



# **Comprehensive Transportation Plan**



## **Cleveland County**

**July 2012**

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# Comprehensive Transportation Plan

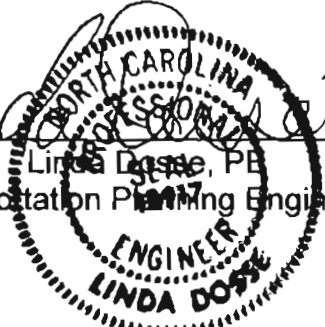
## Cleveland County

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Transportation Planning Branch  
N.C. Department of Transportation

**In Cooperation with:** Cleveland County  
Town of Boiling Springs  
City of Kings Mountain  
City of Shelby  
Town of Belwood  
Town of Casar  
Town of Earl  
Town of Fallston  
Town of Grover  
Town of Kingstown  
Town of Lattimore  
Town of Lawndale  
Town of Mooresboro  
Town of Patterson Springs  
Town of Polkville  
Town of Waco  
Lake Norman Rural Planning Organization

July 2012

  
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*Linda Dosse, P.E.*  
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## Executive Summary

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A meeting was held in June 2008 with the Cleveland County Comprehensive Transportation Plan (CTP) steering committee to initiate a study to cooperatively develop the Cleveland County CTP, which includes Boiling Springs, Kings Mountain, Shelby, Belwood, Casar, Earl, Fallston, Grover, Kingstown, Lattimore, Lawndale, Mooresboro, Patterson Springs, Polkville, and Waco. 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. Refer to Figure 1 for the CTP maps, which were mutually adopted in 2011 by the municipalities, by the county, and by NCDOT; Lake Norman RPO endorsed the CTP maps. Implementation of the plan is the responsibility of Cleveland County, its municipalities, and NCDOT. Refer to Chapter 2 for information on the implementation process.

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

**I-85:** Widen to eight lanes from South Carolina to Gaston County.

**US 74:** The proposed improvements include:

- TIP Project R-2707: US 74 Bypass (Shelby): This project involves the relocation of US 74 onto a new four lane freeway on the north side of Shelby. Additionally, US 74 is recommended to be upgraded to freeway standards from west of Peachtree Road (SR 1162) near Mooresboro to west of Pleasant Ridge Road (SR 1161) and from west of Long Branch Road (SR 2238) to Stony Point Road (SR 1001) near Kings Mountain.
- TIP Project R-4045: Upgrade to freeway standards from US 74 Business (Ellenboro Road) in Mooresboro to the proposed Shelby Bypass (R-2707). An interchange is recommended at Lattimore Road (SR 1168).
- Widen Dixon Boulevard between the western and the eastern ends of the proposed US 74 Bypass to a six lane boulevard with an interchange at NC 150 (U-2567).

**NC 18:** Widen to a four lane boulevard from South Carolina to Lincoln County including a bypass of Fallston.

**NC 150:** The proposed improvements include:

- College Avenue: Widen to a four lane boulevard from the eastern city limits of Boiling Springs to NC 18 (South Lafayette St) in Shelby.
- Dekalb Street: Widen to a four lane boulevard from NC 18 (South Lafayette Street) to US 74 (Dixon Boulevard) including an interchange at US 74 (Dixon Boulevard).
- Cherryville Road: Widen to a four lane boulevard from US 74 (East Marion Street) to the beginning of the proposed Waco Bypass at Capernium Road (SR 2075).
- Proposed Waco Bypass: Construct a four lane boulevard on new location from NC 150 (Cherryville Road) near Capernium Road (SR 2075) into Gaston County.

**NC 180:** It is recommended that the remaining two lane sections be widened to four lanes from NC 18 (South Lafayette Street) south of Shelby to Taylor Road (SR 2200) and from Elizabeth Avenue (SR 2052) to NC 18 (Fallston Road) north of Shelby.

**NC 226:** The proposed improvements include:

- NC 226 (Earl Road): Widen to a four lane boulevard from US 74 (Dixon Boulevard) to NC 180 (South Post Road).
- NC 226 (Polkville Road): Widen to a four lane boulevard from US 74 (Dixon Boulevard) to Zion Church Road (SR 1337).

**Homestead Avenue Extension (Boiling Springs Western Bypass):** To reduce traffic in the central business district, a western bypass is recommended, consisting of Holly Hill Road (SR 1149), Clyde Wallace Road (SR 1196), Rockford Road (SR 1194), a new two lane minor thoroughfare, and existing West Homestead Avenue (SR 1158).

**Northwest Connector (Kings Mountain):** This facility is an extension of Kings Mountain Boulevard to the north. Construct a two lane minor thoroughfare with a new interchange at US 74.

**Patrick Avenue Extension (Boiling Springs Eastern Bypass):** An eastern bypass is recommended, consisting of existing Patrick Avenue and a new two lane minor thoroughfare that would extend Patrick Avenue from NC 150 (College Avenue) to Skinner Road (SR 1159) at a point just east of the intersection of Skinner Road (SR 1159) and Beaver Dam Road (SR 1158).

**Southern Connector (Shelby):** This recommended facility connects existing roads across the south side of Shelby and will help relieve the traffic and congestion on existing US 74 (Dixon Boulevard). The recommended cross section is a two lane minor thoroughfare that utilizes the existing James Love School Road (SR 1117), Pleasant Drive (SR 1103) and Caleb Road (SR 2201) with three short new location segments.

**Adopted by:** Burke County

Cleveland County Grover  
Date: 03/15/2011 Date: 01/03/2011

Boiling Springs Kingstown  
Date: 01/04/2011 Date: 12/13/2010

Kings Mountain Lattimore  
Date: 01/25/2011 Date: 02/14/2011

Shelby Lawndale  
Date: 02/21/2011 Date: 01/13/2011

Belwood Mooresboro  
Date: 12/07/2010 Date: 03/14/2011

Casar Patterson Springs  
Date: 02/08/2011 Date: 01/03/2011

Earl Polkville  
Date: 01/24/2011 Date: 12/02/2010

Fallston Waco  
Date: 01/04/2011 Date: 02/21/2011

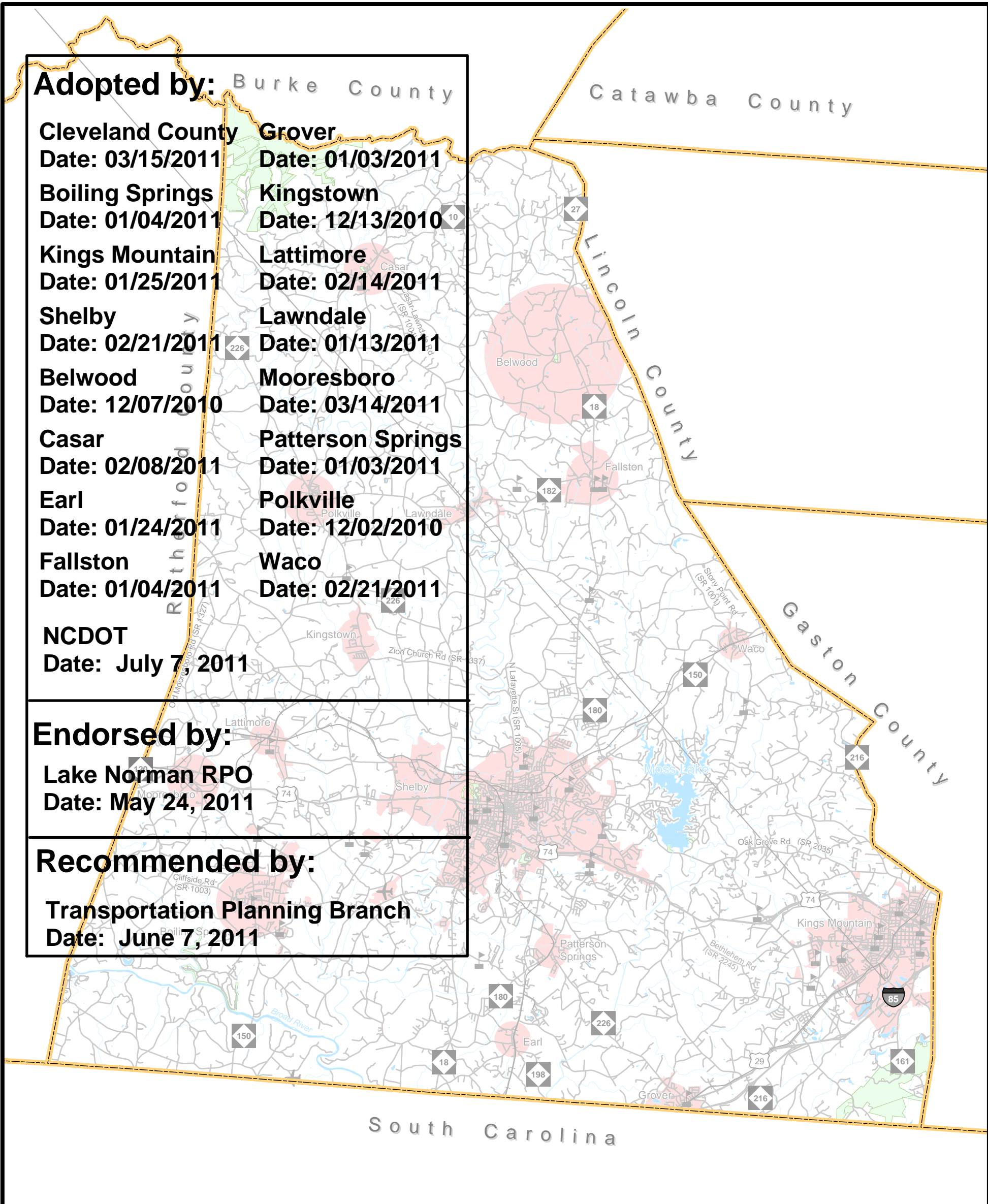
NCDOT  
Date: July 7, 2011

**Endorsed by:**

Lake Norman RPO  
Date: May 24, 2011

**Recommended by:**

Transportation Planning Branch  
Date: June 7, 2011



Sheet 1	Adoption Sheet
Sheet 2	Highway Map
Sheet 3	Public Transportation and Rail Map
Sheet 4	Bicycle Map
Sheet 5	Pedestrian Map

Legend	
	Airports
	Schools
	Railroads
	Rivers and Streams
	Roads
	Water Bodies
	Public Lands
	Municipal Boundary
	County Boundary

**Figure 1**  
Sheet 1 of 5

Base map date: July 16, 2010

Refer to CTP document for more details

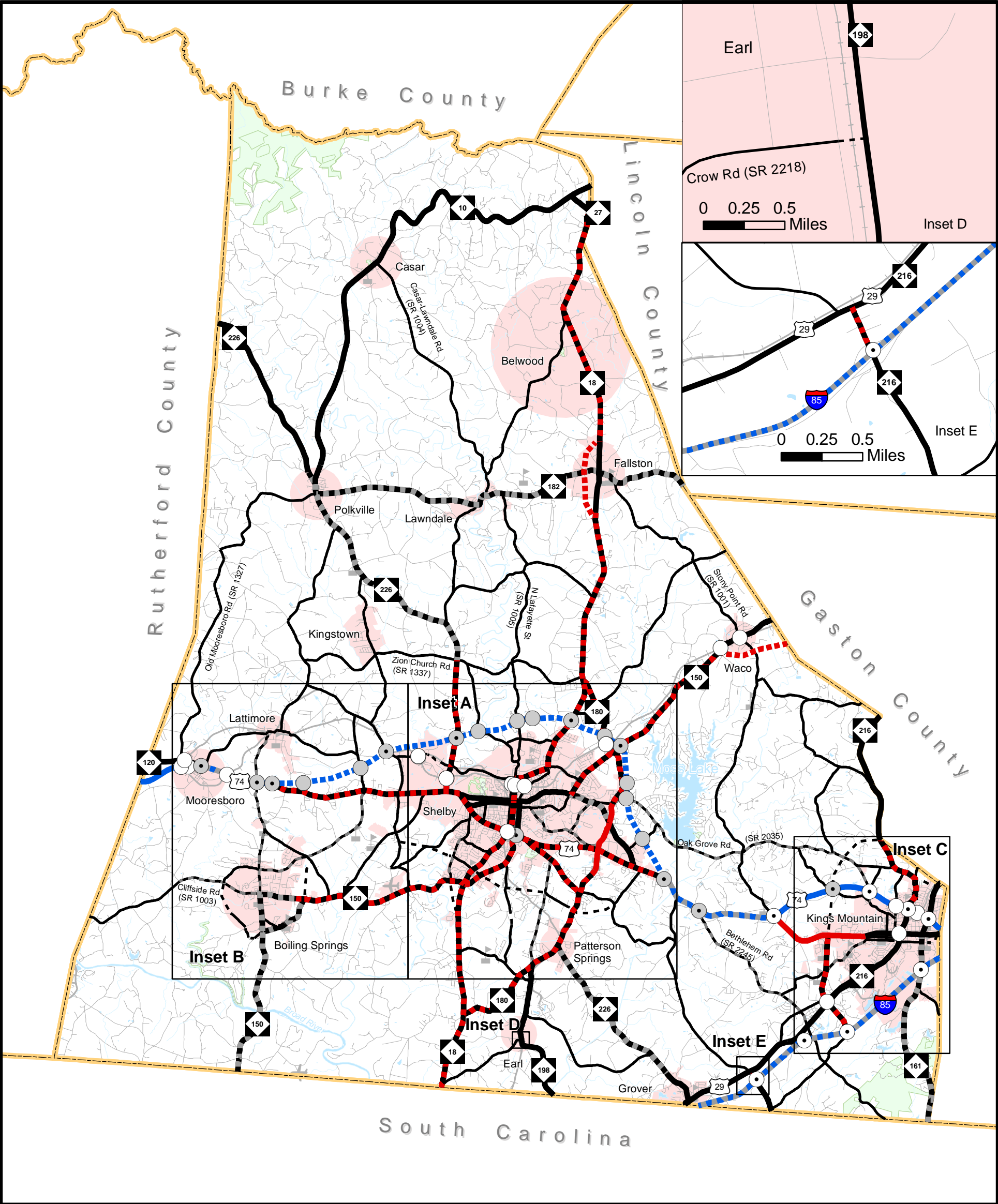
**Cleveland County**

North Carolina

**Comprehensive Transportation Plan**

Plan date: November 16, 2010





Freeways

- Existing
- Needs Improvement
- Recommended

Expressways

- Existing
- Needs Improvement
- Recommended

Boulevards

- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares

- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares

- Existing
- Needs Improvement
- Recommended

- Existing Interchange
- Proposed Interchange
- Existing Grade Separation
- Proposed Grade Separation

0 0.5 1 2 3 4 Miles

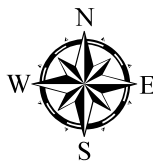


Figure 1

Sheet 2 of 5

Base map date: July 16, 2010

Refer to CTP document for more details

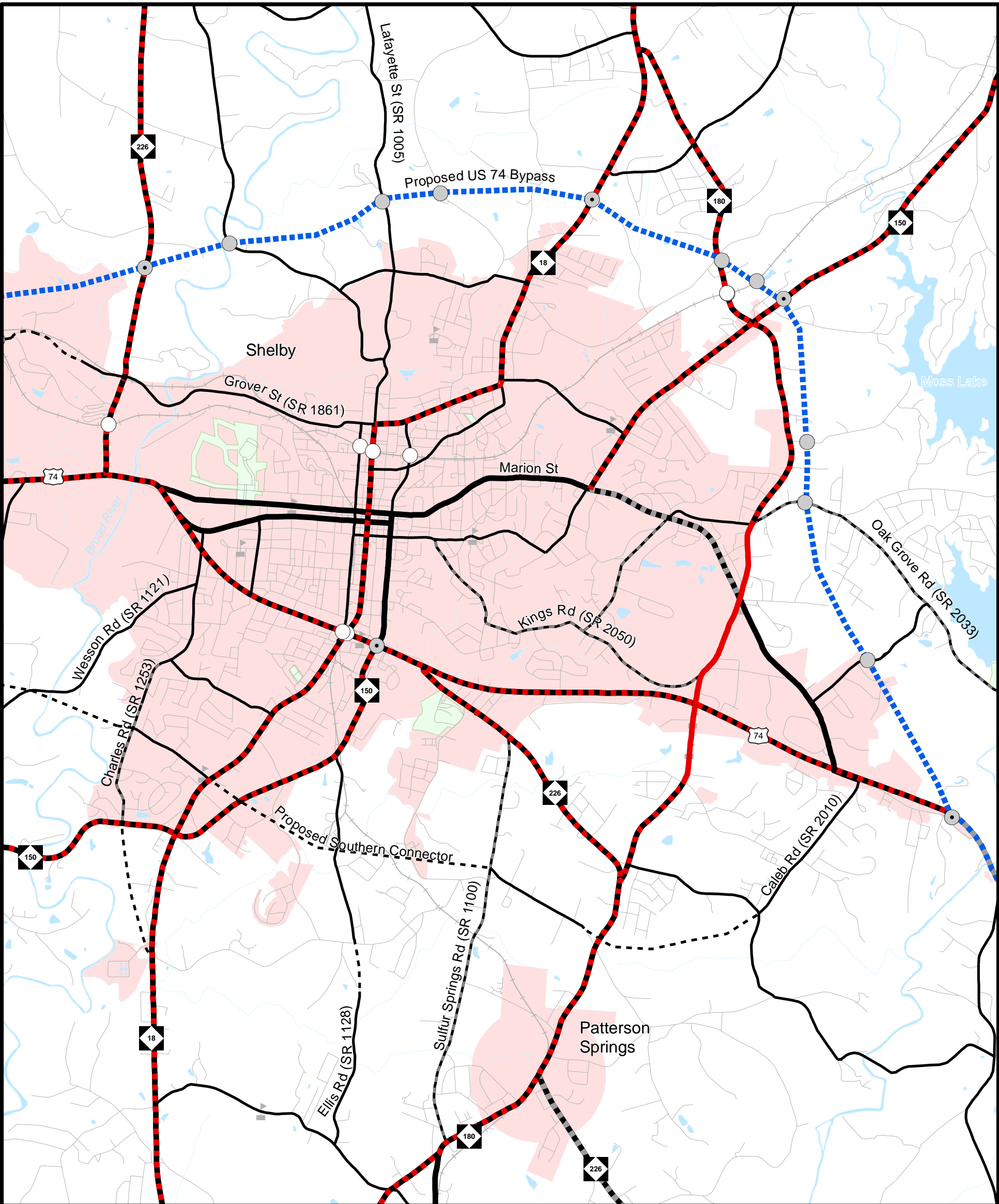
Highway Map

Cleveland County

North Carolina

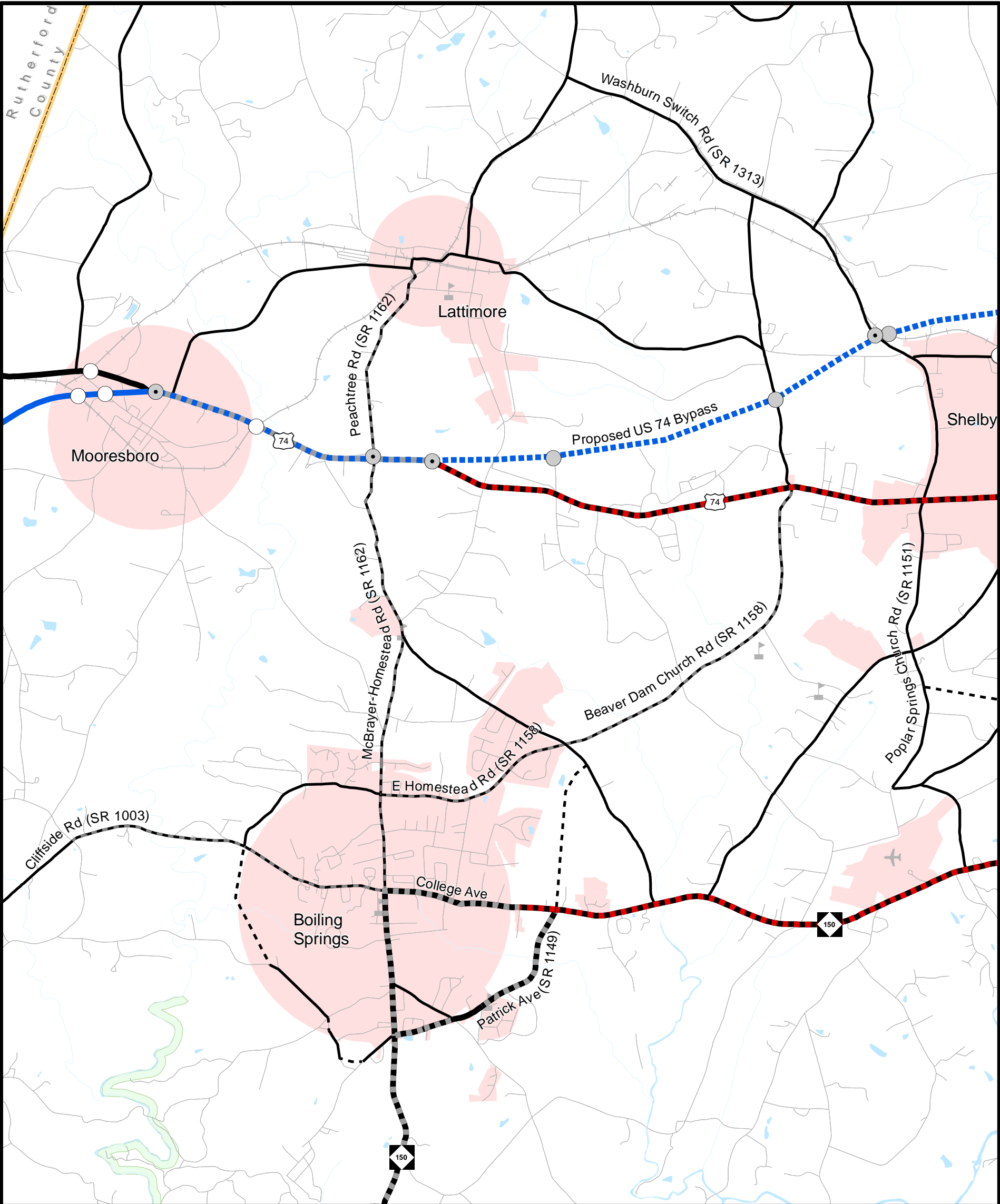
Comprehensive Transportation Plan

Plan date: November 16, 2010



<p><b>Freeways</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Expressways</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Boulevards</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul>	<p><b>Other Major Thoroughfares</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Minor Thoroughfares</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Interchanges</b></p> <ul style="list-style-type: none"><li>Existing Interchange</li><li>Proposed Interchange</li><li>Existing Grade Separation</li><li>Proposed Grade Separation</li></ul>	<p>0 0.25 0.5 1 Miles</p> <p><b>Figure 1</b> Sheet 2A of 5</p> <p>Base map date: July 16, 2010</p> <p>Refer to CTP document for more details</p>	<p><b>Highway Map</b> <b>Inset A</b> <b>Cleveland County</b> North Carolina</p> <p><b>Comprehensive Transportation Plan</b> Plan date: November 16, 2010</p>
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Freeways

- Existing
- Needs Improvement
- Recommended

Expressways

- Existing
- Needs Improvement
- Recommended

Boulevards

- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares

- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares

- Existing
- Needs Improvement
- Recommended

- Existing Interchange
- Proposed Interchange
- Existing Grade Separation
- Proposed Grade Separation

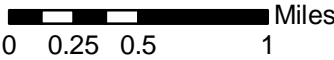


Figure 1  
Sheet 2B of 5

Base map date: July 16, 2010

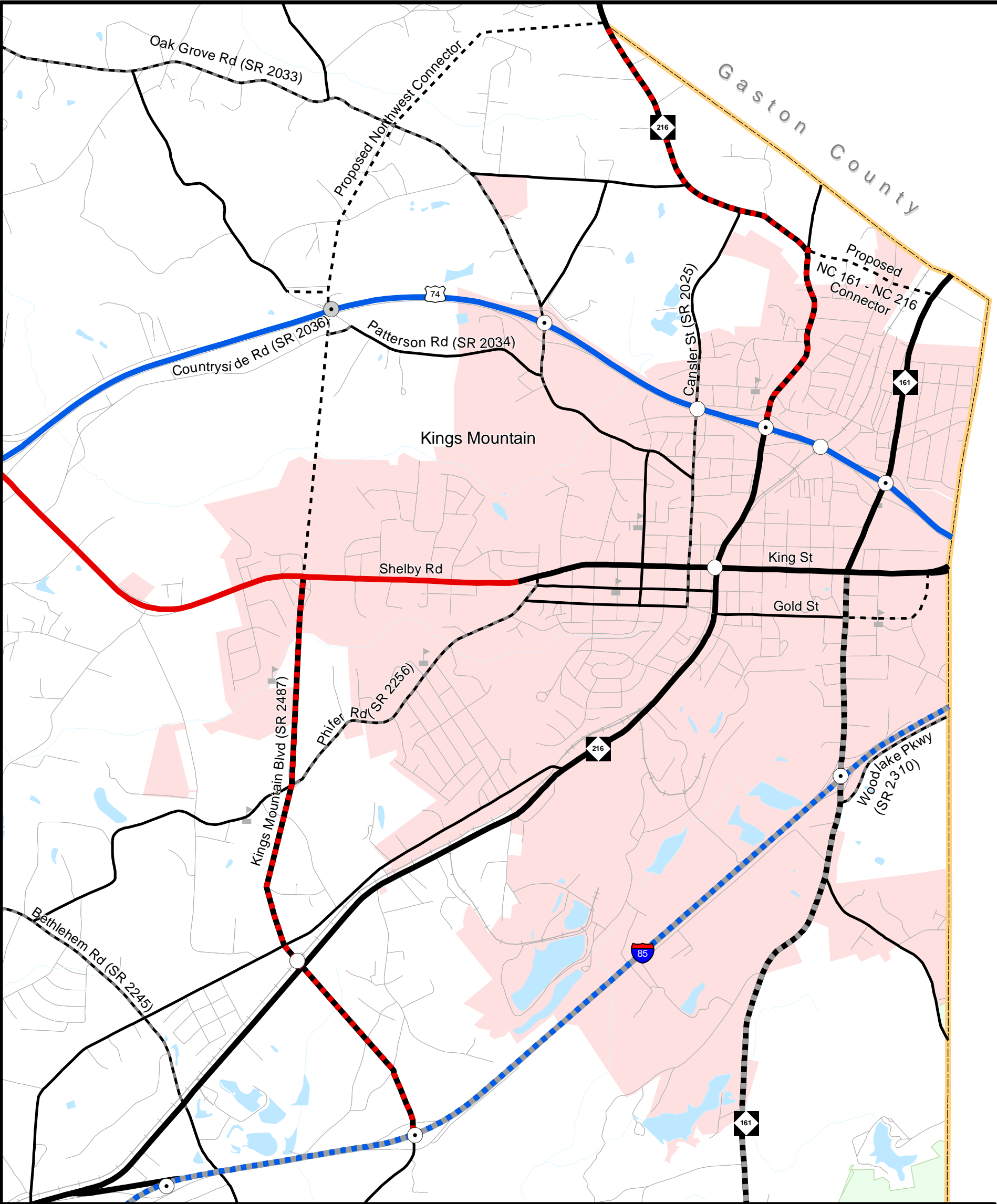
Refer to CTP document for more details

Highway Map  
Inset B

Cleveland  
County  
North Carolina

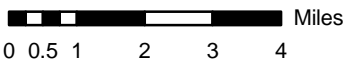
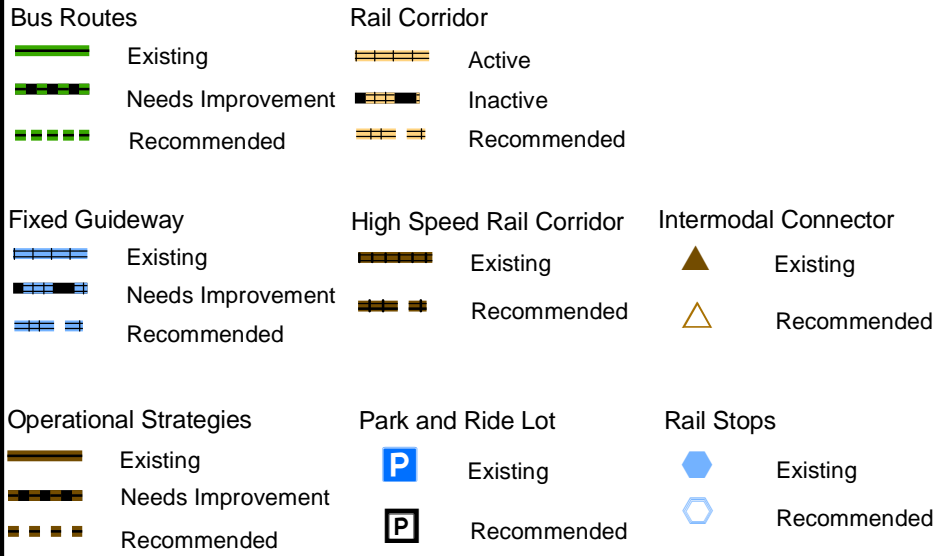
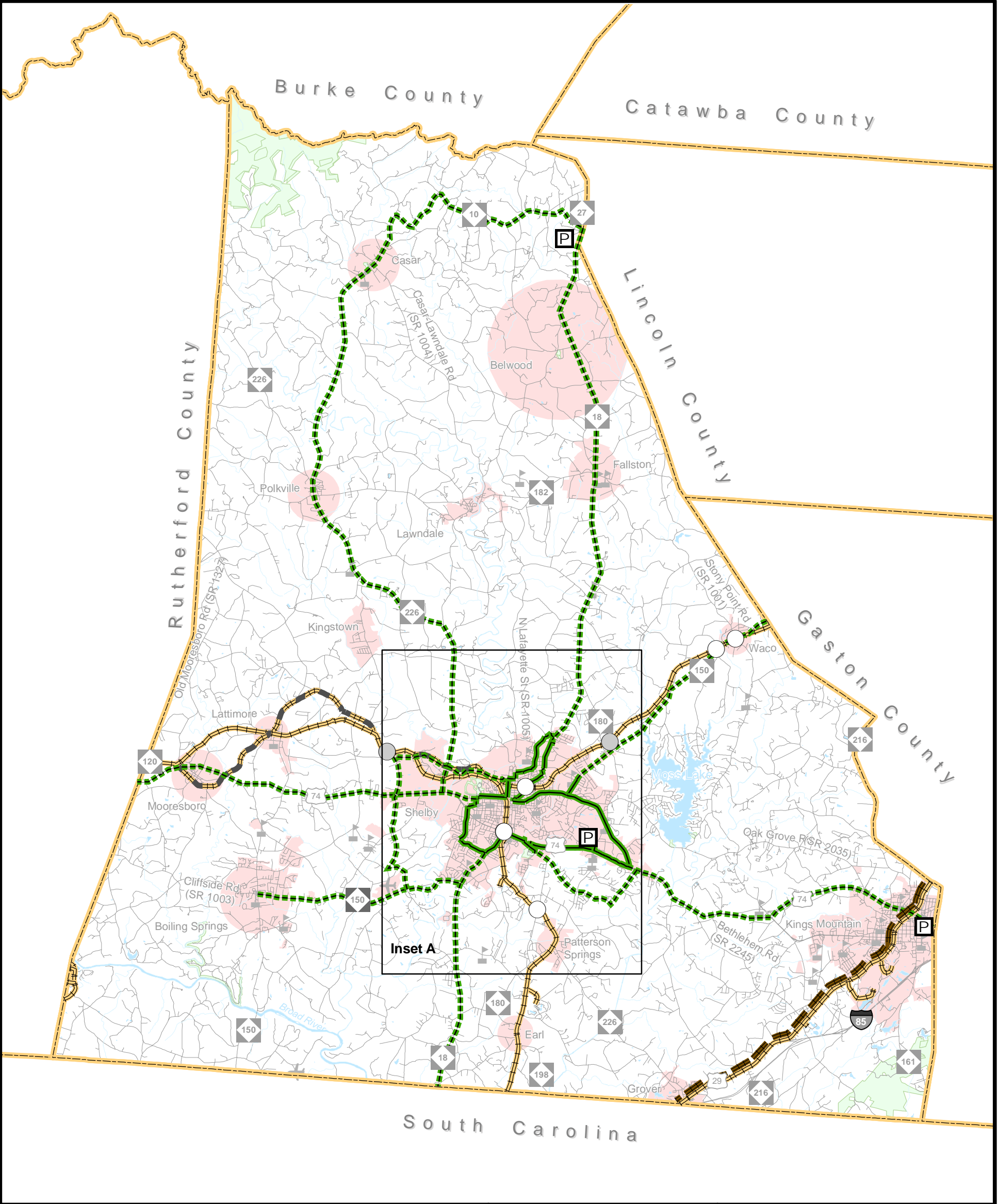
Comprehensive  
Transportation Plan

