation Locations where rail facilities are recommended to be physically separated from existing or recommended highways or other transportation facilities. These may be bridges, culverts, or other structures.

# Bicycle Map

- On Road-Existing Conditions for bicycling on the highway facility are adequate to safely accommodate cyclists.
- ❖ On Road-Needs Improvement At the systems level, it is desirable for an existing highway facility to accommodate bicycle transportation; however, highway improvements are necessary to create safe travel conditions for the cyclists.
- On Road-Recommended At the systems level, it is desirable for a recommended highway facility to accommodate bicycle transportation. The highway should be designed and built to safely accommodate cyclists.

- Off Road-Existing A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- ❖ Off Road-Needs Improvement A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way that will not adequately serve future bicycle needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment.
- ❖ Off Road-Recommended A facility needed to accommodate only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- ❖ Multi-use Path-Existing An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- ❖ Multi-use Path-Needs Improvement An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.
- ❖ Multi-use Path-Recommended A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- ❖ Existing Grade Separation Locations where existing "Off Road" facilities and "Multi-use Paths" are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.
- ❖ Proposed Grade Separation Locations where "Off Road" facilities and "Multi-use Paths" are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

# Pedestrian Map

- ❖ Sidewalk-Existing Paved paths (including but not limited to concrete, asphalt, brick, stone, or wood) on both sides of a highway facility and within the highway right-of-way that are adequate to safely accommodate pedestrian traffic.
- ❖ Sidewalk-Needs Improvement Improvements are needed to provide paved paths on both sides of a highway facility. The highway facility may or may not need

- improvements. Improvements do not include re-paving or other maintenance activities but may include: filling in gaps, widening sidewalks, or meeting ADA (Americans with Disabilities Act) requirements.
- ❖ Sidewalk-Recommended At the systems level, it is desirable for a recommended highway facility to accommodate pedestrian transportation or to add sidewalks on an existing facility where no sidewalks currently exist. The highway should be designed and built to safely accommodate pedestrian traffic.
- Off Road-Existing A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-ofway.
- ❖ Off Road-Needs Improvement A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way that will not adequately serve future pedestrian needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), improved horizontal or vertical alignment, and meeting ADA requirements.
- ❖ Off Road-Recommended A facility needed to accommodate only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.
- ❖ Multi-use Path-Existing An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- ❖ Multi-use Path-Needs Improvement An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.
- ❖ Multi-use Path-Recommended A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- ❖ Existing Grade Separation Locations where existing "Off Road" facilities and "Multi-use Paths" are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.
- ❖ Proposed Grade Separation Locations where "Off Road" facilities and "Multi-use Paths" are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

# Appendix C CTP Inventory and Recommendations

### **Assumptions/ Notes:**

- Local ID: This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- Jurisdiction: Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- Existing Cross-Section: Listed under '(ft)' is the approximate width of the roadway from edge of pavement to edge of pavement. Listed under 'lanes' is the total number of lanes, with the letter 'D' if the facility is divided.
- Existing ROW: The estimated existing right-of-way is based on Lincoln County parcel data. These right-of-way amounts are approximate and may vary.
- Existing and Proposed Capacity: The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using NCLOS, as documented in Chapter 1.
- Existing and Proposed AADT (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2010 AADT E+C' is an estimate of the volume in 2010 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012 2018 Transportation Improvement Program (TIP). The '2035 AADT with CTP' is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter 1.
- Proposed Cross-section: The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended as part of the CTP.
- CTP Classification: The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.

- **Tier:** Tiers are defined as part of the North Carolina Multimodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- Other Modes: If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H=highway, T= public transportation, R= rail, B= bicycle, P= pedestrian, and M= multi-use path).

					ŀ	HIGHV	VAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
					_	ross-		Speed	0		2035	2035	Proposed			CTP		
				Dist.			ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
		Gaston County to US 321 BUS			40				=0000	0.4.000	40000	45000	450	450		_	0.	
	US 321	(Gastonia Hwy)	Lincoln County	0.4	48	4D	200	65	58000	31000	46000	45800	ADQ	ADQ	ADQ	F	Sta	<del>                                     </del>
	US 321	US 321 BUS (Gastonia Hwy) to NC 73 Extension	Lincolnton	2.0	48	4D	250	65	58000	27000	39200	48700	ADQ	ADQ	ADQ	F	Sta	
	03 321	NC 73 Extension to NC 27 (E		2.0	40	40	250	65	56000	27000	39200	40700	ADQ	ADQ	ADQ	Г	Sia	$\vdash$
	US 321	Main St)	Lincolnton	2.6	48	4D	250	65	58000	27000	39200	39200	ADQ	ADQ	ADQ	F	Sta	
	00 321	NC 27 (E Main St) to US 321	Lincolnton	2.0	70	70	200	00	30000	27000	33200	33200	ADQ	ADQ	ADQ	- '	Ola	
	US 321	BUS (Maiden Hwv)	Lincoln County	3.6	48	4D	250	65	58000	30000	38500	34200	ADQ	ADQ	ADQ	F	Sta	
	0002.	US 321 BUS (Maiden Hwy) to	,	0.0					00000	00000	00000	0.200	7.2 4	7.2 4	7.2 0		J.G	
	US 321	Catawba County	Lincoln County	2.5	48	4D	250	65	58000	25200	30400	33300	ADQ	ADQ	ADQ	F	Sta	1
	US 321 BUS	Gaston County to Salem Church																
LINC0012-H	(Gastonia Hwy)	Rd (SR 1307)	Lincoln County	0.3	22	2	60	35	14100	3000	6000	6000	14600	2A	ADQ	Maj	Reg	
	US 321 BUS	Salem Church Rd (SR 1307) to																
LINC0012-H	(Gastonia Hwy)	US 321	Lincoln County	0.4	22	2	60	45	14100	5600	11100	11100	14600	2A	ADQ	Maj	Reg	
	US 321 BUS																	
LINC0012-H	(Gastonia Hwy)	US 321 to Glade Ln (SR 1757)	Lincoln County	0.2	22	2	100	45	14100	6000	11900	12400	14600	2A	ADQ	Maj	Reg	
	US 321 BUS	Glade Ln (SR 1757) to Long				_												
LINC0012-H	(Gastonia Hwy)	Shoals Rd (SR 1242)	Lincoln County	1.4	22	2	60	45	14100	5800	9900	12900	14600	2A	ADQ	Maj	Reg	<b></b>
	US 321 BUS	Long Shoals Rd (SR 1242) to			00		00	45	4.4400	0000	40400	40400	4.4000	0.4	450		_	
LINC0012-H	(Gastonia Hwy) US 321 BUS	Tin Mine Rd (SR 1299) Tin Mine Rd (SR 1299) to South	Lincoln County	0.6	22	2	60	45	14100	6600	12100	12100	14600	2A	ADQ	Maj	Reg	$\vdash$
LINC0012-H			Lincoln County	0.6	22	2	60	45	14100	7000	12900	10600	14600	2.4	ADQ	Mai	Dag	
LINCUU12-FI	(Gastonia Hwy) US 321 BUS	Fork Rd (SR 1248) South Fork Rd (SR 1248) to NC	Lincoln County	0.6	22		60	45	14100	7000	12900	10600	14600	2A	ADQ	Maj	Reg	<b>—</b>
LINC0012-H	(Gastonia Hwy)	150 Relocation	Lincoln County	0.2	22	2	60	45	14100	8000	12700	12500	14600	2A	ADQ	Maj	Reg	1
LINCOUTZ-FI	US 321 BUS	NC 150 Relocation to Victory	Lincoln County	0.2	22		60	45	14100	8000	12700	12300	14600	ZA	ADQ	iviaj	Keg	
LINC0012-H	(Gastonia Hwy)	Grove Church Rd (SR 1298)	Lincoln County	0.3	22	2	60	35	14100	8000	12900	12500	14600	2A	ADQ	Maj	Reg	1
_11400012-11	US 321 BUS	Victory Grove Church Rd (SR	Lincoln County	0.5			00	55	17100	0000	12300	12300	17000		אטע	iviaj	rveg	
LINC0012-H	(Gastonia Hwy)	1298) to S Aspen St (SR 1406)	Lincolnton	0.2	22	2	60	35	14100	8200	12900	12900	14600	2A	ADQ	Maj	Reg	1
_11400012-11	US 321 BUS	S Aspen St (SR 1406) to	Lincollitott	0.2			00	55	17100	0200	12300	12300	17000		אטע	iviaj	rveg	
LINC0001-H	(Generals Blvd)	Georgetown Rd	Lincolnton	0.1	24	2	160	45	12200	13000	18700	18700	35100	4C	ADQ	В	Sta	T,M
	US 321 BUS	Georgetown Rd to Country Club		0.7	- '	_	100		12200	10000	107.00	10700	50.00		. 15 3			.,
LINC0001-H	(Generals Blvd)	Rd (SR 1262)	Lincolnton	0.9	24	2	150	45	12200	14000	19600	18000	35100	4C	ADQ	В	Sta	T,M
	US 321 BUS	Country Club Rd (SR 1262) to							- 1									
LINC0001-H	(Generals Blvd)	Gaston St Ext (SR 1419)	Lincolnton	0.3	24	2	190	45	12200	14000	20000	20000	35100	4C	ADQ	В	Sta	Т
	ÙS 321 BUS	Gaston St Ext (SR 1419) to NC																
LINC0001-H	(Generals Blvd)	27	Lincolnton	0.3	24	2	150	45	12200	16000	24000	24500	35100	4C	ADQ	В	Sta	<u>i                                     </u>
	US 321 BUS																	
LINC0001-H	(Generals Blvd)	NC 27 to Timkin Dr (SR1761)	Lincolnton	0.2	36	3	150	45	13300	15000	18900	14900	35100	4C	ADQ	В	Reg	
	US 321 BUS	Timkin Dr (SR 1761) to Wilma						-	-									i T
LINC0001-H	(Generals Blvd)	Sigmon Rd (SR 1267)	Lincolnton	0.9	36	3	150	45	13300	15000	18900	14900	35100	4C	ADQ	В	Reg	
	US 321 BUS	Wilma Sigmon Rd (SR 1267) to														_	_	1
LINC0001-H	(Generals Blvd)	N Aspen St (SR 1405)	Lincolnton	0.3	36	3	190	45	13300	8600	14300	16000	35100	4C	ADQ	В	Reg	<u>i                                      </u>

					ŀ	HIGH\	NAY											
							2010 E	Existing	System			2035 Pro	posed Sys	stem				
					С	ross-		Speed			2035	2035	Proposed			CTP		
				Dist.		ection	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	US 321 BUS	N Aspen St (SR 1405) to																
LINC0001-H	(Maiden Hwy)	Industrial Park Rd (SR 1463)	Lincolnton	0.2	40	3	60	45	13100	7000	17600	15000	35100	4C	110	В	Reg	
	US 321 BUS	Industrial Park Rd (SR 1463) to																
LINC0001-H	(Maiden Hwy)	Bethel Church Rd (SR 1282)	Lincolnton	0.6	40	3	60	45	13200	12000	18800	19000	35100	4C	110	В	Reg	
	US 321 BUS	Bethel Church Rd (SR 1282) to				_												
LINC0001-H	(Maiden Hwy)	Horseshoe Lake Rd (SR 1338)	Lincoln County	0.7	24	2	60	45	12700	8200	10700	11000	36600	4B	150	В	Reg	
	US 321 BUS	Horseshoe Lake Rd (SR 1338)				_												
LINC0001-H	(Maiden Hwy)	to Roper Rd Extension	Lincoln County	0.3	24	2	60	45	12700	7000	9600	9600	36600	4B	150	В	Reg	
	US 321 BUS	Roper Rd Extension to		l	l	_										_	_	
LINC0001-H	(Maiden Hwy)	Summerow Rd (SR 1279)	Lincoln County	0.7	24	2	60	45	12700	7000	9600	9600	36600	4B	150	В	Reg	
	US 321 BUS	Summerow Rd (SR 1279) to US							10105	40005	40405	10.105		4.5				
LINC0001-H	(Maiden Hwy)	321	Lincoln County	0.2	24	2	90	45	12400	10000	13400	13400	36600	4B	150	В	Reg	
	US 321 BUS	US 321 to Finger Mill Rd (SR			٠.		000		40400	40000	40000	40000	00000	45	450	_		
LINC0001-H	(Maiden Hwy)	1276)	Lincoln County	0.3	24	2	300	45	12400	12000	18800	19000	36600	4B	150	В	Reg	
	US 321 BUS	Finger Mill Rd (SR 1276) to					-00	45	40400	5000	0000	40000	00000	45	450		_	
LINC0001-H	(Maiden Hwy)	Springs East Rd (SR 1342)	Lincoln County	0.9	24	2	60	45	12400	5800	8900	12000	36600	4B	150	В	Reg	
	US 321 BUS	Springs East Rd (SR 1342) to				_			10100	=000			450	400	400		_	
	(Maiden Hwy)	Catawba County	Lincoln County	1.1	24	2	60	45	12400	5000	8000	8000	ADQ	ADQ	ADQ	Maj	Reg	
		Howards Creek School Rd (Sr		l	l	_											_	
	NC 27	1186) to Daniels Rd (SR 1185)	Lincoln County	0.1	24	2	60	55	15100	6800	9000	11000	ADQ	ADQ	ADQ	Maj	Reg	
		Daniels Rd (SR 1185) to Rock				_			45400			40000	450	400	400		_	
	NC 27	Dam Rd (SR 1184)	Lincoln County	1.1	24	2	60	55	15100	7400	9600	12900	ADQ	ADQ	ADQ	Maj	Reg	
	110.07	Rock Dam Rd (SR 1184) to				_			10100		40000	40000	0.4000	4.0	440		_	l l
LINC0002-H	NC 27	Southwest Connector	Lincoln County	1.1	24	2	60	45	12400	7800	12200	13900	31600	4C	110	В	Reg	M
	110.07	Southwest Connector to Bob				_			10100		40000	4.4000	0.4000	4.0	440		_	l l
LINC0002-H	NC 27	Burgin Rd (SR 1183)	Lincoln County	0.3	24	2	60	35	12400	7800	12200	14600	31600	4C	110	В	Reg	M
	110.07	Bob Burgin Rd (SR 1183) to NC 182					-00	0.5	40400	7000	40000	4.4000	04000	40	440		_	١ ,, ١
LINC0002-H	NC 27	1.4-	Lincoln County	0.4	24	2	60	35	12400	7800	12200	14900	31600	4C	110	В	Reg	
LINC0002-H	NC 27	NC 182 to Motz Ave Extension	Lincoln County	0.4	24	2	60	35	12400	12000	15600	15300	31600	4C	110	В	Reg	M
	NC 27 (Riverside	Motz Ave Extension to Grove St			1												_	
LINC0002-H	Dr)	(SR 1008)	Lincolnton	0.5	44	2	60	35	14600	15000	19300	18600	31600	4C	110	В	Reg	М
		Grove St (SR 1008) to W Court				_												_
	NC 27 (W Main St)	Square EB	Lincolnton	0.3	44	2	90	20	14600	9000	14000	10300	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 (W Court					l .										l		1 _
	Square) EB	US 27 W to Water St	Lincolnton	<0.1	12	1	50	20	6600	4500	7100	4500	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 (E Court					l .										l		1 _
	Square) EB	Water St to US 27 E	Lincolnton	<0.1	12	1	50	20	6600	5900	8400	5100	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 (E Court	110.07.51.0			١.,	l .						0500						
	Square) WB	US 27 E to Sycamore Street	Lincolnton	<0.1	12	1	50	20	6600	5700	8000	6500	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 (W Court	0			4.			6.0	0000	5000	0000	0500	450	450	450		_	_
	Square) WB	Sycamore St to US 27 W	Lincolnton	<0.1	12	1	50	20	6600	5200	6900	3500	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 /E Main Ct)	E Court Square ED to Code: St	Lincolaton	0.0	F.C.	_	00	20	11000	0.400	10000	10100	ADQ	100	400	Mai	Dass	В
	NC 27 (E Main St)	E Court Square EB to Cedar St	Lincolnton	0.3	58	2	90	20	11000	8400	10800	10100	ADQ	ADQ	ADQ	Maj	Reg	ь

					H	HIGHV	VAY											
								xisting	System			2035 Pro	posed Sys	stem				
					Cı	oss-		Speed	Existing		2035	2035	Proposed			CTP		
				Dist.	Se	ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	NC 27 (E Main St)	Cedar St to Laurel St	Lincolnton	0.1	44	3	60	25	12200	10000	15000	12000	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 (E Main St)	Laurel St to Flint St	Lincolnton	0.2	44	4	60	35	22500	10000	15200	12000	ADQ	ADQ	ADQ	Maj	Reg	В
	NC 27 (E Walli St)	Flint St to US 321 BUS	LITICOITION	0.2	44	4	00	33	22300	10000	13200	12000	ADQ	ADQ	ADQ	iviaj	Keg	В
	NC 27 (E Main St)	(Generals Blvd)	Lincolnton	0.4	44	4	90	45	23800	17000	25200	20100	ADQ	ADQ	ADQ	Maj	Reg	В
	110 21 (2 mani 01)	US 321 BUS (Generals Blvd) to	Lincolnton	0.1			- 00	- 10	20000	11000	20200	20100	7100	7100	/ LD G	iviaj	rtog	
LINC0003-H	NC 27 (E Main St)	Roper Rd (SR 1287)	Lincolnton	0.4	60	5	70	45	26800	28000	42100	32700	35100	4C	110	В	Sta	B,P
	, ,	Roper Rd (SR 1287) to Gaston																
LINC0003-H	NC 27 (E Main St)	St Ext (SR 1419)	Lincolnton	0.1	60	5	70	45	26800	28000	42100	32700	35100	4C	110	В	Sta	B,P
		Gaston St Ext (SR 1419) to US																
LINC0003-H	NC 27 (E Main St)	321	Lincolnton	0.1	60	5	70	45	26800	28000	42100	32700	35100	4C	110	В	Sta	B,P
																_		
LINC0003-H	NC 27 (E Main St)	US 321 to US 321	Lincolnton	<0.1	60	5	70	45	26800	23000	31400	25600	35100	4C	110	В	Sta	B,P
LINC0003-H	NC 27 (E Main St)	US 321 to Stanford Rd	Lincolnton	0.4	60	5	70	45	26800	23000	25800	25600	35100	4C	110	В	Sta	B,P
LINCUUU3-H	NC 27 (E Main St)	Stanford Rd to Walker Branch	Lincolnton	0.1	60	5	70	45	20000	23000	23600	25000	35100	40	110	Ь	Sia	Б,Р
LINC0003-H	NC 27 (E Main St)	Rd (SR 1267)	Lincolnton	0.6	60	5	70	45	26800	23000	25800	25600	35100	4C	110	В	Sta	B,P
LINGUOGO II	ITO 27 (2 main ot)	Walker Branch Rd (SR 1267) to	Lincolnton	0.0	00	0	,,,	70	20000	20000	20000	20000	00100	70	110		Ola	
LINC0003-H	NC 27 (E Main St)	Lithia Inn Rd (SR 1294)	Lincolnton	0.1	60	5	70	45	26800	27000	41500	26400	35100	4C	110	В	Sta	B,P
		Lithia Inn Rd (SR 1294) to																
LINC0003-H	NC 27 (E Main St)	Salem Church Rd (SR 1001)	Lincolnton	0.3	60	5	70	45	26800	28000	45000	29500	35100	4C	110	В	Sta	B,P
		Salem Church Rd (SR 1001) to																
LINC0003-H	NC 27 (E Main St)	Buffalo Shoals Rd (SR 1003)	Lincolnton	0.1	60	5	70	45	26800	24000	39300	29300	35100	4C	110	В	Sta	B,P
		Buffalo Shoals Rd (SR 1003) to																1
LINC0003-H	NC 27 (E Main St)	NC 150	Lincolnton	0.2	60	5	70	45	26800	23000	37900	25700	35100	4C	110	В	Sta	T,B,P
		NC 150 to Sunny Hill Dr (SR				•			40400	40000	0=000	40400	40000				٥.	
LINC0013-H	NC 27	1650)	Lincoln County	0.6	22	2	60	45	12400	16000	25600	12100	13800	3A	80	Maj	Sta	T,P
LINC0013-H	NC 27	Sunny Hill Dr (SR 1650) to Hill Rd (SR 1321)	Lincoln County	0.3	22	2	60	45	12400	15500	23600	6000	13800	ЗА	80	Mai	Sta	T,P
LINCOUTS-FI	NC 21	Hill Rd (SR 1321) to Asbury	Lincoln County	0.3	22		60	45	12400	15500	23000	6000	13000	3A	60	Maj	Sia	1,5
LINC0013-H	NC 27	Church Rd (SR 1354)	Lincoln County	0.1	22	2	60	45	12400	16000	24100	6000	13800	3A	80	Maj	Sta	T,P
<u> </u>	110 21	Asbury Church Rd (SR 1354) to	Lincoln County	0.1			- 00	70	12400	10000	24100	0000	10000	0/1	- 00	iviaj	Ola	- ','
LINC0014-H	NC 27	Pine Village Rd (SR 1661)	Lincoln County	0.4	22	2	60	45	12400	15000	23700	8500	14600	2A	ADQ	Maj	Sta	T,P
	_	Pine Village Rd (SR 1661) to NC																,-
LINC0014-H	NC 27	73	Lincoln County	0.3	22	2	60	45	12400	15500	21700	6000	14600	2A	ADQ	Maj	Sta	T,P
LINC0014-H	NC 27	NC 73 to NC 73 Extension	Lincoln County	0.6	22	2	60	45	12400	7000	10100	6000	14600	2A	ADQ	Maj	Reg	
LINC0014-H	NC 27	NC 73 Extension to Beryl Ln	Lincoln County	0.3	22	2	60	45	14100	7000	8900	14300	14600	2A	ADQ	Maj	Reg	
		Beryl Ln to Whisnant St (SR								<u>-</u>								
LINC0014-H	NC 27	1712)	Lincoln County	1.0	22	2	60	45	14100	7000	9200	11500	14600	2A	ADQ	Maj	Reg	
		Whisnant St (SR 1712) to Low								=0		44555						ı
LINC0014-H	NC 27	Bridge Rd (SR 1314)	Lincoln County	0.3	22	2	60	45	14100	7000	8800	11500	14600	2A	ADQ	Maj	Reg	
LINCOOCAL	NC 27	Low Bridge Rd (SR 1314) to	Linaala Carret	0.0	20	_	60	45	14400	7000	0000	11500	4.4000	2.4	400	N/-:	D	ı
LINC0014-H	NC 27	Orchard Rd (SR 1358)	Lincoln County	0.3	22	2	60	45	14100	7000	9600	11500	14600	2A	ADQ	Maj	Reg	

					ŀ	HIGHV	NAY											
								Existing	System			2035 Pro	posed Sys	stem				
LeadID	En allie.	Ocation (France To)	la colta di adia ca	Dist.	Se	ross- ection	ROW	Speed Limit	Existing Capacity	2010	2035 AADT	2035 AADT	Proposed Capacity	Cross-	ROW	CTP Classifi-	T:	Other
Local ID	Facility	Section (From - To) Orchard Rd (SR 1358) to	Jurisdiction	(mi)	(π)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
LINC0014-H	NC 27	Bluegrass Ln Bluegrass Ln to Devine Rd (SR	Lincoln County	0.5	22	2	60	45	14100	5000	8400	10000	14600	2A	ADQ	Maj	Reg	
LINC0014-H	NC 27	1312)	Lincoln County	0.6	22	2	60	45	14100	5200	6900	8500	14600	2A	ADQ	Maj	Reg	
LINC0015-H	NC 73	NC 27 to E Oakwood Cir	Lincoln County	0.8	22	2	60	45	12400	7800	13400	4000	12700	2A	ADQ	Maj	Sta	T,B
		Oakwood Cir (SR 1475) to							1 - 100				1=100					- ,-
LINC0015-H	NC 73	Camp Creek Rd (SR 1356)	Lincoln County	0.8	22	2	60	55	12400	8200	14100	4000	12700	2A	ADQ	Maj	Sta	T,B
		Camp Creek Rd (SR 1356) to	·															
R-2706	NC 73	Furnace Rd (SR 1355)	Lincoln County	2.0	22	2	60	55	14100	8400	14300	15400	40500	4B	150	В	Sta	T,B
R-2705	NC 73 Extension	NC 73 to NC 27	Lincoln County	1.1	-	-	-	-	-	-	-	19000	59900	4A	250	F	Sta	
		NC 27 to Salem Church Rd (SR																
R-2705	NC 73 Extension	1001)	Lincoln County	2.0	-	-	-	-	-	-	-	28100	59900	4A	250	F	Sta	
		Salem Church Rd (SR 1001) to	·															
R-2705	NC 73 Extension	US 321	Lincoln County	1.0	ļ -	-	-	-	-	-	-	31400	59900	4A	250	F	Sta	
	NO 450	Gaston County to Crouse Rd					400	45	00000	0.400	44700	45000	400	400	400	_	٥.	_
	NC 150	(SR 1169) Crouse Rd (SR 1169) to	Lincoln County	0.2	52	4	120	45	36600	8400	11700	15000	ADQ	ADQ	ADQ	В	Sta	Т
	NC 150	Swanson Rd	Lincoln County	0.4	52	4	120	45	36600	9500	13400	17000	ADQ	ADQ	ADQ	В	Sta	Т
	NC 150	Swanson Rd to Pleasant Grove	Lincoln County	0.4	52	4	120	45	30000	9300	13400	17000	ADQ	ADQ	ADQ	ь	Sia	'
	NC 150	Church Rd (SR 1177)	Lincoln County	0.7	52	4	120	45	36600	10400	16000	17000	ADQ	ADQ	ADQ	В	Sta	Т
	110 100	Pleasant Grove Church Rd (SR	Lincoln County	0.7	02		120		00000	10100	10000	17000	7100	/ ID G	7100		0.0	
	NC 150	1177) to Main St (SR 2098)	Lincoln County	0.5	52	4	120	45	36600	10500	16100	18200	ADQ	ADQ	ADQ	В	Sta	Т
		Main St (SR 2098) to Old Linc-	,															
R-0617BB	NC 150	Crouse Rd (SR 1228)	Lincoln County	0.4	22	2	60	45	14100	9600	15400	19500	43600	4B	150	В	Sta	Т
		Old Linc-Crouse Rd (SR 1228)	•															
R-0617BB	NC 150	to Old Cherryville Hwy (SR 1407)		0.6	22	2	60	45	14100	10000	15500	19100	43600	4B	150	В	Sta	Т
		Old Cherryville Hwy (SR 1407) to																
R-0617BB	NC 150	Riverview Rd (SR 1236)	Lincoln County	0.3	24	2	150	45	14600	7800	12100	17700	43600	4B	150	В	Sta	Т
		Riverview Rd (SR 1236) to			l	_										_	_	_
R-0617BB	NC 150	Southwest Connector	Lincoln County	0.4	24	2	150	45	14600	9000	13400	23800	43600	4B	150	В	Sta	Т
	NO 450	Southwest Connector to					4.50				40400	00400	40000	45	4.50		٥.	_
R-0617BB	NC 150	Confederate Rd (SR 1222)	Lincoln County	0.3	24	2	150	45	14600	9000	13400	32400	43600	4B	150	В	Sta	Т
D 0647BB	NC 450	Confederate Rd (SR 1222) to	Linaala Causti		24	,	150	45	14000	10000	14400	24200	42000	40	150	_	CAE	Т
R-0617BB	NC 150	NC 150 Relocation NC 150 Relocation to US 321	Lincoln County	0.9	24	2	150	45	14600	10000	14100	31300	43600	4B	150	В	Sta	l
	NC 150	BUS (Gastonia Hwy)	Lincoln County	0.5	24	2	150	45	14600	11000	20400	8700	ADQ	ADQ	ADQ	Mai	Sta	Т
	140 130	Concurrent with US 321 BUS	Lincoln County	0.5	24		130	45	14000	11000	20400	0700	ADQ	ADQ	אטע	iviaj	Sla	
	NC 150	and NC 27														]		
LINC0005-H	NC 150	NC 27 to Myra Ln (SR 1738)	Lincoln County	0.4	24	2	60	45	14600	9800	15600	14300	40500	4C	110	В	Sta	Т
	1.0.00	Myra Ln (SR 1738) to Fran Ave		J	<del>  - '</del>	<del>-</del>	- 30		500			000		<u> </u>				<u> </u>
LINC0005-H	NC 150	(SR 1613)	Lincoln County	0.3	24	2	60	45	14600	9300	14300	14300	40500	4C	110	В	Sta	Т

					H	HIGHV	VAY											
								xisting	System			2035 Pro	posed Sys	stem				
				Dist.	Se	oss- ction	ROW	Speed Limit	Existing Capacity	2010	2035 AADT	2035 AADT	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
LINCOORE	NC 450	Fran Ave (SR 1613) to	Linaala Cauatu	0.4	24	0	60	45	14600	0000	44200	14900	40500	4C	110	В	Sta	т
LINC0005-H	NC 150	Fernwood Rd (SR 1692) Fernwood Rd (SR 1692) to E	Lincoln County	0.1	24	2	60	45	14600	8800	14300	14900	40500	40	110	ь	Sia	
LINC0005-H	NC 150	Curve View Rd (SR 1335)	Lincoln County	0.6	24	2	60	45	14600	8800	14300	15900	40500	4C	110	В	Sta	Т
LINCOUUS-II	140 130	E Curve View Rd (SR 1335) to	Lincoln County	0.0	24		00	43	14000	0000	14300	13300	40300	40	110	ь	Jia	<del>- '-</del>
LINC0005-H	NC 150	Suford Rd (SR 1339)	Lincoln County	0.8	24	2	60	45	14600	8400	13100	17800	45200	4B	150	В	Sta	Т
LINGUOGO II	110 100	Suford Rd (SR 1339) to Old Mill	Lincoln County	0.0			- 00	70	14000	0400	10100	17000	40200	75	100		Ola	
LINC0005-H	NC 150	Rd (SR 1351)	Lincoln County	0.2	24	2	60	55	15100	8200	13500	15900	45200	4B	150	В	Sta	Т
		Old Mill Rd (SR 1351) to Otis		1														
LINC0005-H	NC 150	Dellinger Rd (SR 1350)	Lincoln County	1.4	24	2	60	55	15100	8400	13600	15900	45200	4B	150	В	Sta	Т
		Otis Dellinger Rd (SR 1350) to																
LINC0005-H	NC 150	Jenkins Rd (SR 1660)	Lincoln County	0.2	24	2	60	55	15100	8600	12900	14900	45200	4B	150	В	Sta	Т
		Jenkins Rd (SR 1660) to King																
LINC0005-H	NC 150	Wilkinson Rd (SR 1349)	Lincoln County	0.1	24	2	60	55	15100	8600	12400	13100	45200	4B	150	В	Sta	Т
		King Wilkinson Rd (SR 1349) to																
LINC0005-H	NC 150	Ivey Church Rd (SR 1343)	Lincoln County	0.7	24	2	60	55	15100	8800	11800	12000	45200	4B	150	В	Sta	T
		NC 150 to US 321 BUS														_		
R-0617C	NC 150 Relocation	(Gastonia Hwy)	Lincoln County	0.9	-	-	-	-	-	-	-	24500	59900	4A	250	F	Sta	
		US 321 BUS (Gastonia Hwy) to										00400	=0000	4.0	0=0	_	٥.	İ
R-0617C	NC 150 Relocation	US 321	Lincoln County	1.3	-	-	-	-	-	-	-	29100	59900	4A	250	F	Sta	
		Leonard Creek to Howards																
LINC0016-H	NC 182	Creek School Rd (SR 1186)	Lincoln County	1.0	20	2	60	45	11800	2200	4000	4000	12700	2A	ADQ	Maj	Reg	В
LINCOUTO-H	NC 102	Howards Creek School Rd (SR	Lincoln County	1.0	20		00	45	11000	2200	4000	4000	12700	ZA	ADQ	iviaj	Keg	В
LINC0016-H	NC 182	1186) to Harmon Rd (SR 1187)	Lincoln County	0.5	20	2	60	45	11800	2200	3400	4400	12700	2A	ADQ	Maj	Reg	В
LING001011	110 102	Harmon Rd (SR 1187) to George	Lincoln County	0.0	20		- 00	70	11000	2200	0400	1100	12700	2/1	/ LDQ	iviaj	rteg	
LINC0016-H	NC 182	Brown Rd (SR 1180)	Lincoln County	0.6	20	2	65	45	11800	2200	3900	5600	12700	2A	ADQ	Mai	Reg	В
		George Brown Rd (SR 1180) to		1														
		Pleasant Grove Church Rd (SR																
LINC0016-H	NC 182	1177)	Lincoln County	0.4	20	2	60	45	11800	3000	4700	6400	12700	2A	ADQ	Maj	Reg	В
		Pleasant Grove Church Rd (SR	·													,	Ŭ	
		1177) to Modern Estates Rd (SR																
LINC0016-H	NC 182	1720)	Lincoln County	0.3	20	2	60	45	11800	4000	6300	7000	12700	2A	ADQ	Maj	Reg	В
		Modern Estates Rd (SR 1720) to																1
LINC0016-H	NC 182	,	Lincoln County	0.2	20	2	60	45	11800	4000	6300	7000	12700	2A	ADQ	Maj	Reg	В
		Gainsville Church Rd (SR 1181)																1
LINC0016-H	NC 182	to Southwest Connector	Lincoln County	0.5	20	2	60	45	11800	3400	5400	6000	12700	2A	ADQ	Maj	Reg	В
l		Southwest Connector to Old Linc-															_	_
LINC0016-H	NC 182	Crouse Rd (SR 1228)	Lincoln County	0.7	20	2	60	45	11800	3400	5400	5000	12700	2A	ADQ	Maj	Reg	В
	NO 400	Old Linc-Crouse Rd (SR 1228)						4-	1	4000		4000	40706		456	l		_
LINC0016-H	NC 182	to Hilltop Rd (SR 1225)	Lincoln County	0.1	20	2	60	45	11800	4200	6600	1000	12700	2A	ADQ	Maj	Reg	
LINC0016-H	NC 182	Hilltop Rd (SR 1225) to NC 27	Lincoln County	0.1	20	2	60	45	11800	4600	7200	3500	12700	2A	ADQ	Maj	Reg	В