Plan date: November 16, 2010



<p><b>Freeways</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Expressways</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Boulevards</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul>	<p><b>Other Major Thoroughfares</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p><b>Minor Thoroughfares</b></p> <ul style="list-style-type: none"><li>Existing</li><li>Needs Improvement</li><li>Recommended</li></ul> <p>Existing Interchange</p> <p>Proposed Interchange</p> <p>Existing Grade Separation</p> <p>Proposed Grade Separation</p>	<p>0 0.25 0.5 Miles</p> <p>N W E S</p> <p><b>Figure 1</b> Sheet 2C of 5</p> <p>Base map date: July 16, 2010</p> <p>Refer to CTP document for more details</p>	<p><b>Highway Map</b></p> <p><b>Inset C</b></p> <p><b>Cleveland County</b></p> <p>North Carolina</p> <p><b>Comprehensive Transportation Plan</b></p> <p>Plan date: November 16, 2010</p>
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**Figure 1**  
Sheet 3 of 5

Base map date: July 16, 2010

Refer to CTP document for more details

**Public Transportation  
and Rail Map**

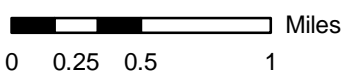
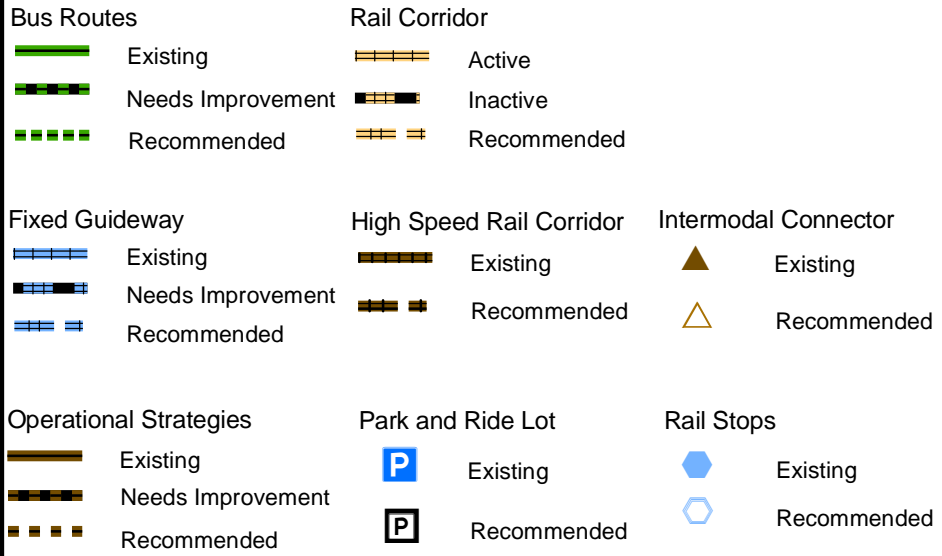
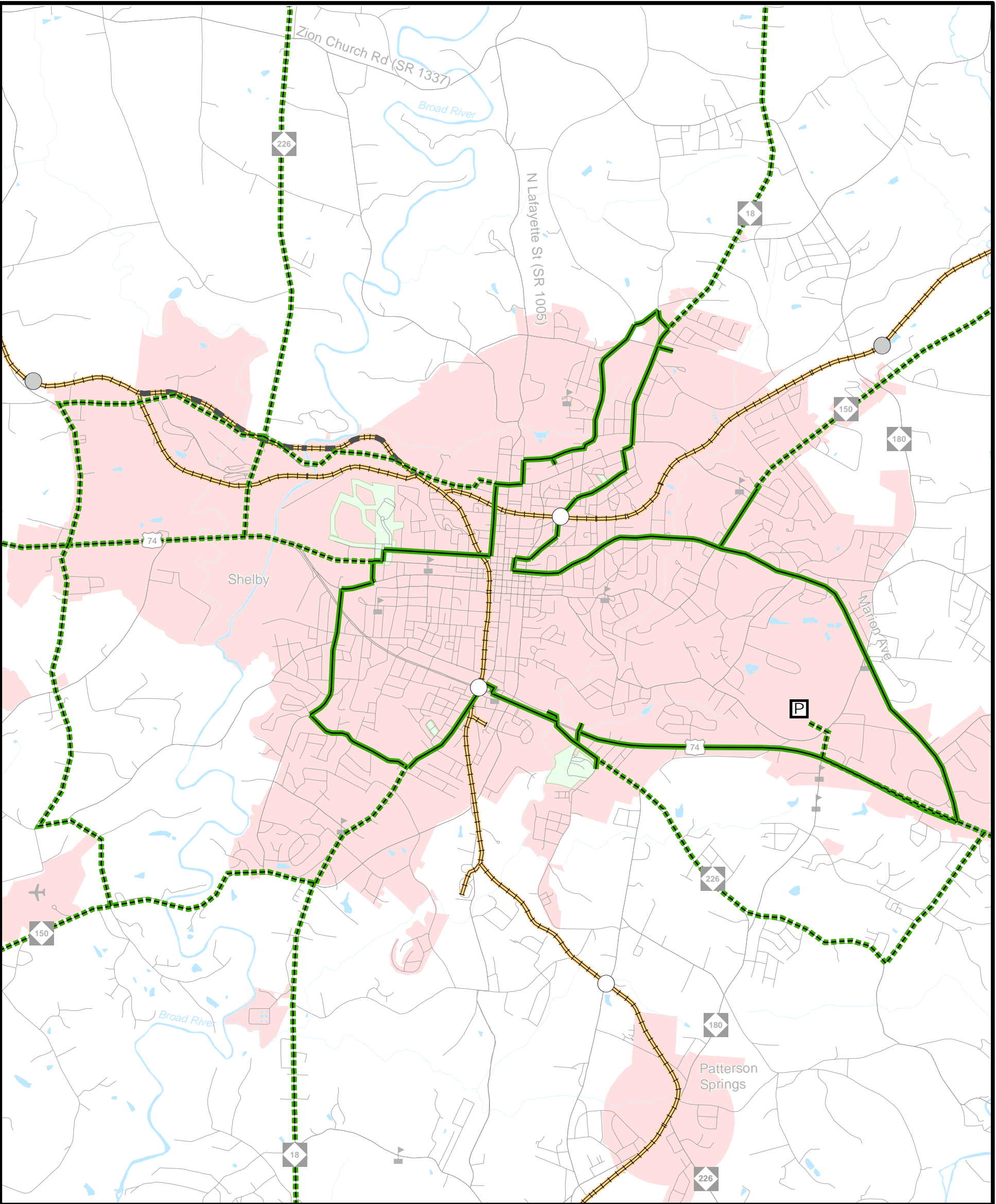
**Cleveland  
County**

North Carolina

**Comprehensive  
Transportation Plan**

Plan date: November 16, 2010





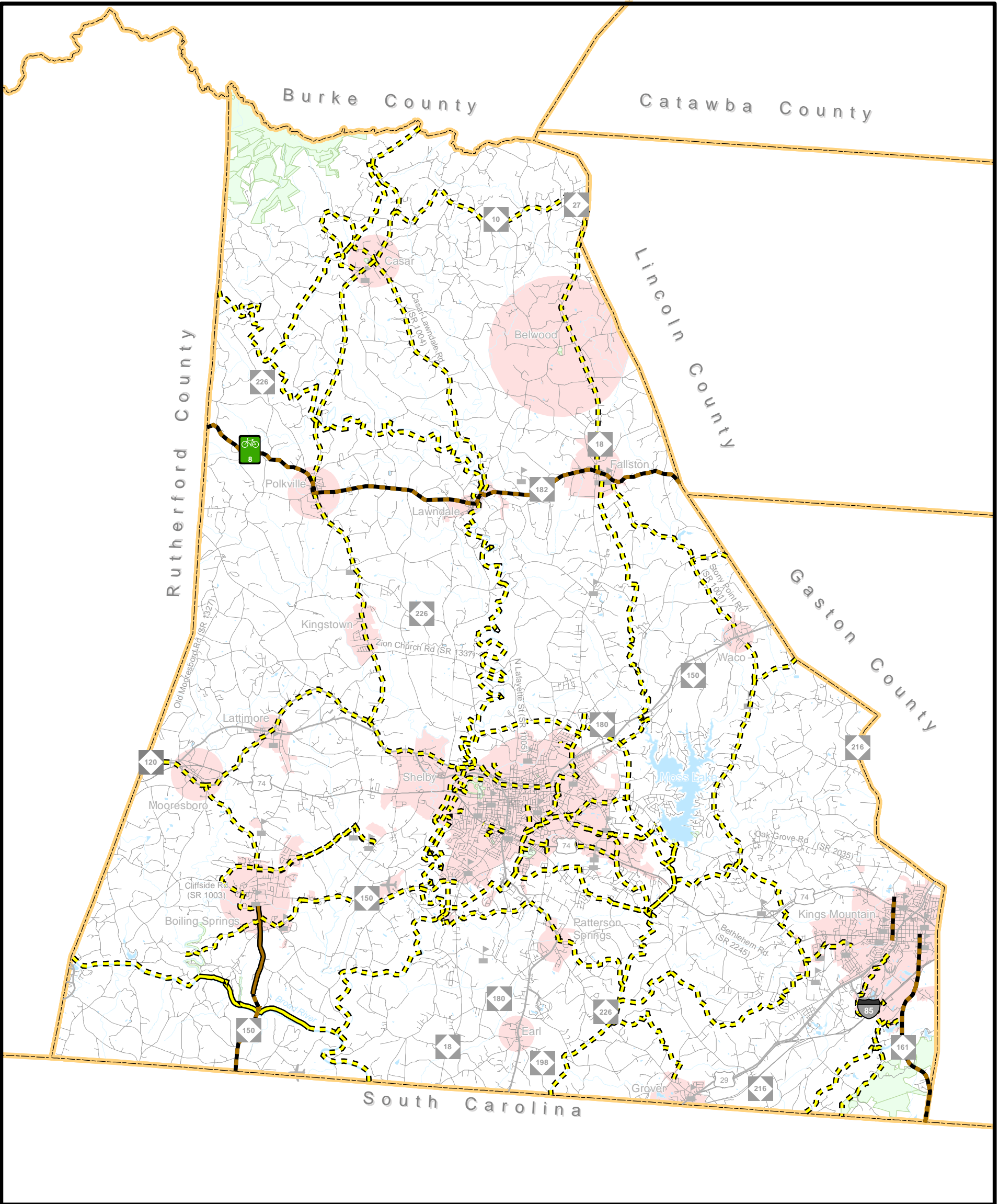
**Figure 1**  
Sheet 3A of 5

Base map date: July 16, 2010

Refer to CTP document for more details

**Public Transportation  
and Rail Map  
Inset A  
Cleveland  
County**  
North Carolina

**Comprehensive  
Transportation Plan**  
Plan date: November 16, 2010



On-road

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

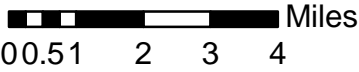


Figure 1

Sheet 4 of 5

Base map date: July 16, 2010

Refer to CTP document for more details

Bicycle Map

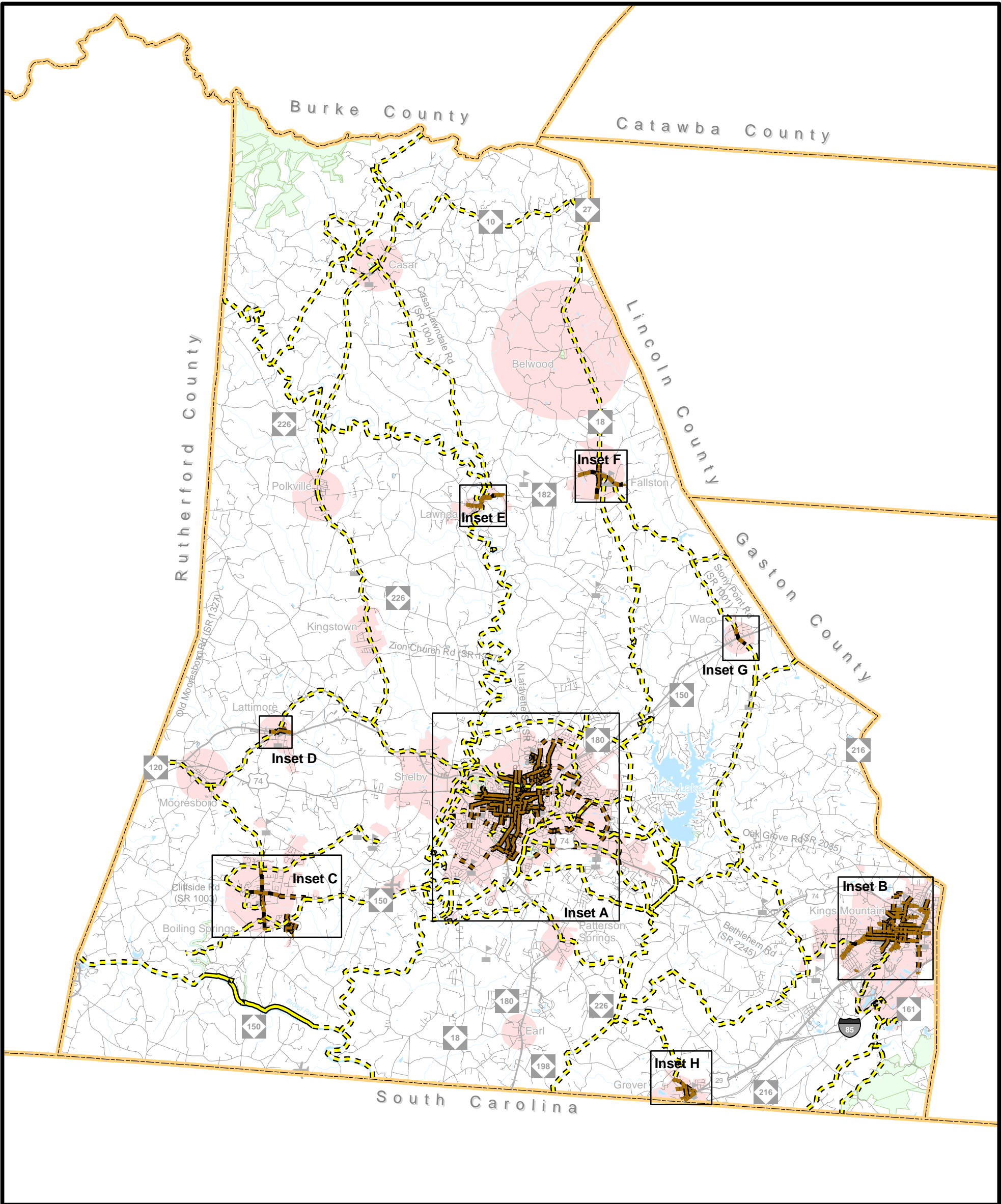
Cleveland County

North Carolina

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Plan date: November 16, 2010





Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

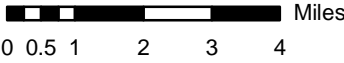


Figure 1  
Sheet 5 of 5

Base map date: July 16, 2010

Refer to CTP document for more details

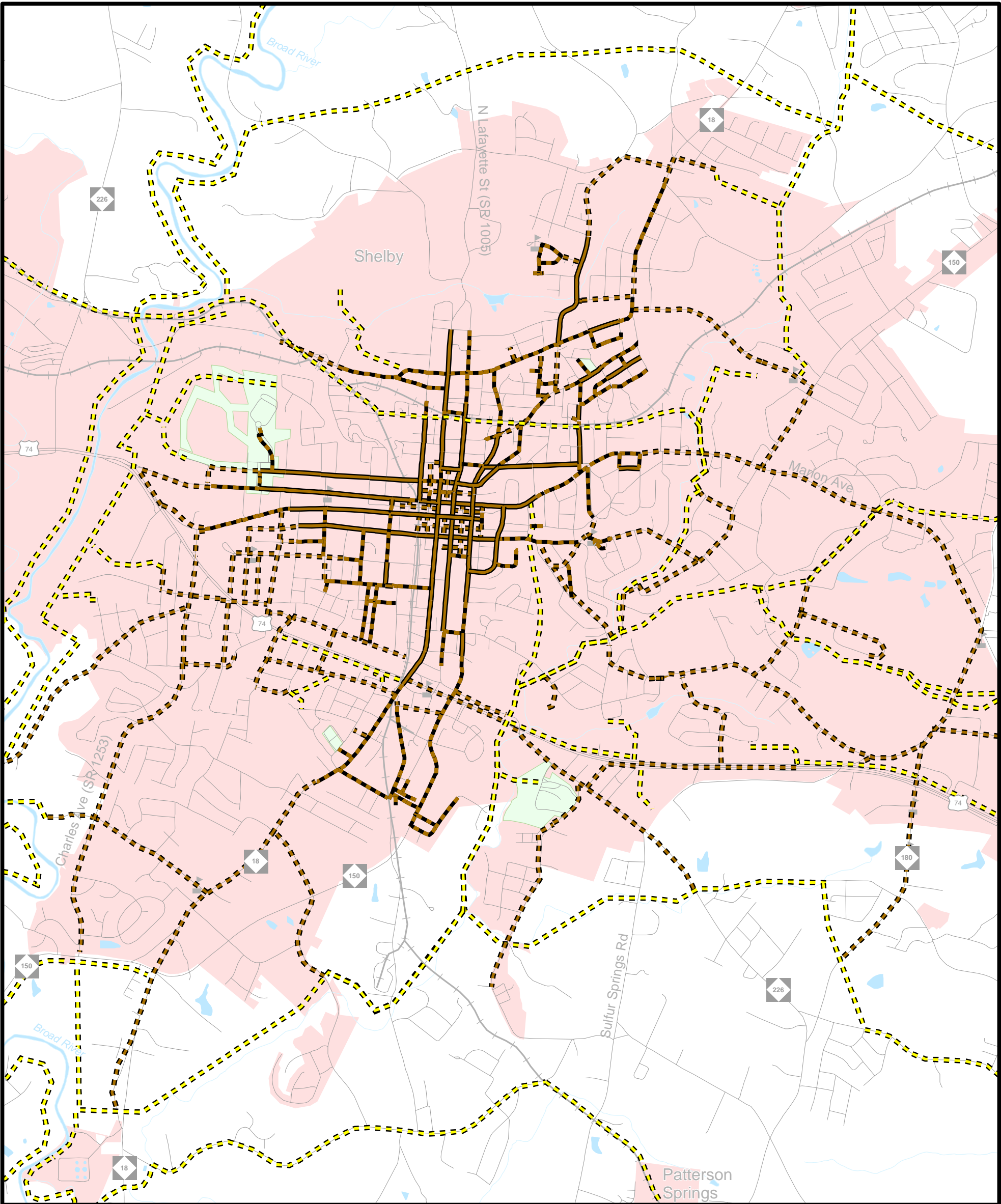
Pedestrian Map

Cleveland  
County

North Carolina

Comprehensive  
Transportation Plan

Plan date: November 16, 2010



Sidewalks

- Existing
- Needs Improvement
- Recommended

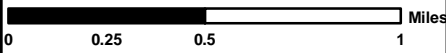
Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation



**Figure 1**  
Sheet 5A of 5

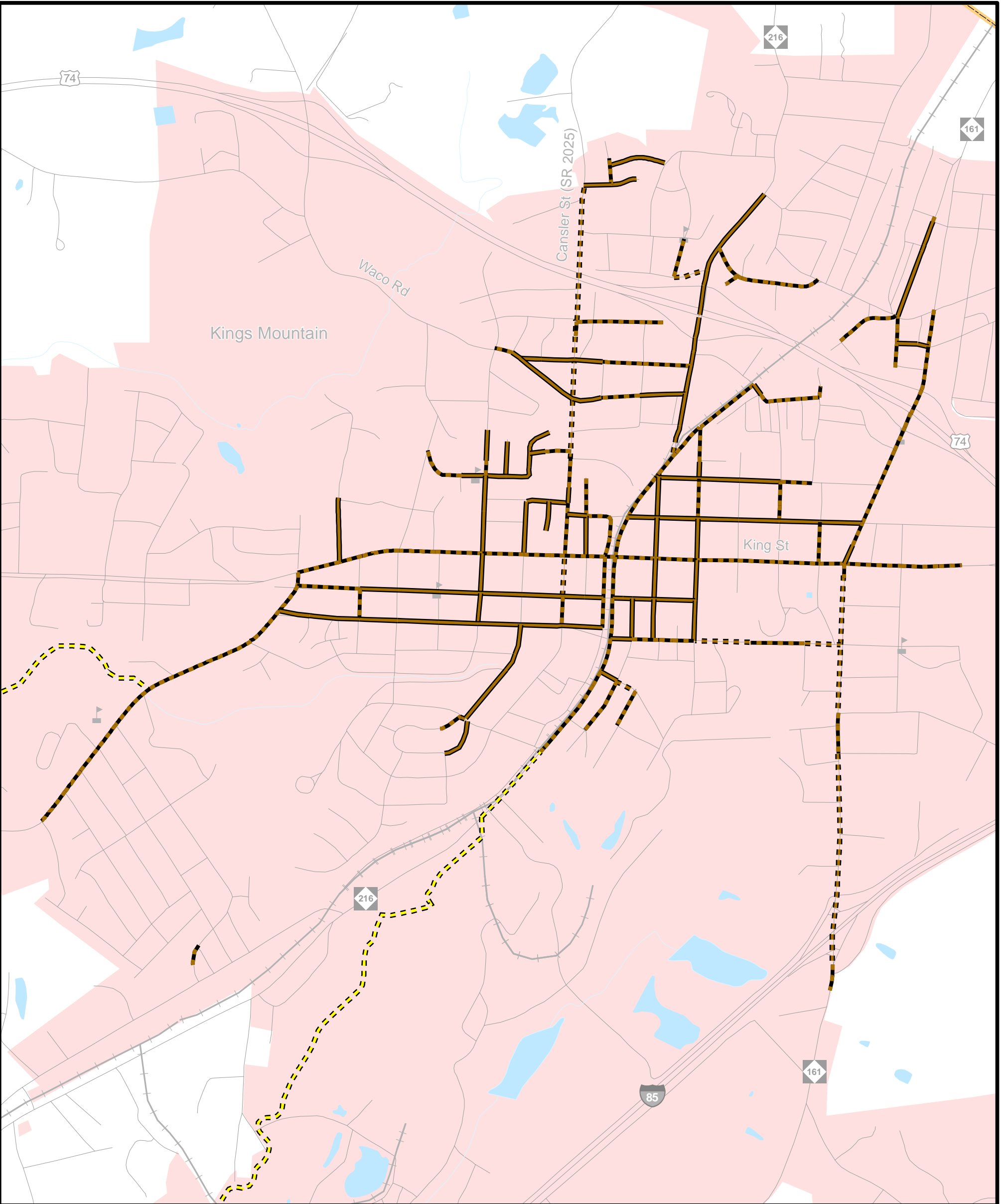
Base map date: July 16, 2010

Refer to CTP document for more details

**Pedestrian Map**  
**Inset A**  
**Cleveland County**  
North Carolina

**Comprehensive  
Transportation Plan**  
Plan date: November 16, 2010





Sidewalks

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

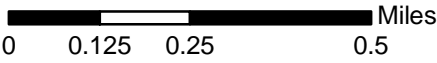


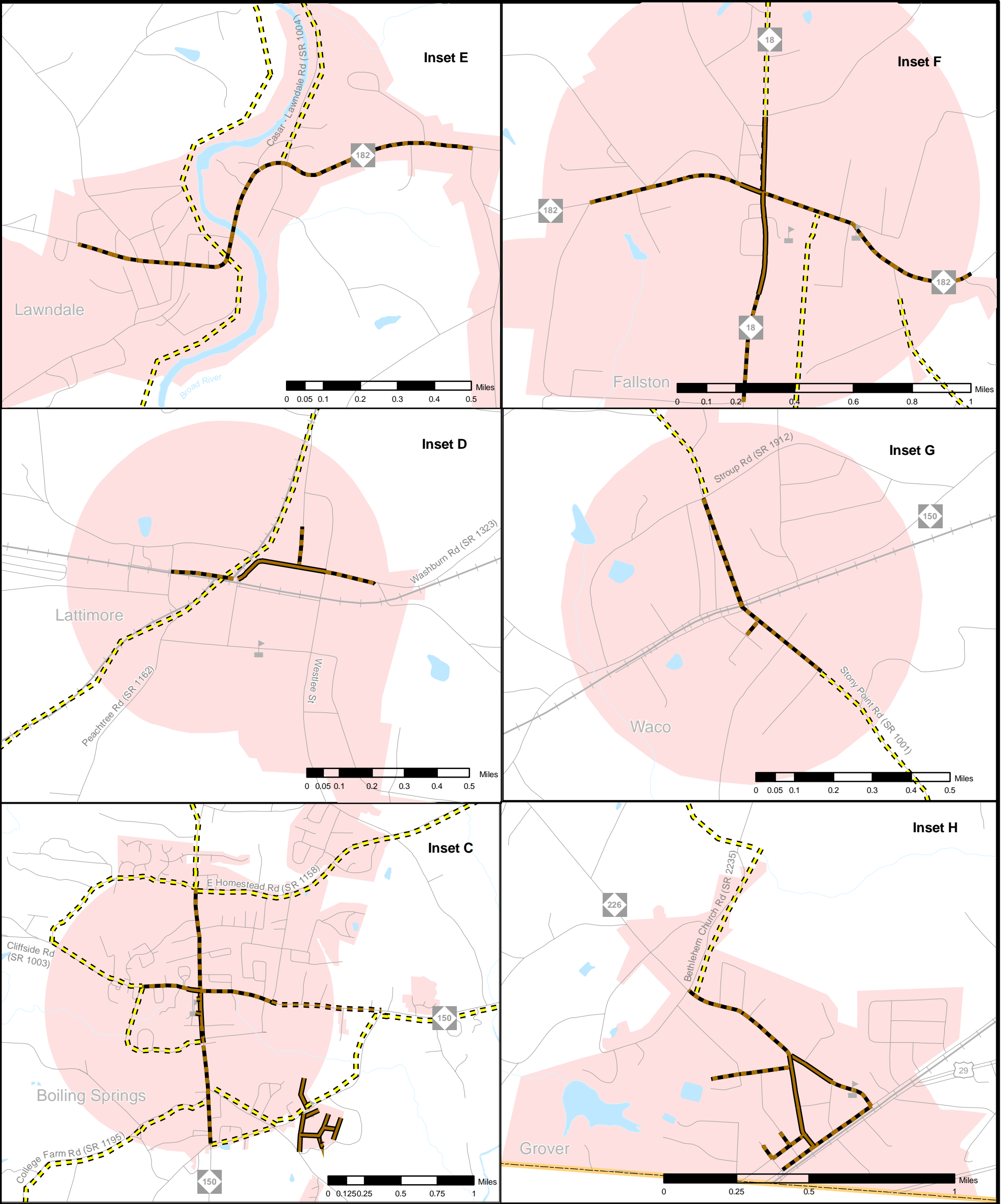
Figure 1  
Sheet 5B of 5

Base map date: July 16, 2010

Refer to CTP document for more details

Pedestrian Map  
Inset B  
Cleveland County  
North Carolina

Comprehensive  
Transportation Plan  
Plan date: November 16, 2010



Sidewalks

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation



**Figure 1**  
Sheet 5C of 5

Base map date: July 16, 2010

Refer to CTP document for more details

**Pedestrian Map**  
**Insets C - H**  
**Cleveland**  
**County**  
North Carolina

**Comprehensive**  
**Transportation Plan**  
Plan date: November 16, 2010

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

---

A Comprehensive Transportation Plan (CTP) is developed to ensure that the progressively developed transportation system will meet the needs of the region for the planning period. 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 such as pavement widths, intersection geometry, and intersection controls; or system problems, such as the need to construct missing travel links, bypass routes, loop facilities, additional radial routes or infrastructure 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 and last revised on July 10, 2008. The SHC Vision Plan represents an initiative to protect and maximize the mobility and connectivity on a core set of highway corridors throughout North Carolina, while promoting environmental 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 Comprehensive Transportation Plans shall incorporate the long-term vision of each corridor. Refer to Appendix A for contact information.

In the development of this plan, travel demand in the urban areas of the county, around Shelby and Kings Mountain, was projected from 2009 to 2035 using the Metrolina Regional Model (MRM06\_v1.1). Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2035. Travel demand in the rural areas of the county was projected from 2009 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1991 to 2009. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were approved by the Metrolina Regional Model Executive Committee on September 6, 2007. The established future growth rates for the rural areas were endorsed by the CTP Steering Committee.

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;

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<sup>1</sup> For more information on the SHC Vision Plan, refer to: <http://www.ncdot.gov/doh/preconstruct/tpb/SHC/>.



- 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 express dissatisfaction. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using the NCLOS program and LOS tables. 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.

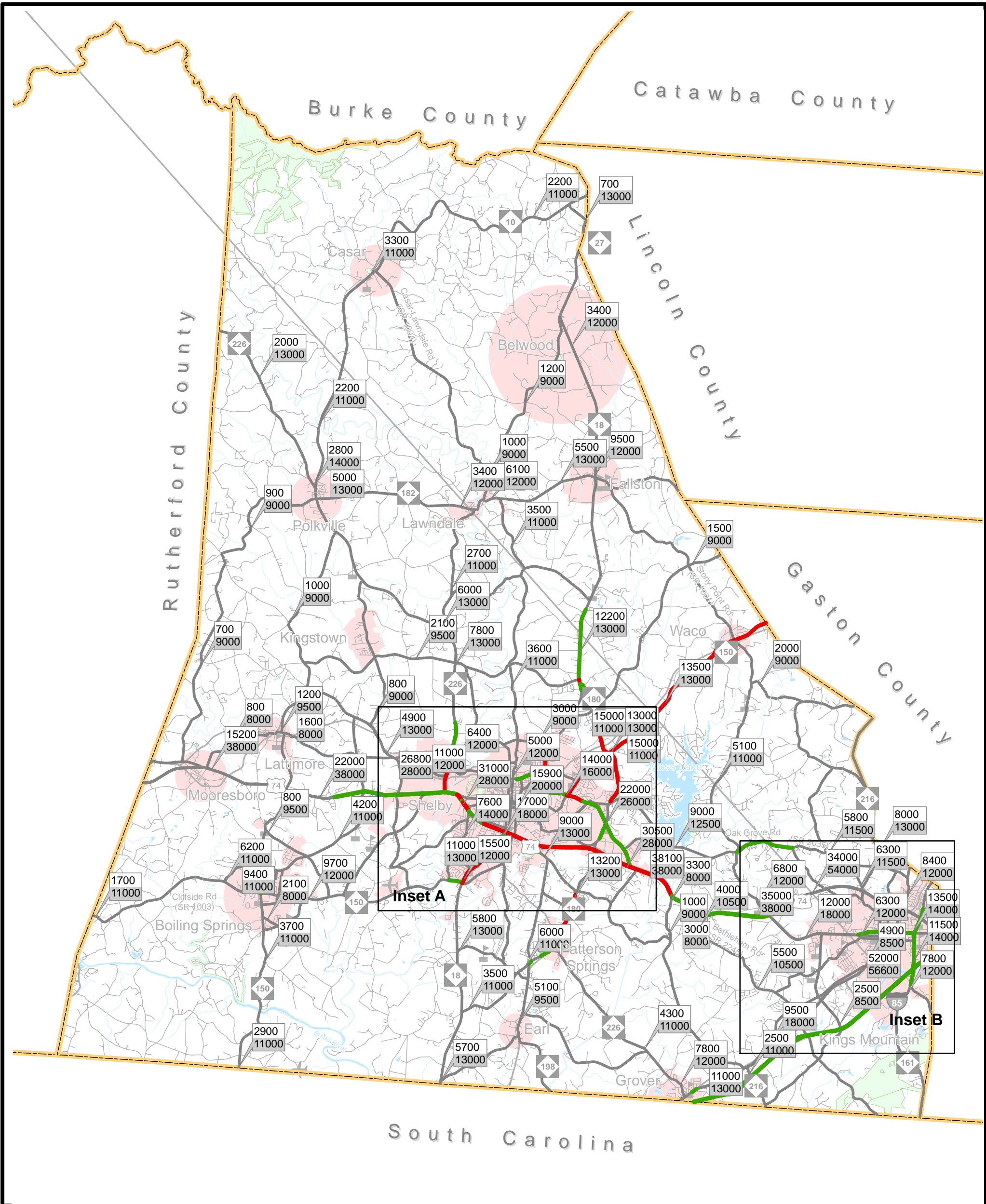
### Traffic Crash Analysis

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 Cleveland County CTP for crashes occurring in the planning area between January 1, 2006 and December 31, 2008. During this period, a total of forty-five 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 and unique 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. Thirty-five deficient bridges were identified on roads evaluated as part of the CTP and are illustrated in Figure 5. Refer to Appendix G for more detailed information.