					ŀ	HIGH\	NAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
				Dist.	Se	ross- ection	ROW	Speed Limit	Capacity	2010	2035 AADT	2035 AADT	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
LINC0017-H	(SR 1354)	NC 27 to Sherrill Farm Rd (SR 1353)	Lincoln County	0.2	18	2	60	45	10500	2000	4100	2100	12400	2A	ADQ	Min	Sub	
LINC0017-H	Asbury Church Rd (SR 1354) Asbury Church Rd	Old Mill Rd (SR 1351)	Lincoln County	1.7	18	2	60	45	10500	1200	1800	2100	12400	2A	ADQ	Min	Sub	
LINC0017-H	(SR 1354)	Old Mill Rd (SR 1351) to Furnace Rd (SR 1355)	Lincoln County	1.8	18	2	60	45	10500	1400	4600	1600	12400	2A	ADQ	Min	Sub	
	Aspen St (SR 1406)	US 321 BUS (Gastonia Hwy) to Laboratory Rd (SR 1238)	Lincolnton	0.8	22	2	60	35	10700	4400	5600	8000	ADQ	ADQ	ADQ	Min	Sub	
	Aspen St (SR 1406)	Laboratory Rd (SR 1238) to Motz Ave	Lincolnton	0.1	30	2	60	35	11100	4400	5600	9500	ADQ	ADQ	ADQ	Min	Sub	
	Aspen St (SR 1406)	Motz Ave to Congress St	Lincolnton	0.4	30	2	60	35	11100	4200	5300	3400	ADQ	ADQ	ADQ	Min	Sub	ļ
	Aspen St (SR 1406)	Congress St to Water St	Lincolnton	0.2	30	2	50	20	11100	4000	5100	3400	ADQ	ADQ	ADQ	Min	Sub	<u> </u>
	Aspen St (SR 1405)	Sycamore St to Pine St	Lincolnton	0.1	44	2	60	35	11400	4200	5600	2800	ADQ	ADQ	ADQ	Min	Sub	<u> </u>
	Aspen St (SR 1405)	Pine St to Bonview Ave	Lincolnton	0.2	44	2	60	35	11500	4200	5600	4800	ADQ	ADQ	ADQ	Min	Sub	<u> </u>
	Aspen St (SR 1405)	Bonview Ave to Dixon St	Lincolnton	0.2	44	3	60	35	11500	4800	5600	4800	ADQ	ADQ	ADQ	Min	Sub	
LINC0006-H	Aspen St (SR 1405)	Dixon St to Creek Creek to Walt Burgess Rd (SR	Lincolnton	0.4	44	3	60	35	11500	5400	7600	7500	ADQ	ADQ	ADQ	Min	Sub	Р
LINC0006-H	Aspen St (SR 1405)	•	Lincolnton	0.4	22	2	60	35	12300	6600	8000	9000	11700	3B	80	Min	Sub	Р
LINC0006-H	Aspen St (SR 1405)		Lincolnton	0.1	22	2	60	45	12300	6800	10000	9000	13100	3B	80	Min	Sub	Р
LINC0006-H	Aspen St (SR 1405)	Flint St to Sigmon Rd (SR 1267) Sigmon Rd (SR 1267) to US 321	Lincolnton	0.2	22	2	60	45	12300	6800	10000	9000	13100	3B	80	Min	Sub	Р
LINC0006-H	Aspen St (SR 1405)	0 (	Lincolnton	0.3	22	2	60	45	11800	7000	8000	12400	13100	3B	80	Min	Sub	Р
	Bethel Church Rd	US 321 Bus (Maiden Hwy) to																
LINC0018-H	(SR 1282) Bethel Church Rd	Roper Rd Ext	Lincoln County	0.3	18	2	80	45	10500	3000	4400	5000	12400	2A	ADQ	Min	Sub	
LINC0018-H	(SR 1282) Bethel Church Rd	Roper Rd Ext to US 321 US 321 to Walker Branch Rd	Lincoln County	0.7	18	2	80	45	10500	3000	4500	5600	12400	2A	ADQ	Min	Sub	
LINC0018-H	(SR 1282) Bethel Church Rd	(SR 1333) Walker Branch Rd (SR 1333) to	Lincoln County	0.1	18	2	60	45	10500	4500	7200	6600	12400	2A	ADQ	Min	Sub	
LINC0018-H	(SR 1282) Bethel Church Rd	Worthington PI (SR 1852) Worthington PI (SR 1852) to	Lincoln County	0.6	18	2	60	45	10500	5000	7400	6600	12400	2A	ADQ	Min	Sub	
LINC0018-H	(SR 1282)	Buffalo Shoals Rd (SR 1003)	Lincoln County	0.3	18	2	60	45	10500	4500	6500	6600	12400	2A	ADQ	Min	Sub	

					H	HIGHV	VAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
					Cı	oss-		Speed	Existing		2035	2035	Proposed			CTP		
				Dist.	Se	ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
		Grove St (SR 1008) to																
	Bonview Ave	Government St	Lincolnton	0.2	20	2	60	25	9000	5000	4800	9000	ADQ	ADQ	ADQ	Min	Sub	
		Government St to Aspen St (SR																
	Bonview Ave	1405)	Lincolnton	0.1	20	2	60	25	9000	5000	4500	9000	ADQ	ADQ	ADQ	Min	Sub	
		Main St (SR 2098) to Landers																
LINC0019-H	1175)	Church Rd (SR 1176)	Lincoln County	0.2	18	2	60	45	10500	1400	2000	2000	12400	2A	ADQ	Min	Sub	
	Buffalo Shoals Rd																	
LINC0020-H	(SR 1003)	NC 27 to McAlister Rd (SR 1334)	Lincolnton	0.2	22	2	60	35	9900	6800	11100	7500	12400	2A	ADQ	Min	Sub	
	Buffalo Shoals Rd	McAlister Rd (SR 1334)to Quail																
LINC0020-H	(SR 1003)	Hollow Rd (SR 1631)	Lincolnton	0.9	22	2	60	35	9900	6000	8100	7500	12400	2A	ADQ	Min	Sub	
	Buffalo Shoals Rd	Quail Hollow Rd (SR 1631) to				_											l	
LINC0020-H	(SR 1003)	Bethel Church Rd (SR 1282)	Lincoln County	0.4	22	2	60	45	12400	6000	8100	7500	14300	2A	ADQ	Min	Sub	
	Buffalo Shoals Rd	Bethel Church Rd (SR 1282) to				_											l	
LINC0020-H	(SR 1003)	Woolie Rd (SR 1336)	Lincoln County	0.2	22	2	60	45	12400	5400	8100	6500	14300	2A	ADQ	Min	Sub	
		Woolie Rd (SR 1336) to Tomes				_												
LINC0020-H	(SR 1003)	Rd (SR 1759)	Lincoln County	0.4	22	2	60	45	12400	5400	7800	6500	14300	2A	ADQ	Min	Sub	
	Buffalo Shoals Rd	Tomes Rd (SR 1759) to McClain							40400	= 400		0=00	4.4000					
LINC0020-H	(SR 1003) Buffalo Shoals Rd	Tr (SR 1538)	Lincoln County	0.1	22	2	60	45	12400	5400	7800	6500	14300	2A	ADQ	Min	Sub	
		McClain Tr (SR 1538) to Buck		0.0	00	_	00	45	40400	F 400	7000	0500	4.4000	0.4	400			
LINC0020-H	(SR 1003)	Oak Rd (SR 1618)	Lincoln County	0.2	22	2	60	45	12400	5400	7800	6500	14300	2A	ADQ	Min	Sub	
1 1000000 11	Buffalo Shoals Rd (SR 1003)	Buck Oak Rd (SR 1618) to	Lines In County	0.0	00	0	00	0.5	0000	E 400	7400	4700	4.4000	0.4	400	N 41:	0	
LINC0020-H		Shuford Rd (SR 1339) Shuford Rd (SR 1339) to	Lincoln County	0.2	22	2	60	35	9900	5400	7100	4700	14300	2A	ADQ	Min	Sub	
1 1000000 11	Buffalo Shoals Rd (SR 1003)		Lines In County	0.0	00	0	00	0.5	0000	2000	0500	4700	4.4000	0.4	400	N 41:	0	
LINC0020-H	Buffalo Shoals Rd	Wisteria Ln (SR 1340)	Lincoln County	0.2	22	2	60	35	9900	3200	6500	4700	14300	2A	ADQ	Min	Sub	
LINC0020-H	(SR 1003)	Wisteria Ln (SR 1340) to Beal Rd (SR 1445)	Linaala Cauatu	1.2	22	2	60	45	12400	3200	6500	4700	14300	2A	ADQ	Min	Sub	
LINCUUZU-H	Buffalo Shoals Rd	Beal Rd (SR 1445) to Springs	Lincoln County	1.2	22		60	45	12400	3200	6500	4700	14300	ZA	ADQ	IVIII	Sub	
LINC0020-H	(SR 1003)	East Rd (SR 1342)	Lincoln County	0.9	22	2	60	45	12400	2600	4900	4700	14300	2A	ADQ	Min	Sub	
LINCUUZU-H	Buffalo Shoals Rd	Springs East Rd (SR 1342) to	Lincoln County	0.9	22		60	45	12400	2000	4900	4700	14300	ZA	ADQ	IVIIII	Sub	
LINC0020-H	(SR 1003)	Ivey Church Rd (SR 1343)	Lincoln County	0.4	22	2	60	45	12400	2600	4900	4700	14300	2A	ADQ	Min	Sub	
LINCOUZU-FI	(31. 1003)	ivey Church Nu (SN 1343)	Lincoln County	0.4	22		UU	40	12400	2000	4900	4700	14300	ZA	ADQ	IVIIII	Sub	
	Cedar St	Congress St to Church St	Lincolnton	0.2	24	2	60	25	10000	4800	7800	4500	ADQ	ADQ	ADQ	Min	Sub	
		Church St to NC 27	Lincolnton	0.2	24	2	60	25	10000	5200	8400	3500	ADQ	ADQ	ADQ	Min	Sub	
	Cedar St (SK 1939)	NC 27 to Pine St	Lincolnton	0.0	24	2	60	25	10000	5000	8200	2500	ADQ	ADQ	ADQ	Min	Sub	
	Cedar St	Pine St to Dixon St	Lincolnton	0.0		2	60	25	10000	1400	2400	2500	ADQ	ADQ	ADQ	Min	Sub	
	Jedai St	I IIIO OL LO DIXOII OL	LITICOTTICOTT	0.0	24		00		10000	1400	2400	2300	ADQ	ADQ	ADQ	IVIIII	Jub	
	Clarks Creek Rd	Startown Rd (SR 1005) to																
	(SR 1282)	Industrial Park Rd (SR 1463)	Lincoln County	1.2	20	2	65	45	11800	4200	6500	8000	ADQ	ADQ	ADQ	Min	Sub	
	Clarks Creek Rd	Industrial Park Rd (SR 1463) to	Lincoln County	1.4	20		00	70	11000	7200	0000	0000	ADQ	ADQ	ADQ	IVIIII	Gub	<b>-</b>
	(SR 1282)	US 321 Bus (Maiden Hwy)	Lincoln County	0.4	20	2	65	45	11800	4200	6500	8000	ADQ	ADQ	ADQ	Min	Sub	
	(511 1202)	CC CZ : Bus (Maidell 11wy)	Lincoln County	0.7	20		00	70	11000	7200	0000	0000	ADQ.	ADQ	ADQ	IVIIII	Jub	