Legend

- Near Capacity
- Over Capacity
- 2009 Volumes (AADT)
- 2009 Capacity
- Study Roads
- County Boundary
- ✈ Airports
- 🏫 Schools
- Railroads
- Rivers and Streams
- Public Lands
- Water Bodies
- Roads
- Municipal Boundary

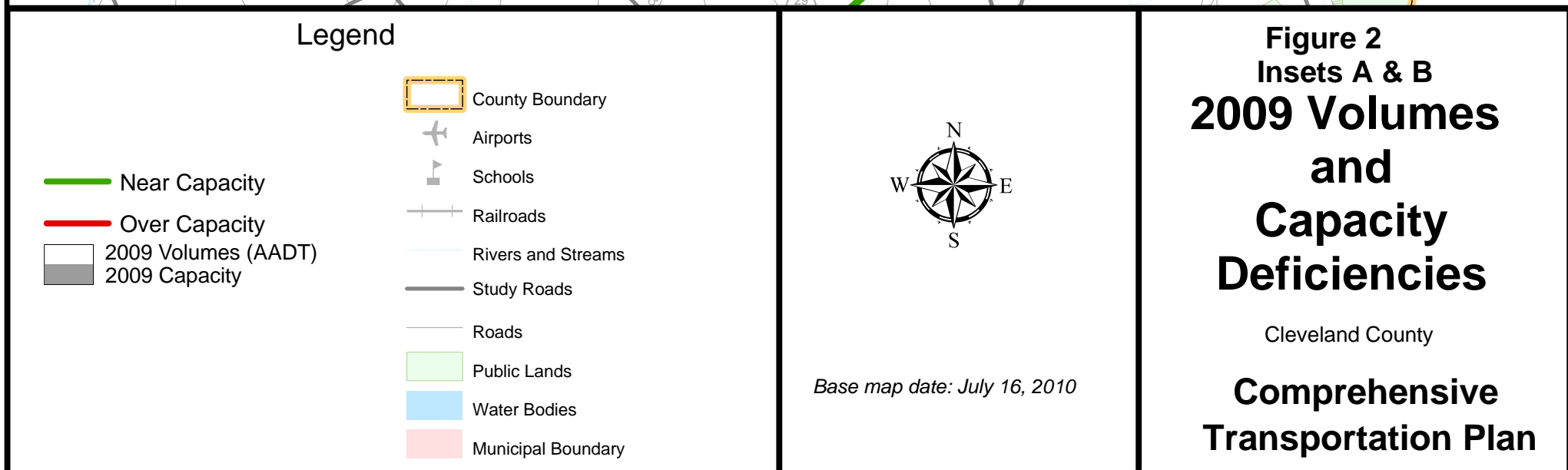
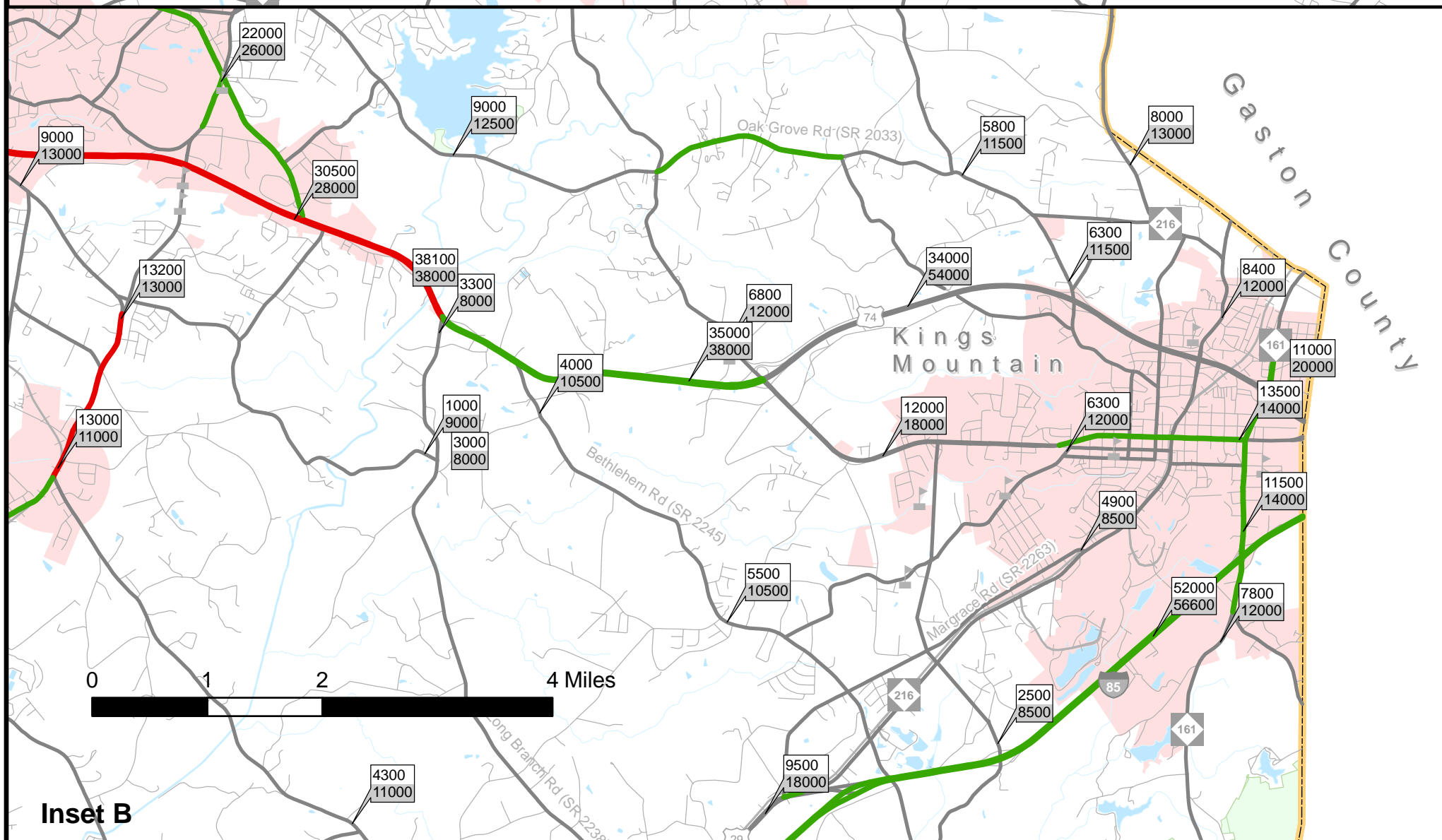
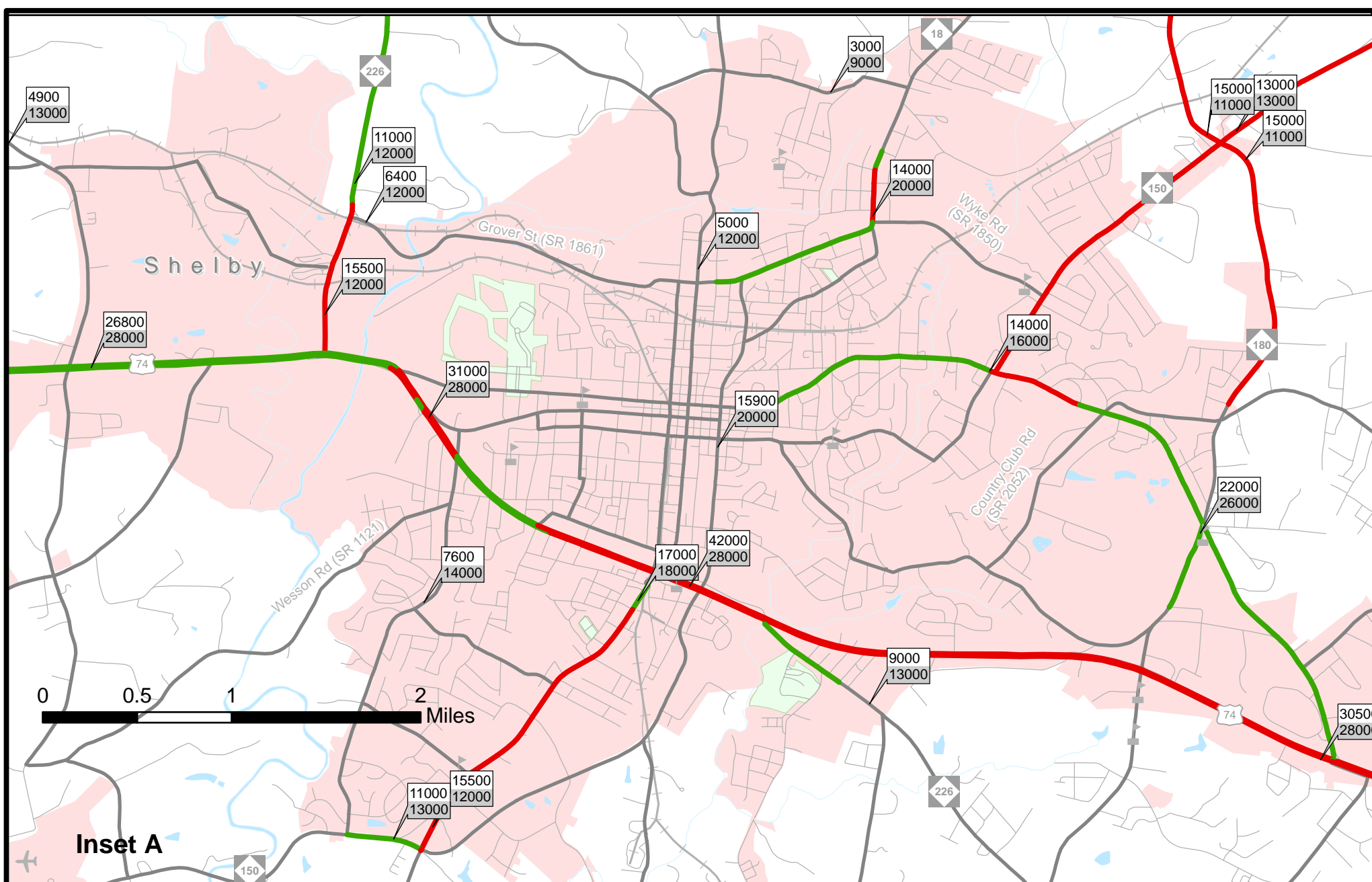
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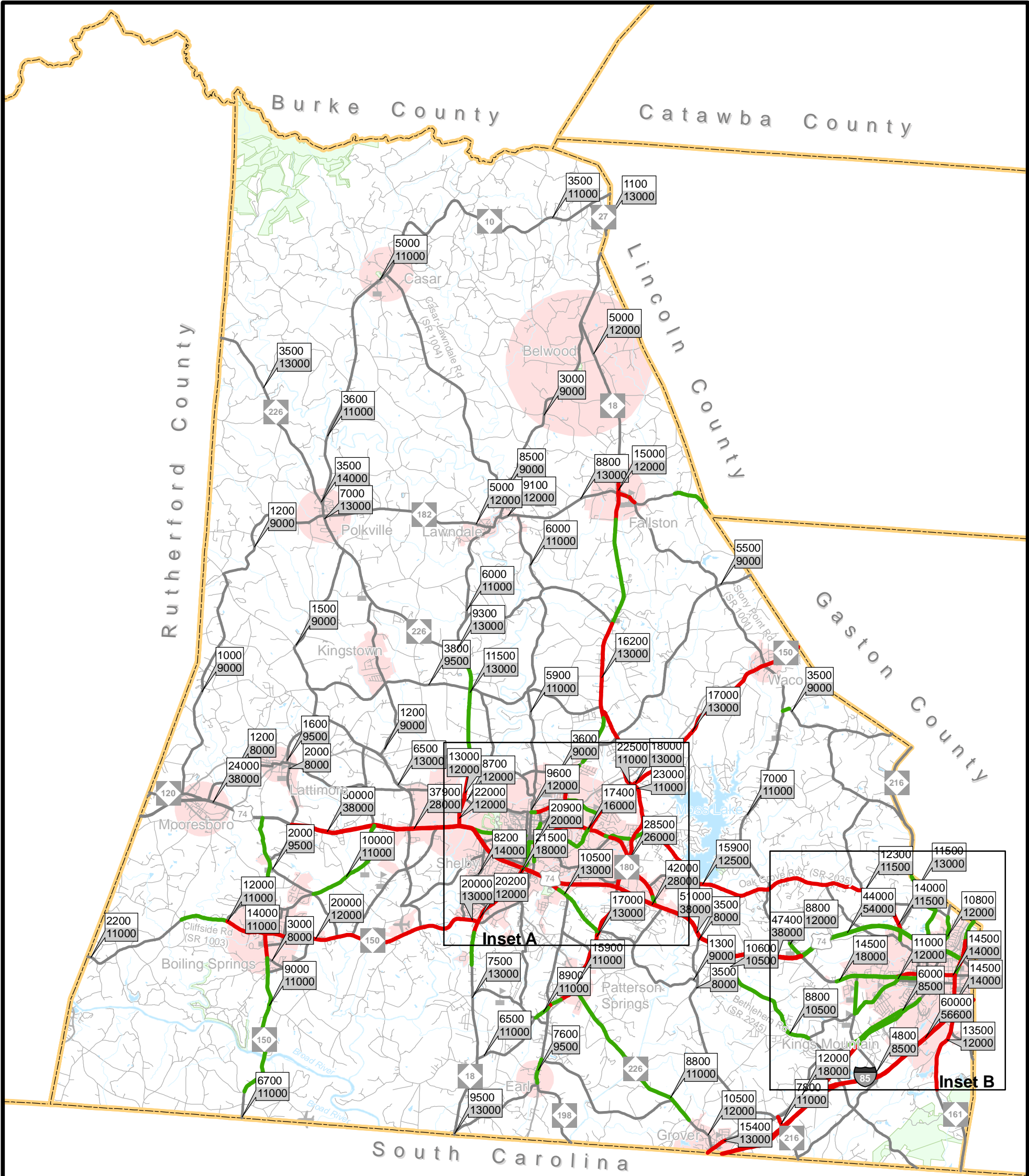


Base map date: July 16, 2010

Figure 2  
**2009 Volumes  
and  
Capacity  
Deficiencies**  
Cleveland County  
**Comprehensive  
Transportation Plan**







Legend

Near Capacity

Over Capacity

2035 Volumes (AADT)

2009 Capacity

County Boundary

Airports

Schools

Railroads

Rivers and Streams

Study Roads

Roads

Water Bodies

Municipal Boundary

Miles

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1

2

3

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Base map date: July 16, 2010

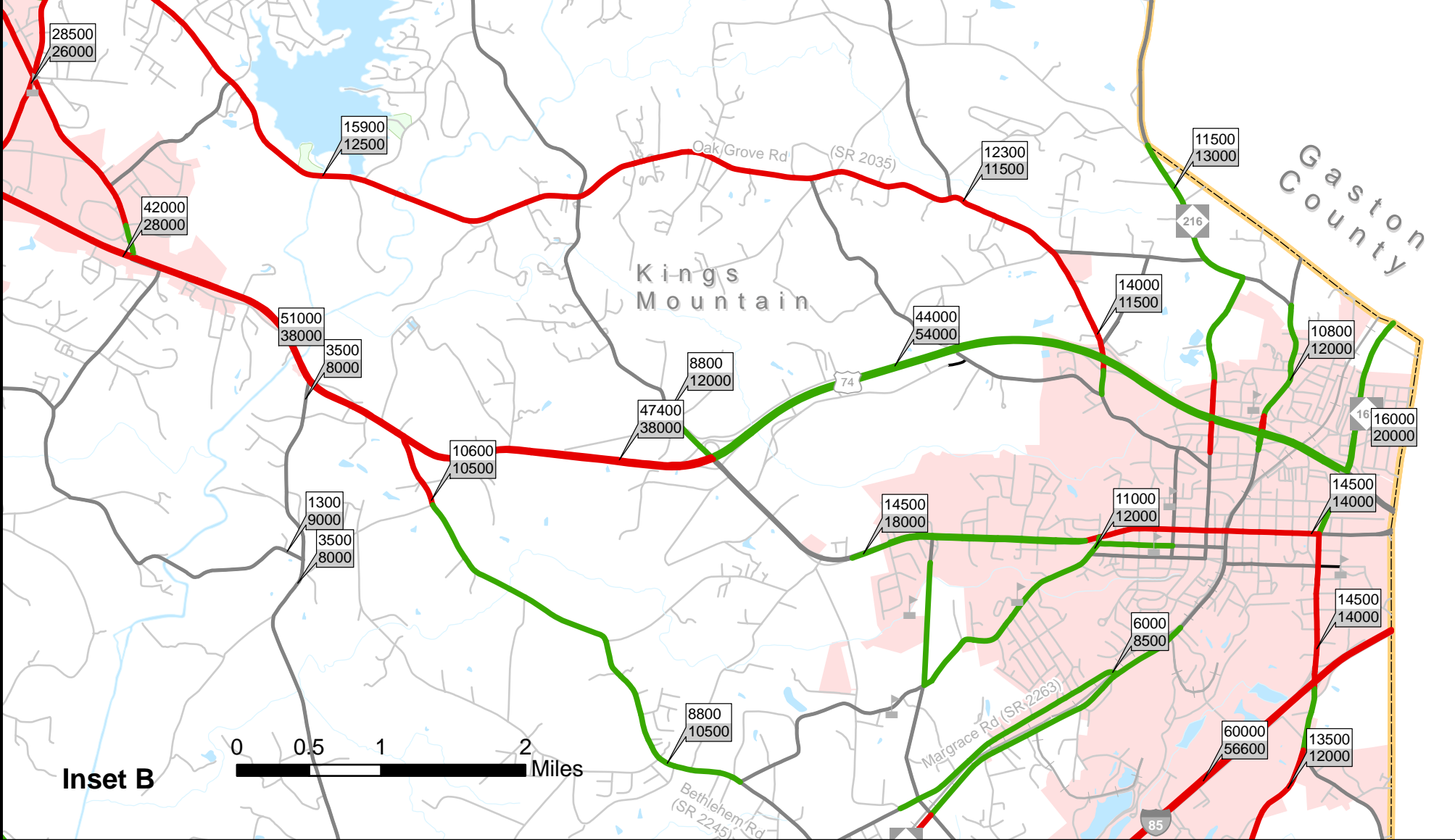
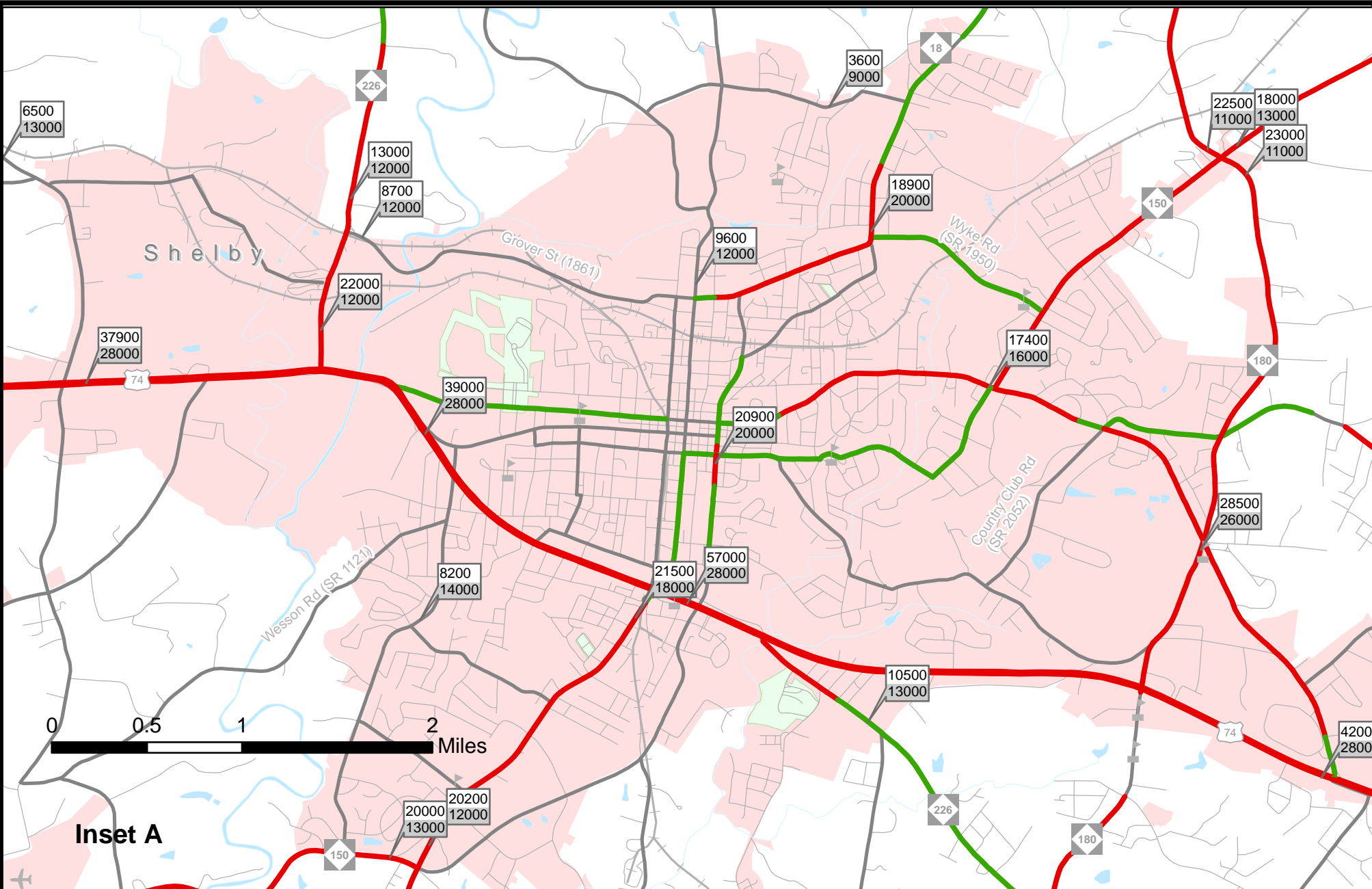
Figure 3

2035 Volumes and Capacity Deficiencies

Cleveland County

Comprehensive Transportation Plan





**Legend**

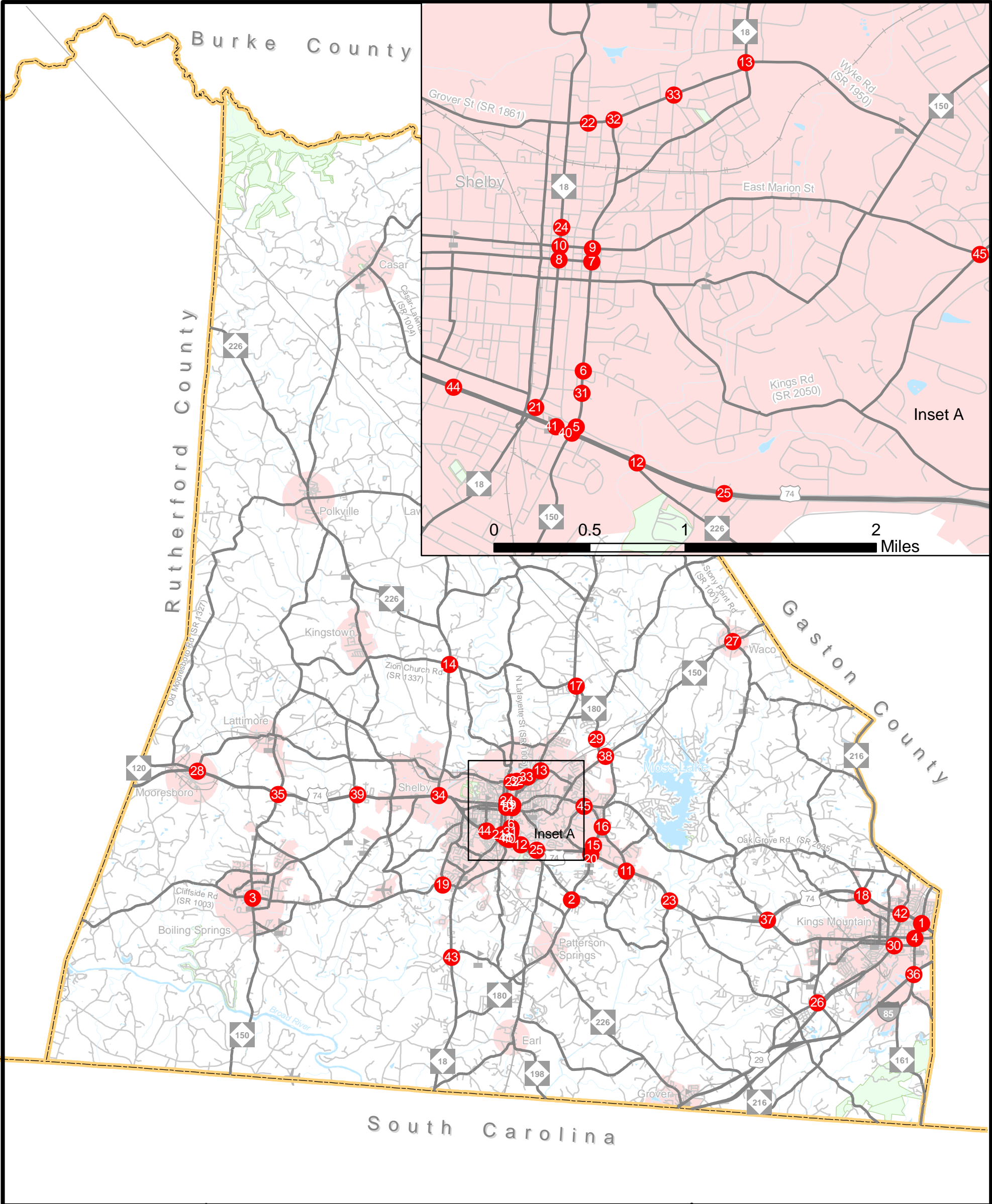
- Near Capacity
- Over Capacity
- 2035 Volumes (AADT)
- 2009 Capacity
- County Boundary
- Airports
- Schools
- Railroads
- Rivers and Streams
- Roads
- Study Roads
- Public Lands
- Water Bodies
- Municipal Boundary

Base map date: July 16, 2010

**Figure 3**  
**Insets A & B**  
**2035 Volumes**  
**and**  
**Capacity**  
**Deficiencies**












Cleveland County

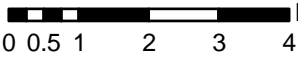
**Comprehensive**  
**Transportation Plan**



**Figure 4  
Crash  
Locations**

January 1, 2006  
to  
December 31, 2008

- Legend**
-  Crash Locations (# Map Index)
  -  County Boundary
  -  Airports
  -  Schools
  -  Railroads
  -  Rivers and Streams
  -  Study Roads
  -  Roads
  -  Public Lands
  -  Water Bodies
  -  Municipal Boundary

 Miles



Base map date: July 16, 2010

Refer to table 4 in Appendix F for more details

**Cleveland  
County**

**Comprehensive  
Transportation Plan**







## ***Public Transportation and Rail***

Public transportation and rail are vital modes of transportation that give alternative options 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, the NCDOT Board of Transportation 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 are at work 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. The Transportation Administration of Cleveland County (TACC) currently operates one fixed route, the Shelby Circulator. The TACC also operates para-transit (dial-a-ride) service throughout the County. 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.

## 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.

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 everyday. Combined, the Carolinian and Piedmont carry more than 200,000 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. Amtrak operates passenger rail service, two trains a day, on the track through the southeast corner of the county with no stops. Freight service is provided by Norfolk Southern Corporation and CSX Transportation on the other active tracks within the county. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

## ***Bicycles & Pedestrians***

Bicyclists and pedestrians are a growing part of the transportation equation 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 upon and 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 the 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 2007 Shelby Pedestrian Plan, the 2006 Boiling Springs Pedestrian Plan and the 2009 Carolina Thread Trail Master Plan for Cleveland County Communities were utilized in the development of these elements of the CTP. NC Bicycle Route 8, Southern Highlands, traverses the northern section of the county from Rutherford County to Lincoln County. 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.

### ***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 2005 Cleveland County Land Use Plan (Amended July 1, 2008), the 2009 Shelby Comprehensive Land Use Plan and the 2009 Town of Boiling Springs Land Use Plan were used to meet this requirement and are illustrated in Figures 6 and 7, respectively.

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.
- Commercial: 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.
- Industrial: Land devoted to the manufacturing, storage, warehousing, and transportation of products.
- Public: 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.