					F	HIGHV	WAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
				Dist.	Se	oss- ction	ROW	Speed Limit	Capacity	2010	2035 AADT	2035 AADT	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility Confederate Rd	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	(SR 1222)	Laboratory Rd (SR 1252) to NC 150	Lincoln County	0.8	20	2	60	35	9200	1000	5300	5400	ADQ	ADQ	ADQ	Min	Sub	
	Confederate Rd	NC 150 to Rhodes Rhyne Rd	Lincoln County	0.0	20		60	33	9200	1000	5300	3400	ADQ	ADQ	ADQ	IVIIII	Sub	
	(SR 1222)	(SR 1235)	Lincoln County	0.1	20	2	60	45	11800	2000	5300	5400	ADQ	ADQ	ADQ	Min	Sub	
	(OK 1222)	Rhodes Rhyne Rd (SR 1235) to	Lincoln County	0.1	20		00	70	11000	2000	3300	3400	ADQ	ADQ	ADQ	IVIIII	Oub	
	Confederate Rd	Love Memorial School Rd (SR																
	(SR 1222)	1416)	Lincoln County	0.4	20	2	60	45	11800	2000	6000	5400	ADQ	ADQ	ADQ	Min	Sub	
		-1	,															
		S Grove St (SR 1222) to S																
	Congress St	Aspen St (SR 1406)	Lincolnton	0.3	24	2	40	35	10200	5900	9300	4500	ADQ	ADQ	ADQ	Min	Sub	
		S Aspen St (SR 1406) to Cedar						•										
	Congress St	St (SR 1959)	Lincolnton	0.3	24	2	40	35	10200	4200	8900	3100	ADQ	ADQ	ADQ	Min	Sub	
		Cedar St (SR 1959) to Laurel St																
	Congress St	(SR 1262)	Lincolnton	0.2	24	2	40	35	10200	2800	5400	3400	ADQ	ADQ	ADQ	Min	Sub	
	Country Club Dd	Colore Church Dd (CD 4004) to																
	Country Club Rd (SR 1262)	Salem Church Rd (SR 1001) to Lithia Inn Rd (SR 1294)	Lincoln County	1.2	24	2	60	45	12400	2600	EE00	2700	ADQ	ADQ	۸۵۸	Min	Sub	
	Country Club Rd	Lithia Inn Rd (SR 1294)	Lincoln County	1.2	24		60	45	12400	2600	5500	2700	ADQ	ADQ	ADQ	Min	Sub	
	(SR 1262)	321 BUS (Generals Blvd)	Lincolnton	1.2	24	2	60	35	10200	6600	12200	4400	ADQ	ADQ	ADQ	Min	Sub	
	(OK 1202)	321 BOO (Generals Bivd)	LITICOTTION	1.2	27		00	- 55	10200	0000	12200	7700	ADQ	ADQ	ADQ	IVIIII	Oub	
	Crouse Rd (SR																	
	1169)	Indian Creek to NC 150	Lincoln County	1.3	20	2	60	45	11800	1600	2300	2300	ADQ	ADQ	ADQ	Min	Sub	
	,		,															
	Curve View Rd (SR																	
LINC0021-H	1335)	NC 150 to Woolie Rd (SR 1336)	Lincoln County	0.3	18	2	60	45	10500	1200	4000	2200	12400	2A	ADQ	Min	Sub	
	Daniels Rd (SR	NC 27 to Rock Dam Rd (SR				_												
LINC0022-H	1185)	1184)	Lincoln County	8.0	18	2	60	45	10500	400	1200	1300	12400	2A	ADQ	Min	Sub	
LINCOOSS	Daniels Rd (SR 1185)	Rock Dam Rd (SR 11840 to Lewis Rd (SR 1185)	Lincoln County	1.0	10	2	60	45	10500	1600	3200	2000	12400	2A	۸۵۵	N.A.:	Sub	
LINC0022-H	Daniels Rd (SR	Lewis Rd (SR 1185)	Lincoln County	1.6	18	2	UO	45	10000	1600	3200	2000	12400	ZA	ADQ	Min	Sub	
LINC0022-H	1204)	Reepsville Rd (SR 1113)	Lincoln County	0.8	18	2	60	45	10500	600	1500	1700	12400	2A	ADQ	Min	Sub	
	. 207)	. tospormo rea (Ore 1110)		0.0	-0		30	70	10000	550	1000	1700	12-700	<i>L</i> /\	, .DQ	141111	Jub	
	Devine Rd (SR	Gaston County to Keever Dairy																
LINC0023-H	1312)	Farm Rd (SR 1313)	Lincoln County	0.1	18	2	60	45	10500	1200	2400	2800	12400	2A	ADQ	Min	Sub	
	Devine Rd (SR	Keever Dairy Farm Rd (SR	, , , , , , , , , , , , , , , , , , ,															
LINC0023-H	1312)	1313) to NC 27	Lincoln County	1.7	18	2	60	45	10500	800	2300	2300	12400	2A	ADQ	Min	Sub	
			,															
	Divon St	N Aspen St (SR 1405) to Flint St	Lincolnton	0.0	24	2	40	25	10000	400	3000	2500	ADQ	ADQ	ADQ	Min	Sub	Р
	Dixon St	IN ASPELL OF (OK 1400) TO FILL OF	LITICOITION	0.0	24		40	25	10000	400	3000	2500	ADQ	ADQ	ADQ	Min	Sub	P
	Finger Mill Rd (SR	US 321 Bus (Maiden Hwy) to													l		l	
	1276)	Lincoln County Pkwy (SR 1277)	Lincoln County	1.1	24	2	60	45	14900	4000	10100	14900	ADQ	ADQ	ADQ	Min	Sub	

					H	HIGHV	NAY											
								xisting	System			2035 Pro	posed Sys	stem				
Local ID	Facility	Section (From - To)	Jurisdiction	Dist.	Se	ross- ection lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)	CTP Classifi- cation	Tier	Other Modes
Local ID	Finger Mill Rd (SR	Lincoln County Pkwy (SR 1277)	Julisulction	(1111)	(11)	ianes	(11)	(IIIpII)	(vpu)	AADI	E+C	WILLICIF	(vpu)	Section	(11)	Callon	Hei	Modes
LINC0024-H	1276)	to Catawba County	Lincoln County	0.8	20	2	60	45	13600	4000	7600	14300	14600	2A	ADQ	Min	Sub	
	Flint St	Country Club Rd (SR 1262) to NC 27	Lincolnton	0.4	20	2	40	25	9300	4000	5100	4600	ADQ	ADQ	ADQ	Min	Sub	
	Flint St	NC 27 to Dixon St	Lincolnton	0.4	20	2	50	25	9300	2400	3100	2800	ADQ	ADQ	ADQ	Min	Sub	1
	Flint St	Dixon St to N Aspen St (SR 1405)	Lincolnton	0.7	20	2	60	25	9300	2400	3100	2800	ADQ	ADQ	ADQ	Min	Sub	
LINC0025-H	Furnace Rd (SR 1355)	NC 73 to Asbury Church Rd (SR 1354)	Lincoln County	2.6	18	2	60	45	10500	800	3500	2500	12400	2A	ADQ	Min	Sub	
LINC0025-H	Furnace Rd (SR 1355)	Asbury Church Rd (SR 1354) to King Wilkinson Rd (SR 1349)	Lincoln County	0.9	18	2	60	45	10500	1700	4000	2500	12400	2A	ADQ	Min	Sub	
LINC0026-H	Gainsville Church Rd (SR 1181)	NC 182 to NC 27	Lincoln County	0.4	18	2	60	45	10500	600	1400	1000	12400	2A	ADQ	Min	Sub	
LINC0027-H	Gaston St Ext (SR 1419)	US 321 BUS (Generals Blvd) to NC 27 (E Main St)	Lincolnton	0.9	22	2	60	35	9900	4200	7100	7100	10200	2A	ADQ	Min	Sub	
LINC0028-H	Gaston-Webbs Chapel Rd (SR 1173)	Gaston County to St Marks Church Rd (1172)	Lincoln County	0.5	18	2	60	45	10500	1100	3200	3000	12400	2A	ADQ	Min	Sub	
LINC0029-H	George Brown Rd (SR 1180)	Leonard Fork Creek to NC 182	Lincoln County	2.7	18	2	60	45	10500	600	1000	1000	12400	2A	ADQ	Min	Sub	
	Government St	Motz Ave to Congress St		0.5	24	2	60	25	10200	500	3800	1400	ADQ	ADQ	ADQ	Min	Sub	
	Government St	Congress St to NC 27		0.2	24	2	60	25	10200	500	3800	1400	ADQ	ADQ	ADQ	Min	Sub	ĺ
	Government St	NC 27 to Sycamore St		0.1	24	2	60	25	10200	500	3800	3800	ADQ	ADQ	ADQ	Min	Sub	ĺ
	Government St	Sycamore St to Pine St		0.1	24	2	60	25	10200	500	3800	1600	ADQ	ADQ	ADQ	Min	Sub	
	Government St	Pine St to Bonview St		0.1	24	2	60	25	10200	500	3800	300	ADQ	ADQ	ADQ	Min	Sub	
	Grove St (SR 1222)	Love Memorial School Rd (SR 1416) to Hillton Rd (SR 1225)	Lincoln County	0.1	20	2	60	45	11800	2600	6700	5600	ADQ	ADQ	ADQ	Min	Sub	
	Grove St (SR 1222)	Hilltop Rd (SR 1225) to Carolina Mill Cir (SR 1259)	Lincoln County	0.5	20	2	60	35	9200	2000	6700	5600	ADQ	ADQ	ADQ	Min	Sub	
	, ,	Carolina Mill Cir (SR 1259) to Glenn St (SR 1261)	Lincoln County	0.2	20	2	60	35	9200	2000	6700	5600	ADQ	ADQ	ADQ	Min	Sub	
	Grove St (SR 1222)	Glenn St (SR 1261) to Motz Ave	Lincolnton	0.6	20	2	40	35	9200	2000	6700	5600	ADQ	ADQ	ADQ	Min	Sub	
	Grove St (SR 1222)	Motz Ave to Congress St	Lincolnton	0.6	20	2	40	35	9200	2000	7500	3500	ADQ	ADQ	ADQ	Min	Sub	Р

					F	IIGHV	VAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
					Cr	OSS-		Speed			2035	2035	Proposed			CTP		
				Dist.	Se	ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Grove St (SR 1222)	Congress St to NC 27	Lincolnton	0.2	20	2	40	35	9200	4200	8500	3500	ADQ	ADQ	ADQ	Min	Sub	Р
	O 04 (OD 4000)	NO 07 to Dia - 0t	Linealatea	0.4	20	_	00	0.5	40000	0000	40000	40000	400	400	400	N 41:	0	D D
	Grove St (SR 1008)	INC 27 to Pine St	Lincolnton	0.1	32	2	60	35	10200	8600	10800	10200	ADQ	ADQ	ADQ	Min	Sub	B,P
	Grove St (SR 1008)	Pine St to Bonview Ave	Lincolnton	0.1	32	2	60	35	10200	8600	10800	10000	ADQ	ADQ	ADQ	Min	Sub	В,Р
		Bonview Ave to Elm Grove Rd	Lincolnton	0.1	02		- 00	- 00	10200	0000	10000	10000	/IDQ	/ LD Q	/LDQ	101111	Oub	Б,1
	Grove St (SR 1008)	(SR 1221)	Lincolnton	0.3	32	2	60	35	10200	6500	10000	10000	ADQ	ADQ	ADQ	Min	Sub	В,Р
		Elm Grove Rd (SR 1221) to																,
	Grove St (SR 1008)	Startown Rd (SR 1005)	Lincoln County	0.2	24	2	60	45	12400	5100	10000	6600	ADQ	ADQ	ADQ	Min	Sub	В
		Salem Church Rd (SR 1001) to																
LINC0030-H	, ,	Keener Rd (SR 1323)	Lincoln County	2.0		2	60	45	11800	800	1100	1100	12400	2A	ADQ	Min	Sub	
LINC0030-H	Hill Rd (SR 1321)	Keener Rd (SR 1323) to NC 27	Lincoln County	0.5	18	2	60	45	10500	800	1100	1100	12400	2A	ADQ	Min	Sub	
	Hilltop Rd (SR	Grove St (SR 1222) to Old																
LINC0031-H		Cherryville Hwy (SR 1407)	Lincoln County	0.5	18	2	60	35	9200	2800	10300	3500	12400	2A	ADQ	Min	Sub	
LING0031-11		Old Cherryville Hwy (SR 1407) to	Lincoln County	0.0	10		- 00	33	3200	2000	10300	3300	12400	2/1	ADQ	IVIIII	Oub	
LINC0031-H		NC 182	Lincoln County	0.3	18	2	60	35	9200	1200	4600	3000	12400	2A	ADQ	Min	Sub	
	,					_												
	Horseshoe Lake	US 321 BUS (Maiden Hwy) to																
LINC0032-H		Roper Rd Ext	Lincoln County	0.2	18	2	60	45	10500	1000	1200	1900	12400	2A	ADQ	Min	Sub	
		Roper Rd Ext to Springdale Pk																
LINC0032-H		(SR 1557)	Lincoln County	1.2	18	2	60	45	10500	1000	1200	2000	12400	2A	ADQ	Min	Sub	
		Springdale Pk (SR 1557) to Car		۰.	40	•	00	45	40500	4000	4000	0000	40400	0.4	400			
LINC0032-H	Rd (SR 1338)	Farm Rd (SR 1339)	Lincoln County	0.5	18	2	60	45	10500	1000	1200	2800	12400	2A	ADQ	Min	Sub	
		Keever Dairy Farm Rd (SR																
		1313) to Will Schronce Rd																
	Hovis Rd (SR 1315)	/	Lincoln County	1.2	20	2	60	45	11800	600	800	800	ADQ	ADQ	ADQ	Min	Sub	
						_												
	Howards Creek																	
	School Rd (SR																	
LINC0033-H	1186)	NC 182 to NC 27	Lincoln County	1.0	18	2	60	45	10500	700	1600	1600	12400	2A	ADQ	Min	Sub	
	•	Catawba County to Short Cut Rd	Lineale Occurs	0.0			00	45	40400	0000	4400	4400	400	400	400	N 45		
	(SR 1343) Ivey Church Rd	(1409) Short Cut Rd (SR 1409) to	Lincoln County	0.6	22	2	60	45	12400	2800	4400	4400	ADQ	ADQ	ADQ	Min	Sub	
		Buffalo Shoals Rd (SR 1003)	Lincoln County	0.3	22	2	60	45	12400	2800	3100	4400	ADQ	ADQ	ADQ	Min	Sub	
		Buffalo Shoals Rd (SR 1003) to	Enterin County	0.3			UU	40	12400	2000	3100	4400	אטע	אטע	אטע	IVIIII	Jub	
LINC0034-H	,	Union Church Rd (SR 1344)	Lincoln County	0.9	18	2	60	45	10500	1800	2800	4200	12400	2A	ADQ	Min	Sub	
		Union Church Rd (SR 1344) to																
LINC0034-H	•	Walker Rd (SR 1346)	Lincoln County	0.9	18	2	60	45	10500	2000	3100	4200	12400	2A	ADQ	Min	Sub	

					ŀ	HIGHV	VAY											
							2010 E		System			2035 Pro	posed Sys	stem				
					_	oss-		•	Existing		2035	2035	Proposed			CTP		
				Dist.		ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
1 1000004 11	Ivey Church Rd	W-II D-I (OD 4040) t- NO 450	Linaala Oassats	4.0	40	0	00	45	40500	0000	0400	4000	40400	0.4	400	N 4:	0	
LINC0034-H	(SR 1343)	Walker Rd (SR 1346) to NC 150	Lincoln County	1.0	18	2	60	45	10500	2000	3100	4200	12400	2A	ADQ	Min	Sub	
	Keever Dairy Farm	Devine Rd (SR 1312) to Hovis																
LINC0035-H	Rd (SR 1313)	Rd (SR 1315)	Lincoln County	1.8	20	2	60	45	9000	1200	3800	1900	12400	2A	ADQ	Min	Sub	
			-															
	Keever Dairy Farm	Hovis Rd (SR 1315) to Salem																
LINC0035-H	Rd (SR 1313)	Church Rd (SR 1001)	Lincoln County	1.2	18	2	60	45	7500	1200	3800	1900	12400	2A	ADQ	Min	Sub	
	Killian Rd (SR	Reepsville Rd (SR 1113) to Pott																
LINC0036-H	1008)	Creek	Lincoln County	3.3	18	2	60	45	10500	800	1700	1700	12400	2A	ADQ	Min	Sub	
	. 555,	5.55K		0.0	.0	_	50	.0	10000	550	1,00	1,00	12 100		,,,,,,,	141111	Cub	
	King Wilkinson Rd	NC 150 to Clubhouse Rd (SR																
LINC0037-H	(SR 1349)	1459)	Lincoln County	0.5	18	2	60	45	10500	4200	5700	5700	12400	2A	ADQ	Min	Sub	
	King Wilkinson Rd	Clubhouse Rd (SR 1459) to																
LINC0037-H	(SR 1349)	Furnace Rd (SR 1355)	Lincoln County	0.2	18	2	60	45	10500	4200	5700	5700	12400	2A	ADQ	Min	Sub	
	Laboratory Rd (SR	Gaston County to Riverview Rd																
LINC0038-H	1252)	(SR 1236)	Lincoln County	1.4	18	2	60	35	9200	1000	3400	3400	12400	2A	ADQ	Min	Sub	
LINCOUSE-II	Laboratory Rd (SR	Riverview Rd (SR 1236) to	Lincoln County	1.4	10		00	33	9200	1000	3400	3400	12400	2/1	ADQ	IVIIII	Sub	
LINC0038-H	1252)	Confederate Rd (SR 1222)	Lincoln County	0.4	18	2	60	35	9200	1400	5000	4700	12400	2A	ADQ	Min	Sub	
	Laboratory Rd (SR	Confederate Rd (SR 1222) to	j															
LINC0038-H	1252)	South Fork Rd	Lincoln County	0.1	18	2	60	35	9200	1500	3000	3900	12400	2A	ADQ	Min	Sub	
	Laboratory Rd (SR	South Fork Rd (SR 1248) to NC																
	1252)	150	Lincoln County	1.1	20	2	100	45	11800	1200	2200	2100	ADQ	ADQ	ADQ	Min	Sub	
	Laboratory Rd (SR 1238)	NC 150 to S Aspen St (SR 1406)	Lincolnton	0.8	20	2	60	45	11800	800	1300	2400	ADQ	ADQ	ADQ	Min	Sub	
	1230)	NC 130 to 3 Aspell 3t (3tt 1400)	LITICOITION	0.6	20		00	40	11000	800	1300	2400	ADQ	ADQ	ADQ	IVIIII	Sub	
	Landers Church	Boy Scout Rd (SR 1175) to																
LINC0039-H	Rd (SR 1176)	Gaston County	Lincoln County	1.6	18	2	60	45	10500	1400	2000	2000	12400	2A	ADQ	Min	Sub	
		US 321 BUS (Generals Blvd) to																
	Laurel St (SR 1262)	Flint St	Lincolnton	0.3	48	2	110	35	24300	6400	6800	10800	ADQ	ADQ	ADQ	Min	Sub	
		Flint St to Congress St	Lincolnton	0.3	48	2	110	35	24300	6400	6800	6800	ADQ	ADQ	ADQ	Min	Sub	
	Laurel St	Congress St to NC 27	Lincolnton	<0.1	24	2	60	35	11000	2800	3000	1600	ADQ	ADQ	ADQ	Min	Sub	Р
	Laurel St	NC 27 to Pine St	Lincolnton	<0.1		2	50	35	11000	2500	3500	1600	ADQ	ADQ	ADQ	Min	Sub	•
						_												
		Daniels Rd (1204) to Reepsville																
	Lewis Rd (SR 1185)	Rd (SR 1113)	Lincoln County	0.7	20	2	60	45	11800	1400	2200	3100	ADQ	ADQ	ADQ	Min	Sub	

					ŀ	HIGHV	VAY											
							2010 E		System				posed Sys	stem				
					_	oss-		•	Existing		2035	2035	Proposed			CTP		
				Dist.		ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Litteia Inna Dal (OD	Victory Grove Church Rd (SR																1
1 1000040 11	Lithia Inn Rd (SR	1298) to Country Club Rd (SR 1262)	I in a a last a sa	0.0		0	00	45	44700	2000	0500	4000	40400	0.4	400	N 4:	01-	1
LINC0040-H	1294) Lithia Inn Rd (SR	Country Club Rd (SR 1262) to	Lincolnton	0.8	20	2	60	45	11700	3000	6500	1800	12400	2A	ADQ	Min	Sub	
LINC0040-H	1294)	US 321	Lincolnton	0.4	24	2	60	45	11700	3200	6500	2500	12400	2A	ADQ	Min	Sub	1
LINCOUTO-II	Lithia Inn Rd (SR	00 321	LITICOTTION	0.4	24		00	40	11700	3200	0300	2300	12400	2/1	ADQ	IVIIII	Sub	
LINC0040-H	1294)	US 321 to NC 27	Lincolnton	0.8	18	2	60	45	10500	5000	10100	5000	12400	2A	ADQ	Min	Sub	1
2.110001011	1201)	00 021 10 110 21	Lincolnton	0.0		_	- 00	10	10000	0000	10100	0000	12100		/ LD Q	14	Cub	
	Long Shoals Rd	Gaston County to Southside Rd																
	(SR 1242)	(SR 1243)	Lincoln County	0.5	24	2	80	35	10200	1400	3800	3800	ADQ	ADQ	ADQ	Min	Sub	1
	Long Shoals Rd	Southside Rd (SR 1243) to US																
LINC0041-H	(SR 1242)	321 BUS (Gastonia Hwy)	Lincoln County	1.0	20	2	60	35	9000	1800	3200	3200	ADQ	ADQ	ADQ	Min	Sub	
		NC 150 to Gaston-Webb Chapel				•	4=0		=000			4000	450	450				1
	Main St (SR 2098)	Rd (SR 1173) Gaston-Webb Chapel Rd (SR	Lincoln County	0.7	16	2	150	45	7000	600	900	4300	ADQ	ADQ	ADQ	Min	Sub	<del>                                     </del>
		1173) to Pleasant Grove Church																1
	Main St (SR 2098)	Rd (SR 1177)	Lincoln County	0.1	24	2	150	45	12400	1200	4100	4300	ADQ	ADQ	ADQ	Min	Sub	ĺ
	Main St (SIX 2090)	Pleasant Grove Church Rd (SR	Lincoln County	0.1	24		130	40	12400	1200	4100	4300	ADQ	ADQ	ADQ	IVIIII	Sub	
		1177) to Landers Church Rd (SR																1
	Main St (SR 2098)	1176)	Lincoln County	0.3	22	2	140	45	12400	1200	3300	4300	ADQ	ADQ	ADQ	Min	Sub	ĺ
	,	Landers Church Rd (SR 1176) to	,															
	Main St (SR 2098)	NC 150	Lincoln County	0.4	22	2	150	45	12400	1200	1900	4300	ADQ	ADQ	ADQ	Min	Sub	<u> </u>
	McAlister Rd (SR	Buffalo Shoals Rd (SR 1003) to																ĺ
LINC0042-H	1334)	Hospital Dr	Lincolnton	0.4	18	2	60	45	7500	1400	2000	2000	12400	2A	ADQ	Min	Sub	<del></del>
1 10100040 11	McAlister Rd (SR	Handital Bata NO 450		0.4	40	•	00	45	7500	4.400	0000	0000	40400	0.4	400			ĺ
LINC0042-H	1334)	Hospital Dr to NC 150	Lincoln County	0.1	18	2	60	45	7500	1400	2000	2000	12400	2A	ADQ	Min	Sub	
	Motz Ave																	
LINC0007-H	Extension W	NC 27 to S Grove St (SR 1222)	Lincolnton	0.4	_	_	_	-	-	-	-	5000	10200	2E	60	Min	Sub	Р
		S Grove St (SR 1222) to S																
LINC0007-H	Motz Ave	Aspen St (SR 1406)	Lincolnton	0.8	18	2	60	30	7500	500	800	7500	10200	2E	60	Min	Sub	Р
	Motz Ave	S Aspen St (SR 1406) to Laurel																
LINC0007-H	Extension E	St (SR 1262)	Lincolnton	0.5	-	-	-	-	-	-	-	4000	10200	2E	60	Min	Sub	Р
	Northeast																	İ
		t NC 73 to End of Airport Rd																İ
LINC0008-H	Pkwy (SR 1750)	(1750)	Lincoln County	0.4	20	2	60	45	11800	1200	_	1600	ADQ	ADQ	ADQ	Min	Sub	İ
FII4C0000-FI	Northeast	End of Airport Rd (SR 1750) to	Lincoln County	0.4	20		00	40	11000	1200	-	1000	ADQ	ADQ	ADQ	IVIIII	Sub	
LINC0008-H	Connector	Asbury Church Rd (SR 1354)	Lincoln County	0.8	_	_	_	_	_	_	_	1600	12400	2A	60	Min	Sub	İ
	Connector	riodary Oriaion Na (Ort 1004)	Lincoln County	0.0		_		_	_	_	_	1000	12700	27	00	IVIIII	Jub	

					ŀ	HIGHV	VAY											
							2010 E		System			2035 Pro	posed Sys	stem				
					Cı	ross-		Speed	Existing		2035	2035	Proposed			CTP		
				Dist.		ection	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Northeast																	
	Connector - Old	Asbury Church Rd (SR 1354) to																
LINC0008-H	Mill Rd (SR 1351)	NC 150	Lincoln County	1.4	20	2	60	45	11800	900	3300	2100	12400	2A	ADQ	Min	Sub	
	Northeast	NC 150 to Union Church Rd (SR																
LINC0008-H	Connector	1344)	Lincoln County	0.6	-	-	-	-	-	-	-	5600	12400	2A	60	Min	Sub	
	Northeast																	
	Connector -																	
	Shuford Rd (SR	Union Church Rd (SR 1344) to																
LINC0008-H	1339)	Buffalo Shoals Rd (SR 1003)	Lincoln County	0.9	18	2	60	45	10500	5900	7500	5600	12400	2A	ADQ	Min	Sub	
	Northeast																	
	Connector - Car																	
	Farm Road (SR	Buffalo Shoals Rd (SR 1003) to																
LINC0008-H	1339)	North St (SR 1563)	Lincoln County	0.8	18	2	60	45	10500	3000	4200	7500	12400	2A	ADQ	Min	Sub	
	Northeast	North St (SR 1563) to US 321																
LINC0008-H	Connector	Business (Maiden Hwy)	Lincoln County	0.5	-	-	-	-	-	-	-	7400	12400	2A	60	Min	Sub	
	Old Cherryville Rd																	
	(SR 1407)		Lincoln County	0.8	24	2	90	45	12400	4000	5000	6800	ADQ	ADQ	ADQ	Min	Sub	
	Old Cherryville Rd	Southwest Connector to Love																
	(SR 1407)	Memorial School Rd (SR 1416)	Lincoln County	0.1	24	2	90	45	12400	4000	6000	6800	ADQ	ADQ	ADQ	Min	Sub	
	Old Cherryville Rd	Love Memorial School Rd (SR																
	(SR 1407)	1416) to Hilltop Rd (SR 1225)	Lincoln County	0.8	24	2	90	45	12400	4000	6500	6800	ADQ	ADQ	ADQ	Min	Sub	
	Old Cherryville Rd																	
	(SR 1407)	Hilltop Rd (SR 1225) to NC 27	Lincoln County	0.5	24	2	90	35	10200	4400	6500	5600	ADQ	ADQ	ADQ	Min	Sub	
	Old Linc-Crouse	NC 150 to Drive Inn Rd (SR																
LINC0043-H	Rd (1228)	1232)	Lincoln County	1.4	18	2	60	45	10500	600	1600	2000	12400	2A	ADQ	Min	Sub	
	Old Linc-Crouse	Drive Inn Rd (SR 1232) to																
LINC0043-H	Rd (1228)	Southwest Connector	Lincoln County	0.4	18	2	60	45	10500	600	1600	2000	12400	2A	ADQ	Min	Sub	
	Old Linc-Crouse					_												
LINC0043-H	Rd (1228)	Southwest Connector to NC 182	Lincoln County	0.9	18	2	60	45	10500	600	1600	1500	12400	2A	ADQ	Min	Sub	
	0 1 15 1 (05																	
	Orchard Rd (SR		l <u>.</u>													l	١	
	1358)	NC 27 to Armstrong Branch	Lincoln County	2.8	20	2	60	45	11800	1000	1500	1500	ADQ	ADQ	ADQ	Min	Sub	
	BUT LILE																	
	Philadelphia	Gaston County to Salem Church							40555	40	4=		40:	٥.	45.5			
LINC0044-H	Church Rd (1001)	Rd (SR 1307)	Lincoln County	1.7	18	2	60	45	10500	1000	1700	1700	12400	2A	ADQ	Min	Sub	
	<b>D</b> 1 <b>D</b> 1	0 014 4 01	1.				4-		10000	2077	40.7.7		45.5	45.5	45.5			
ļ	Pine St	Grove St to Aspen St	Lincolnton	0.0		2	40	35	10200	2900	4300	7200	ADQ	ADQ	ADQ	Min		P
	Pine St	Aspen St to Flint St	Lincolnton	0.0	24	2	40	35	10200	2900	4300	4800	ADQ	ADQ	ADQ	Min		Р

					H	HIGHV	VAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
					Cı	oss-		Speed	Existing		2035	2035	Proposed			CTP		
				Dist.	Se	ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Pleasant Grove																	
	Church Rd (SR	Main St (SR 2098) to Crouse																
LINC0045-H	1177)	School Rd (1171)	Lincoln County	0.1	20	2	60	35	9200	1200	2500	2900	12400	2A	ADQ	Min	Sub	1
	Pleasant Grove																	
	Church Rd (SR	Crouse School Rd (SR 1171) To																1
LINC0045-H	1177)	NC 150	Lincoln County	0.4	18	2	60	45	10500	1200	2500	2900	12400	2A	ADQ	Min	Sub	
	Pleasant Grove																	1
	Church Rd (SR	NC 150 to Dave Heafner Rd (SR																1
	1177)	1178)	Lincoln County	8.0	24	2	60	45	12400	800	1700	1800	ADQ	ADQ	ADQ	Min	Sub	
	Pleasant Grove																	
	Church Rd (SR	Dave Heafner Rd (SR 1178) to																
LINC0045-H	1177)	NC 182	Lincoln County	1.4	18	2	60	45	10500	800	1700	1800	12400	2A	ADQ	Min	Sub	
	Reepsville Rd (SR	0 1 1 1 5 1 (05 1105)				_												_
	1113)	Creek to Lewis Rd (SR 1185)	Lincoln County	0.5	20	2	60	45	11800	2600	4600	4600	12400	2A	ADQ	Min	Sub	В
1 1000040 11	Reepsville Rd (SR	Lewis Rd (SR 1185) to June Bug			00	_	00	45	44000	0000	4000	4000	40400	0.4	400			
LINC0046-H	1113)	Rd (SR 1215)	Lincoln County	0.7	20	2	60	45	11800	2600	4600	4600	12400	2A	ADQ	Min	Sub	В
1 1000040 11	Reepsville Rd (SR	June Bug Rd (SR 1215) to			00	_	00	45	40400	0000	4000	4000	40400	0.4	400			
LINC0046-H	1113) Reepsville Rd (SR	Daniels Rd (SR 1204)	Lincoln County	0.3	22	2	60	45	12400	2600	4600	4600	12400	2A	ADQ	Min	Sub	В
1 1000046 11		Daniels Rd (SR 1204) to Killian	Linaala Oawata		00	0	00	45	40400	0.400	7400	7400	40400	0.4	400	N 41:	0	_
LINC0046-H	1113) Reepsville Rd (SR	Rd (SR 1008) Killian Rd (SR 1008) to Gold	Lincoln County	1.1	22	2	60	45	12400	3400	7100	7100	12400	2A	ADQ	Min	Sub	В
LINC0046-H	1008)	Rush Rd (SR 1845)	Lincoln County	0.1	20	2	60	45	11800	3400	7100	7100	12400	2A	ADQ	Min	Sub	В
LINCUU40-FI	Reepsville Rd (SR	Gold Rush Rd (SR 1845) to	Lincoln County	0.1	20		60	45	11000	3400	7100	7100	12400	ZA	ADQ	IVIIII	Sub	В
LINC0046-H	1008)	Sage Field Rd (SR 2037)	Lincoln County	2.5	20	2	60	45	11800	4000	8000	8400	12400	2A	ADQ	Min	Sub	В
LII4C0040-II	Reepsville Rd (SR	Sage Field Rd (SR 2037) to	Lincoln County	2.5	20		00	40	11000	4000	0000	0400	12400	2/1	ADQ	IVIIII	Sub	
LINC0046-H	1008)	Startown Rd (SR 1005)	Lincoln County	0.3	20	2	60	45	11800	4600	9600	9600	12400	2A	ADQ	Min	Sub	В
LII400040-11	1000)	Ctartown red (Circ 1003)	Lincoln County	0.5	20		00	70	11000	4000	3000	3000	12400	ZA	ADQ	IVIIII	Oub	
	Riverview Rd (SR																	
LINC0047-H	1236)	NC 150 to Kawaii Rd (SR 1764)	Lincoln County	0.7	18	2	60	45	10500	2000	5800	8000	12400	2A	ADQ	Min	Sub	1
	Riverview Rd (SR	Kawaii Rd (SR 1764) to Bill		0				.0			0000	0000	12.00		7.2 4		000	
LINC0047-H	1236)	Lynch Rd (SR 1237)	Lincoln County	0.7	18	2	60	45	10500	2000	3900	8000	12400	2A	ADQ	Min	Sub	
	Riverview Rd (SR	Bill Lynch Rd (SR 1237) to																
LINC0047-H	1236)	Laboratory Rd (SR 1252)	Lincoln County	0.1	18	2	60	35	9200	2000	3900	1300	12400	2A	ADQ	Min	Sub	1
	,		,															
	Rock Dam Rd (SR																	
LINC0048-H	1184)	NC 27 to Daniels Rd (SR 1185)	Lincoln County	1.3	18	2	60	45	10500	1600	2000	2000	12400	2A	ADQ	Min	Sub	1
	Roper Rd																	
	Extension (SR	NC 27 to End of Roper Rd (SR																1
LINC0009-H	1287)	1287)	Lincolnton	0.2	18	2	60	45	10500	-	-	1800	ADQ	2C	50	Min	Sub	<u> </u>
	Roper Rd	End of Roper Rd (SR 1287) to																
LINC0009-H	Extension	Wilma Sigmon Rd (SR 1267)	Lincolnton	8.0	-	-	-	-	-	-	-	1100	9500	2C	50	Min	Sub	1