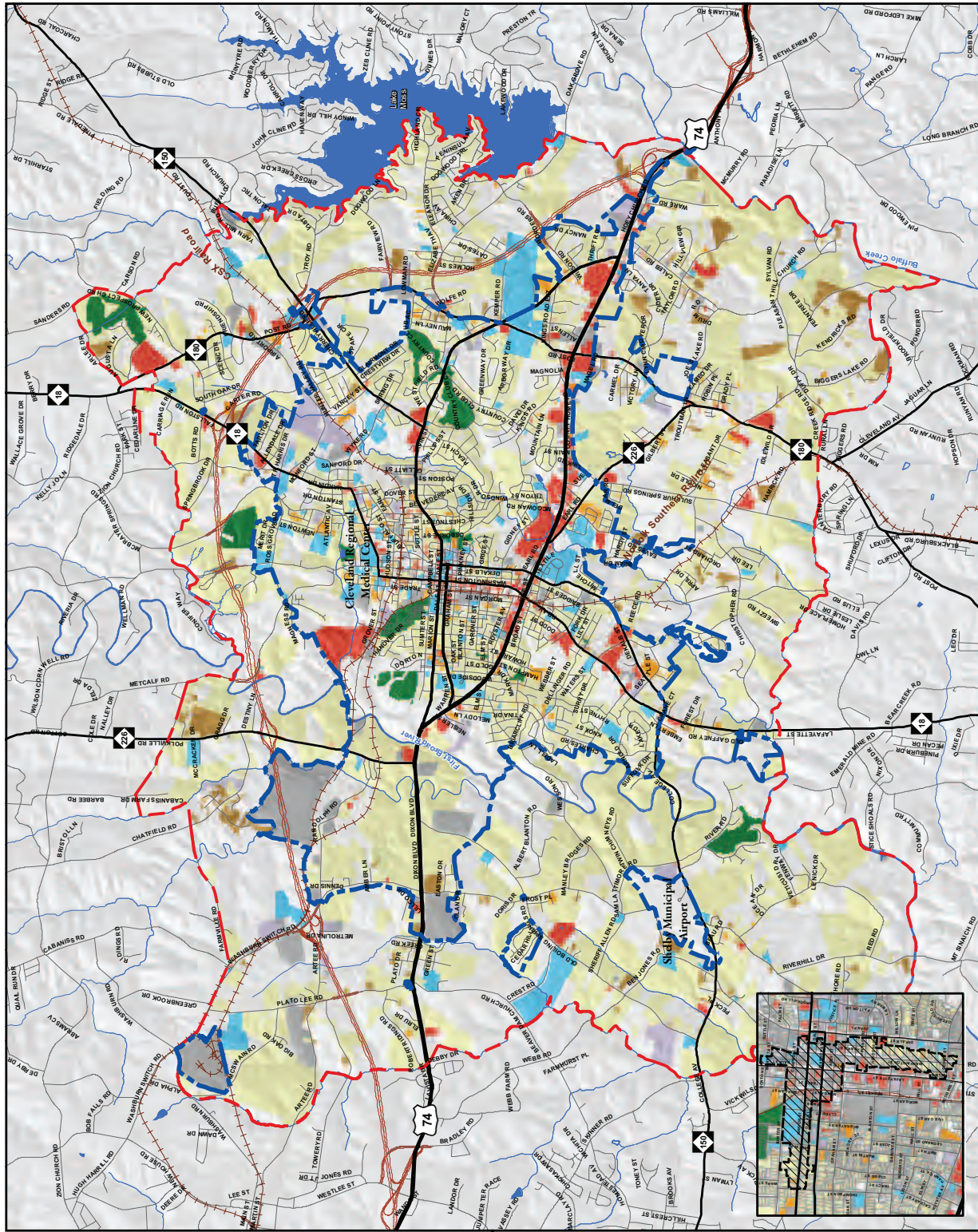
Anticipated future land development is, in general, a logical extension of the present spatial land use distribution. Locations and types of expected growth within the planning area help to determine the location and type of proposed transportation improvements.

Existing commercial land uses in Shelby are mainly along US 74, NC 18 and NC 150. Industrial areas are located northwest of the city. There are several large tracts of government owned institutional and open space land uses throughout the city. Boiling Springs is dominated by the Gardner-Webb University campus in the central business district with a mixture of residential and vacant land surrounding it. The majority of the rural parts of the county are residential with industrial areas west of Shelby, along NC 150 northeast of Shelby, along US 29 and I-85 south of Kings Mountain, and around the coal power plant west of Boiling Springs.

The highest projected population growth rates in Cleveland County are in areas north and west of Shelby, and on the east side of Shelby within the city limits. For employment, the highest projected increases are to the south and west of Kings Mountain and to the north and west of Shelby. Most of the areas with larger employment growth projections are near US 74 and I-85.



- Legend**
- Shelby City Limits
  - Planning Area
  - US Routes
  - State Routes
  - Secondary Roads
  - US 74 Bypass (Future)
  - Railroads
  - Streams
  - Waterbodies
  - Existing Land Use
  - Single Family
  - Multi-Family
  - Mobile Home
  - Civic/Institutional
  - Commercial
  - Office
  - Industrial/Warehouse
  - Park
  - Vacant



**FIGURE 6**  
**Sheet 1 of 2**



Disclaimer: All base information depicted on this map is preliminary and for informational purposes only. Information used to develop this map was provided by the City of Shelby, Cleveland County, and HNTB and HNTB.

**Existing Land Use Map**  
**Shelby Comprehensive Land Use Plan**  
**City of Shelby, North Carolina**



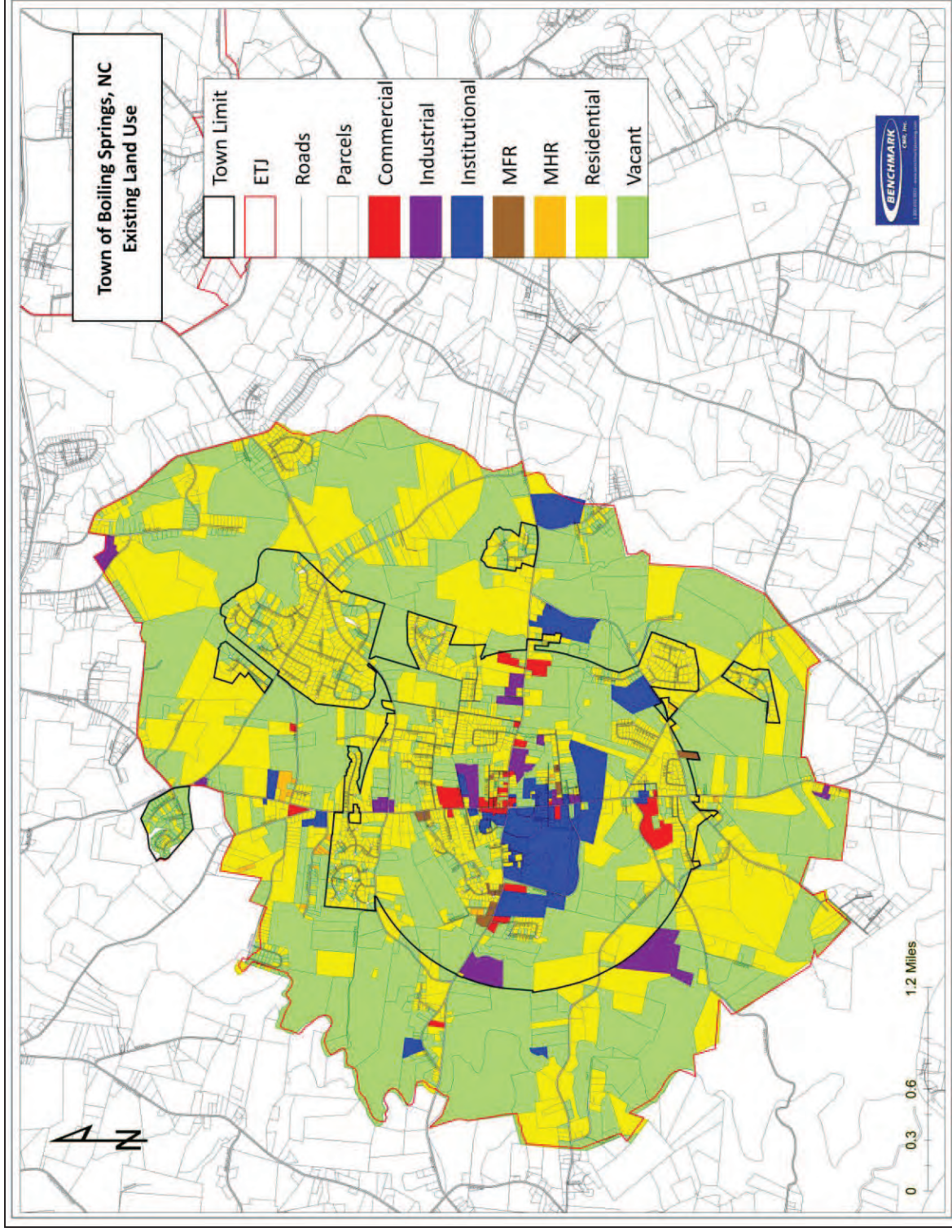
121 W. Trade Street  
Suite 2050  
Charlotte, NC 28226

HNTB Project No: 48910  
Date: April, 2009



# FIGURE 6

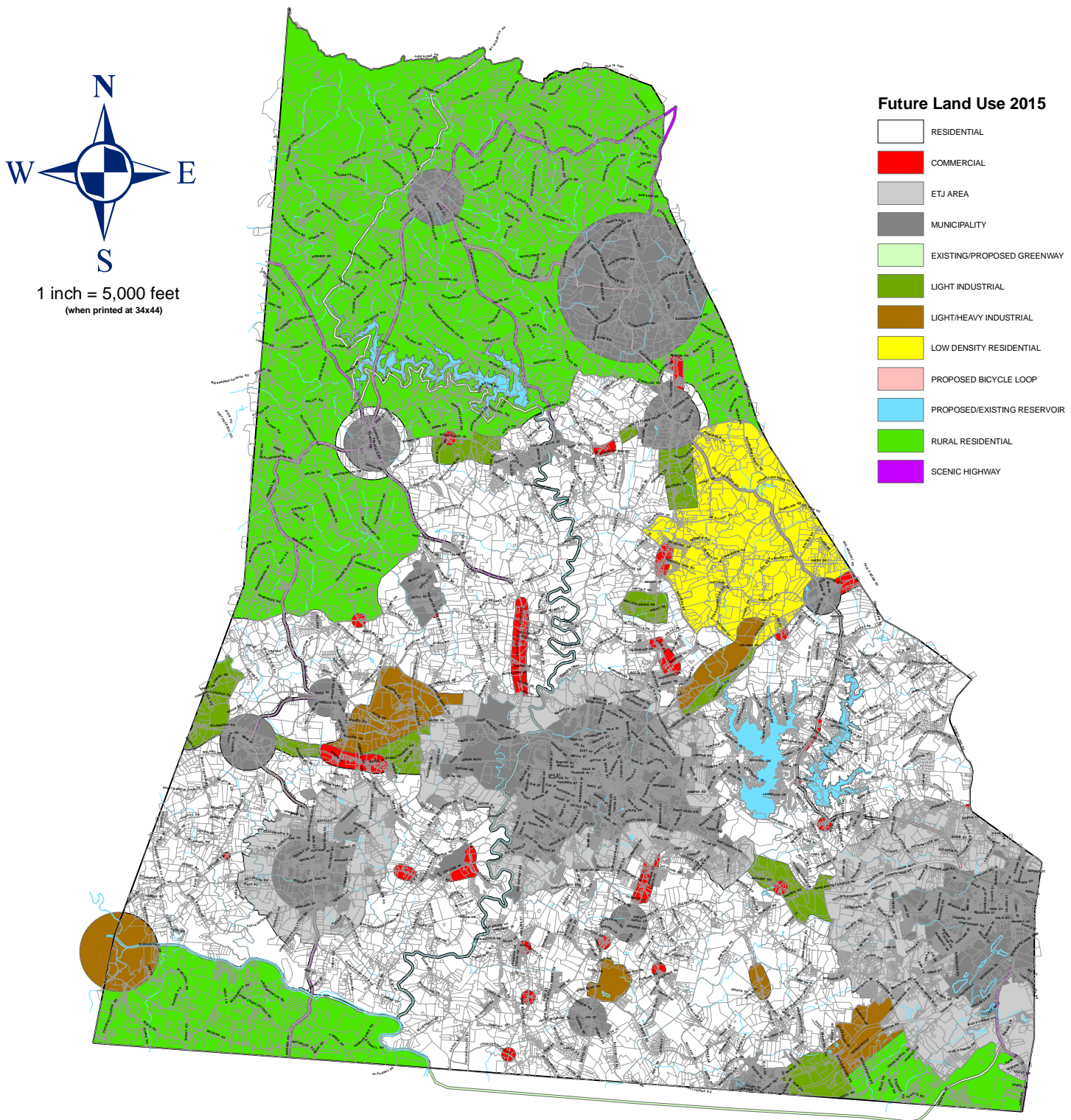
## Sheet 2 of 2





# Cleveland County Future Land Use 2015

(Map Amended July, 2008)



**FIGURE 7**  
**Sheet 1 of 3**

**Disclaimer:** The information contained on this map is furnished by government and private industry sources and is believed to be accurate but accuracy is not guaranteed. Mapping information is a representation of various data sources and is not a substitute for information that would result from an accurate land survey. The information contained hereon does not replace information that may be obtained by consulting the information's official source. In no event shall Cleveland County, NC or the consultants of Cleveland County, NC be liable for any damages, direct or consequential, from the use of the information contained on this map.

Map Created By  
CLEVELAND COUNTY GEOGRAPHIC INFORMATION SYSTEMS  
331 East Marion Street  
Shelby, North Carolina 28150

Alan Hamrick (GISP)  
Email: alan.hamrick@clevelandcounty.com  
Phone: 704-484-4862





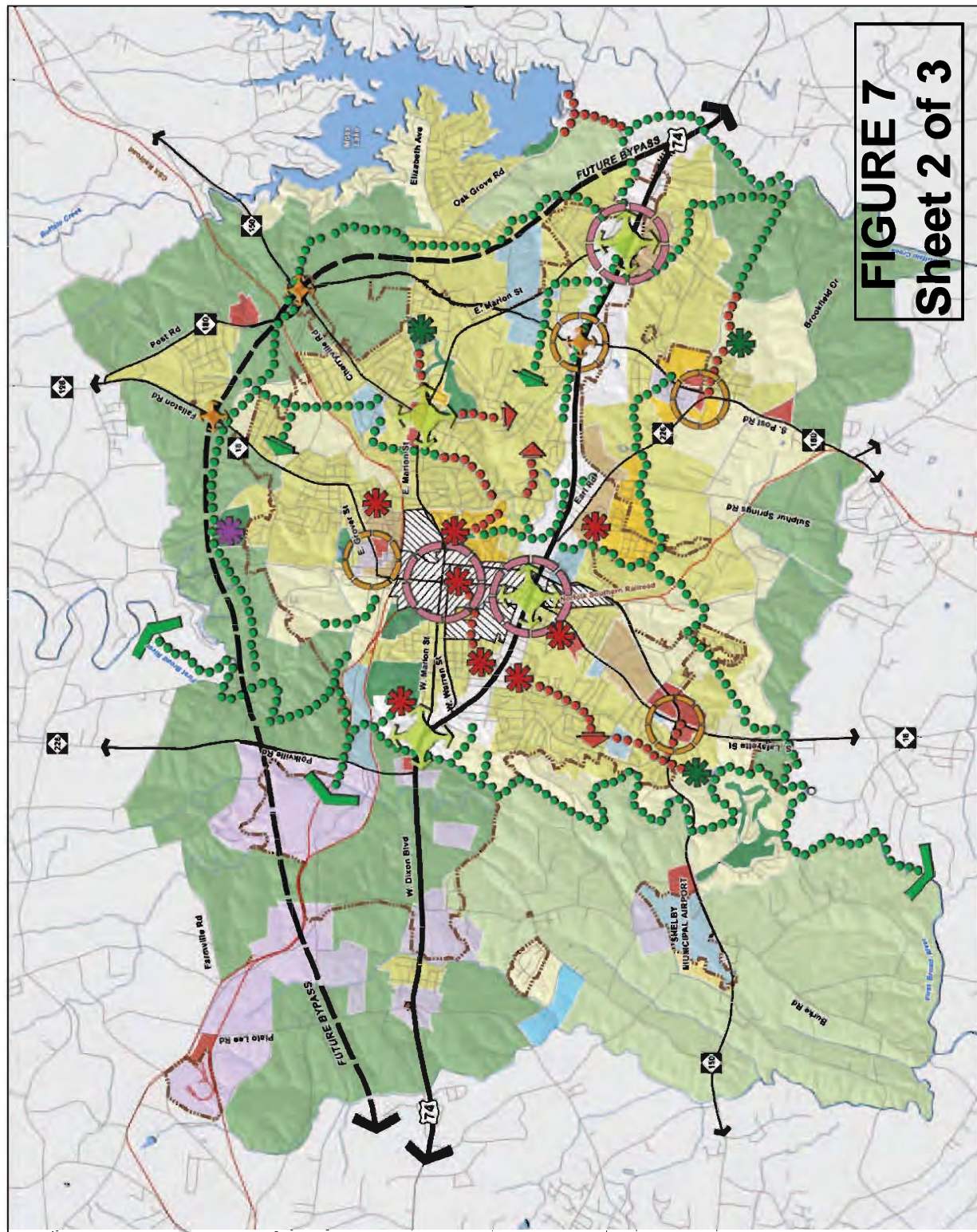


# Legend

- Open Space
- Agriculture
- Conservation Development
- Residential Low Density
- Residential Medium Density
- Residential High Density
- Mixed Use
- Commercial
- Institutional
- Employment
- Neighborhood Revitalization
- Corridor Revitalization
- Uptown Master Plan District
- Primary Gateway Opportunity
- Secondary Gateway Opportunity
- Major Activity Center
- Minor Activity Center
- Existing Park Location
- Future Park Location
- Potential Park Location
- Proposed Greenways (developed as part of the Performance Master Plan)
- Proposed Greenway Corridor
- Existing Roadways
- Proposed Roadways
- Existing City Limits



0 2000 4000 8000 Feet  
 Distances are approximate and should not be used for engineering purposes without additional information.  
 Adopted by the City of Shelby, North Carolina  
 10/2017 and 11/2018



## Future Land Use Plan Map

Shelby Comprehensive Land Use Plan

City of Shelby, North Carolina

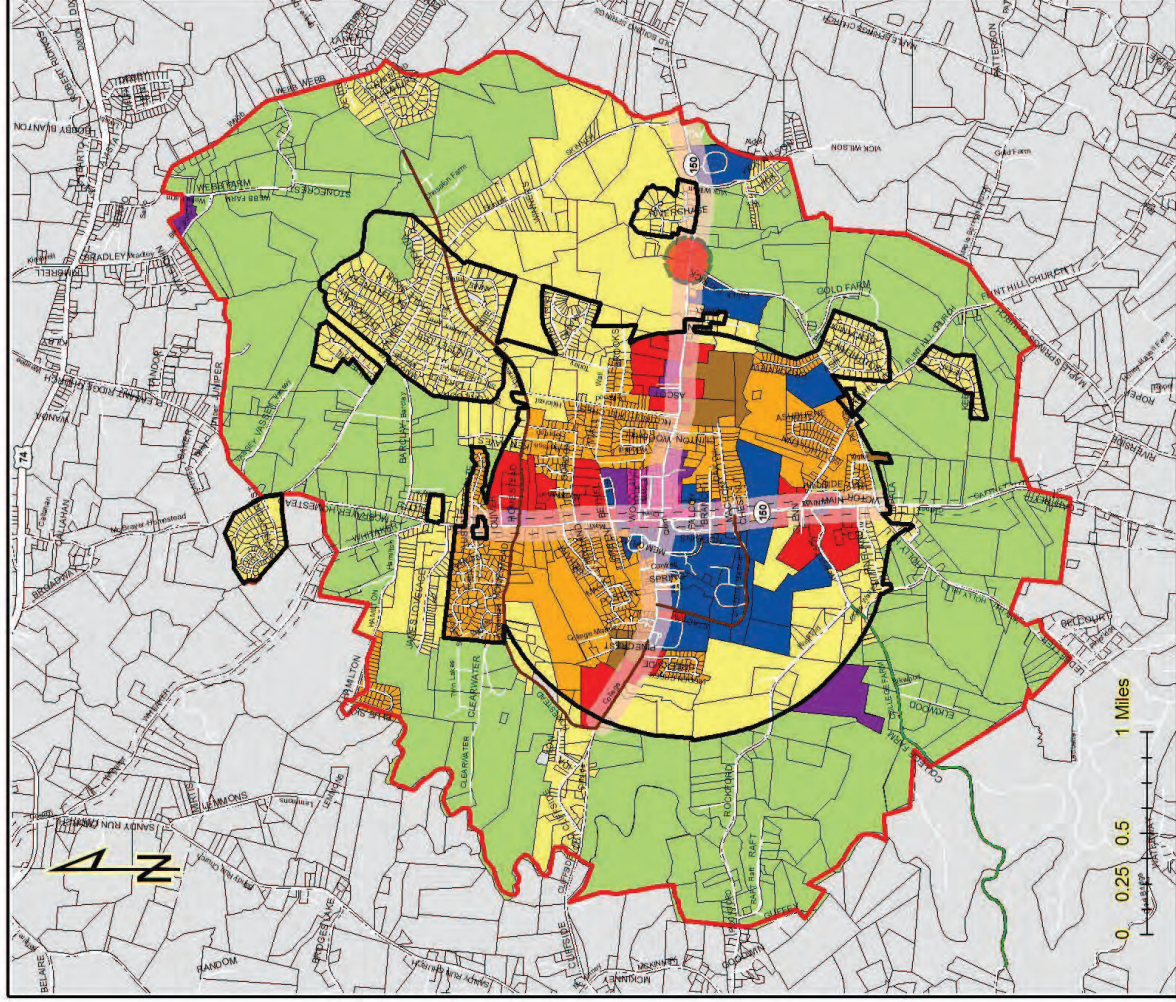
I-27



121 W. Trade Street  
 Suite 2050  
 Charlotte, NC 28226  
 P: 704.372.4000  
 F: 704.372.2007

WMTB Project No. 45910  
 Date: April, 2006





# **Boiling Springs, NC** **Recommended Future Land Use**



- Town Limit
- ETJ
- Roads
- Parcels
- Greenway Trail
- Stadium/Homestead Trail
- County-Wide Bike Loop
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Central Business
- Institutional
- Industrial
- Open Space/Farmland Presv.
- Commercial/Mixed-Use
- College Ave Business Corridor
- Main St. Business Corridor

February 2009



**FIGURE 7**  
**Sheet 3 of 3**

## ***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 (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, 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 typically examined as a part of a CTP study is shown in the following tables utilizing the best available data. Environmental features occurring within Cleveland County are shown in Figure 8 and highlighted in Tables 1 and 2.

---

**Table 1 – Environmental Features**

---

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• <b>Airport Boundaries</b></li><li>• Anadromous Fish Spawning Areas</li><li>• Beach Access Sites</li><li>• <b>Bike Routes (NCDOT)</b></li><li>• Coastal Marinas</li><li>• <b>Colleges and Universities</b></li><li>• <b>Conservation Tax Credit Properties</b></li><li>• <b>Emergency Operation Centers</b></li><li>• Federal Land Ownership</li><li>• Fisheries Nursery Areas</li><li>• <b>Geology (including Dikes and Faults)</b></li><li>• <b>Hazardous Substance Disposal Sites</b></li><li>• <b>Hazardous Waste Facilities</b></li><li>• <b>High Quality Water and Outstanding Resource Water Management Zones</b></li><li>• <b>Hospital Locations</b></li><li>• <b>Hydrography (1:24,000 scale)</b></li><li>• <b>Land Trust Priority Areas</b></li><li>• <b>Natural Heritage Element Occurrences</b></li><li>• <b>National Wetlands Inventory</b></li></ul> | <ul style="list-style-type: none"><li>• North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)</li><li>• Paddle Trails – Coastal Plain</li><li>• <b>Railroads (1:24,000 scale)</b></li><li>• <b>Recreation Projects – Land and Water Conservation Fund</b></li><li>• <b>Sanitary Sewer Systems – Discharges, Land Application Areas, Pipes, Pumps and Treatment Plants</b></li><li>• <b>Schools – Public and Non-Public</b></li><li>• Shellfish Strata</li><li>• <b>Significant Natural Heritage Areas</b></li><li>• <b>State Parks</b></li><li>• Submersed Rooted Vasculars</li><li>• Target Local Watersheds - EEP</li><li>• <b>Trout Streams (DWQ)</b></li><li>• <b>Trout Waters (WRC)</b></li><li>• <b>Water Distribution Systems – Pipes, Pumps, Tanks, Treatment Plants, and Wells</b></li><li>• <b>Water Supply Watersheds</b></li><li>• Wild and Scenic Rivers</li></ul> |
|---|---|

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                         | • Macrosite Boundaries |
| • <b>Historic National Register Districts</b>  | • Managed Areas        |
| • <b>Historic National Register Structures</b> | • Megasite Boundaries  |

### ***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.

A meeting was held with the Cleveland County CTP Steering Committee in June 2008 to initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

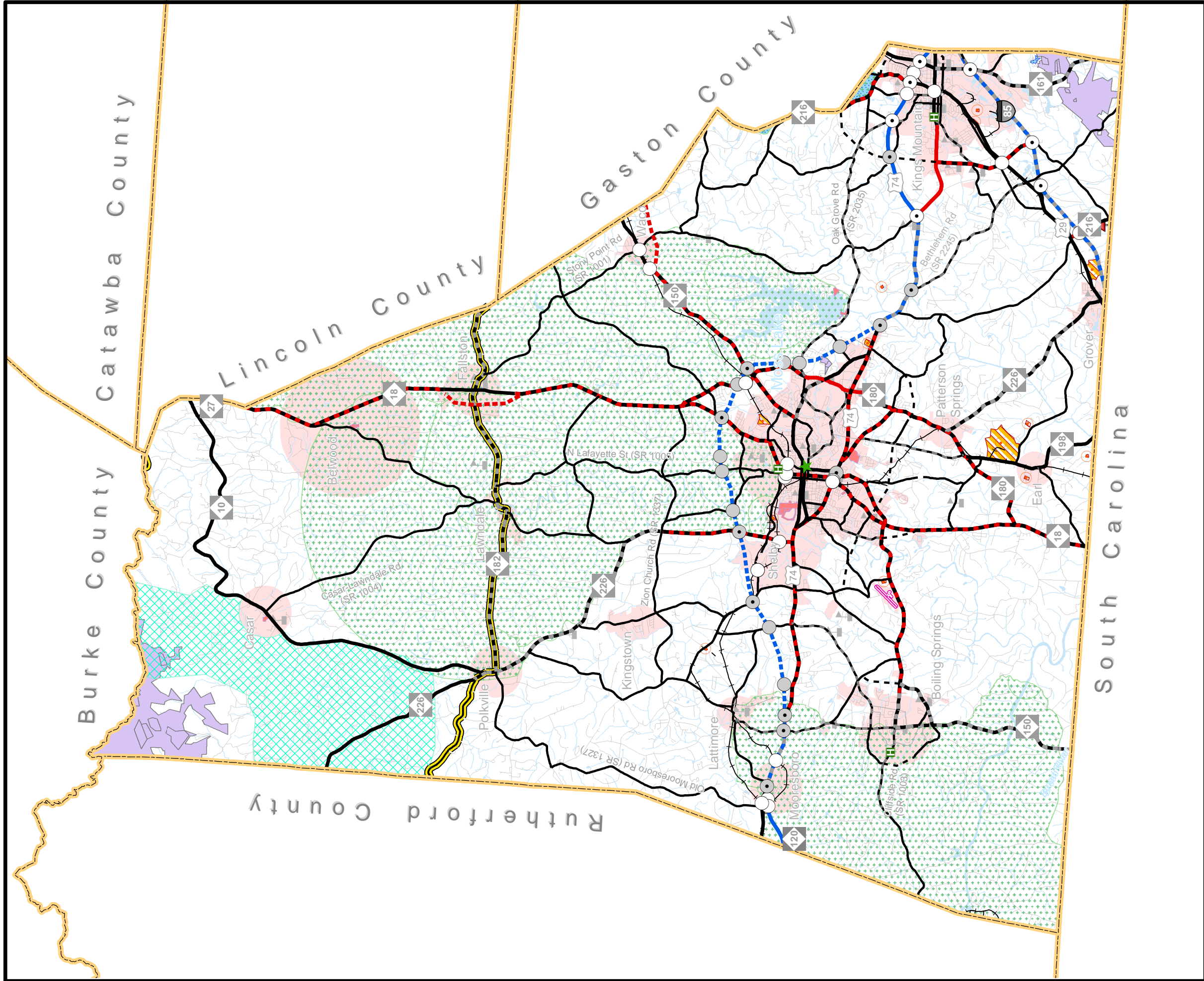
Throughout the course of the study, the Transportation Planning Branch cooperatively worked with the County CTP Steering Committee, which included a representative from each municipality, county staff, the RPO and others, to provide information on current local plans, to develop transportation vision and goals, to discuss population and employment projections, and to develop proposed CTP recommendations. Refer to Appendix H for detailed information on the vision statement, the goals and objectives survey and a listing of committee members.

The public involvement process included holding two public drop-in sessions in Cleveland County to present the proposed CTP to the public and solicit comments. The meetings were held on November 10, 2010 at the Lawndale Community Center from 4-7 pm and the Shelby Parks and Recreation Center from 4:30-6:30 pm. Each session was publicized in the local newspaper. No completed comment forms were submitted during the sessions.

Public hearings were held for each of the sixteen jurisdictions in the county. Refer to Appendix H for a list of the public hearing and adoption dates.

The Lake Norman RPO endorsed the CTP on May 24, 2011. The North Carolina Department of Transportation mutually adopted the Cleveland County CTP on July 7, 2011.





Airports

Schools

Hospital

Emergency Operations Center

NCDOT Bike Route

Hazardous Substance Disposal Site

Hazardous Substance Disposal Site

Hazardous Waste Facility

Land Trust Priority Areas

Recreation Projects Land Water Conservation Fund

State Owned Complex

Water Supply Watershed

HQW Outstanding Resource

Rivers and Streams

Water Bodies

Municipal Boundary

County Boundary

Railroad

Roads

Figure 8

Environmental Features

Cleveland County Comprehensive Transportation Plan

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Miles

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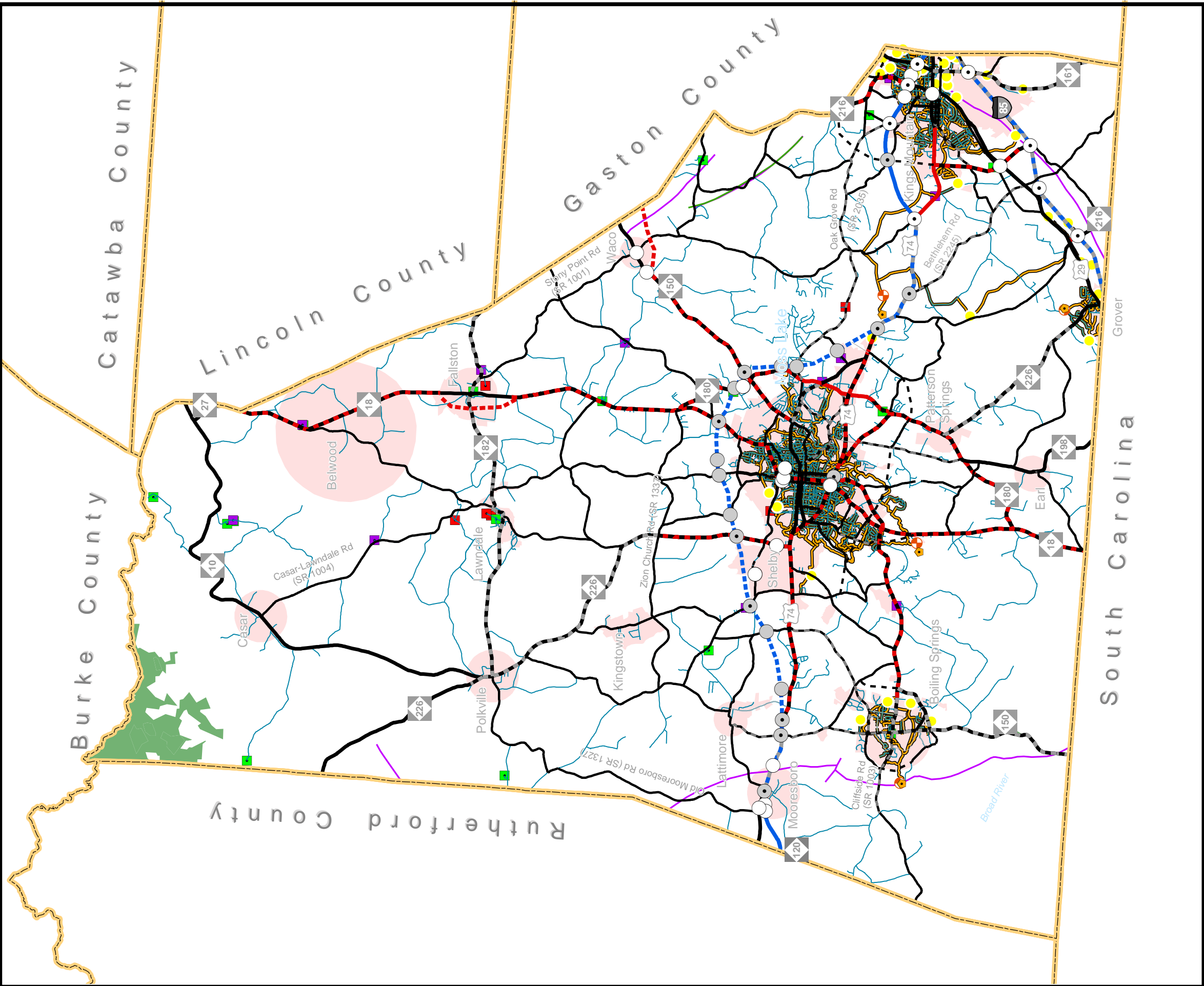
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Sheet 1 of 3

Base map date: July 16, 2010







**Figure 8**

**Environmental Features**

**Cleveland County Comprehensive Transportation Plan**

Miles

0 0.5 1 2 3 4

N  
W E S

Sheet 3 of 3

Base map date: July 16, 2010

**Legend**

Sanitary Sewer System Discharge Site	Water Distribution System Pump
Sanitary Sewer System Pump	Water Distribution System Tank
Sanitary Sewer System Treatment Plant	Water Distribution System Treatment Plant
Water Distribution System Pipes	Water Distribution System Well
Sanitary Sewer System Pipes	Conservation Tax Credit Properties
	Geology-Dikes
	Geology-Faults
	Municipal Boundary
	County Boundary



## II. Recommendations

---

This chapter presents recommendations for each mode of transportation in the county as shown in Figure 1.

### ***Unaddressed Deficiencies***

The following deficiencies were identified during the development of the CTP, but remain unaddressed:

- NC 216 (Battleground Road) from US 29 (Battleground Ave) to the southern city limits of Kings Mountain is projected to be slightly over capacity by 2035. With no improvements to the highway network, 2035 traffic projections will range from 10,000 to 18,500 vehicles per day (vpd) compared to a LOS D capacity of 8,000 to 12,000 vpd. With the CTP recommended improvements to the highway network, 2035 traffic projections are anticipated to range from 9,500 to 13,500 vpd. Since the traffic projections with the CTP recommended improvements remain only slightly over capacity (13,500 vpd compared to a capacity of 12,000 vpd), no improvements were recommended.
- US 29 in Grover sometimes has delays due to trains that block Carolina Avenue (SR 2233) and Cherry Street (NC 226). Through traffic on US 29 can be delayed because there are no turn lanes on US 29 at Carolina Avenue or at Cherry Street. A brief investigation was conducted on the feasibility of grade separations at US 29 and Carolina Avenue and/or at US 29 and Cherry Street. Because of the short distances between US 29, the railroad tracks, and development on and near Main Street, it was concluded that grade separations could not be constructed without major impacts to existing development. It is recommended that the Town pursue an investigation through the NCDOT Division 12 Office for the construction of turn lanes on US 29 at Carolina Avenue and at Cherry Street. Refer to Appendix A for contact information for the Division Office.

### ***Implementation***

The CTP recommendations are based on accommodating 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 county and its municipalities. 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 identified locally and submitted to the Lake Norman RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on 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<sup>1</sup> (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.

The following pages contain problem statements for each recommendation, organized by CTP modal element.

---

<sup>1</sup> For more information on NEPA, go to: <http://ceq.hss.doe.gov/>.

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

## Problem Statements

### HIGHWAY

#### I-85 Proposed improvements from South Carolina to Gaston County

Local ID: CLEV0001-H  
Last Updated 4/30/12

#### Identified Problem

I-85 through Cleveland County is projected to be over capacity by 2035. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

#### Justification of Need

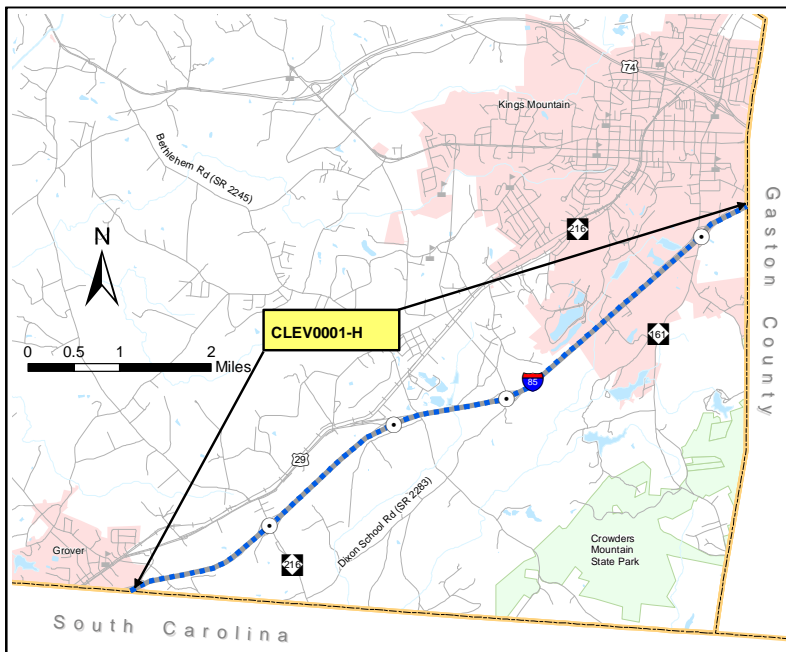
I-85 runs southwest to northeast through the southeast corner of the county. As an interstate highway, it is a major facility that runs through the southeastern United States from I-65 in Montgomery, Alabama to I-95 in Petersburg, Virginia. This section of I-85 currently has a four lane divided freeway cross section and is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN)<sup>3</sup>. Statewide tier facilities serve long-distance trips, connect regional centers, have the highest usage, and mostly serve a mobility need. I-85 is the county's main access to the rest of North Carolina and the country.

By 2035, this facility is projected to be over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 45,000 to 58,000 vpd in 2009 to a range of 80,600 to 100,700 vpd in 2035 compared to a capacity of 54,000 to 56,600 vpd.

#### Community Vision and Problem History

The parallel I-85 and US 29 corridors are zoned industrial with both existing businesses and some properties for sale. Industrial uses are planned to continue in this area of the county. Additionally, the preservation of the Kings Mountain and Crowder's Mountain view sheds as seen from I-85 is important.

The 1996 Kings Mountain Thoroughfare Plan also projected this section of I-85 to be over capacity and recommended improvements.



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



## **CTP Project Proposal**

### **Project Description**

The proposed project is to widen I-85 between SC and Gaston County from a four lane freeway to an eight lane freeway. The proposed improvements will help reduce congestion on the facility.

Additionally, during the most recent three year period, the intersection of I-85 and NC 161 experienced 51 crashes. The average severity index at this location was 4.38, which was below the state's 4.73 average for the same period.

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

Land use along this corridor is currently industrial development with room for additional growth. The 2005 Cleveland County Land Use Plan (Amended July 2008) indicates that area along the interstate is planned to be a commercial and industrial growth corridor.

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

The US 74 Bypass (R-2707) through Cleveland County to the west of I-85 will improve access to I-85 from Shelby with a new interchange at Bethlehem Road (SR 2245). Another new interchange on US 74 at the northwest extension of Kings Mountain Boulevard (SR 2487) on the north side of Kings Mountain will also allow better access to I-85.

The 1996 Kings Mountain Thoroughfare Plan recommended widening I-85 to six lanes from South Carolina to Gaston County. Additionally, I-85 in Cleveland County is designated as a freeway on NCDOT's 2004 Strategic Highway Corridor Vision Plan.

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. There is a hazardous substance disposal site located adjacent to I-85 just north of Grover. I-85 also is located in an area of natural heritage element occurrences. Additionally, NCDOT's Structures Management Unit identified bridge #22 on I-85 over NC216; bridge # 58 on Bethlehem Road (SR 2245) over I-85; and bridge #7 on US 29 over I-85 as functionally obsolete.

### **Multi-modal Considerations**

The CTP includes a recommendation for an off-road multi-use path along Kings Creek which will cross under Interstate 85.

### **Public/ Stakeholder Involvement**

No issues associated with this project were identified during the public workshops and public hearings.

## US 74 (Dixon Boulevard) Proposed Improvements from east of Peachtree Road (SR 1162) to east of Caleb Road (SR 2201)

Local ID: R-2222  
Last Updated: 4/30/12

### Identified Problem

US 74 from 0.4 miles east of Peachtree Road (SR 1162) to 0.7 miles east of Caleb Road (SR 2201) is projected to be over capacity by 2035. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

### Justification of Need

As a US highway, US 74 is a major facility that runs through the southeastern United States from I-75 in Cleveland, Tennessee to Wrightsville Beach, North Carolina. US 74 (Dixon Blvd) is the main east-west route through the county. This section of US 74 currently has a four-lane divided cross section for its entire length with multiple signals and median breaks between the western Marion Street and eastern Marion Street intersections.

By 2035 the facility is projected to be over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 18,000 to 46,000 vpd in 2009 to a range of 30,000 to 59,000 vpd in 2035, compared to a capacity that ranges from 28,000 to 40,000 vpd.

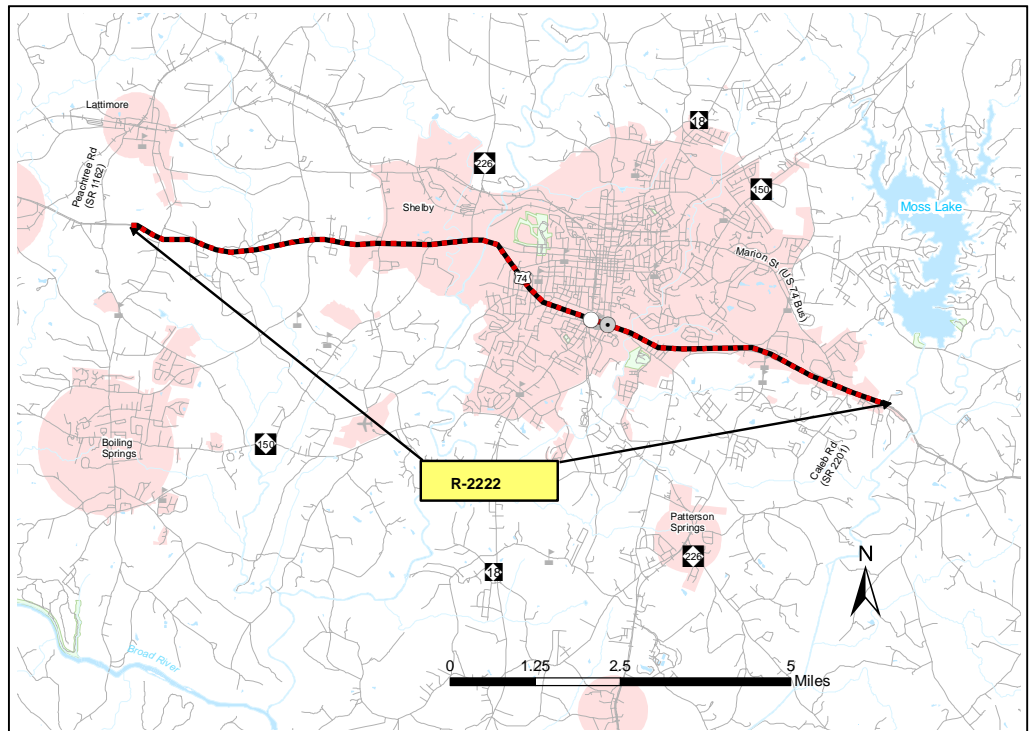
### Community Vision and Problem History

US 74 (Dixon Boulevard) has over time become the “main street” or gateway for Shelby, and is known locally as the US 74 bypass. Although US 74 (Dixon Boulevard) is referred to as the “US 74 bypass”, it should not be confused with the new bypass (TIP project R-2707). The 1995 Shelby Thoroughfare Plan identified a future deficiency on US 74 (Dixon Boulevard).

### CTP Project Proposal

#### Project Description

The proposed project is to widen this section of US 74 (Dixon Boulevard) from a four lane boulevard to a six lane boulevard with an interchange at South Dekalb Street (U-2567) and



upgrade the control of access on the facility. The proposed improvements will help reduce congestion on the facility. This project also includes bicycle and pedestrian accommodations.

Additionally, during the most recent three year period, ten intersections along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's 4.73 average for the same period. Those intersections included: US 74 Business (East Marion Street), NC 180 (South Post Road), Grove Street, NC 226 (Earl Road), NC 150 (South Dekalb Street), South Washington Street, Hamrick Street, NC 226 (Polkville Road), Plato Lee Road (SR 1315) / Beaver Dam Church Road (SR 1158), and Westlee Street / Pleasant Ridge Church Road (SR 1161). Refer to Appendix F for more detailed information on these locations. A congestion management study is recommended for the corridor.

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

There is existing commercial development along both sides of US 74 (Dixon Boulevard) from NC 226 (Polkville Road) to the eastern city limits of Shelby. The 2005 Cleveland County Land Use Plan (Amended July 2008) indicates that the area along US 74 (Dixon Boulevard) is planned for revitalization with activity centers and greenways in addition to the existing businesses. West of NC 226 (Polkville Road) the corridor will remain rural in nature.

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

The proposed project directly connects to the proposed US 74 Bypass (R-2707) north of Shelby. The proposed US 74 Bypass will reduce congestion on US 74 (Dixon Boulevard) by removing through traffic. However, even with the proposed bypass to the north and the proposed Southern Connector to the south, projected traffic volumes and congestion of local traffic on US 74 (Dixon Boulevard) warrant additional widening and control of access.

US 74 is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN). Statewide tier facilities serve long-distance trips, connect regional centers, have the highest usage, and mostly serve a mobility need. Additionally, US 74 through Cleveland County, excluding this section, is designated as a freeway in NCDOT's Strategic Highway Corridors Vision Plan. The SHC follows the proposed US 74 Bypass (R-2707) in lieu of this section of US 74 which has no SHC designation.

The 1995 Shelby Thoroughfare Plan identified a future deficiency on US 74 (Dixon Boulevard) and recommended operational improvements.

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. There is a hazardous substance disposal site located adjacent to US 74 on the eastern end of the project. The proposed project also crosses several rivers and streams on the National Wetlands Inventory. There is an existing grade separation for the rail over US 74 that is parallel to Morgan Street (SR 1106). Additionally, NCDOT's Structures Management Unit identified bridge #73 over Bushy Creek and bridge #79 over First Broad River as functionally obsolete.



### **Multi-modal Considerations**

The CTP includes recommendations for expansion of the bus system in Cleveland County. Several routes will use US 74 (Dixon Boulevard). Sidewalks are recommended along US 74 (Dixon Boulevard) from US 74 Business (West Marion Street) to West Warren Street, from NC 18 (South Lafayette Street) to NC 226 (Earl Road), from Grove Street to 0.4 miles east of East Main Street, and from 0.2 miles west of Manchester Drive to Manchester Drive. There are also several recommendations for multi-use paths both parallel to US 74 (Dixon Boulevard) and crossing US 74 (Dixon Boulevard) along the Broad River and other streams in Shelby.

### **Public/ Stakeholder Involvement**

A number of concerns relating to congestion and safety along this corridor were identified during the public involvement process.

### **Identified Problem**

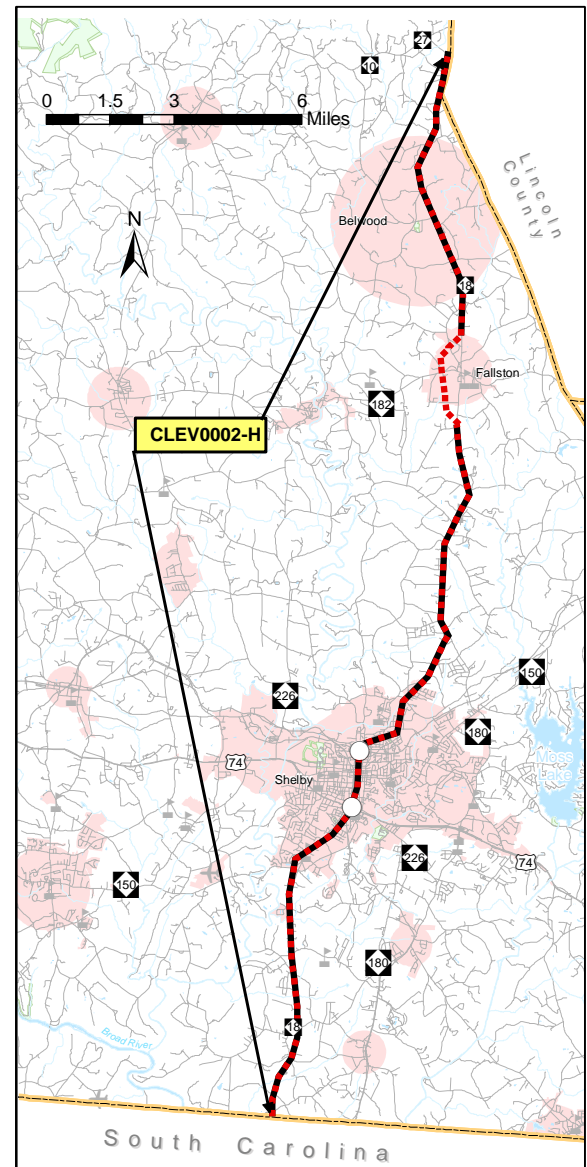
Several sections of NC 18 through Cleveland County are projected to be near or over capacity by 2035. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

### **Justification of Need**

NC 18 runs south to north through the county and connects to I-85 to the south in South Carolina and to I-40 to the north in Burke County. Within the county, it is the major north-south corridor that connects Fallston and Belwood to the Shelby urban area, which is also the county seat.

NC 18 from South Carolina to Melrose Drive has a two lane cross section with 12 foot lanes. Between Melrose Drive and the Morton Street, NC 18 has a three lane cross section with 12 foot lanes. Between Morton Street and South Morgan Street, NC 18 has a two lane cross section with 15 foot lanes. Between South Morgan Street and East Graham Street, NC 18 has five 12 foot lanes. The section between East Graham Street and Sumter Street has four 12 foot lanes with parking. NC 18 has two 18 foot lanes from Sumter Street to North Grover Street. NC 18 (Grover Street, Fallston Road) has four 10 to 13 foot lanes between Lafayette Street and East Zion Church Road (SR 1337). NC 18 (Fallston Road) then becomes two 12 foot lanes from East Zion Church Road (SR 1337) to Lincoln County except for a section within the Fallston town limits where it is three 12 foot lanes.

By 2035, NC 18 is projected to be near or over capacity based on providing a LOS D from north of Poole Street in Fallston to Cedar Circle Drive (SR 2532) at the southern Shelby city limit. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 6,000 to 17,000 vpd in 2009 to a range of 9,500 to 21,500 vpd in 2035, compared to a capacity ranging from 12,000 to 26,000 vpd.



## **Community Vision and Problem History**

Shelby has plans to revitalize their Central Business District (CBD) to bring development back downtown. NC 18 is a major facility for access to the center of Shelby from both the north and the south. The 1994 Shelby Thoroughfare plan projected that NC 18 would be over capacity from NC 180 south of Shelby to West Shannonhouse Street, and from US 74 (Dixon Boulevard) to NC 180 north of Shelby.

## **CTP Project Proposal**

### **Project Description**

The proposed project is to widen/convert NC 18 from South Carolina to Lincoln County to a four lane boulevard. The proposed project also includes constructing a shallow bypass on new location to the west of Fallston from Royster Road (SR 1803) to 0.2 miles south of the Fallston northern town limits. Additionally, pedestrian accommodations are also recommended as a part of this project.

During the most recent three year period, the 10 intersections along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's 4.73 average for the same period. Those intersections included: Davis Road (SR 1107), the ramp 300 feet north of US 74 (Dixon Boulevard), West Warren Street, US 74 Business (East Marion Street), Sumter Street, North Washington Street, North Dekalb Street (SR 1958), Frederick Street (SR 1848), Wyke Road (SR 1950), NC 180 (North Post Road), 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 2009 Shelby Land Use Plan indicates that NC 18 passes through mostly residential areas, both urban and rural, and will do so in the future. Shelby has plans for revitalization of the CBD toward more preservation, culture, and local businesses. Outside of Shelby, most of the areas surrounding NC 18 are residential, with some areas of commercial and light industrial.

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

This project directly connects to the proposed extension and widening of Charles Road (SR 1253), Local ID: CLEV0024-H, on the west side of Shelby which will help reduce the anticipated congestion around the NC18 and NC 150 intersection south of Shelby.

The 1994 Shelby Thoroughfare Plan and the 1996 Cleveland County Thoroughfare Plan both recommended improvements to NC 18. The 1994 Shelby Thoroughfare Plan recommended widening NC 18 to four lanes from Sumter Street to West Grover Street (SR 1861). The 1996 Cleveland County Thoroughfare Plan recommended widening NC 18 to four lanes from NC 180 south of Shelby to the southern city limits of Shelby and from the southern town limits of Fallston to Lincoln County.



The majority of NC 18 in Cleveland County is designated as a boulevard on NCDOT's Strategic Highway Corridors Vision Plan and is on the statewide tier of NCMIN. The section between NC 180 to the north and south of Shelby has no SHC designation and is on the regional tier of NCMIN. Statewide tier facilities serve long-distance 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.

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. The segment of the proposed project north of Shelby is within the water supply watershed. Water and sewer pipes are located along this facility within Shelby and a water distribution system tank is located south of East Double Shoals Road (SR 1808). NC 18 (South Lafayette Street) also travels through an area of natural heritage element occurrences south of Shelby and through Shelby's CBD. The entrance to the Cleveland Regional Medical Center is also located on NC 18 (Grover Street). There is an existing grade separation (bridge #57) on NC 18 (North Lafayette Street) over an active rail line and an at grade rail crossing located at the Morgan Street (SR 1106) intersection. In addition to bridge #57 above, NCDOT's Structures Management Unit has also identified bridge #1 over the Boween River and bridge #2 over a branch of First Broad River as functionally obsolete.

### **Multi-modal Considerations**

The CTP includes recommendations for express bus routes connecting Shelby with locations in South Carolina, Boiling Springs and the northern towns in the county. These routes would use NC 18. Also, there are recommendations for sidewalks from Old Gaffney Road (SR 1256) to Pine Street, from Sumter Street to Marietta Street, from Ford Street to East Avenue, from North Lafayette Street to Glendale Street, from Julius Street to 300 feet north of Ross Grove Road (SR 1847), and from Jim Cline Road (SR 1800) to 700 feet south of Boggs Drive. Multi-use paths are recommended parallel to NC 18 from Dickson Road (SR 1654) to NC 27 (Poe Road) and several cross NC 18 throughout the county.

### **Public/ Stakeholder Involvement**

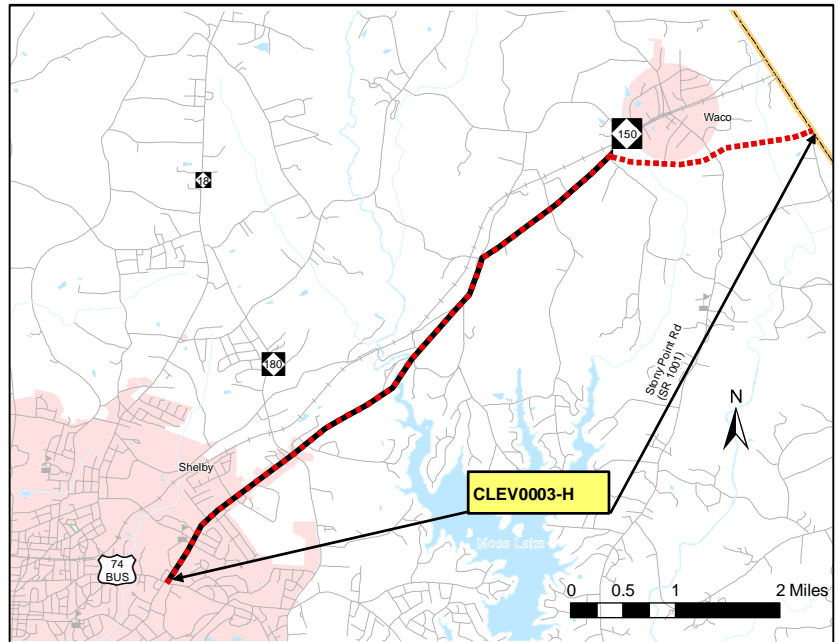
Safety and congestion concerns were identified on NC 18 during the public involvement process.

### **Identified Problem**

NC 150 (Cherryville Road) from US 74 Business (E Marion Street) to Gaston County is projected to be over capacity by 2035. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

### **Justification of Need**

NC 150 runs southwest to northeast through the middle of the county. The section of NC 150 from US 74 Business to NC 180 is on the regional tier of NCMIN connecting major population centers and serving local land use. The remaining section is on the statewide tier serving long distance trips, connecting regional centers and serving mobility. NC 150 connects to I-85 in Gaffney, South Carolina and runs through North Carolina to US 158 in Yanceyville. NC 150 (Cherryville Road) between US 74 (East Marion Street) and Gaston County is a rural two lane road with 12 foot lanes.



By 2035, this facility is projected to be over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 12,000 to 15,000 vpd in 2009 to a range of 17,000 to 21,900 vpd in 2035 compared to a capacity of 12,000 to 13,000 vpd.

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

The 1996 Cleveland County Thoroughfare Plan identified this section of NC 150 as deficient.

### **CTP Project Proposal**

#### **Project Description**

The proposed project is to widen NC 150 between US 74 Business (East Marion Street) and Capernium Road (SR 2075) from a two lane road to a four lane boulevard and construct a four lane bypass (boulevard) on new location south of Waco from Capernium Road (SR 2075) continuing into Gaston County to NC 279. The proposed improvements will help reduce congestion on the facility. This project also includes pedestrian accommodations.

Additionally, during the most recent three year period, the intersection of NC 150 and Main Street (SR 1001) experienced 11 crashes and the intersection of NC 150 and NC 180 experienced 16 crashes. The average severity indexes at these locations were 3.02 and 4.24 respectively, which were below the state's 4.73 average for the same period.

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

The 2005 Cleveland County Land Use Plan (Amended July 2008) and the 2009 Shelby Land Use Plan indicate that NC 150 goes through an area that is planned to be a mix of commercial and residential development around Waco and downtown Shelby, and industrial and residential between the two.

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

The US 74 Bypass (R-2707) through Cleveland County north of Shelby will have a direct connection to NC 150 (Cherryville Road) via an interchange. NC 150, from NC 180 to Gaston County via the bypass around Waco, is designated as a boulevard on NCDOT's Strategic Highway Corridors Vision Plan. In this plan, the proposed bypass around Waco continues into Gaston County and ties into NC 279. The Gaston County CTP is currently underway and should present a consistent recommendation upon completion.

The 1994 Shelby Thoroughfare Plan recommended widening NC 150 to a four lane divided cross section and the 1996 Cleveland County Thoroughfare Plan recommended widening the facility to a four lane urban section.

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. Portions of the proposed project are within the water supply watershed north of Moss Lake. Additionally, there are a few locations where NC 150 (Cherryville Road) crosses streams on the National Wetlands Inventory.

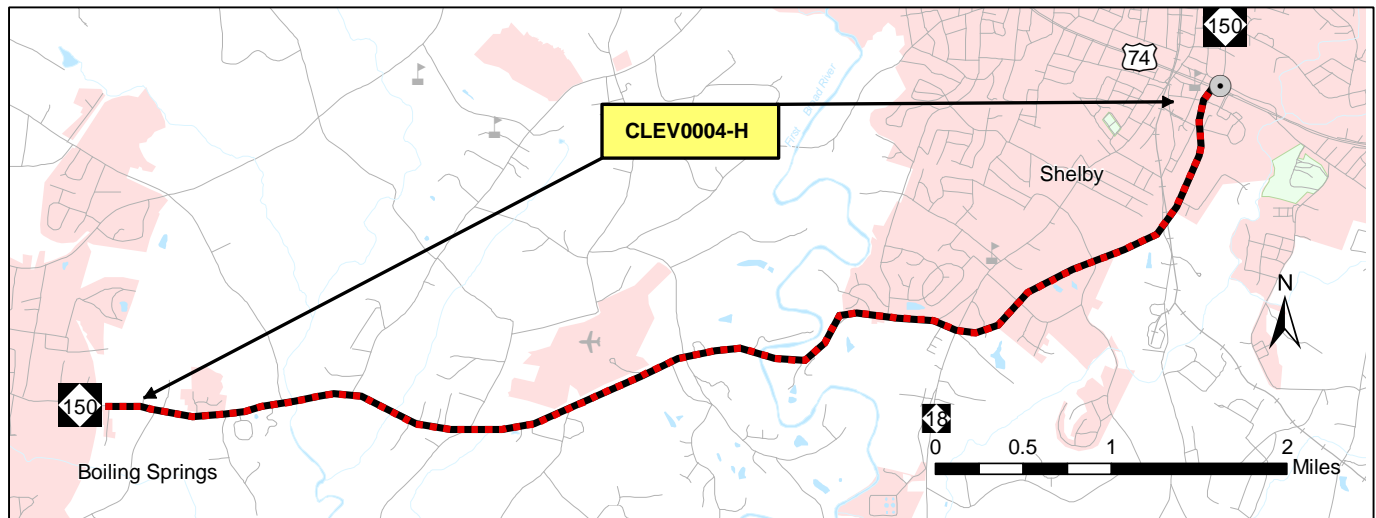
### **Multi-modal Considerations**

The CTP includes a recommendation for bus service between Cherryville and Lincolnton along NC 150 (Cherryville Road). There is a recommendation for sidewalks along NC 150 (Cherryville Road) in Shelby from US 74 Business (East Marion Street) to Wyke Road (SR 1950). A multi-use path is recommended parallel to NC 150 from 950 feet north of Troy Road (SR 2068) to the southern intersection with Yarn Mill Road (SR 1942). Also, there are recommendations for multi-use paths crossing NC 150 (Cherryville Road) along Stony Point Road (SR 1001), the US 74 Bypass, and along a stream feeding Moss Lake.

### **Public/ Stakeholder Involvement**

Safety and congestion concerns were identified along this corridor during the public involvement process.





### **Identified Problem**

NC 150 (East College Avenue, South Dekalb Street) from east of Lyman Street in Boiling Springs to US 74 (Dixon Boulevard) is projected to be over capacity by 2035. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

### **Justification of Need**

NC 150 runs southwest to northeast through the middle of the county. It connects to I-85 in Gaffney, South Carolina and runs through North Carolina to US 158 in Yanceyville. This section of NC 150, connecting Shelby and Boiling Springs, is on the regional tier of NCMIN connecting major population centers and serving local land uses. NC 150 (East College Avenue) from east of Lyman Street in Boiling Springs to NC 18 (South Lafayette Street) is a rural two lane road with 12 foot lanes. Between NC 18 (South Lafayette Street) and South Morgan Street (SR 1106), NC 150 (South Dekalb Street) has a five lane cross section with 12 foot lanes. From South Morgan Street (SR 1106) to US 74 (Dixon Blvd), NC 150 (Dekalb Street) has a four lane cross section with 12 foot lanes.

By 2035, the facility is projected to be over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 7,300 to 12,200 vpd in 2009 to a range of 13,500 to 20,000 vpd in 2035, compared to a capacity of 12,500 to 20,000 vpd.

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

This section of road is an important corridor for the county. It is the main entrance to Boiling Springs from the east and the airport is located on this road. The 1996 Cleveland County Thoroughfare Plan projected this section of NC 150 to be near capacity by 2020.

## **CTP Project Proposal**

### **Project Description**

The proposed project is to widen NC 150 (East College Avenue) between the Boiling Springs city limits (east of Lyman Street) and NC 18 (South Lafayette Street) from a two lane facility to a four lane boulevard. NC 150 (South Dekalb Street) between NC 18 (South Lafayette Street) and US 74 (Dixon Blvd) is recommended to be converted from a four to five lane facility to a four lane boulevard, including an interchange with US 74 (Dixon Blvd) (U-2567). This project also includes pedestrian accommodations. The proposed improvements will help reduce congestion on the facility and improve access to US 74 (Dixon Blvd).