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							2010 E	xisting	System			2035 Pro	posed Sys	stem				
					Cr	oss-		Speed	Existing		2035	2035	Proposed			CTP		
				Dist.	Se	ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
	Roper Rd	Wilma Sigmon Rd (SR 1267) to					` /	` ' /	/				,		, ,			
LINC0009-H	Extension	Bethel Church Rd (SR 1282)	Lincolnton	0.9	-	-	-	-	-	-	-	1100	9500	2C	50	Min	Sub	
	Roper Rd	Bethel Church Rd (SR 1282) to																
LINC0009-H	Extension	Horseshoe Lake Rd (SR 1338)	Lincolnton	0.8	-	-	-	-	-	-	-	300	9500	2C	50	Min	Sub	
	Roper Rd	Horseshoe Lake Rd (SR 1338)																
LINC0009-H	Extension	to US 321 BUS (Maiden Hwy)	Lincoln County	0.4	-	-	-	-	-	-	-	300	9500	2C	50	Min	Sub	
		, , , , , , , , , , , , , , , , , , ,	Í															
	Salem Church Rd	US 321 BUS (Gastonia Hwy) to																
LINC0049-H	(SR 1307)	Mirror Lake Rd (SR 1432)	Lincoln County	0.6	20	2	60	45	11800	3000	3800	3500	12400	2A	ADQ	Min	Sub	
		Mirror Lake Rd (SR 1432) to																
	Salem Church Rd	Philadelphia Church Rd (SR																
LINC0049-H	(SR 1307)	1001)	Lincoln County	0.6	20	2	60	45	11800	3500	4700	3500	12400	2A	ADQ	Min	Sub	
		Philadelphia Church Rd (SR																
	Salem Church Rd	1001) to Keever Dairy Farm Rd																
LINC0049-H	(SR 1001)	(SR 1313)	Lincoln County	0.8	20	2	60	45	11800	4000	5100	3500	12400	2A	ADQ	Min	Sub	
	Salem Church Rd	Keever Dairy Farm Rd (SR																
LINC0049-H	(SR 1001)	1313) to Hill Dr (SR 1321)	Lincoln County	0.6	20	2	60	45	11800	5000	6400	6000	12400	2A	ADQ	Min	Sub	
	Salem Church Rd	Hill Rd (SR 1321) to Country																
LINC0049-H	(SR 1001)	Club Rd (SR 1262)	Lincoln County	0.5	20	2	60	45	11800	5000	6400	6000	12400	2A	ADQ	Min	Sub	
	Salem Church Rd	Country Club Rd (SR 1262) to																
LINC0049-H	(SR 1001)	Freeman Rd (SR 1322)	Lincolnton	1.0	20	2	60	45	11800	2600	3300	3500	12400	2A	ADQ	Min	Sub	
	Salem Church Rd	Freeman Rd (SR 1322) to																
LINC0049-H	(SR 1001)	Keener Rd (SR 1323)	Lincolnton	0.2	20	2	60	45	10900	4600	5900	3500	12400	2A	ADQ	Min	Sub	
	Salem Church Rd																	
LINC0049-H	(SR 1001)	Keener Rd (SR 1323) to NC 27	Lincolnton	0.6	20	2	60	45	10900	6800	8700	8000	12400	2A	ADQ	Min	Sub	
	Short Cut Rd (SR	Buffalo Shoals Rd (SR 1003) to																
LINC0050-H	1409)	Ivey Church Rd (SR 1343)	Lincoln County	0.2	20	2	60	45	11800	2500	3800	3800	12400	2A	ADQ	Min	Sub	
	•	Laboratory Rd (SR 1252) to																
LINC0051-H	1248)	Southside Rd (SR 1243)	Lincoln County	1.2	18	2	60	35	9200	600	4800	4000	12400	2A	ADQ	Min	Sub	
	South Fork Rd (SR	Southside Rd (SR 1243) to US												_			_	
LINC0051-H	1243)	321 BUS (Gastonia Hwy)	Lincoln County	0.3	18	2	60	35	9200	1000	5200	4000	12400	2A	ADQ	Min	Sub	
	<b>6</b> 41 14 <b>5</b> 14 <b>5</b> 5																	
	Southside Rd (SR	Long Shoals Rd (SR 1242) to															L.	
LINC0052-H	1243)	South Fork Rd (SR 1248)	Lincoln County	1.8	18	2	60	45	10500	600	3300	3300	12400	2A	ADQ	Min	Sub	
	0 11																	
	Southwest	NO 074 NO 400										44000	45400					
LINC0004-H	Connector	NC 27 to NC 182	Lincoln County	1.7	-	-	-	-	-	-	-	11200	15100	2A	60	Maj	Sub	
	Southwest	NC 182 to Old Linc-Crouse Rd											4=	٥.		l	۱	
LINC0004-H	Connector	(SR 1228)	Lincoln County	1.7	-	-	-	-	-	-	-	11000	15100	2A	60	Maj	Sub	
1 1000004 11	Southwest	Old Linc-Crouse Rd (SR 1228)	Linaala Cassat	4 -								40500	45400	0.4	00	NA=:	0	
LINC0004-H	Connector	to Old Cherryville Rd (SR 1407)	Lincoln County	1.7	-	-	-	-	-	-	-	10500	15100	2A	60	Maj	Sub	<u> </u>

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								Existing	System			2035 Pro	posed Sys	stem				
	- "	0 11 15 7)		Dist.	Se	ross- ection	ROW	Speed Limit	Capacity	2010	2035 AADT	2035 AADT	Proposed Capacity	Cross-	ROW	CTP Classifi-		Other
Local ID	Facility Southwest	Section (From - To) Old Cherryville Rd (SR 1407) to	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
LINC0004H	Connector	NC 150	Lincoln County	1.7	-	-	-	-	-	-	-	10900	15100	2A	60	Maj	Sub	
LINC0053-H	Springs East Rd (SR 1342)	US 321 BUS (Maiden Hwy) to Buffalo Shoals Rd (SR 1003)	Lincoln County	1.7	18	2	60	45	10500	2000	3500	3500	12400	2A	ADQ	Min	Sub	
LINC0054-H	St Marks Church Rd (SR 1172)	Gaston County to Gaston- Webbs Chapel Rd (SR 1173)	Lincoln County	0.4	18	2	60	45	10500	1200	1700	1700	12400	2A	ADQ	Min	Sub	
	St Marks Church Rd (SR 1172)	Gaston-Webbs Chapel Rd (SR 1173) to Main St (SR 2098)	Lincoln County	0.1	20	2	60	45	11800	1200	4900	4900	ADQ	ADQ	ADQ	Min	Sub	
LINC0010-H	Startown Rd Extension	NC 27 to Reepsville Rd (SR 1008)	Lincoln County	1.0	-	-	-	-	-	-	-	5000	12200	2E	60	Min	Sub	
	Startown Rd (SR 1005)	Reepsville Rd (SR 1008) to Sigmon Rd Extension	Lincoln County	1.4	24	2	60	45	12400	3800	4100	8100	ADQ	ADQ	ADQ	Min	Sub	
	Startown Rd (SR 1005)	Sigmon Rd Extension to Clarks Creek Rd (SR 1282)	Lincoln County	1.2	24	2	60	45	12400	4400	5500	5900	ADQ	ADQ	ADQ	Min	Sub	
	Startown Rd (SR 1005) Startown Rd (SR	Clarks Creek Rd (SR 1282) to Carriage Ln (SR 2004) Carriage Ln (SR 2004) to	Lincoln County	1.4	24	2	60	45	12400	5000	6400	7200	ADQ	ADQ	ADQ	Min	Sub	
	1005)	Catawba County	Lincoln County	2.0	24	2	60	45	12400	2600	3300	4200	ADQ	ADQ	ADQ	Min	Sub	
LINC0055-H	1279)	US 321 BUS (Maiden Hwy) to Maiden Salem Rd (SR 1274)	Lincoln County	2.2	18	2	90	45	10500	1400	2000	2000	12400	2A	ADQ	Min	Sub	
LINC0055-H	1274)	Maiden Salem Rd (SR 1274) to Null Rd (SR 1275) Null Rd (SR 1275) to Catawba	Lincoln County	0.2	24	2	110	45	12400	1400	2000	2000	ADQ	ADQ	ADQ	Min	Sub	
LINC0055-H	1274)	County	Lincoln County	0.2	18	2	100	45	10500	1400	2000	2000	12400	2A	ADQ	Min	Sub	
	Sycamore St	N Grove St (SR 1008) to N Aspen St (SR 1405)	Lincolnton	0.2	24	2	40	20	10000	2600	2800	2800	ADQ	ADQ	ADQ	Min	Sub	Р
	Sycamore St	N Aspen St (SR 1405) to Flint St	Lincolnton	0.2	24	2	40	20	10000	2600	500	500	ADQ	ADQ	ADQ	Min	Sub	Р
LINC0056-H	Victory Grove Church Rd (SR 1298)	US 321 BUS (Gastonia Hwy) to Lithia Inn Rd (SR 1294)	Lincolnton	0.9	18	2	60	35	9200	2200	4300	4300	12400	2A	ADQ	Min	Sub	
LINC0057-H	Walker Branch Rd (SR 1267)	NC 27 to Wilma Sigmon Rd (SR 1267)	Lincolnton	0.7	18	2	60	35	9200	5200	7300	6700	12400	2A	ADQ	Min	Sub	
LINC0057-H	Walker Branch Rd (SR 1333)	Wilma Sigmon Rd (SR 1267) to Bethel Church Rd (SR 1282)	Lincoln County	1.1	18	2	60	45	7500	1400	2100	2100	12400	2A	ADQ	Min	Sub	

					F	IIGHV	VAY											
							2010 E	xisting	System			2035 Pro	posed Sys	stem				
					Cr	oss-		Speed	Existing		2035	2035	Proposed			CTP		
				Dist.	Se	ction	ROW	Limit	Capacity	2010	AADT	AADT	Capacity	Cross-	ROW	Classifi-		Other
Local ID	Facility	Section (From - To)	Jurisdiction	(mi)	(ft)	lanes	(ft)	(mph)	(vpd)	AADT	E+C	with CTP	(vpd)	Section	(ft)	cation	Tier	Modes
		S Grove St (SR 1222) to S																1
	Water St	Aspen St (SR 1406)	Lincolnton	0.2	24	2	40	20	10000	700	1000	1100	ADQ	ADQ	ADQ	Min	Sub	Р
																		1
	Water St	S Aspen St (SR 1406) to Flint St	Lincolnton	0.2	24	1	40	20	10000	700	400	400	ADQ	ADQ	ADQ	Min	Sub	Р
	Will Schronce Rd	Hovis Rd (SR 1315) to E Fox																i l
	(SR 1314)	Den Cir (SR 1645)	Lincoln County	0.9	18	2	50	45	10500	600	800	800	ADQ	ADQ	ADQ	Min	Sub	<b></b>
	Will Schronce Rd	E Fox Den Cir (SR 1645) to NC																i l
	(SR 1314)	27	Lincoln County	0.4	18	2	60	45	7000	600	800	800	ADQ	ADQ	ADQ	Min	Sub	
	W(1 0' D.I	D   (0D 4005)																
	Wilma Sigmon Rd	Startown Rd (SR 1005) to end of														l		ı _ l
LINC0011-H	Extension	Cochrane Rd	Lincoln County	0.5	-	-	-	-	-	-	-	9600	12400	2E	60	Min	Sub	Р
	Wilma Sigmon Rd	End of Cochrane Rd to Aspen St				_										l		ı _ l
LINC0011-H	Extension	(SR 1405)	Lincoln County	0.3	18	2	50	35	9200	-	-	9600	12400	2E	60	Min	Sub	Р
	Wilms Cinns on Dd	0. (00.4405) 1. 110.004																
	Wilma Sigmon Rd	Aspen St (SR 1405) to US 321			40	•	00	45	40500	7.400	0500	0000	40400	0.5	400			
LINC0058-H	(SR 1267)	BUS (Generals Blvd)	Lincolnton	0.2	18	2	60	45	10500	7400	9500	9600	12400	2E	ADQ	Min	Sub	Р
1 1100050 11	Wilma Sigmon Rd	US 321 BUS (Generals Blvd) to	Linaslatan	0.4	40	0	00	45	40500	5000	0000	7400	40400	2E	400	N 4:	0	Р
LINC0058-H	(SR 1267) Wilma Sigmon Rd	Roper Rd Extension	Lincolnton	0.4	18	2	60	45	10500	5600	8300	7400	12400	2E	ADQ	Min	Sub	Р
1 1200050 11	(SR 1267)	Dener Dd Evtension to US 224	Linaslatan	0.0	40	0	00	45	40500	5000	0000	7400	40400	0.5	400	N 4:	0	i l
LINC0058-H	(SK 1201)	Roper Rd Extension to US 321	Lincolnton	0.6	18	2	60	45	10500	5600	8300	7400	12400	2E	ADQ	Min	Sub	
	Woolie Rd (SR	Buffalo Shoals Rd (SR 1003) to																
LINC0059-H	1336)	` ,	Lincoln County	0.4	18	2	60	45	10500	1200	2100	2200	12400	2A	ADQ	Min	Sub	
E114C0033-11	Woolie Rd (SR	Keener Rd (SR 1743) to Curve	Lincoln County	0.4	10		00	40	10300	1200	2100	2200	12400	4/1	אטע	IVIIII	Jub	
LINC0059-H	1336)	View Rd (SR 1336)	Lincoln County	0.3	18	2	60	45	10500	1200	2100	2200	12400	2A	ADQ	Min	Sub	
FII4C0033-U	1000)	view ita (oit 1550)	Lincoln County	0.3	10		UU	40	10300	1200	2100	2200	12400	2A	ADQ	IVIIII	Sub	

### **PUBLIC TRANSPORTATION AND RAIL**

	PUBLIC TRANSPORTATION <sup>1</sup>											
			Speed		Existing System	Proposed System						
			Limit	Distance			Other					
Local ID	Facility/ Route	Section (From - To)	(mph)	(mi)	Туре	Туре	Modes					

Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to the 2009 Lake Norman RPO Coordinated Comprehensive Public Transportation Plan.