Additionally, during the most recent three year period, the intersection of NC 150 and Charles Road (SR 1253) experienced 12 crashes with an average severity index of 3.47, which was below the state's 4.73 average for the same period.

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

The 2005 Cleveland County Land Use Plan (Amended July 2008), the 2009 Boiling Springs Land Use Plan and the 2009 Shelby Land Use Plan indicate that the area along this section of NC 150 is planned for various levels of residential development. There are locations for major commercial development mainly around Patrick Avenue (SR 1149), Old Boiling Springs Road (SR 1123), the airport, and at the intersection with NC 18.

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

The Charles Road Extension (Local ID: CLEV0014-H) should help relieve some of the congestion around the NC 150 and NC 18 intersection. The widening of NC 18 (Local ID: CLEV0002-H) parallel to NC 150 should also help, but even with those improvements, the increase in traffic between Shelby and Boiling Springs will necessitate improvements to NC 150.

The 1994 Shelby Thoroughfare Plan and the 1996 Cleveland County Thoroughfare Plan recommended widening NC 150 (East College Avenue) to four lanes.

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. NC 150 crosses Beaver Dam Creek, First Broad River and other streams on the National Wetlands Inventory. The Shelby-Cleveland County Regional Airport is located on this section of NC 150. There is also an at grade rail crossing north of South Morgan Street (SR 1106). Additionally, NCDOT's Structures Management Unit has identified bridge #42 over Beaverdam Creek as functionally obsolete.

**Multi-modal Considerations**

The CTP includes a recommendation for a scheduled bus route between Shelby and Boiling Springs which would use NC 150. Also, there are recommendations for sidewalks in Boiling Springs from Lyman Street to Patrick Avenue (SR 1149) and in Shelby from Whitner Street to US 74 (Dixon Boulevard) and a multi-use path parallel to NC 150 from Patrick Avenue (SR 1149) to NC 18 (South Lafayette Street). There is also a proposed multi-use path perpendicular to NC 150 along the First Broad River.

**Public/ Stakeholder Involvement**

Safety and congestion concerns along this corridor were identified during the public involvement process.



### **Identified Problem**

NC 180 (Post Road) is projected to be near or over capacity by 2035 from NC 18 (Fallston Road) north of Shelby to Elizabeth Avenue (SR 2052) and from Taylor Road (SR 2200) to NC 198 (Blacksburg Road) south of Shelby. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

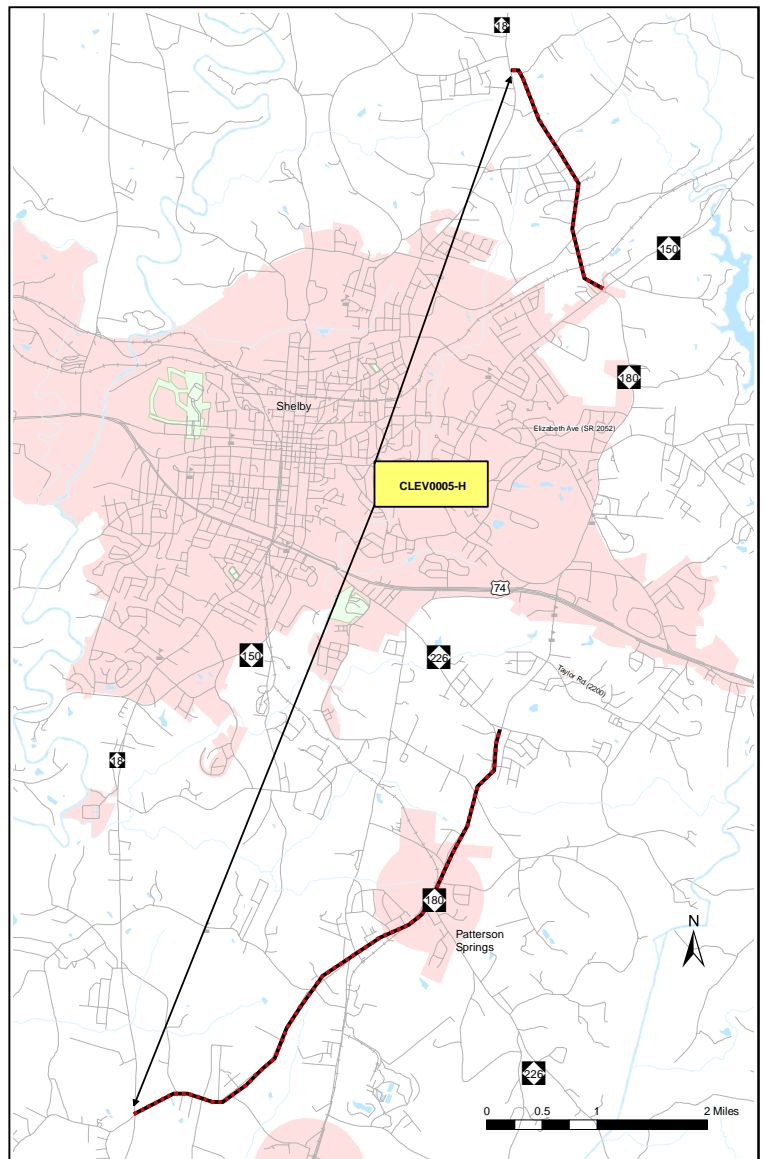
### **Justification of Need**

NC 180 (Post Road) runs south to north along the east side of Shelby. NC 180 currently has two 10 foot lanes between NC 18 (South Lafayette Street) and NC 226 (Earl Road) and two 12 foot lanes from NC 226 (Earl Road) to Taylor Road (SR 2200). From Taylor Road (SR 2200) to Elizabeth Avenue (SR 2052), NC 180 has five 12 foot lanes. From Elizabeth Avenue (SR 2052) to NC 18 (Fallston Road), NC 180 has two 11 foot lanes.

By 2035 the facility is projected to be near or over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) ranges from 6,000 vpd to 22,000 vpd in 2009. The volumes range from 8,900 vpd to 28,500 vpd in 2035. The current capacity ranges from 9,500 vpd to 26,000 vpd.

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

The 1994 Shelby Thoroughfare Plan and the 1996 Cleveland County Thoroughfare Plan projected NC 180 to be over capacity.



## **CTP Project Proposal**

### **Project Description**

The proposed project is to widen NC 180 (Post Road) from two lanes to a four lane boulevard from NC 18 (Fallston Road) north of Shelby to NC 150 and from NC 226 (Earl Road) to NC 18 (South Lafayette Street) south of Shelby.

During the most recent three year period, the seven intersections along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's 4.73 average for the same period. Those intersections included: NC 226 (Earl Road), US 74 (Dixon Boulevard), Kings Road (SR 2048/SR 2049), US 74 Business (East Marion Street), NC 150 (Cherryville Road), Airport Road (SR 1926), and NC 18 (Fallston Road). 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 2005 Cleveland County Land Use Plan (Amended July 2008) and the 2009 Shelby Land Use Plan indicate that the NC 180 (Post Road) corridor will have several gateway and major activity centers along it. Currently, the corridor is mostly residential interspersed with some commercial and institutional development within the city.

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

NC 180 (Post Road) will have a grade separation with the proposed US 74 Bypass (R-2707). NC 180 (Post Road) in Cleveland County is designated as a boulevard on NCDOT's Strategic Highway Corridors Vision Plan and is on the statewide tier on NCMIN.

TIP Project U-2221 covers the portion of NC 180 from NC 150 (Cherryville Road) to NC 226 (Earl Road). The portion of this project between Taylor Road (SR 2200) and Elizabeth Avenue (SR 2052) has been completed as a five lane cross section and is open to traffic. Although this portion of NC 180 is projected to be over capacity in 2035, the improvements to other roads recommended by the CTP are projected to reduce traffic on NC 180 such that the five lane section will be adequate to carry the traffic. Also, this area has substantial residential, commercial, and institutional development, making the existing five lane cross section suitable for the traffic volumes and land use.

The 1994 Shelby Thoroughfare Plan and the 1996 Cleveland County Thoroughfare Plan recommend improvements to segments of NC 180 (Post Road) not covered by U-2221. The 1996 Cleveland County Thoroughfare Plan recommended widening NC 180 to a four lane curb and gutter section from NC 198 to NC 226 (Earl Road). The 1994 Shelby Thoroughfare Plan recommended widening NC 180 to a three lane curb and gutter section from Sulphur Springs Road (SR 1100) to NC 226 (Cleveland Avenue).

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. NC 180 (Post Road) runs along the edge of the Moss Lake water supply watershed north of Shelby. It also goes through an area of natural heritage element occurrences in the vicinity of NC 18 south of Shelby. There are two water distribution system tanks located along this facility, one to the north of NC 150 and the other near NC 226. NC 180 (Post Road) also crosses water distribution system pipes at a number of locations along the facility. There is an at grade rail crossing north of Peeler Street (SR 1282) and a grade separated crossing (bridge #15) over the railroad north of NC 150. NCDOT's Structures Management Unit has identified bridge #15 over the Seaboard Coastline Railroad as functionally obsolete.

### **Multi-modal Considerations**

The CTP includes a recommendation for sidewalks along NC 180 (Post Road) near several schools and the Cleveland County Community College. Also, there are recommendations for several off-road multi-use paths crossing NC 180, including paths along the US 74 Bypass and several creeks.

### **Public/ Stakeholder Involvement**

Safety and congestion concerns were identified on NC 180 during the public involvement process.



### **Identified Problem**

NC 226 is projected to be near or over capacity by 2035 from NC 180 to Zion Church Road (SR 1337). The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

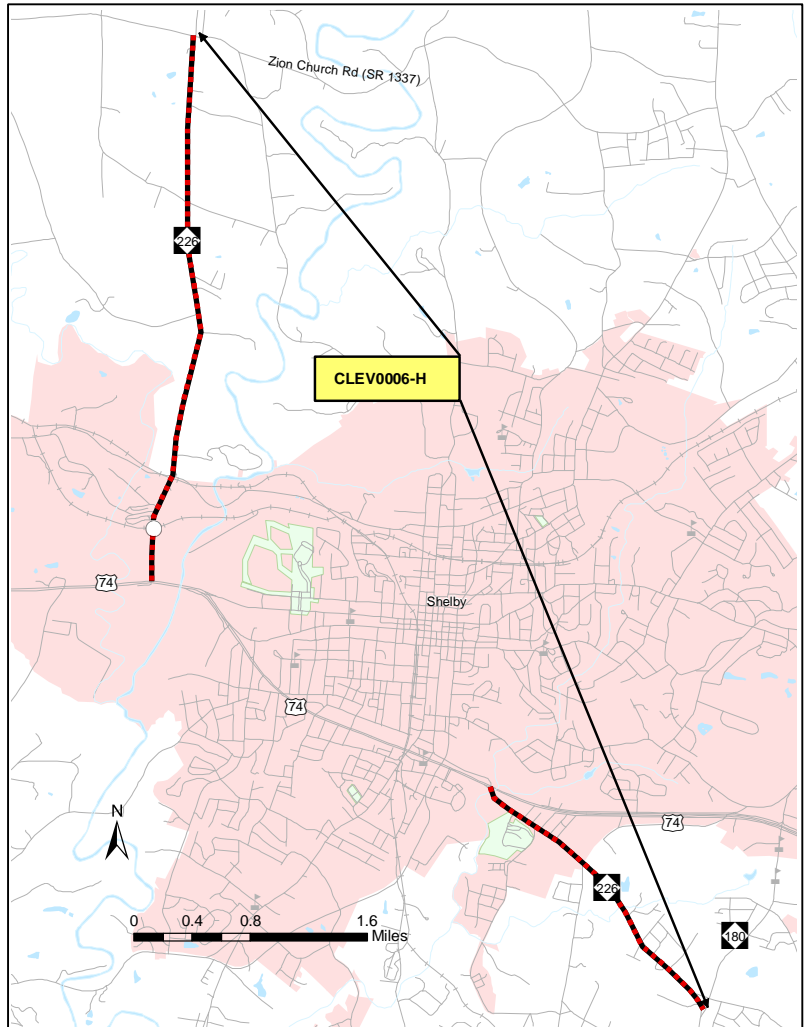
### **Justification of Need**

NC 226 is on the regional tier of NCMIN connecting major population centers and serving local land use. NC 226 runs southeast to northwest through the county connecting several towns to Shelby, the county seat. The section of NC 226 (Earl Road) from NC 180 (Post Road) to US 74 (Dixon Boulevard) currently has a two lane cross section with 10 to 12 foot lanes. NC 226 (Polkville Road) from US 74 (Dixon Boulevard) to Zion Church Road (SR 1337) currently has a two lane cross section with 12 foot lanes.

By 2035 both sections of this facility are projected to be near or over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 4,200 to 15,500 vpd in 2009 to a range of 9,000 to 22,000 vpd in 2035, compared to a capacity of 10,000 to 13,000 vpd.

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

The 1994 Shelby Thoroughfare Plan projected NC 226 to be over capacity from NC 180 to US 74 (Dixon Boulevard) and from US 74 (Dixon Boulevard) to West Grover Street (SR 1861).



## **CTP Project Proposal**

### **Project Description**

The proposed project is to widen NC 226 (Earl Road/Polkville Road) to a four lane boulevard from NC 180 (Post Road) to US 74 (Dixon Boulevard) and from US 74 (Dixon Boulevard) to Zion Church Road (SR 1337). The proposed improvements will help reduce congestion on the facility.

During the most recent three year period, four intersections along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's 4.73 average for the same period. Those intersections included: NC 180 (South Post Road), US 74 (Dixon Boulevard) at Earl Road, US 74 (Dixon Boulevard) at Polkville Road, and West Zion Church Road (SR 1337). Refer to Appendix F for more detailed information on these locations.

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

Current land use along this section of NC 226 is primarily residential, with some commercial and institutional development. The 2009 Shelby Land Use Plan indicates that the area around NC 226 (Earl Road) and NC 180 (Post Road) is planned for an activity center with high-density residential and commercial development, with mixed use in the rest of the corridor. Along NC 226 (Polkville Road) there is planning for a large area of employment around the existing Walmart distribution center located near the intersection of NC 226 (Polkville Road) and West Grover Street (SR 1861).

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

The US 74 (Dixon Boulevard) improvements and corridor revitalization would also involve improvements at the US 74 intersections with NC 226. In particular, the intersection of NC 226 (Earl Road) and US 74 (Dixon Boulevard) needs considerable attention due to the number and severity of crashes.

The 1995 Shelby Thoroughfare Plan recommended improvements to both sections of NC 226. The plan recommended widening both NC 226 (Earl Road) and NC 226 (Polkville Road) to five lanes. The Shelby Bypass (R-2707) will have an interchange with NC 226 (Polkville Road).

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. There is a Recreation Projects Land Water Conservation Fund site located adjacent to NC 226 (Earl Road) just south of US 74. Also, NC 226 (Earl Road) crosses some National Wetlands Inventory streams. NC 226 (Polkville Road) runs along the western edge of the water supply watershed for Moss Lake. NC 226 (Polkville Road) has a grade separation (bridge #56) over the Seaboard Coastline Railroad. NCDOT's Structures Management Unit has identified this bridge as functionally obsolete.

### **Multi-modal Considerations**

The CTP includes recommendations for bus service that would use both sections of NC 226. There is a proposed sidewalk along Earl Road between the recommended multi-use path

along Little Hickory Creek and US 74. There is also an off-road multi-use path along the abandoned rail track that crosses Polkville Road.

### **Public/ Stakeholder Involvement**

Safety and congestion concerns were identified on NC 226 during the public involvement process.



### **Identified Problem**

Several facilities in downtown Kings Mountain, including NC 161, NC 216, US 74 and US 74 Business, are projected to be near or over capacity by 2035. The primary purpose of this project is to relieve congestion and improve mobility on the existing facilities in the Central Business District (CBD) such that a minimum of Level of Service (LOS) D can be achieved.

### **Justification of Need**

By 2035, US 74 Business (King Street) is projected to be over capacity based on providing a LOS D. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 13,400 vpd in 2009 to 14,500 vpd in 2035, compared to a capacity of 14,000 vpd.

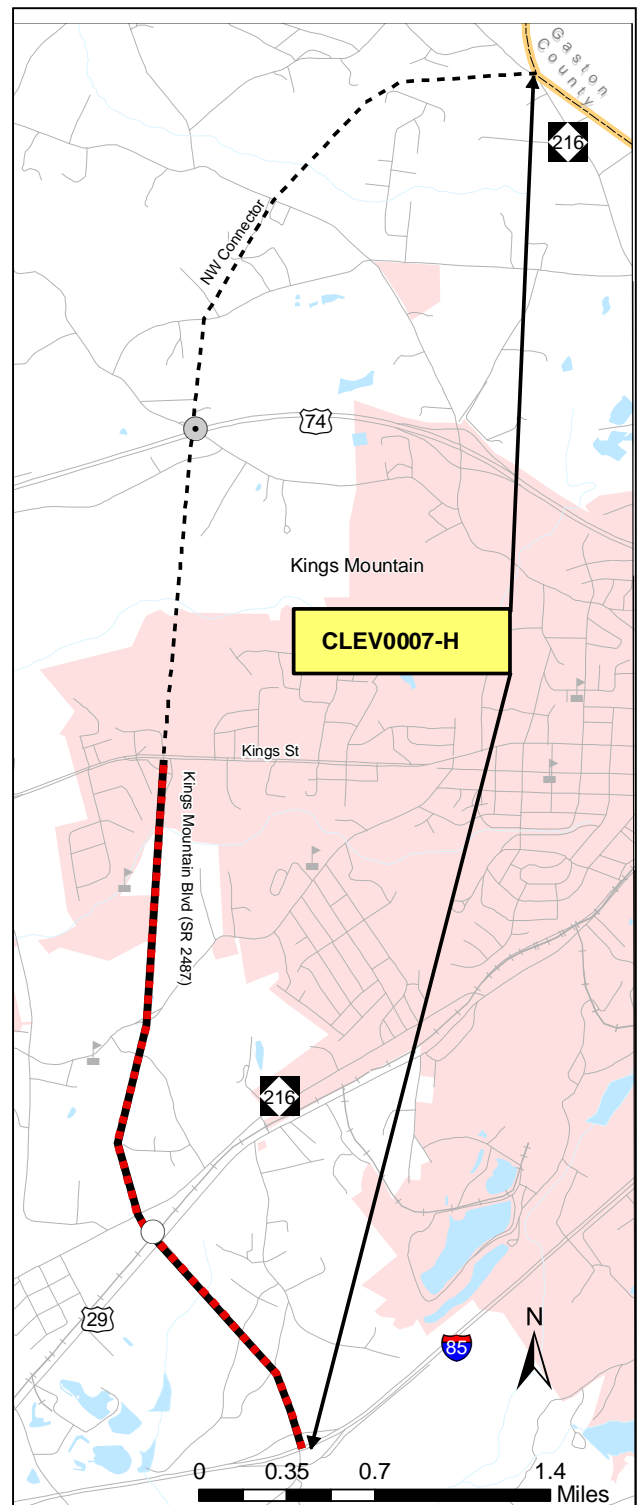
NC 161 (York Road and Cleveland Avenue) within the city limits are expected to be near capacity or over capacity based on providing a LOS D. The AADT is projected to increase from a range of 7,800 to 12,000 in 2009 to a range of 10,000 to 15,000 vpd in 2035, compared to a capacity of 12,000 to 20,000 vpd.

US 74 Business (King Street) and NC 161 (York Road and Cleveland Avenue) cannot be widened to four lanes without impacting existing development.

By 2035, portions of Kings Mountain Boulevard (SR 2487) are projected to be near capacity based on providing a LOS D. The AADT is projected to increase from a range of 2,500 to 7,800 vpd in 2009 to a range of 4,800 to 11,000 vpd in 2035, compared to a capacity of 12,000 to 13,000 vpd.

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

The 1996 Kings Mountain Thoroughfare Plan projected portions of US 74 Business (King Street)



to be near capacity to over capacity. The same plan also projected portions of NC 161 to be near capacity to over capacity.

## **CTP Project Proposal**

### **Project Description**

Kings Mountain Boulevard (SR 2487) is recommended to be widened from a two lane facility to a four lane boulevard from I-85 to US 74 Business. The extension, the Northwest Connector, is recommended to be constructed as a two lane minor thoroughfare on new location from US 74 Business to NC 216 at Goforth Road (SR 2014). This includes constructing a new interchange with US 74 at Patterson Road (SR 2034). The proposed improvements will help reduce congestion and improve mobility within the Kings Mountain CBD.

During the most recent three year period, four intersections along Kings Mountain Boulevard, US 74 Business (King Street), and NC 161 (York Road and Cleveland Avenue) were identified as having 10 or more crashes and/or had a severity index above the state's 4.73 average for the same period. Those intersections included: Kings Mountain Boulevard (SR 2487) at Margrace Road (SR 2263), US 74 at NC 161 (Cleveland Avenue), US 74 Business (East King Street) at NC 161 (Cleveland Avenue), and NC 161 (York Road) at I-85. Refer to Appendix F for more detailed information on these locations.

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

The 2005 Cleveland County Land Use Plan (Amended July 2008) designated the area northwest of Kings Mountain as rural residential.

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

Kings Mountain Boulevard (SR 2487) was originally constructed as a two lane facility with enough right-of-way for a multi-lane facility. At the southern end of this project, I-85 is recommended for widening (Local ID: CLEV0001-H) and at the northern end of this project, NC 216 (CLEV0013-H) is recommended for widening.

The 1996 Kings Mountain Thoroughfare Plan recommended improving Kings Mountain Boulevard (SR 2487) to a four lane facility with the extension of the Northwest Connector as a two lane facility. The 1996 Kings Mountain Thoroughfare Plan also recommended widening NC 161 to a four and five lane cross section.

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

Based on a planning level environmental assessment using available GIS data, several features may potentially be impacted. The proposed Northwest Connector crosses several streams that are on the National Wetlands Inventory. The project is also located in an area of Natural Heritage Element Occurrences. There is a water distribution system tank located north of NC 216 and the project also crosses several water and sewer pipes. Kings Mountain Intermediate School is located along Kings Mountain Road (SR 2487) just north of Phiifer Road (SR 2256) and two additional schools, Kings Mountain Middle School and Kings Mountain High School, are located east of Kings Mountain Road (SR 2487) along Phiifer Road (SR

2256). Kings Mountain Road (SR 2487) has an existing grade separation over the railroad just north of NC 216.

### **Multi-modal Considerations**

The CTP includes a recommendation for an off-road multi-use path along Beason Creek which crosses Kings Mountain Boulevard (SR 2487).

### **Public/ Stakeholder Involvement**

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

### **US 74, TIP No. R-4045**

US 74 in Cleveland County is designated as a freeway in NCDOT's Strategic Highway Corridors Vision Plan. It connects I-26 in Polk County and I-85 in Gaston County. Existing US 74 from US 74 Business (Ellenboro Road) to the future US 74 Bypass (R-2707) does not meet freeway standards. The 2012 – 2018 State Transportation Improvement Program (STIP) includes project R-4045 that is intended to address this problem.

The existing four-lane divided facility is recommended to be upgraded to freeway standards from US 74 Business (Ellenboro Road) to the proposed US 74 Bypass of Shelby, implementing full control of access along the facility. An interchange is recommended at Lattimore Road (SR 1168). This project is currently in the design stage. For additional information about this project, including Purpose and Need, contact the NCDOT Project Development and Environmental Analysis Branch.

### **US 74 (Shelby Bypass), TIP No. R-2707**

The proposed US 74 Bypass of Shelby from east of Peachtree Road (SR 1162) to US 74 Business (Shelby Road) west of Kings Mountain is designated as a freeway in NCDOT's Strategic Highway Corridors Vision Plan. The existing facility does not meet freeway standards. The 2012 – 2018 STIP includes project R-2707 that is intended to address this problem.

TIP project R-2707 includes upgrading the existing four lane facility to freeway standard by implementing full access control and constructing a bypass north of Shelby from east of Peachtree Road (SR 1162) to east Caleb Road (SR 2010). Interchanges are recommended at: Peachtree Road (SR 1162), US 74 (Dixon Boulevard west of Shelby), Washburn Switch Road (SR 1313), NC 226 (Polkville Road), NC 18 (Fallston Road), NC 150 (Cherryville Road), US 74 (Dixon Boulevard east of Shelby), and Bethlehem Road (SR 2245). Grade separations are recommended at: Kimbrell Drive (SR 1318), Plato Lee Road (SR 1315), Metcalf Road (SR 1850), North Lafayette Street (SR 1005), McBrayer Springs Road (SR 1827), NC 180 (North Post Road), Fairview Road (SR 2067), Elizabeth Avenue (SR 2052), and Borders Road (SR 2047).

Portions of this project are currently in the right-of-way stage. For additional information about this project, including Purpose and Need, contact the NCDOT Project Development and Environmental Analysis Branch.

### **NC 180 (Post Road), TIP No. U-2221**

NC 180 from NC 226 (Earl Road) to NC 150 (Cherryville Road) is projected to be over capacity by 2035. Project U-2221 is intended to address this problem, but has been scheduled for reprioritization in the 2012 – 2018 STIP. The segment of this project between Taylor Road (SR 2200) and Elizabeth Avenue (SR 2052) has been completed and is open to traffic with a five lane cross section. For additional information about this project, including Purpose and Need, contact the NCDOT Project Development and Environmental Analysis Branch.



### **US 74 Business (East Marion Street), Local ID: CLEV0008-H**

US 74 Business between NC 150 (Cherryville Road) and NC 180 (Post Road) 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. There is also a need to accommodate pedestrians.

US 74 Business (East Marion Street) is currently a 2 lane facility with 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 13,000 vpd in 2009 to 15,000 vpd in 2035, compared to an existing capacity is 13,000 vpd. Additionally, during the most recent three year period, the intersection of US 74 Business (East Marion Street) and NC 180 (Post Road) experienced 13 crashes and the intersection of US 74 Business (East Marion Street) and Elizabeth Avenue (SR 2052) experienced 21 crashes. The average severity indexes at these locations were 2.71 and 2.41 respectively, which were below the state's 4.73 average for the same period. This section of US 74 Business (East Marion Street) is recommended to be widened to a three lane major thoroughfare with 12 foot lanes. Sidewalks are recommended along this segment of US 74 Business (East Marion Street).

Based on a planning level environmental assessment using available GIS data, the proposed project crosses several water and sewer distribution pipes.

The 1995 Shelby Thoroughfare Plan recommended widening this segment of US 74 Business (East Marion Street) to a three lane facility.

### **NC 150 (South Main Street), Local ID: CLEV0009-H**

NC 150 (South Main Street) in Boiling Springs is expected to be over capacity by 2035 from West College Avenue (SR 1003) to Flint Hill Church Road (SR 1148), and near capacity from Flint Hill Church Road (SR 1148) to the southern town limits. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

NC 150 (South Main Street) is currently a two to three lane facility with 10 to 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 6,600 to 9,400 vpd in 2009 to 10,000 to 14,000 vpd in 2035, compared to an existing capacity of 11,000 to 14,000 vpd. This section of NC 150 (South Main Street) is recommended to be widened to a three lane major thoroughfare with 12 foot lanes and sidewalks from Stadium Drive to West College Avenue (SR 1003), and widened to two 12 foot lanes with sidewalks from the southern town limits to Stadium Drive. Bicycle lanes currently exist along this facility from Stadium Drive to the southern town limits and should be maintained.

Based on a planning level environmental assessment using available GIS data, water and sewer distribution pipes are located along the proposed project. This project is also adjacent to the eastern edge of a water supply watershed area. Gardner Webb University has direct access to this facility and is located in the southwestern quadrant of the intersection of West College Avenue (SR 1003) and NC 150 (South Main Street).

The 1996 Boiling Springs Thoroughfare Plan recommended widening NC 150 (South Main Street) to a multilane facility from Branch Avenue to West College Avenue (SR 1003).

### **NC 150 (East College Avenue), Local ID: CLEV0010-H**

NC 150 (East College Avenue) is expected to be over capacity by 2035 from West College Avenue (SR 1003) to the eastern town limits at Lyman Street. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

NC 150 (East College Avenue) is currently a 2 lane facility with 12 to 18 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 7,800 vpd in 2009 to 15,000 vpd in 2035, compared to an existing capacity is 12,000 vpd. The facility is recommended to be widened to a three lane major thoroughfare with 12 foot lanes. Sidewalks are recommended along this facility. The CTP also includes a recommendation for a new bus route that will utilize the NC 150 corridor between Boiling Springs and Shelby.

Based on a planning level environmental assessment using available GIS data, water and sewer distribution pipes are located along the proposed project.

The 1997 Boiling Springs Thoroughfare Plan recommended widening this segment of NC 150 (East College Avenue) to a three lane facility.

### **NC 161 (York Road), Local ID: CLEV0011-H**

NC 161 between US 74 Business (King Street) and Lake Montonia Road (SR 2292) is expected to be near or over capacity by 2035. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

NC 161 (York Road) is currently a three to four lane facility with 12 to 13 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 11,000 to 13,100 vpd in 2009 to a range of 14,500 to 17,800 vpd in 2035, compared to an existing capacity ranging from 14,000 to 20,000 vpd. Additionally, during the most recent three year period, the intersection of US 74 Business (King Street) and NC 161 (York Road) experienced 24 crashes and the intersection of NC 161 (York Road) and I-85 experienced 51 crashes. The average severity indexes at these locations were 5.39 and 4.38 respectively, compared to the state's 4.73 average for the same period. The facility is recommended to be widened to a three lane major thoroughfare with 12 foot lanes, bicycle accommodations and sidewalks.

Based on a planning level environmental assessment using available GIS data, the proposed project is located within a natural heritage element occurrence area and is within the vicinity of several sanitary sewer system pumps.

The 1996 Kings Mountain Thoroughfare Plan recommended widening NC 161 (York Road) to a five lane facility from US 74 Business (King Street) to I-85 and a four lane divided facility for the section between I-85 and Lake Montonia Road (SR 2292).

### **NC 216 (Battleground Road), Local ID: CLEV0012-H**

NC 216 (Battleground Road) is projected to be over capacity between US 29 and the I-85 interchange. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

This section of NC 216 (Battleground Road) is currently a two lane facility with 10 foot lanes and is 0.3 miles long. The Annual Average Daily Traffic Volume (AADT) is expected to increase from 2,500 vpd in 2009 to 19,500 vpd in 2035. The current capacity is 11,000 vpd. NC 216 (Battleground Road) is recommended to be widened to a four lane boulevard to accommodate the projected increase in traffic. The large increase in AADT is due to projected high growth of industrial development along the I-85 and US 29 corridors. Traffic will use this short segment of NC 216 to travel from I-85 to US 29 both north and south of the I-85 / NC 216 interchange.

Based on a planning level environmental assessment using available GIS data, the proposed project is located within a natural heritage element occurrence area.

The 1997 Cleveland County Thoroughfare Plan did not recommend any improvements for this facility.

#### **NC 216 (North Piedmont Avenue), Local ID: CLEV0013-H**

The section of NC 216 (North Piedmont Avenue) between US 74 and Goforth Road (SR 2014) is projected to be near capacity by 2035, with a short segment projected to be over capacity. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

This portion of NC 216 currently has a two lane cross section. By 2035 the facility is projected to be near or over capacity based on providing a LOS D. The traffic is projected to increase from a range of 6,400 to 8,400 vpd in 2009 to a range of 10,000 to 12,000 vpd in 2035, compared to a capacity of 12,000 to 13,000 vpd. The proposed project is to widen NC 216 (North Piedmont Avenue) between US 74 and the proposed NW Connector at Goforth Road (SR 2014) to a four lane boulevard. The proposed improvements will help avoid congestion on the facility.

The CTP does not include any recommendations for multi-modal improvements for this section of NC 216 (North Piedmont Avenue). Both the proposed Northwest Connector and the NC 216-NC 161 Connector connect to this section of NC 216 (North Piedmont Avenue).

Based on a planning level environmental assessment using available GIS data, this section of NC 216 (North Piedmont Avenue) runs along the edge of a High Quality Water area. The Kings Mountain Water Department is also located on the corridor.

The 1996 Kings Mountain Thoroughfare Plan recommended widening NC 216 (North Piedmont Avenue) to four lanes from US 74 to Goforth Road (SR 2014). The 1996 Cleveland County Thoroughfare Plan recommended widening NC 216 (North Piedmont Avenue) to 12 foot lanes from Saint Luke's Church Road (SR 2008) to Gaston County.

#### **NC 161/NC 216 Connector, Local ID: CLEV0014-H**

NC 161 (York Road) and NC 216 (Battleground Road) are the major north south routes through Kings Mountain, connecting with I-85, US 74 and continuing into Gaston County.

There is a lack of connectivity on the north side of Kings Mountain between NC 161 (York Road) and NC 216 (Battleground Road). Improvements are needed to provide connectivity and improve mobility on the north side of Kings Mountain.

The proposed facility connects NC 216 at Chestnut Ridge Road (SR 2020) to NC 161 near Gaston County. This connector will carry traffic around the north side of Kings Mountain and help reduce traffic in downtown Kings Mountain. The proposed facility is recommended to be constructed on new location as a two lane minor thoroughfare with 12 foot lanes. The 2035 projected traffic volume for this facility is 5,500 vpd with a capacity of 12,000 vpd.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity of sanitary sewer system pumps. Additionally, the proposed project will have an at grade rail crossing 0.1 miles west of NC 161 (York Road).

The 1996 Kings Mountain Thoroughfare Plan included the proposed project. This plan noted that a grade separation was preferred over the railroad tracks.

#### **NC 226 (Cleveland Avenue), Local ID: CLEV0015-H**

NC 226 between NC 180 (Post Road) and Blackburn Drive at the Grover town limits is expected to be near capacity by 2035. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

NC 226 (Cleveland Avenue) is currently a two lane facility with 10 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 6,100 to 7,800 vpd in 2009 to 9,500 vpd in 2035, compared to an existing capacity of 11,000 vpd. NC 226 (Cleveland Avenue) is recommended to be widened to a three lane major thoroughfare with 12 foot lanes.

Based on a planning level environmental assessment using available GIS data, the proposed project crosses a trout stream north of Mallard Drive (SR 2228).

The 1997 Cleveland County Thoroughfare Plan recommended widening this facility to twelve foot lanes.

#### **Bethlehem Road (SR 2245), Local ID: CLEV0016-H**

TIP project R-2707 (US 74 – Shelby Bypass) includes adding a new interchange at Bethlehem Road (SR 2245). As a result, Bethlehem Road (SR 2245) between US 74 and NC 216 is expected to be near capacity by 2035. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

Bethlehem Road (SR 2245) is currently a two lane minor thoroughfare with 10 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 2,500 to 5,000 vpd in 2009 to a range of 7,000 to 13,000 vpd in 2035, compared to an existing capacity of 10,500 vpd. Bethlehem Road (SR 2245) is recommended to be widened to a three lane facility with 12 foot lanes.



Based on a planning level environmental assessment using available GIS data, the proposed project crosses several water and sewer distribution system pipes, crosses a trout stream (Beason Creek), and the southern half of the proposed project is within a natural heritage element occurrence area. Additionally, NCDOT's Structures Management Unit has identified bridge #67 over Beason Creek as functionally obsolete.

The proposed project does not include any additional modes of transportation and has not been identified on any previous transportation plan.

#### **Boiling Springs Western Bypass, Local ID: CLEV0017-H**

College Avenue and Main Street, the primary routes through central Boiling Springs, are projected to be over capacity by 2035. These routes serve many traffic generators in the area, including Gardner Webb University and the Crawley Memorial Hospital. Improvements are needed to reduce congestion and improve mobility in the central business district of Boiling Springs.

A western bypass is recommended around Boiling Springs, consisting of the a portion of Holly Hill Road (SR 1149), realignment of Clyde Wallace Road (SR 1196) to directly connect to Holly Hill Road (SR 1149) and Rockford Road (SR 1194), a portion of Rockford Road (SR 1194), an extension of West Homestead Avenue (SR 1158) connecting Rockford Road (SR 1194) to West Homestead Avenue (SR 1158) at Cliffside Road (SR 1003), and the existing West Homestead Avenue between Cliffside Road (SR 1003) and North Main Street (SR 1161). The existing facilities utilized as a part of the proposed bypass do not require any improvement. The new connection/realignments included in this project are recommended to be constructed on new location as a two lane minor thoroughfares with 12 foot lanes. In conjunction with the proposed Eastern Bypass (CLEV0009-H), a complete loop system around Boiling Springs will be formed.

Based on a planning level environmental assessment using available GIS data, the proposed project is within a water supply watershed area. It also crosses a trout stream and water and sewer distribution pipes.

The proposed project was included in the 1997 Boiling Springs Thoroughfare Plan.

#### **Charles Road (SR 1253), Local ID: CLEV0018-H**

Due to the planned Charles Road Extension (CLEV0019-H), the existing section of Charles Road (SR 1253) between Dellinger Road (SR 1115) and NC 150 (East College Avenue) 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.

Charles Road (SR 1253) is currently a two to three lane minor thoroughfare with 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 3,000 to 5,000 vpd in 2009 to a range of 13,000 to 16,000 vpd in 2035, compared to an existing capacity of 12,000 to 14,000 vpd. Additionally, during the most recent three year period, the intersection of Charles Road (SR 1253) and NC 150 (East College Avenue) experienced 12 crashes with an average severity index of 3.47, which was below the state's

4.73 average for the same period. Charles Road (SR 1253) is recommended to be widened to a three lane facility with 12 foot lanes with sidewalks.

Based on a planning level environmental assessment using available GIS data, the proposed project crosses national wetland areas and has water and sewer distribution pipes located along the facility.

The proposed project does not include any additional modes of transportation and has not been identified on any previous transportation plan.

#### **Charles Road (SR 1253) Extension, Local ID: CLEV0019-H**

NC 150 (East College Avenue) and NC 18 (S Lafayette Street) are two primary entrances into Shelby from the south and west. Within this area, these facilities serve many traffic generators, including James Love Elementary School and the Shelby-Cleveland County Regional Airport. Improvements are needed to reduce congestion and improve mobility.

The proposed facility is recommended to be constructed on new location as a two lane minor thoroughfare with 12 foot lanes. The proposed facility extends from NC 18 (S Lafayette Street) to NC 150 (East College Avenue) at Charles Road (SR 1253). The projected traffic volume on the proposed facility in 2035 is 5,000 vpd with a capacity of 12,000 vpd. Upon implementation of this project, Charles Road (SR 1253) will serve as an alternate route in southwestern Shelby to access US 74, help relieve congestion and improve mobility.

Based on a planning level environmental assessment using available GIS data, the southern end of the proposed project near NC 18 is within a natural heritage element occurrence area.

The proposed project does not include any additional modes of transportation. The proposed project was identified in the 1995 Shelby Thoroughfare Plan.

#### **Crow Road (SR 2218) Extension, Local ID: CLEV0020-H**

The town of Earl is located in southern Cleveland County and is bisected through the middle by NC 198 and the active railroad that is adjacent to NC 198 on the west. Within Earl, there are four at grade crossings of the railroad. In order to improve safety, the CTP recommends closing two at-grade crossings: the Trent-McSwain Road (SR 2217) crossing and the crossing that connects Bettis Road (SR 2225) with NC 198 (Blacksburg Road). Improvements are needed to maintain mobility and connectivity in and around Earl.

The proposed project includes extending Crow Road (SR 2218) across the railroad tracks with an at-grade crossing to tie into NC 198. The proposed extension will be constructed as a minor thoroughfare with two 12-foot lanes. The projected traffic volume on this facility in 2035 is 2,000 vpd.

Based on a planning level environmental assessment using available GIS data, none of the features evaluated are anticipated to be impacted.

The proposed project does not include any additional modes of transportation and has not been identified on any previous transportation plan.

#### **Elizabeth Avenue (SR 2052, Local ID: CLEV0021-H)**

Elizabeth Avenue (SR 2052) between NC 180 (Post Road) and Oak Grove Road (SR 2033) is expected to be near capacity by 2035. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

Elizabeth Avenue (SR 2052) is currently a two lane minor thoroughfare with 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 7,500 vpd in 2009 to 9,000 vpd, compared to an existing capacity of 12,500 vpd. Additionally, during the most recent three year period, the intersection of Elizabeth Avenue (SR 2052) and US 74 Business (East Marion Street) experienced 21 crashes with an average severity index of 2.41, which was below the state's 4.73 average for the same period. Elizabeth Avenue (SR 2052) is recommended to be widened to a three lane facility with 12 foot lanes. The CTP also includes a recommendation for a multi-use path adjacent to this facility.

Based on a planning level environmental assessment using available GIS data, none of the features evaluated are anticipated to be impacted.

The 1995 Shelby Thoroughfare Plan proposed widening Elizabeth Avenue (SR 2052) to a multi-lane facility.

#### **Ellis Road Realignment, Local ID: CLEV0022-H**

Together Ellis Road (SR 1128) and Morgan Street (SR 1106) serve as a north-south radial connector into Shelby from the south. This connection is used as an alternate to NC 18. Currently this connection is routed as follows: from the south, Ellis Road (SR 1128) connects to Christopher Road (SR 1105). Turn right onto Christopher Road (SR 1105), then turn left onto Morgan Street (SR 1106) and continue into Shelby. Improvements are needed to increase mobility in this area.

Ellis Road (SR 1128) is currently a two lane minor thoroughfare with 9 foot lanes. It is recommended to be realigned to the east of its existing location to connect to Christopher Road (SR 1105) at Morgan Street (SR 1106), thereby removing the offset intersection and forming one full movement intersection. The realigned section is recommended to have two 12 foot lanes. The projected traffic volume on this facility in 2035 is 2,500 vpd.

Based on a planning level environmental assessment using available GIS data, the proposed project is also within a natural heritage element occurrence area.

The proposed project has not been identified on any previous transportation plan.

#### **Gold Street Extension, Local ID: CLEV0023-H**

Gold Street currently serves as an alternate route to US 74 Business (East King Street) in downtown Kings Mountain. By 2035, traffic volumes and congestion on US 74 Business (East

King Street) will continue to increase and further impede mobility. Improvements are needed to help to reduce congestion and improve mobility on US 74 Business (East King Street).

The proposed facility connects the eastern end of Gold Street to US 74 Business (East King Street) near US 74 (Andrew Jackson Highway). The proposed facility is recommended to be constructed on new location as a two lane minor thoroughfare with 12 foot lanes. The projected traffic volume on this facility in 2035 is 5,000 vpd.

Based on a planning level environmental assessment using available GIS data, the proposed project is within a natural heritage occurrence area and is in the vicinity of a sanitary sewer system pump.

The proposed project was included in the 1996 Kings Mountain Thoroughfare Plan.

#### **McBrayer-Homestead Road (SR 1161), Local ID: CLEV0024-H**

McBrayer-Homestead Road (SR 1162) is expected to be over capacity in 2035 from the northern town limits of Boiling Springs just south of James Lovelace Road (SR 1165) to Whitaker Road (SR 1164). Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

McBrayer-Homestead Road (SR 1162) is currently a two lane minor thoroughfare with 10 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 6,200 vpd in 2009 to a range of 12,000 vpd in 2035, compared to an existing capacity of 10,500 vpd. McBrayer-Homestead Road (SR 1162) is recommended to be widened to a three lane facility with 12 foot lanes from the northern town limits of Boiling Springs to Whitaker Road (SR 1164). The CTP also includes a recommendation for a multi-use path adjacent to this facility.

Based on a planning level environmental assessment using available GIS data, there are water and sewer distribution pipes along this facility. The proposed project is also within a water supply watershed area.

The proposed project has not been identified on any previous transportation plan.

#### **North Main Street (SR 1161), Local ID: CLEV0025-H**

North Main Street (SR 1161) in Boiling Springs is expected to be over capacity by 2035 from West College Avenue (SR 1003) to the northern town limits of Boiling Springs just south of James Lovelace Road (SR 1165). Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

North Main Street (SR 1161) is currently a two lane minor thoroughfare with 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 10,000 vpd in 2009 to 15,000 vpd in 2035, compared to an existing capacity of 12,000 vpd. Additionally, during the most recent three year period, the intersection of North Main Street (SR 1161) and West College Avenue (SR 1003) experienced 26 crashes with an average severity index of 2.71, which was below the state's 4.73 average for the same period. North Main Street (SR 1161) is recommended to be widened to a three lane facility with 12 foot lanes from West College



Avenue (SR 1003) to the northern town limits of Boiling Springs. Sidewalk improvements are recommended along North Main Street (SR 1161) from West College Avenue (SR 1003) to East Homestead Avenue (SR 1158) and an adjacent multi-use path is recommended from East Homestead Avenue (SR 1158) to the northern town limits.

Based on a planning level environmental assessment using available GIS data, the proposed project is also within a water supply watershed area. There are also water and sewer distribution lines located along this facility.

The proposed project has not been identified on any previous transportation plan.

#### **Oak Grove Road (SR 2033), Local ID: CLEV0026-H**

Oak Grove Road (SR 2033) between Elizabeth Avenue (SR 2052) and US 74 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.

Oak Grove Road (SR 2033) is currently a two lane minor thoroughfare with 11 to 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 6,300 to 8,000 vpd in 2009 to a range of 14,000 to 16,500 vpd in 2035, compared to an existing capacity ranging from 11,500 to 12,500 vpd. Oak Grove Road (SR 2033) is recommended to be widened to a three lane facility with 12 foot lanes.

Based on a planning level environmental assessment using available GIS data, the proposed project follows the southern edge of a water supply watershed area and crosses several wetland areas. There is also a Land and Water Conservation Fund project adjacent to Oak Grove Road (SR 2033) at Moss Lake and a waste water treatment plant. Additionally, NCDOT's Structures Management Unit has identified bridge #25 over Buffalo Creek and bridge # 34 over Muddy Fork Creek as functionally obsolete.

The proposed project has not been identified on any previous transportation plan.

#### **Patrick Avenue Widening/Ext. (Boiling Springs Eastern Bypass), Local ID: CLEV0027-H**

College Avenue and Main Street, the primary routes through central Boiling Springs, are projected to be over capacity by 2035. These routes serve many traffic generators in the area, including Gardner Webb University and the Crawley Memorial Hospital. Additionally, with the construction of the proposed Boiling Springs Eastern Bypass, Patrick Avenue (SR 1149) is expected to be near or over capacity in 2035 from Highland Pine Drive to NC 150 (East College Avenue). Improvements are needed to reduce congestion and improve mobility in the central business district of Boiling Springs.

An eastern bypass is recommended around Boiling Springs, consisting of Patrick Avenue and the extension of Patrick Avenue (SR 1149) on new location from NC 150 (East College Avenue) to Skinner Road (SR 1159) at a point just east Homestead Avenue / Beaver Dam Church Road (SR 1158). Patrick Avenue (SR 1149) is currently a two lane major thoroughfare with 9 foot lanes from NC 150 (South Main Street) to Flint Hill Church Road (SR 1148); a three lane major thoroughfare with 12 foot lanes from Flint Hill Church Road (SR 1148) to Highland

Pine Drive; and a two lane major thoroughfare with 10 foot lanes from Highland Pine Drive to NC 150 (East College Avenue). The two lane sections of Patrick Avenue are recommended to be widened to 12 foot lanes. The proposed extension is recommended to be constructed on new location as a two lane minor thoroughfare with 12 foot lanes. In conjunction with the proposed Western Bypass (CLEV0017-H), a complete loop system around Boiling Springs will be formed.

Based on a planning level environmental assessment using available GIS data, the proposed project crosses a wetland area. Boiling Springs Elementary School is located along Patrick Avenue (SR 1149) at School Road.

The proposed project was included in the 1997 Boiling Springs Thoroughfare Plan.

#### **Phifer Road (SR 2256) , Local ID: CLEV0028-H**

Phifer Road (SR 2256) between Kings Mountain Boulevard (SR 2487) and US 74 Business (King Street) is expected to be near capacity by 2035. Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

Phifer Road (SR 2256) is currently a two lane minor thoroughfare with 9 to 12 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from a range of 3,000 to 5,800 vpd in 2009 to a range of 7,300 to 11,000 vpd in 2035. The existing capacity ranges from 9,000 to 12,000 vpd. Phifer Road (SR 2256) is recommended to be widened to a three lane cross section with 12 foot lanes. Sidewalks are recommended along this facility from US 74 Business (King Street) to Southridge Drive.

Based on a planning level environmental assessment using available GIS data, the proposed project crosses several water and sewer distribution lines and is within a natural heritage element occurrence area. Kings Mountain Middle School and Kings Mountain High School are located along Phifer Road (SR 2256) near Kings Mountain Blvd (SR 2487).

A portion of the proposed project was included in the 1996 Kings Mountain Thoroughfare Plan, which recommended widening Phifer Road (SR 2256) to three lanes with exclusive right turn lanes into the middle school and the high school.

#### **Shelby Southern Connector, Local ID: CLEV0029-H**

There are currently no contiguous east-west routes around southern Shelby. US 74 (Dixon Boulevard) is the primary east-west route through Shelby and will be over capacity by 2035. Improvements are needed improve connectivity and mobility in and around southern Shelby.

The proposed project includes connecting Poplar Springs Church Road (SR 1151), Wesson Road (SR 1121), Charles Road (SR 1253), James Love School Road (SR 1117), NC 18 (South Lafayette Street), NC 150 (South Dekalb Street), Morgan Street (SR 1106), Sulfur Springs Road (SR 1100), Pleasant Drive (SR 1103), NC 180/226 (South Post Road), Joe's Lake Road (SR 2202) and Caleb Road (SR 2201) across the south side of Shelby via short connectors on new location to form the Shelby Southern Connector. The existing facilities utilized as a part of the proposed connector do not require any improvement. The new

connections included in this project are recommended to be constructed on new location as two lane minor thoroughfares with 12 foot lanes. The projected traffic volume on the proposed connector in 2035 is 5,000 to 6,000 vpd. This new facility will help reduce the traffic volume and congestion on existing US 74 (Dixon Boulevard).

Based on a planning level environmental assessment using available GIS data, the proposed project crosses several wetland areas and water and sewer distribution pipes. James Love Elementary School is located along James Love School Road (SR 1117) at Knox Street. Additionally, the new segment of this facility between Morgan Street (SR 1106) and Sulfur Springs Road (SR 1100) will have an at grade rail crossing.

The proposed project was included in the 1995 Shelby Thoroughfare Plan. That plan also included an additional segment that connected Caleb Road (SR 2201) to the proposed US 74 Bypass of Shelby (R-2707). This segment was not recommended in the current CTP, because the current plans for R-2707 do not include a connection to Caleb Road (SR 2201).

#### **Southern Drive (SR 1433) / Walmart Drive (SR 1305) Connector, Local ID: CLEV0030-H**

Currently Walmart Drive (SR 1305) extends from NC 226 (Polkville Road) west until it turns north toward the Walmart distribution center. There is no connection from Walmart Drive (SR 1305) to Southern Drive (SR 1433) near Randolph Road (SR 1308). Improvements are needed to provide connectivity and improve mobility in this area of Shelby.

The proposed project will connect Southern Drive (SR 1433) to Walmart Drive (SR 1305), thereby providing access to Walmart Drive (SR 1305) from both Randolph Road (SR 1308) and NC 226 (Polkville Road). The proposed project will increase access for employees and delivery trucks at the Walmart distribution center located on Walmart Drive and other businesses in the immediate area, giving the distribution center access to two interchanges on the future US 74 Bypass (R-2707). The proposed project is recommended to be a two lane minor thoroughfare with 12 foot lanes. The projected traffic volume on this facility in 2035 is 3,600 vpd.

Based on a planning level environmental assessment using available GIS data, there are water distribution pipes along the proposed project.

The proposed project was not included in any previous transportation plan.

#### **West College Avenue (SR 1003), Local ID: CLEV0031-H**

West College Avenue (SR 1003) in Boiling Springs is expected to be near capacity by 2035 from NC 150 (South Main Street) to the western town limits at West Homestead Avenue (SR 1158). Improvements are needed to accommodate projected traffic volumes in order to maintain a LOS D on the existing facility.

West College Avenue (SR 1003) is currently a two lane minor thoroughfare with 10 to 18 foot lanes. The Annual Average Daily Traffic Volume (AADT) is projected to increase from 6,500 vpd in 2009 to 11,000 in 2035. The existing capacity ranges from 9,500 to 12,000 vpd. Additionally, during the most recent three year period, the intersection of North Main Street

(SR 1161) and West College Avenue (SR 1003) experienced 26 crashes with an average severity index of 2.71, which was below the state's 4.73 average for the same period. West College Avenue (SR 1003) is recommended to be widened to a three lane facility with 12 foot lanes from NC 150 (South Main Street) to the western town limits of Boiling Springs. Sidewalks are recommended along this facility from NC 150 (South Main Street) to Stadium Drive and a multi-use path is recommended from Stadium Drive to West Homestead Avenue (SR 1158).

Based on a planning level environmental assessment using available GIS data, water and sewer distribution pipes are located along the proposed project. This project is also within a water supply watershed area. Crawley Memorial Hospital and Gardner Webb University have direct access to this facility and are located in the southwestern quadrant of the intersection of West College Avenue (SR 1003) and NC 150 (South Main Street).

The 1997 Boiling Springs Thoroughfare Plan recommended widening West College Avenue (SR 1003) to a three lane facility.

### **Minor Widening Improvements**

The following routes are not expected to exceed capacity, but are recommended to be upgraded to improve mobility, safety and/or to accommodate bicycles.

- **CLEV0032-H:** NC 150 (Gaffney Road) from South Carolina to the southern town limits of Boiling Springs is recommended for widening to 12 foot lanes. Bicycle lanes currently exist from north of Riverside Road to the southern town limits of Boiling Springs and are recommended to be extended to South Carolina.
- **CLEV0033-H:** NC 161(York Road) between Lake Montonia Road (SR 2292) and South Carolina is recommended for widening to 12 foot lanes with bicycle accommodations.
- **CLEV0034-H:** NC 182 (Stagecoach Trail) from NC 226 (Polkville Road) to Lincoln County is recommended for widening to 12 foot lanes with bicycle accommodations.
- **CLEV0035-H:** NC 226 (Polkville Road) between Zion Church Road (SR 1337) and Hollis Road (SR 1376) is recommended for widening to 12 foot lanes. Bicycle accommodations are recommended from NC 182 (Stagecoach Trail) to Hollis Road (SR 1376).
- **CLEV0036-H:** Beaver Dam Church Road (SR 1158) is expected to be near capacity in 2035, and is recommended for widening to 12 foot lanes from Skinner Road (SR 1159) to US 74.
- **CLEV0037-H:** Cansler Street (SR 2025) between West Gold Street and Barnett Drive in Kings Mountain is currently a four lane undivided facility. It is recommended for a road diet to three lanes with accommodations for pedestrians and bicycles.
- **CLEV0038-H:** Cliffside Road (SR 1003) is expected to be approaching capacity in 2035, and is recommended for widening to 12 foot lanes from West Homestead Avenue (SR 1158) to McKinney Road (SR 1184).



- **CLEV0039-H:** Country Club Road (SR 2052) from Kings Road (SR 2050) to US 74 Business (Marion Street) in Shelby is recommended for widening to 12 foot lanes with sidewalks and a parallel multi-use trail.
- **CLEV0040-H:** East Homestead Avenue (SR 1158) from Skinner Road (SR 1159) to North Main Street (SR 1161) in Boiling Springs is recommended for widening to 12 foot lanes with a multi-use trail parallel to the road.
- **CLEV0041-H:** Kings Road (SR 2050) from NC 180 (Post Road) to East Graham Street in Shelby is recommended for widening to 12 foot lanes with sidewalks.
- **CLEV0042-H:** McBrayer-Homestead Road (SR 1161) is expected to be near capacity in 2035 from Whitaker Road (SR 1164) to US 74, and is recommended for widening to 12 foot lanes.
- **CLEV0043-H:** Peachtree Road (SR 1162) from US 74 to Lattimore Road (SR 1168) in Lattimore is recommended for widening to 12 foot lanes.
- **CLEV0044-H:** Sulphur Springs Road (SR 1100) between NC 180 (Post Road) and NC 226 (Earl Road) is recommended for widening to 12 foot lanes.
- **CLEV0045-H:** Woodlake Parkway (SR 2310) between NC 161(York Road) and Gaston County in Kings Mountain is recommended for widening to 12 foot lanes.

## **PUBLIC TRANSPORTATION & RAIL**

The public transportation recommendations incorporated into the CTP were developed from the 2009 Lake Norman Rural Planning Organization Coordinated Comprehensive Public Transportation Plan and are shown on the Public Transportation and Rail Map of Figure 1. Major recommendations from the plan include:

- Three park and ride lots are recommended in Cleveland County. One is located in the northern part of the county near the intersection of NC 10, NC 18 and NC 27. Another lot is recommended at the Cleveland Mall in Shelby, and the third location is on the east side of Kings Mountain near I-85.
- Van pools are recommended between Shelby and Rutherfordton, between Shelby and Spartanburg, South Carolina, and between Shelby and Lincolnton.
- Fixed routes are recommended between Shelby and Boiling Springs, between Shelby and Gastonia, and a northern loop which would connect Shelby with many of the smaller towns in the northern portion of the county.

The following rail initiatives are recommended.

- Close two rail crossings in Earl. One is on Trent-McSwain Road (SR 2217) and the other connects Bettis Road (SR 2225) with NC 198 (Blacksburg Road).
- Conduct a Traffic Safety and Separation Study for potential crossing improvements across the county.

## **BICYCLE**

The 2010 Cleveland County Carolina Thread Trail Master Plan and the 2005 Cleveland County Land Use Plan identify recommended greenways for bicycles and pedestrians throughout the county. These features are shown on the Bicycle and Pedestrian Maps of Figure 1 as recommended multi-use paths. In addition to the multi-use paths from the above plans, the CTP recommends the following multi-use paths:

- **CLEV0004-H:** Parallel to NC 150 between Boiling Springs and Shelby.
- **CLEV0001-M:** Parallel to College Farm Road (SR 1195) from NC 150 (Gaffney Road) to the Broad River Greenway.
- **CLEV0002-M:** Parallel to Flint Hill Church Road (SR 1148) from NC 150 (Gaffney Road) to Patrick Avenue (SR 1149).
- **CLEV0027-H:** Parallel to Patrick Avenue (SR 1149) from NC 150 (Gaffney Road) to NC 150 (East College Avenue).

NC Bicycle Route 8, Southern Highlands, is a state designated bicycle route through Cleveland County. The route is signed along Hollis Road (SR 1376), NC 226 (Polkville Road) and NC 182 (Stagecoach Trail). Bicycle accommodations are recommended for facilities along this route and for other popular bicycling routes in Cleveland County, which include:

- **CLEV0032-H:** NC 150 (Gaffney Road) from the existing bicycle lanes to South Carolina.
- **CLEV0033-H:** NC 161(York Road) between Lake Montonia Road (SR 2292) and South Carolina.
- **CLEV0034-H:** NC 182 (Stagecoach Trail) from NC 226 (Polkville Road) to Lincoln County.
- **CLEV0035-H:** NC 226 (Polkville Road) between NC 182 (Stagecoach Trail) and Hollis Road (SR 1376).
- **CLEV0037-H:** Cansler Street (SR 2025) between Gold Street and Barnett Drive.
- **CLEV0001-B:** Hollis Road (SR 1376) between NC 226 (Polkville Road) and Rutherford County.

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

## **PEDESTRIAN**

The 2010 Cleveland County Carolina Thread Trail Master Plan and the 2005 Cleveland County Land Use Plan identify recommended greenways for bicycles and pedestrians throughout the county. These features are shown on the Bicycle and Pedestrian Maps of Figure 1 as recommended multi-use paths. In addition to the multi-use paths from the above plans, the CTP recommends the following multi-use paths:

- **CLEV0004-H:** Parallel to NC 150 between Boiling Springs and Shelby.
- **CLEV0001-M:** Parallel to College Farm Road (SR 1195) from NC 150 (Gaffney Road) to the Broad River Greenway.
- **CLEV0002-M:** Parallel to Flint Hill Church Road (SR 1148) from NC 150 (Gaffney Road) to Patrick Avenue (SR 1149).
- **CLEV0027-H:** Parallel to Patrick Avenue (SR 1149) from NC 150 (Gaffney Road) to NC 150 (East College Avenue).

The sidewalk recommendations incorporated into the CTP were developed from the Lake Norman Rural Planning Organization Cleveland County sidewalk inventory (2009), the 2005 Cleveland County Land Use Plan (Amended July 2008), the 2009 Shelby Comprehensive Land Use Plan, the 2007 Shelby Comprehensive Pedestrian Plan, the 2006 Boiling Springs Pedestrian Plan, and the 2009 Cleveland County Carolina Thread Trail Plan. These features are shown on the Pedestrian Map of Figure 1 as existing sidewalks or sidewalks that need improvement. In addition, the following facilities in Kings Mountain are recommended to have sidewalks:

- **CLEVE0011-H:** NC 161(York Road) between US 74 Bus (King Street) and Woodlake Pkwy (SR 2310).
- **CLEVE0037-H:** Cansler Street (SR 2025) between Gold Street and Barnett Drive.

# APPENDICES



## 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 Engineer*

1710 E. Marion St. Shelby, NC 28151-0047 (704) 480-9020

<http://www.ncdot.gov/doh/operations/division12/>

*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/over width permits, paving priorities, secondary road construction program and road maintenance.

1702 E. Marion St. Shelby, NC 28151-0047 (704) 480-2082

### 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 N Tryon Street, 12<sup>th</sup> Floor                      Charlotte, NC 28202                      (704) 372-2416  
[www.lakenormanrpo.org/](http://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/>

### Project Development & Environmental Analysis (PDEA)

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  
<http://www.ncdot.gov/doh/preconstruct/pe/>

### 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  
<http://www.ncdot.gov/doh/operations/secondaryroads/>

### 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  
<http://www.ncdot.org/planning/development/>

### 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                      Raleigh, NC 27699-1553                      (919) 707-4700  
<http://www.bytrain.org/>

### *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/transit/bicycle/>

### *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/](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  
<http://www.ncdot.org/doh/preconstruct/highway/roadway/>

## ***Other State Government Offices***

### Department of Commerce – Division of Community Assistance

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/en/CommunityServices/>

## **Appendix B**

### **Comprehensive Transportation Plan Definitions**

#### ***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

- **Expressways**

- 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 U-turns 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, or system continuity. The improvement to the facility may be widening, other operational strategies, increasing the level of access control along the facility, or a combination of improvements and strategies. *“Needs improvement” does not refer to the maintenance needs of existing facilities.*
- **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-of-way.
- **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 NCDOT's LRS shapefile and field investigation. 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 I.
- **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 '2035 AADT E+C' is an estimate of the volume in 2035 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2009 - 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 I.
- **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, and P= pedestrian).