RAIL												
				Speed		Exi	sting Syste	m	Prop	osed Syste	em	
				Limit	Distance		ROW	Trains		ROW	Trains	Other
Local ID	Facility/ Route	Section (From - To)	Class	(mph)	(mi)	Type	(ft)	per day	Type	(ft)	per day	Modes
	CSX Railroad	Gaston County to Devine Road (SR 1312)	I	25	13.7	Freight	200	8 to 10	Freight	200	8 to 10	

### BICYCLE AND PEDESTRIAN 1

BICYCLE											
				Existing System	Propose	d System					
			Distance	Cross-Section			Other				
Local ID	Facility/ Route	Section (From - To)	(mi)	(ft) lanes	Type	Cross-Section	Modes				

		PEDESTRIAN						
				Existin	g System	Propose	d System	Other
			Distance		Side of			
Local ID	Facility/ Route	Section (From - To)	(mi)	Type	Street	Type	Side of Street	Modes
LINC0001-P	Battleground Road	Bonview Ave - N Aspen St (SR 1205)	0.1			Sidewalks	Both	
LINC0002-P	Church Street	Grove St (SR 1222) - Acadamy St	0.4	-		Sidewalks	Both	
LINC0003-P	Dixon Street	End of Sidewalk - Cedar St	0.1			Sidewalks	Both	
LINC0004-P	Grove Street (SR 1222)	Motz Ave - Betty Ross Park	0.2			Sidewalks	Both	
LINC0005-P	High Street	Pine St - Congress St	0.3			Sidewalks	Both	
LINC0006-P	Hollybrook Avenue	McBee Street - NC 27 (East Main Street)	0.2			Sidewalks	Both	
LINC0007-P	Laurel Street	Congress Street - Tait Street	0.4			Sidewalks	Both	
LINC0007-P	Laurel Street	McBee Street - NC 27 (East Main Street)	0.2			Sidewalks	Both	
LINC0008-P	McBee Street	Cedar Street - Hollybrook Avenue	0.6			Sidewalks	Both	
LINC0007-H	Motz Avenue	Grier Street to Aspen Street (SR 1406)	0.9			Sidewalks	Both	Н
LINC0009-P	Oak Street	McBee Street - NC 27 (East Main Street)	0.2			Sidewalks	Both	
LINC0010-P	Pine Street	Grove Street (SR 1008) - Flint Street	0.9			Sidewalks	Both	
LINC0011-P	Sycamore Street	Grove Street (SR 1222) - Flint Street	0.9	-		Sidewalks	Both	
LINC0012-P	Water Street	Grove Street (SR 1222) - Cedar Street	0.6			Sidewalks	Both	
LINC0013-P	Wilma Sigmon Road (SR 1267)	N Aspen Street (SR 1405) - east City Limits	0.7			Sidewalks	Both	
LINC00011-H	Wilma Sigmon Road Extension	N Aspen Street (SR 1405) - Startown Road (SR 1005)	1.0			Sidewalks	Both	Н

		MULTI-USE PATH						
				Existin	g System	Propose	d System	Other
				Side				
			Distance	of	Cross-			
Local ID	Facility/ Route	Section (From - To)	(mi)	Street	Section	Side of Street	Cross-Section	Modes
LINC0001-M	NC 27 (Riverside Drive)	Proposed South Fork Catawba River	1.9			North	MA	Н
LINCOUU I-IVI	NC 27 (Riverside Drive)	greenway - Rock Dam Road (SR 1184)	1.9		1	INOLLI	IVIA	П
LINC0001-M	Rock Dam Road (SR 1184)	NC 27 (Riverside Drive - Childers	0.4			East	MA	Н
LINCOUOT-IVI	Nock Daili Noad (SK 1164)	Elementary School	0.4			Lasi	IVIA	11
LINC0002-M	Eagle Nest Road (SR 1182)	NC 27 (Riverside Drive) - NC 182	0.2			East	MA	

<sup>&</sup>lt;sup>1</sup> Only major routes and proposals are shown here. For further documentation of bicycle and pedestrian facilities and proposals, refer to the 2003 Lincolnton Comprehensive Land Use Plan(reaffirmed in 2010), the 2003 Lincolnton Comprehensive Sidewalk Inventory, the 2007 Lincoln County Land Use Plan, and the 2009 Lincoln County Carolina Thread Trail Plan for Communities.

### **Appendix D Typical Cross Sections**

Cross section requirements for roadways vary according to the capacity and level of service to be provided. Universal standards in the design of roadways are not practical. Each roadway section must be individually analyzed and its cross section determined based on the volume and type of projected traffic, existing capacity, desired level of service, and available right-of-way. These cross sections are typical for facilities on new location and where right-of-way constraints are not critical. For widening projects and urban projects with limited right-of-way, special cross sections should be developed that meet the needs of the project.

The typical cross sections were updated on December 7, 2010 to support the Department's "Complete Streets<sup>1</sup>" policy that was adopted in July 2009. This guidance established design elements that emphasize safety, mobility, and accessibility for multiple modes of travel. These "typical" cross sections should be used as preliminary guidelines for comprehensive transportation planning, project planning and project design activities. The specific and final cross section details and right of way limits for projects will be established through the preparation of the National Environmental Policy Act (NEPA) documentation and through final plan preparation.

On all existing and proposed roadways delineated on the CTP, adequate right-of-way should be protected or acquired for the recommended cross sections. In addition to cross section and right-of-way recommendations for improvements, Appendix C may recommend ultimate needed right-of-way for the following situations:

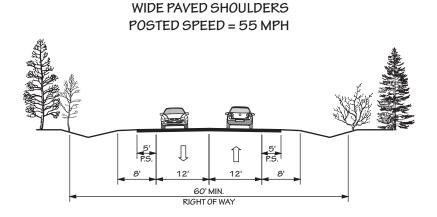
- roadways which may require widening after the current planning period,
- roadways which are borderline adequate and accelerated traffic growth could render them deficient,
- roadways where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment, and
- roadways which may need to accommodate an additional transportation mode.

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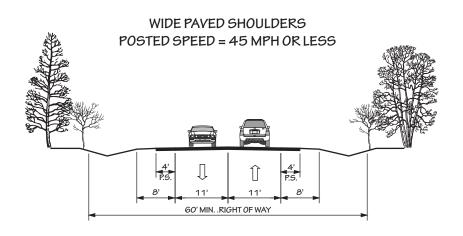
<sup>&</sup>lt;sup>1</sup> For more information on Complete Streets, go to: http://www.completestreetsnc.org/.

# FIGURE 7 TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

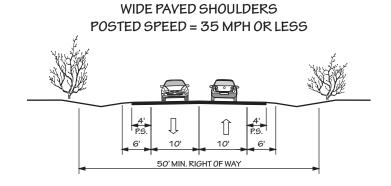
2 A



2 B

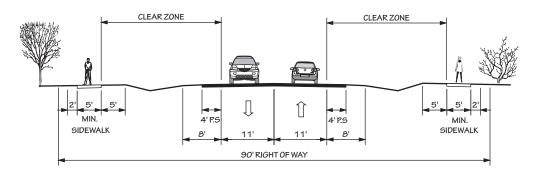


2 C



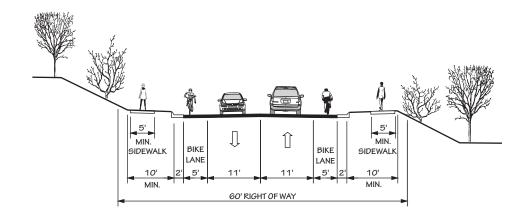
# TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

2 D SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



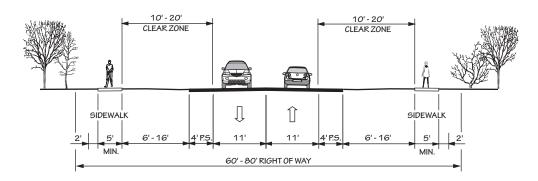
2 E

### CURB AND GUTTER WITH BIKE LANES AND SIDEWALKS



2 F

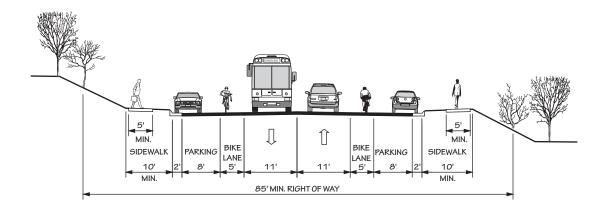
BUFFERS AND SIDEWALKS WITHOUT A ROADWAY DITCH (20 MPH TO 45 MPH) (TYPICALLY COASTAL AREA MANAGEMENT ACT COUNTIES)



## TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

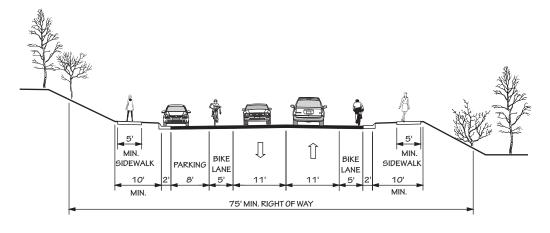
2 G

CURB & GUTTER - PARKING ON EACH SIDE



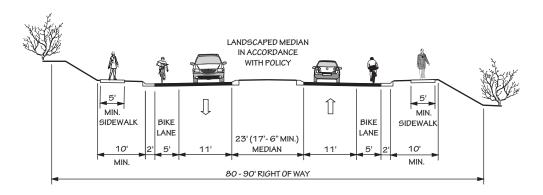
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2

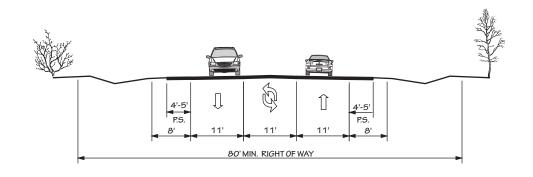
RAISED MEDIAN WITH CURB & GUTTER



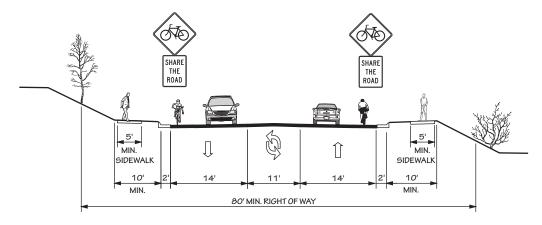
# TYPICAL HIGHWAY CROSS SECTIONS 3 LANES

3 A

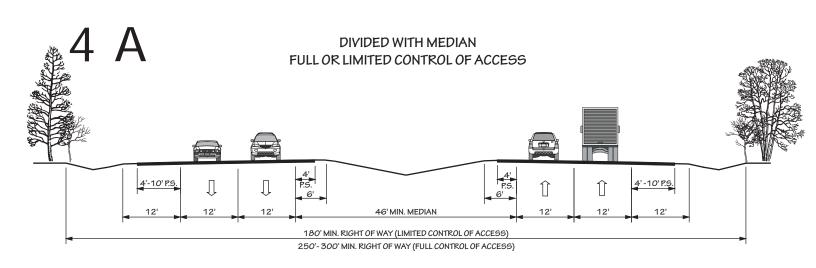
WIDE PAVED SHOULDERS

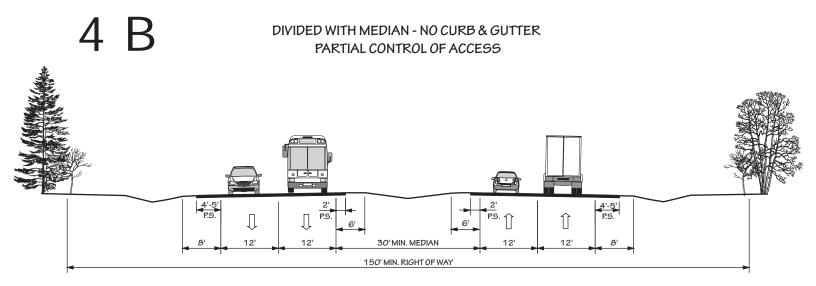


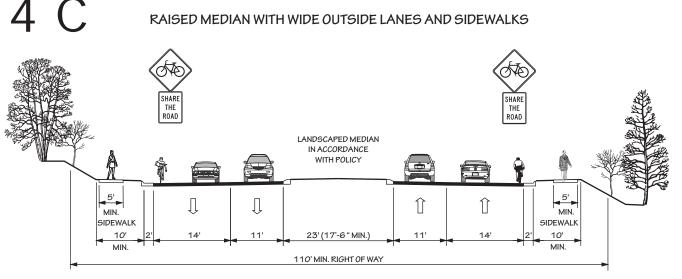
3 B CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



## TYPICAL HIGHWAY CROSS SECTIONS 4 LANES

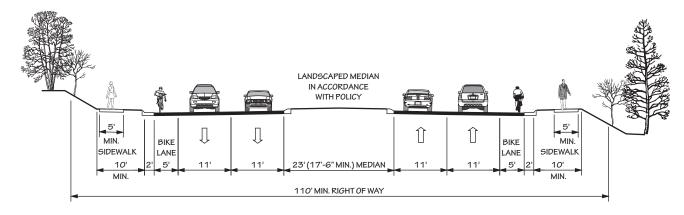




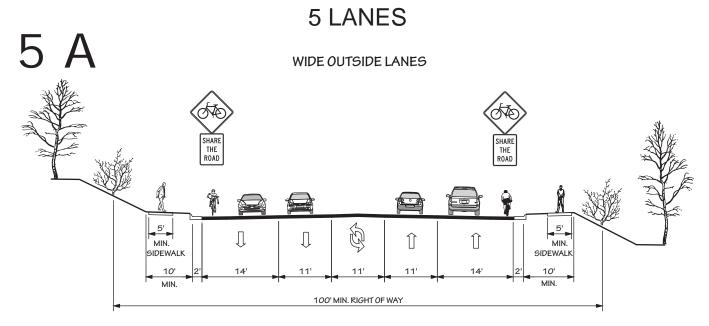


# TYPICAL HIGHWAY CROSS SECTIONS 4 LANES

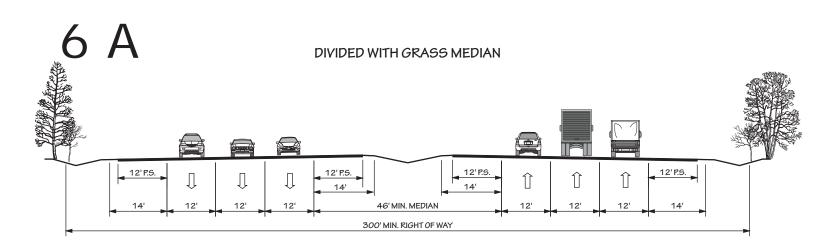
4 D RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS

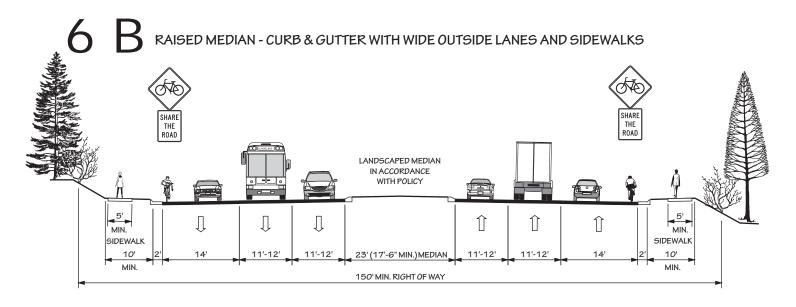


GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS 5' 4' P.S. 6'  $\widehat{\parallel}$  $\hat{\mathbb{I}}$  $\prod$ MIN. MIN. BIKE BIKE SIDEWALK SIDEWALK LANE LANE 46' (30' MIN.) 120' - 135' RIGHT OF WAY

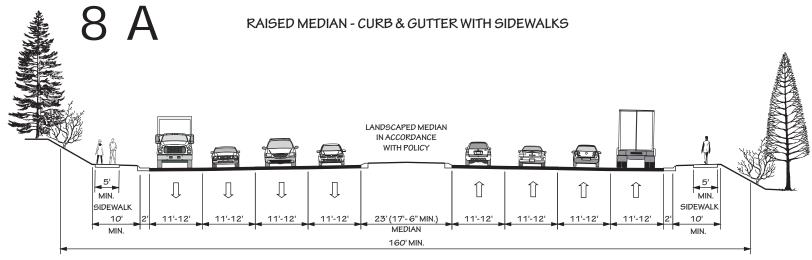


# TYPICAL HIGHWAY CROSS SECTIONS 6 LANES



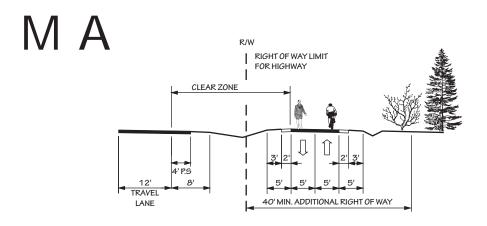


### 8 LANES

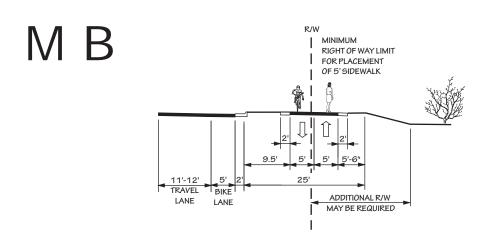


### TYPICAL MULTI - USE PATH

### MULTI - USE PATH ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY



#### MULTI - USE PATH ADJACENT TO CURB AND GUTTER



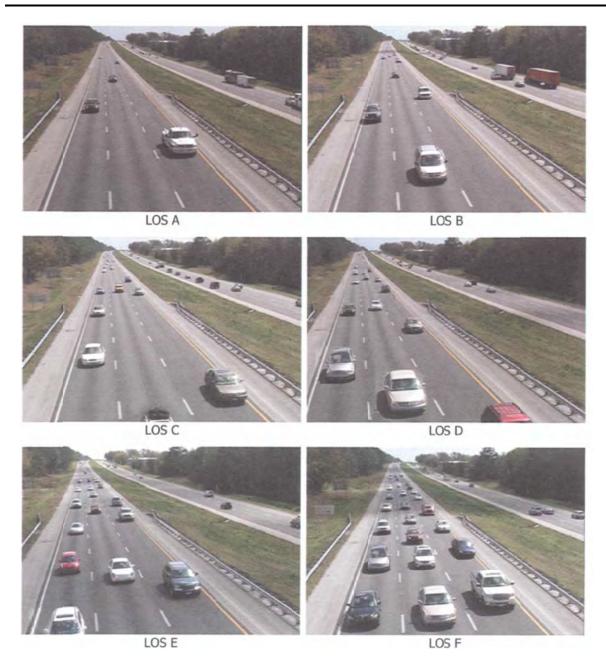
### Appendix E Level of Service Definitions

The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating conditions.

Design requirements for roadways vary according to the desired capacity and level of service. LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to express dissatisfaction. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C on new facilities. The six levels of service are described below and illustrated in Figure 10.

- ❖ LOS A: Describes free-flow operations. Free Flow Speed (FFS) prevails and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.
- ❖ LOS B: Represents reasonably free-flow operations, and FFS is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.
- ❖ LOS C: Provides for flow with speeds near the FFS. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.
- ❖ LOS D: The level at which speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.
- ❖ LOS E: Describes operation at capacity. Operations at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.
- ❖ LOS F: Describes breakdown, or unstable flow. Such conditions exist within queues forming behind bottlenecks.

Figure 10 - Level of Service Illustrations



Source: 2010 Highway Capacity Manual, Exhibit 11-4

### Appendix F Traffic Crash Analysis

A crash analysis performed for the Lincolnton Urban Area CTP considered crash frequency, crash type, and crash severity. Crash frequency is the total number of reported crashes and contributes to the ranking of the most problematic intersections. Crash type provides a general description of the crash and allows the identification of any trends that may be correctable through roadway or intersection improvements. Crash severity is the crash rate based upon injuries and property damage incurred.

The severity of every crash is measured with a series of weighting factors developed by the NCDOT Division of Highways (DOH). These factors define a fatal or incapacitating crash as 76.8 times more severe than one involving only property damage and a crash resulting in minor injury is 8.4 times more severe than one with only property damage. In general, a higher severity index indicates more severe crashes. Listed below are levels of severity for various severity index ranges.

<u>Severity</u>	Severity Index
low	< 6.0
average	6.0 to 7.0
moderate	7.0 to 14.0
high	14.0 to 20.0
very high	> 20.0

Table 4 depicts a summary of the crashes occurring in the planning area between January 1, 2008 and December 31, 2010. The data represents locations with 10 or more crashes and/or a severity average greater than the state's index of 4.37. The "Total" column indicates the total number of crashes reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of the locations listed in Table 4, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in Appendix A.

Table 4 - Crash Locations											
Мар	Intersection	Average	Total Crashes								
Index		Severity									
1	NC 27E & NC 150E	6.31	31								
2	NC 27 & SR 1294	5.11	18								
3	NC 27 & SR 1267	4.70	10								
4	NC 27 & SR 1287	4.45	15								
5	NC 27 & US 321B	4.39	24								
6	NC 27 & SR 1008	4.36	11								
7	NC 27 & Stanford Rd	4.33	20								
8	SR 1003 & SR 1339	4.17	14								
9	NC 27 & SR 1286	3.66	25								
10	NC 27 & SR 1001	3.47	15								
11	NC 27 & SR 1003	3.47	21								
12	NC 27 & Flint St	3.47	15								
13	NC 27 & SR 1419	3.22	10								
14	NC 27 & Hubbard St	3.06	18								
15	NC 27 & US 321	2.93	23								
16	US 321B N & SR 1405	2.85	12								
17	NC 150 & SR 1339	2.85	12								

## Appendix G Bridge Deficiency Assessment

The Transportation Improvement Program (TIP) development process for bridge projects involves consideration of several evaluation methods in order to prioritize needed improvements. A sufficiency index is used to determine whether a bridge is sufficient to remain in service, or to what extent it is deficient. The index is a percentage in which 100 percent represents an entirely sufficient bridge and zero represents an entirely insufficient or deficient bridge. Factors evaluated in calculating the index are listed below.

- structural adequacy and safety
- serviceability and functional obsolescence
- essentiality for public use
- type of structure
- traffic safety features

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. A sufficiency rating for each bridge is calculated and establishes the eligibility and priority for replacement. Bridges having the highest priority are replaced as federal and state funds become available.

A bridge is considered deficient if it is either structurally deficient or functionally obsolete. Structurally deficient means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is "structurally deficient" does not imply that it is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected and repaired/replaced at an appropriate time to maintain its structural integrity. A functionally obsolete bridge is one that was built to standards that are not used today. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand or to meet the current geometric standards, or those that may be occasionally flooded.

A bridge must be classified as deficient in order to qualify for federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges located on roads evaluated as a part of the CTP are listed in Table 5. For more details on deficient bridges within the planning area, contact the Structures Management Unit using the information in Appendix A.

**Table 5 - Deficient Bridges** 

Bridge Number	Facility	Feature	Condition	Local ID
06	NC 150	Indian Creek	Functionally Obsolete	R-0617
25	SR 1354	Lick Run Creek	Functionally Obsolete	LINC0017-H
26	NC 150	SAL Railroad	Functionally Obsolete	R-0617
29	NC 182	Leonards Creek	Structurally Deficient	B-5320
30	US 321 BUS	NC 150	Functionally Obsolete	LINC0001-H
31	SR 1001	SCL Railroad	Functionally Obsolete	LINC0049-H
35	NC 150	S Fork Catawba River	Structurally Deficient	R-0617
42	US 321 BUS	Seaboard Coastline RR	Functionally Obsolete	LINC0001-H
44	NC 150	Relief Creek	Structurally Deficient	B-5850
47	SR 1276	Fork of Clarks Creek	Functionally Obsolete	
48	US 321 BUS	Carpenters Creek	Functionally Obsolete	LINC0001-H
51	US 321 BUS	Lockards Creek	Functionally Obsolete	LINC0001-H
59	E Water St	Pedestrian Walkway	Functionally Obsolete	
66	SR 1176	Creek	Functionally Obsolete	LINC0039-H
118	SR 1008	Clark Creek	Structurally Deficient	B-4176
146	SR 1282	Clark Creek	Functionally Obsolete	
226	SR 1279	Branch of Clark Creek	Functionally Obsolete	LINC0055-H
239	SR 1262	Seaboard Coastline RR	Functionally Obsolete	
241	SR 1406	Motz Creek	Functionally Obsolete	
242	SR 1406	SCL RR	Functionally Obsolete	
243	SR 1406	Pedestrian Walkway	Functionally Obsolete	
244	SR 1405	Walkers Branch	Functionally Obsolete	LINC0007-H
268	SR 1294	US 321	Functionally Obsolete	LINC0040-H

### Appendix H Public Involvement

This appendix documents the public involvement process and includes a listing of steering committee members, the goals and objectives survey results, and public meetings held throughout the development of the CTP.

#### **List of CTP Committee Members**

At the start of a CTP study, a committee is formed that is comprised of individuals who represent the various needs, issues and populations of the community. These representatives are responsible for capturing the transportation needs of the community relative to all modes of transportation and for guiding the development of the CTP. The Lincolnton Planning Department served as the CTP Coordinating Committee to guide development of the plan. The Committee was led by Director Laura Simmons and met as needed. Below are listed the members of the larger CTP committee that attended at any time during the CTP process.

- Kara Brown, Lincoln Economic Development Association
- Andrew Bryant, Lincoln County Planning Department
- Linda Dosse, PE, NCDOT Transportation Planning Branch
- John Gilleland, Lincolnton City Council
- Brad Guth DDA, Lincolnton Business & Community Development
- Bjorn Hansen, Lake Norman RPO
- Ed Hatley, Lincoln County School System/ Lincolnton Planning Board
- Roger R. Huffman, Transportation Lincoln County
- Ken Kindley, Chamber of Commerce
- Martha Lide, Lincoln County Manager's Office
- Alex Patton, Lincoln County Commissioners
- Michael L. Poe, NCDOT District Engineer
- Chaffin Rhyne, Ride-A-Bike
- Sam Schultz. Town of Maiden
- Laura Simmons, Lincolnton Planning Director
- Bill Summers, Lincoln County Emergency Management
- Craig Wyant, A Fine Line Design

### CTP Vision, Goals, Objectives and MOEs

The CTP vision, goals and objectives are developed as part of the public involvement process and help identify how the people within an area would like to develop the transportation system (all modes). The CTP committee develops the draft vision, goals, objectives, and MOEs which are further refined with input from citizens via the CTP Goals & Objectives (G&O) survey. These products become the official guide for the CTP being developed.

The vision statement, goals and objectives reflect what is important for the area and defines any local preferences concerning the transportation system and community

assets. The vision statement is the framework for the area's strategic planning. Goals and objectives document how the area plans to fulfill its vision. The goals break down the vision statement into themes, while the objectives document how the area plans to make progress towards achieving each goal. MOEs are established to enable the area to track the progress of each objective.

### **Goals and Objectives Survey**

A G&O survey is a public involvement technique used to help identify an area's perception of transportation-related issues, identify concerns that should be addressed during the development of a CTP, and to help develop a vision for the community. The G&O survey is most appropriately implemented at the beginning of the transportation planning study. In addition to determining up front what is important to the citizens of the planning area, initiating the G&O survey early in the planning process allows the survey to serve as an introduction to the transportation planning process. The survey usually includes a brief introduction explaining what a transportation plan is and how the area can benefit from having one. The survey also includes a wide variety of questions that is tailored to each area as appropriate. A summary of the Lincolnton Urban Area CTP G & O survey is given below.

There were seventeen survey questions. All of the responses were received on-line. The questions involved ranking the importance of transportation improvements and goals, and several questions requiring a short answer that dealt with specific transportation topics. There were a total of 55 respondents who answered the majority of the questions for both the resident and business sections of the survey.

### Respondent Cross Section

The age range was:

Range	# Responses	Percent
Under 18	0	0
18 to 39	15	29
40 to 64	32	63
65 or over	4	8

#### The primary mode of transportation was:

Mode	# Responses	Percent
Own Car	47	94
Other Driver	2	4
Walking	1	2
Borrowed Car	0	0
Van Pool	0	0
Public Transit	0	0
Bicycle	0	0

Range	# Responses	Percent
0 to 9	3	60
10 to 24	1	20
25 to 99	1	20
100 or more	0	0

Transportation Planning Goals

Goals	# Responses	Percent
Improve Bicycle and Pedestrian Facilities	27	50
Improve Transit Services and Facilities	34	63
Urban and Rural Character Preservation	37	69
Reduce Congestion and Travel Times	28	52
Environmental Preservation	8	15
Provide Travel Choices	17	33
New Economic Development Growth	9	17
Enhancement of Existing Community	11	21
Individual Residence or Business Preservation	4	8

### Road Congestion and Capacity

Possible methods used to alleviate traffic congestion:

Method	# Responses	Percent
Enhance alternative modes	33	61
Build new roads	7	13
Better access management	15	28
Improve intersections & signal timing	38	70
Widen existing roads	20	37

### Safety Concerns

Possible improvements for safe and comfortable walking and bicycling:

Method	# Responses	Percent
Add new sidewalks, bike lanes and shoulders	34	68
Improve existing facilities	26	52
Add crosswalks and pedestrian signals	20	40
Add streetlights	16	32
None	5	10

### Alternative Modes

Possible improvements to the transit system that would cause people to ride more frequently:

Method	# Responses	Percent
More frequent bus service	20	46
Longer operating hours	16	36
More routes and stops	20	46
Vanpools to work	9	21
Buses which connect to other transit systems	32	73

### Responsiveness to local businesses

Is the present road network adequate for present and potential employees?

Mode	# Responses	Yes	No
Driving	6	100	0
Biking	6	50	50
Walking	6	50	50

Is the present public transit service adequate for present and potential employees?

Answer	# Responses	Percent
Yes	3	50
No	3	50

Is there adequate access to truck, rail, and air freight?

Mode	# Responses	Yes	No
Truck	5	100	
Rail	5	40	60
Air	5	80	20

### Road Congestion and Capacity

- Better synchronization or reduction of signals on Main Street between Generals Boulevard and NC 150 E
- Improve intersection of Maiden Highway, N Aspen Street and Sigmon Road
- Widen Congress Street near Gaston College
- Add roundabouts
- There is only one major east/west facility through the whole urban area
- Improve the Grove Street and NC 27 signalized intersection

### Safety Concerns

- Turning traffic on Main Street between Generals Boulevard and NC 150 E
- Signals near Gaston College
- Intersection of Generals Boulevard and Country Club Road/Laurel Street
- Intersection of Congress Street and S Grove Street
- Restrict multiple driveway access along Main Street
- Maiden Highway and Car Farm Road intersection
- Improve the Clarks Creek Road Bridge
- Improve the N Grove Street bridge
- Better maintenance of pavement and shoulders
- Intersection of Buffalo Shoals Road at NC 27
- Intersection of Flint Street and Laurel Street
- Railroad bridge on S Grove Street
- Straighten the curve of NC 27 and Sunny Hill Drive

#### Alternative Modes

- Enhanced transit services fixed route, stop locations, connections
- Better advertisement of services
- Add more sidewalks and bike lanes in downtown
- Greenway along Clarks Creek between the parks
- Extend greenway to Laboratory Road
- Bike lanes on Old Plank Road

#### Responsiveness to local businesses

- Sidewalks between adjacent businesses
- Commuter transit
- There is no local rail siding in Lincolnton to load freight
- Better enforcement or elimination of parking along Main Street

#### Community Enhancement

Restore storefronts and streetscape along Main Street

### **Opportunities for Public Comment**

The formal public comment process included presentations of the Draft CTP maps and project recommendations to the Lincolnton Planning Board on October 16, 2012, the Lincoln County Commissioners and Lincoln County Planning Board on November 5, 2012, and the Lincolnton City Council on November 8, 2012.

After the October Lincolnton Planning Board meeting, one board member suggested that a bypass of Lincolnton to the south be looked at to replace the loop road around the city that was no longer viable. An alignment was later added to the recommended CTP.

A public workshop was held on November 13, 2012 at the Charles R. Jonas Public Library in Lincolnton. Five citizens attended the workshop. One citizen was concerned about the recommendation for converting East Main Street from a five lane urban section into a boulevard. Another citizen was concerned with traffic speeding through his neighborhood along a narrow and winding section of South Grove Street.

A 30-day public comment period was open through December 13, 2012. No additional comments were received.

A public hearing was held on January 7, 2013 during the Lincoln County Commissioners meeting and on January 10, 2013 during the Lincolnton City Council meeting. The purpose of these meetings was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during the meetings.