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		
CLEV0001-H	I-85	SC Line to Exit 2	Cleveland Co	2.0	48	300	65	54,000	45,000	83,600	83,600	108,000	8A	ADQ	F	Sta
CLEV0001-H	I-85	Exit 2 to Exit 4	Cleveland Co	2.0	48	300	65	56,600	46,000	80,600	80,600	108,000	8A	ADQ	F	Sta
CLEV0001-H	I-85	Exit 4 to Exit 5	Cleveland Co	1.0	48	300	65	56,600	49,000	92,500	92,500	108,000	8A	ADQ	F	Sta
CLEV0001-H	I-85	Exit 5 to Exit 8	Kings Mtn	3.0	48	300	65	56,600	52,000	94,300	94,300	108,000	8A	ADQ	F	Sta
CLEV0001-H	I-85	Exit 8 to Gaston Co.	Kings Mtn	0.5	48	300	65	56,600	58,000	100,700	100,700	108,000	8A	ADQ	F	Sta
	US 29 (Battleground Ave)	SC Line to ECL Grover	Grover	0.6	24	60	35	13,000	8,900	14,000	14,000	13,000	ADQ	ADQ	Maj	Reg
	US 29 (Battleground Ave)	ECL Grover to NC 216	Cleveland Co	1.6	48	100	55	33,500	6,200	20,000	20,000	33,500	ADQ	ADQ	Maj	Reg
	US 29 (Battleground Ave)	NC 216 to I-85	Cleveland Co	1.9	48	100	55	33,500	6,600	26,500	26,500	33,500	ADQ	ADQ	Maj	Reg
	US 74 (Dixon Blvd)	Rutherford County to US 74 Bus (Ellenboro Rd)	Mooresboro	1.1	48	100	55	54,000	15,200	24,000	24,000	54,000	ADQ	ADQ	F	Reg
R-4045	US 74 (Dixon Blvd)	US 74 Bus (Ellenboro Rd) to ECL Mooresboro	Cleveland Co	1.6	48	100	55	40,000	15,200	24,000	24,000	54,000	4A	300	F	Reg
R-4045	US 74 (Dixon Blvd)	ECL Mooresboro to US 74 Bypass	Cleveland Co	1.5	48	100	55	40,000	18,000	27,000	27,000	54,000	4A	300	F	Reg
R-2222	US 74 (Dixon Blvd)	US 74 Bypass to Pleasant Ridge Rd (SR 1161)	Cleveland Co	1.7	48	100	55	40,000	18,000	28,000	28,000	54,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Pleasant Ridge Rd (SR 1161) to Beaver Dam Creek Bridge	Cleveland Co	1.5	48	100	55	40,000	24,000	28,000	28,000	40,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Beaver Dam Creek Bridge to WCL Shelby	Cleveland Co	1.4	48	100	55	40,000	26,000	28,000	28,000	40,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	WCL Shelby to Washburn Switch Rd (SR 1313)	Shelby	0.5	48	100	55	28,000	26,000	28,000	28,000	40,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Washburn Switch Rd (SR 1313) to Polkville Rd (NC 226)	Shelby	1.4	48	100	55	28,000	26,800	32,000	30,000	40,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Polkville Rd (NC 226) to Charles Rd (SR 1253)	Shelby	1.0	48	100	55	28,000	31,000	34,000	32,000	50,000	6B	150	B	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
R-2222	US 74 (Dixon Blvd)	Charles Rd (SR 1253) to Lafayette St (NC 150)	Shelby	1.5	48	4D	100	45	28,000	29,000	34,000	32,000	50,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Lafayette St (NC 150) to Earl Rd (NC 226)	Shelby	0.4	48	4D	100	45	28,000	44,000	51,000	49,000	50,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Earl Rd (NC 226) to Post Rd (NC 180)	Shelby	2.0	48	4D	100	55	28,000	42,000	54,000	52,000	50,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Post Rd (NC 180) to Marion St (US 74 Bus)	Shelby	1.1	48	4D	100	55	28,000	31,000	41,000	39,000	50,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	Marion St (US 74 Bus) to ECL Shelby	Shelby	0.7	48	4D	100	55	28,000	38,500	43,000	43,000	50,000	6B	150	B	Sub
R-2222	US 74 (Dixon Blvd)	ECL Shelby to US 74 Bypass	Cleveland Co	0.3	48	4D	100	55	38,000	38,900	43,000	43,000	50,000	6B	151	B	Sub
R-2707	US 74 (Dixon Blvd)	US 74 Bypass to Long Branch Rd (SR 2238)	Cleveland Co	0.6	48	4D	100	55	38,000	38,100	55,000	55,800	54,000	4A	300	F	Reg
R-2707	US 74 (Dixon Blvd)	Long Branch Rd (SR 2238) to Harmon Rd (SR 2244)	Cleveland Co	1.4	48	4D	100	55	38,000	37,000	49,000	49,000	54,000	4A	300	F	Reg
R-2707	US 74 (Dixon Blvd)	Harmon Rd (SR 2244) toUS 74 Bus (Shelby Rd)	Cleveland Co	1.6	48	4D	100	55	38,000	35,000	47,400	42,900	54,000	4A	300	F	Reg
	US 74 (Dixon Blvd)	US 74 Bus (Shelby Rd) to Patterson Rd (SR 2034)	Cleveland Co	1.9	48	4D	100	55	54,000	34,000	44,000	44,000	54,000	ADQ	ADQ	F	Reg
	US 74 (Dixon Blvd)	Patterson Rd (SR 2034) to NCL Kings Mt	Cleveland Co	0.8	48	4D	100	55	54,000	35,000	45,000	45,000	54,000	ADQ	ADQ	F	Reg
	US 74 (Dixon Blvd)	NCL Kings Mt to NC 216	Kings Mtn	1.7	48	4D	100	55	54,000	36,000	47,500	47,500	54,000	ADQ	ADQ	F	Reg
	US 74 (Dixon Blvd)	NC 216 to NC 161	Kings Mtn	0.7	48	4D	100	55	54,000	42,000	53,700	53,700	54,000	ADQ	ADQ	F	Reg
	US 74 (Dixon Blvd)	NC 161 to Gaston County	Kings Mtn	0.4	48	4D	100	55	54,000	35,000	43,000	43,000	54,000	ADQ	ADQ	F	Reg
R-2707	US 74 Bypass	US 74 (Dixon Blvd) to NC 226	Cleveland Co	5.5	-	-	-	-	-	-	20,000	20,000	54,000	4A	300	F	Reg
R-2707	US 74 Bypass	NC 226 (Polkville Rd) to NC 18 (Fallston Rd)	Cleveland Co	3.4	-	-	-	-	-	-	26,500	26,500	54,000	4A	300	F	Reg
R-2707	US 74 Bypass	NC 18 (Fallston Rd) to NC 150 (Cherryville Hwy)	Cleveland Co	1.6	-	-	-	-	-	-	32,700	32,700	54,000	4A	300	F	Reg
R-2707	US 74 Bypass	NC 150 (Cherryville Hwy) to NC 74 (Dixon Blvd)	Cleveland Co	4.1	-	-	-	-	-	-	17,600	17,600	54,000	4A	300	F	Reg

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		
	US 74 Bus (Ellenboro Rd)	Rutherford County to US 74 (Dixon Blvd)	Cleveland Co	1.5	24	2	60	13,000	2,800	3,600	3,600	13,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Warren St)	US 74 (Dixon Blvd) to Thompson St	Shelby	0.8	29	2	60	12,000	3,000	5,000	5,000	12,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Warren St)	Thompson St to Pere St	Shelby	0.4	34	2	60	12,000	5,000	6,000	6,000	12,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Warren St)	Pere St To Morgan St	Shelby	<0.1	48	4	80	20,000	6,000	7,000	7,000	20,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Warren St)	Morgan St to Dekalb St	Shelby	0.3	60	4	80	20,000	3,500	5,000	4,000	20,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Marion St)	Lafayette St to Morgan St	Shelby	0.3	60	4	80	20,000	8,300	6,000	6,000	20,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Marion St)	Morgan St to Martin St	Shelby	0.3	48	2	60	20,000	5,900	8,500	8,500	20,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Marion St)	Martin St to Thompson St	Shelby	0.2	40	2	60	20,000		8,500	8,500	20,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (W Marion St)	Thompson St to US 74(Dixon Blvd)	Shelby	1.0	24	2	60	12,000		8,500	8,500	12,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (E Marion St)	Dekalb St to Dover St	Shelby	0.7	30	2	60	16,000	12,200	13,000	13,000	16,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (E Marion St)	Dover St to NC 150 (Cherryville Rd)	Shelby	0.8	24	2	60	13,000	13,500	14,000	14,000	13,000	ADQ	ADQ	Maj	Sub
CLEV0008-H	US 74 Bus (E Marion St)	NC 150 (Cherryville Rd) to NC 180 (Post Rd)	Shelby	1.5	24	2	60	13,000	13,000	13,000	13,000	16,000	3B	80	Maj	Sub P
	US 74 Bus (E Marion St)	NC 180 (Post Rd) to US 74 (Dixon Blvd)	Shelby	1.5	36	2	60	12,000	11,500	6,000	6,000	12,000	ADQ	ADQ	Maj	Sub
	US 74 Bus (Shelby Rd)	Stoney Point Rd (SR 1001) to WCL Kings Mt	Cleveland Co	1.0	48	4D	80	40,000	11,600	14,000	14,000	40,000	ADQ	ADQ	B	Sub
	US 74 Bus (Shelby Rd)	WCL Kings Mt to Castlewood St	Kings Mtn	0.5	48	4D	80	22,000	12,000	13,000	13,000	22,000	ADQ	ADQ	B	Sub



**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System						Other Modes
					Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	
	<b>US 74 Bus (King St)</b>	Castlewood St to Gaston Co	Kings Mtn	3.6	36	3	60	35	14,000	13,400	10,000	14,000	ADQ	ADQ	Maj	Sub
		NC 226 (Polkville Rd) to School House Rd (SR 1518)	Cleveland Co	6.5	20	2	60	55	11,000	2,200	4,000	11,000	ADQ	ADQ	Maj	Reg
	<b>NC 10 (Casar Rd)</b>	School House Rd (SR 1518) to End C&G (Casar)	Cleveland Co	1.0	36	3	60	35	16,000	2,900	5,000	16,000	ADQ	ADQ	Maj	Reg
	<b>NC 10 (Casar Rd)</b>	End C&G (Casar) to Lincoln Co.	Cleveland Co	7.9	20	2	60	55	11,000	2,000	3,500	11,000	ADQ	ADQ	Maj	Reg
		SC Line to Shoal Creek Church Rd (SR 1130)	Cleveland Co	4.0	24	2	60	55	13,000	5,200	7,500	50,000	4B	150	B	Sta
	<b>NC18 (Lafayette St)</b>	Shoal Creek Church Rd (SR 1130) to NC 150 (College Ave)	Cleveland Co	2.0	24	2	60	55	13,000	8,000	11,000	50,000	4B	110	B	Sta
	<b>NC18 (Lafayette St)</b>	NC 150 (College Ave) to Melrose Dr (SR 1105)	Shelby	0.9	24	2	60	35	12,000	15,800	15,000	20,000	4C	110	B	Sta
	<b>NC18 (Lafayette St)</b>	Melrose Dr (SR 1105) to Morton St (SR 1106)	Shelby	0.5	36	3	60	35	14,000	16,000	17,500	20,000	4C	110	B	Sta
	<b>NC18 (Lafayette St)</b>	Morton St (SR 1106) to S Morgan St	Shelby	0.5	30	2	60	35	12,000	16,800	20,000	20,000	4C	110	B	Sta
	<b>NC18 (Lafayette St)</b>	S Morgan St to East Graham St	Shelby	1.2	60	5	80	35	26,000	17,000	17,000	20,000	4C	110	B	Sta
	<b>NC18 (Lafayette St)</b>	East Graham St to Sumter St	Shelby		60	4	80	35	20,000	17,000	17,000	20,000	4C	111	B	Sta
	<b>NC18 (Lafayette St)</b>	Sumter St to N Grover St (SR 1861)	Shelby	0.5	36	2	60	35	18,000	10,500	10,000	20,000	4C	110	B	Sta
	<b>NC18 (Grover St)</b>	N Lafayette St (SR 1005) to Kenmore St	Shelby	1.2	40	4	80	35	20,000	14,000	14,000	20,000	4C	110	B	Sta
	<b>NC18 (Fallston Rd)</b>	Kenmore St to NCL Shelby	Shelby	1.1	48	4	80	35	20,000	9,000	16,000	20,000	4C	110	B	Sta
	<b>NC18 (Fallston Rd)</b>	NCL Shelby to E Zion Church Rd	Cleveland Co	1.7	52	4	80	45	20,000	7,500	14,000	40,000	4C	110	B	Sta
	<b>NC18 (Fallston Rd)</b>	E Zion Church Rd to Sanders Rd (SR 1824)	Cleveland Co	1.7	24	2	60	55	13,000	12,500	15,000	50,000	4B	150	B	Sta
	<b>NC18 (Fallston Rd)</b>	Sanders Rd (SR 1923) to NC 18 Bypass	Cleveland Co	2.8	24	2	60	55	13,000	8,000	11,000	50,000	4B	150	B	Sta

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classifi- cation	Other Modes	
					Cross- Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
	NC18 (Fallston Rd)	NC 18 Bypass to SCL Fallston	Cleveland Co	0.5	24	2	60	55	13,000	8,000	11,000	11,000	13,000	ADQ	ADQ	Maj	Sta
		SCL Fallston to Beg C&G															
	NC18 (Fallston Rd)	(Fallston)	Fallston	0.4	24	2	60	45	12,500	8,100	13,000	10,000	12,500	ADQ	ADQ	Maj	Sta
		Beg C&G (Fallston) to End C&G															
	NC18 (Fallston Rd)	(Fallston)	Fallston	0.5	36	3	60	35	14,000	7,000	11,500	8,500	14,000	ADQ	ADQ	Maj	Sta
		End C&G (Fallston) to NCL															
	NC18 (Fallston Rd)	Fallston	Fallston	0.9	24	2	60	45	12,500	6,000	10,000	8,000	12,500	ADQ	ADQ	Maj	Sta
	NC18 (Fallston Rd)	NCL Fallston to NC 18 Bypass	Cleveland Co	0.5	24	2	60	45	12,500	6,000	10,000	8,000	12,500	ADQ	ADQ	Maj	Sta
CLEV0002-H	NC18 (Fallston Rd)	NCL Fallston to Lincoln Co.	Cleveland Co	5.9	24	2	60	55	13,000	5,000	6,000	6,000	40,000	4B	150	B	Sta
CLEV0002-H	NC 18 Bypass	NC 18 (Fallston Rd) to NC 18 (Fallston Rd)	Fallston	2.5	-	-	-	-	-	-	-	6,000	40,000	4B	150	B	Sta
	NC 27 (Poe Rd)	NC 10 (Casar Rd) to Lincoln Co.	Cleveland Co	0.7	24	2	60	55	13,000	700	1,100	1,100	13,000	ADQ	ADQ	Maj	Reg
	NC 120 (Brooks Rd)	Rutherford County to US 74 Bus	Cleveland Co	0.1	18	2	60	35	8,500	2,200	3,000	3,000	8,500	ADQ	ADQ	Maj	Reg
	NC150 (Gaffney Rd)	SC Line to SCL Boiling Springs	Cleveland Co	4.3	20	2	60	55	11,000	3,500	9,000	9,000	13,000	2A	60	Maj	Reg
CLEV00032-H		SCL Boiling Springs to Flint Hill															B
CLEV00009-H	NC150 (S Main St)	Church Rd (SR 1148)	Boiling Springs	0.4	22	2	60	35	11,000	6,600	10,000	6,400	12,000	2E	60	Maj	Reg
CLEV00009-H	NC150 (S Main St)	Flint Hill Church Rd (SR 1148) to Stadium Dr	Boiling Springs	0.3	22	2	60	35	11,000	6,600	11,000	7,400	12,000	2E	60	Maj	Reg
CLEV00009-H	NC150 (S Main St)	Stadium Dr to Branch Ave	Boiling Springs	0.1	22	2	60	35	11,000	6,600	14,000	9,100	14,000	3B	80	Maj	Reg
CLEV00009-H	NC150 (S Main St)	Branch Ave to Quinn Cir	Boiling Springs	<0.1	39	2	60	25	12,000	9,400	14,000	9,100	14,000	3B	80	Maj	Reg
CLEV00009-H	NC150 (S Main St)	Quinn Circle to Width Change	Boiling Springs	0.1	50	2	60	25	12,000	9,400	14,000	9,100	14,000	3B	80	Maj	Reg
CLEV00009-H	NC150 (S Main St)	Width Change to W College Ave (SR 1003)	Boiling Springs	<0.1	55	3	60	25	14,000	9,400	14,000	9,100	14,000	3B	80	Maj	Reg
CLEV00010-H	NC150 (E College Ave)	W College Ave (SR 1003) to Fairview St	Boiling Springs	0.2	36	2	60	25	12,000	7,800	15,000	12,000	16,000	3A	80	Maj	Reg

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System						Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	
CLEV00010-H	NC150 (E College Ave)	Fairview St to ECL Boiling Springs	Boiling Springs	0.7	24	60	35	12,000	7,500	15,000	12,000	16,000	3A	80	Maj	Reg B,P
CLEV00004-H	NC150 (E College Ave)	ECL Boiling Springs to Old Boiling Springs Rd (SR 1123)	Cleveland Co	1.5	24	60	55	13,000	9,500	20,000	20,000	35,000	4D	110	B	Reg B,P
CLEV00004-H	NC150 (E College Ave)	Old Boiling Springs Rd (SR 1123) to Beau Rd (SR 2501)	Cleveland Co	1.1	24	60	55	13,000	7,300	20,000	20,000	35,000	4D	110	B	Reg B,P
CLEV00004-H	NC150 (E College Ave)	Beau Rd (SR 2501) to Sam Lattimore Rd (SR 1127)	Cleveland Co	1.0	24	60	55	13,000	9,600	20,000	20,000	35,000	4D	110	B	Reg B,P
CLEV00004-H	NC150 (E College Ave)	Sam Lattimore Rd (SR 1127) to NC 18 (S Lafayette St)	Cleveland Co	1.7	24	60	45	12,500	10,400	20,000	20,000	35,000	4D	110	B	Reg B,P
CLEV00004-H	NC150 (Dekalb St)	NC 18 (S Lafayette St) to SCL Shelby	Cleveland Co	0.2	60	80	45	20,000	11,400	15,000	15,000	20,000	4C	110	B	Reg
CLEV00004-H	NC150 (Dekalb St)	SCL Shelby to S Morgan St (SR 1106)	Shelby	1.1	60	80	35	20,000	12,000	15,000	15,000	20,000	4C	110	B	Reg
CLEV00004-H	NC150 (Dekalb St)	S Morgan St (SR 1106) to US 74	Shelby	0.9	48	80	35	20,000	12,200	16,000	16,000	20,000	4C	110	B	Reg
	NC150 (Dekalb St)	US 74 to US 74 BUS (E Marion St)	Shelby	0.9	48	80	35	20,000	15,000	17,000	17,000	20,000	ADQ	150	B	Reg
	Concurrent with NC150 (Cherryville Rd)	US 74 BUS (E Marion St) to NC 180 (S Post Rd)	Shelby	1.7	24	60	35	12,000	14,000	13,000	13,000	20,000	4B	150	B	Reg P, T
CLEV00003-H	NC150 (Cherryville Rd)	NC 180 (S Post Rd) to Bridge	Cleveland Co	1.2	24	60	55	13,000	13,000	25,000	25,000	40,000	4B	150	B	Reg T
CLEV00003-H	NC150 (Cherryville Rd)	Bridge to Buffalo Church Rd (SR 2069)	Cleveland Co	1.0	24	60	55	13,000	13,500	27,000	27,000	40,000	4B	150	B	Reg T
CLEV00003-H	NC150 (Cherryville Rd)	Buffalo Church Rd (SR 2069) to Old Stubbs Rd (SR 2070)	Cleveland Co	1.3	24	60	55	13,000	13,500	26,000	26,000	40,000	4B	150	B	Reg T
CLEV00003-H	NC150 (Cherryville Rd)	Old Stubbs Rd (SR 2070) to NC 150 Bypass (near Capernium	Cleveland Co	0.8	24	60	55	13,000	13,500	23,700	23,700	40,000	4B	150	B	Reg T
	NC150 (Cherryville Rd)	NC 150 Bypass to ECL Waco	Waco	1.2	24	60	35-45	12,000	12,000	21,000	13,000	12,000	ADQ	ADQ	Maj	Sub T
	NC150 (Cherryville Rd)	ECL Waco to Gaston Co.	Cleveland Co	0.6	24	60	55	13,000	13,500	20,000	12,000	13,000	ADQ	ADQ	Maj	Sub T
CLEV00003-H	NC 150 Bypass	NC 150 (Cherryville Hwy) to Gaston Co	Cleveland Co	2.0	-	-	-	-	-	-	10,000	40,000	4B	150	B	Reg

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System						CTP Classification	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		
CLEV00033-H	NC 161 (York Rd)	SC Line to Ferguson Dr (SR 2354)	Cleveland Co	2.5	24	2	60	55	13,000	7,000	7,000	13,000	2A	60	Maj	Reg B
CLEV00033-H	NC 161 (York Rd)	Ferguson Dr (SR 2354) to SCL Kings Mountain	Cleveland Co	1.2	24	2	60	55	13,000	7,400	7,400	13,000	2C	50	Maj	Reg B
CLEV00033-H	NC 161 (York Rd)	SCL Kings Mountain to Lake Montonia Rd (SR 2292)	Kings Mtn	0.5	24	2	60	45	12,000	7,800	11,900	12,000	2C	50	Maj	Reg B
CLEV00011-H	NC 161 (York Rd)	Lake Montonia Rd (SR 2292) to I-85	Kings Mtn	0.5	48	4	80	45	20,000	11,000	14,400	16,000	3A	ADQ	Maj	Reg B
CLEV00011-H	NC 161 (York Rd)	I-85 to US 74 BUS (E King St)	Kings Mtn	1.0	40	3	60	35	14,000	12,000	12,000	14,000	3B	80	Maj	Reg B, P
	NC 161 (Cleveland Ave)	US 74 BUS (E King St) to Park Dr	Kings Mtn	0.2	36	3	60	35	14,000	11,000	10,000	14,000	ADQ	ADQ	Maj	Reg
	NC 161 (Cleveland Ave)	Park Dr to Lynn St	Kings Mtn	0.4	48	4	80	35	20,000	11,000	10,000	20,000	ADQ	ADQ	Maj	Reg
	NC 161 (Cleveland Ave)	Lynn St to Linwood Rd	Kings Mtn	0.2	48	4	80	35	20,000	11,000	15,000	20,000	ADQ	ADQ	Maj	Reg
	NC 161 (Cleveland Ave)	Linwood Rd to NCL Kings Mountain	Kings Mtn	0.4	24	2	60	35	12,000	7,500	12,500	12,000	ADQ	ADQ	Maj	Reg
	NC 161 (Cleveland Ave)	NCL Kings Mountain to Gaston Co.	Cleveland Co	0.4	24	2	60	55	13,000	7,500	12,500	13,000	ADQ	ADQ	Maj	Reg
CLEV00014-H	NC 161 - NC 216 Connector	NC 161 (Cleveland Ave) to NC 216 (Piedmont Ave)	Cleveland Co	0.7	-	-	-	-	-	-	5,500	12,000	2C	50	Min	Sub
CLEV00005-H	NC 180 (Post Rd)	NC 18 (S Lafayette St) to Emerald Ln (SR 2367)	Cleveland Co	1.1	20	2	60	45	11,000	3,500	9,500	40,000	4B	150	B	Sub
CLEV00005-H	NC 180 (Post Rd)	Emerald Ln (SR 2367) to NC 198 (Blacksburg Rd)	Cleveland Co	1.6	20	2	60	45	11,000	5,000	7,500	40,000	4B	150	B	Sub
CLEV00005-H	NC 180 (Post Rd)	NC 198 (Blacksburg Rd) to SCL Patterson Springs	Cleveland Co	0.4	20	2	60	45	11,000	8,500	11,000	40,000	4B	150	B	Sub
CLEV00005-H	NC 180 (Post Rd)	SCL Patterson Springs to NCL Patterson Springs	Cleveland Co	1.1	20	2	60	45	11,000	10,800	13,500	40,000	4B	150	B	Sub
CLEV00005-H	NC 180 (Post Rd)	NCL Patterson Springs to NC 226 (Earl Rd)	Cleveland Co	1.0	20	2	60	45	11,000	13,200	17,000	40,000	4B	150	B	Sub
U-2221	NC 180 (Post Rd)	NC 226 (Earl Rd) to Taylor Rd (SR 2200)	Cleveland Co	0.9	24	2	60	45	13,000	10,000	19,000	40,000	4B	150	B	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System						Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	
	NC 180 (Post Rd)	Shelby Taylor Rd (SR 2200) to SCL	Cleveland Co	0.4	60	5	45	26,000	12,000	20,000	20,000	26,000	ADQ	ADQ	B	Sub
	NC 180 (Post Rd)	SCL Shelby to Elizabeth Ave (SR 2052)	Shelby	1.7	60	5	45	26,000	18,000	20,000	20,000	26,000	ADQ	ADQ	B	Sub
U-2221	NC 180 (Post Rd)	Elizabeth Ave (SR 2052) to CL	Shelby	0.2	22	2	45	11,000	16,500	15,000	15,000	26,000	4B	150	B	Sub
U-2221	NC 180 (Post Rd)	CL Shelby to NC 150 (Cherryville Rd)	Cleveland Co	1.3	22	2	45	11,000	16,000	15,000	15,000	26,000	4B	150	B	Sub
CLEV00005-H	NC 180 (Post Rd)	NC 150 (Cherryville Rd) to Centerfield Dr (SR 1979)	Cleveland Co	1.1	22	2	45	11,000	13,000	13,000	13,000	26,000	4B	150	B	Sub
CLEV00005-H	NC 180 (Post Rd)	Centerfield Dr (SR 1979) to NC 18 (Fallston Rd)	Cleveland Co	1.2	22	2	45	11,000	10,000	12,000	12,000	26,000	4B	150	B	Sub
CLEV00034-H	NC 182 (Stage Coach Trail)	NC 226 (Polkville Rd) to ECL	Cleveland Co	0.8	24	2	35	12,000	2,400	3,000	3,000	12,000	2C	50	Maj	Reg B
CLEV00034-H	NC 182 (Stage Coach Trail)	ECL Polkville to WCL Lawndale	Cleveland Co	3.5	24	2	55	13,000	2,700	3,500	3,500	13,000	2A	60	Maj	Reg B
CLEV00034-H	NC 182 (Stage Coach Trail)	WCL Lawndale to ECL Lawndale	Lawndale	1.5	32	2	25-35	12,000	5,000	8,000	8,000	12,000	2E	60	Maj	Reg B,P
CLEV00034-H	NC 182 (Stage Coach Trail)	ECL Lawndale to WCL Fallston	Cleveland Co	2.0	24	2	55	13,000	5,500	8,600	8,600	13,000	2A	60	Maj	Reg B
CLEV00034-H	NC 182 (Stage Coach Trail)	WCL Fallston to Spurling Rd (SR 1649)	Fallston	0.4	24	2	45	12,000	5,500	8,000	8,000	12,000	2E	60	Maj	Reg B
CLEV00034-H	NC 182 (Stage Coach Trail)	Spurling Rd (SR 1649) to Fallston-Waco Rd (SR 1001)	Fallston	0.4	36	2	35	12,000	5,200	7,300	7,300	12,000	2E	60	Maj	Reg B
CLEV00034-H	NC 182 (Stage Coach Trail)	Fallston-Waco Rd (SR 1001) to ECL Fallston	Fallston	0.3	20	2	45	10,500	5,500	8,800	8,800	10,500	2E	60	Maj	Reg B
CLEV00034-H	NC 182 (Stage Coach Trail)	ECL Fallston to Lincoln Co.	Cleveland Co	1.9	20	2	55	11,000	7,000	11,000	11,000	13,000	2A	60	Maj	Reg B
NC 198 (Blacksburg Rd)	NC 198	SC Line to ECL Earl	Cleveland Co	1.7	20	2	55	11,000	2,300	4,000	4,000	11,000	ADQ	ADQ	Maj	Reg
NC 198 (Blacksburg Rd)	NC 198	SCL Earl to NCL Earl	Earl	1.1	20	2	35	9,500	5,100	7,600	7,600	9,500	ADQ	ADQ	Maj	Reg
NC 198 (Blacksburg Rd)	NC 198	NCL Earl to NC 180 (S Post Rd)	Cleveland Co	1.5	20	2	45	11,000	5,100	7,200	7,200	11,000	ADQ	ADQ	Maj	Reg



**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes		
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)	
	NC 216 (Battleground Rd)	SC Line to I-85	Cleveland Co	1.0	20	2	60	55	11,000	1,900	5,000	5,000	11,000	ADQ	ADQ	Maj	Reg	
CLEV0012-H	NC 216 (Battleground Rd)	I-85 to US 29 (S Battleground Ave)	Cleveland Co	0.3	20	2	60	55	11,000	2,500	19,500	19,500	37,700	4C	110	B	Reg	
	NC 216 (Battleground Rd)	US 29 (S Battleground Ave) to SCL Kings Mountain	Cleveland Co	2.9	22	2	60	55	12,000	7,800	12,400	12,400	12,000	ADQ	ADQ	Maj	Reg	
	NC 216 (Battleground Rd)	SCL Kings Mountain to Quarry Rd	Kings Mtn	0.8	24	2	60	45	12,000	8,000	10,000	10,000	12,000	ADQ	ADQ	Maj	Reg	
	NC 216 (Battleground Rd)	Quarry Rd to US 74 BUS (W King St)	Kings Mtn	0.9	24	2	60	35	12,000	7,100	9,000	9,000	12,000	ADQ	ADQ	Maj	Reg	
	NC 216 (Battleground Rd)	US 74 BUS (W King St) to Rail Road	Kings Mtn	0.4	30	2	60	35	12,000	4,800	7,000	7,000	12,000	ADQ	ADQ	Maj	Reg	
	NC 216 (N Piedmont Ave)	Rail Road to Begin 4 Lane	Kings Mtn	0.2	32	2	60	35	12,000	4,800	7,000	7,000	12,000	ADQ	ADQ	Maj	Reg	
CLEV0013-H	NC 216 (N Piedmont Ave)	Begin 4 Lane to End 4 Lane	Kings Mtn	0.3	52	4	80	35	20,000	6,000	10,000	10,000	20,000	4C	110	B	Reg	
CLEV0013-H	NC 216 (N Piedmont Ave)	End 4 Lane to Fairview St	Kings Mtn	0.2	32	2	60	35	12,000	8,400	11,800	11,500	24,000	4C	110	B	Reg	
CLEV0013-H	NC 216 (N Piedmont Ave)	Fairview St to NCL Kings Mountain	Kings Mtn	0.5	24	2	60	35	12,000	8,400	11,800	11,500	24,000	4C	110	B	Reg	
CLEV0013-H	NC 216 (N Piedmont Ave)	NCL Kings Mountain to Chestnut Ridge Rd (SR 2020)	Cleveland Co	0.1	24	2	60	35	12,000	8,400	11,800	10,000	24,000	4B	150	B	Reg	
CLEV0013-H	NC 216 (N Piedmont Ave)	Chestnut Ridge Rd (SR 2020) to Goforth Rd (SR 2014)	Cleveland Co	1.6	24	2	60	45	13,000	8,000	11,000	11,000	24,000	4B	150	B	Reg	
	NC 216 (N Piedmont Ave)	Goforth Rd (SR 2014) to St. Lukes Church Rd (SR 2008)	Cleveland Co	1.7	24	2	60	55	13,000	6,000	11,500	11,500	13,000	ADQ	ADQ	Maj	Reg	
	NC 216 (N Piedmont Ave)	St. Lukes Church Rd (SR 2008) to Castle Ct (SR 2666)	Cleveland Co	1.0	24	2	60	55	13,000	4,100	9,500	9,500	13,000	ADQ	ADQ	Maj	Reg	
	NC 216 (N Piedmont Ave)	Castle Ct (SR 2666) to Gaston Co.	Cleveland Co	1.2	24	2	60	55	13,000	4,100	9,500	9,500	13,000	ADQ	ADQ	Maj	Reg	

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
	NC 226 (Cleveland Ave)	US 29 (M H Camp Hwy) to CL Grover	Grover	1.4	24	2	25-35	12,000	6,500	9,000	9,000	12,000	ADQ	ADQ	Maj	Reg	
CLEV00015-H	NC 226 (Cleveland Ave)	CL Grover to SCL Patterson Springs	Cleveland Co	4.2	20	2	55	11,000	6,100	9,500	9,500	20,000	3A	80	Maj	Reg	
CLEV00015-H	NC 226 (Cleveland Ave)	SCL Patterson Springs to NC 180 (S Post Rd)	P. Springs	0.5	20	2	45	11,000	7,800	9,500	9,500	16,000	3A	80	Maj	Reg	
		Concurrent with NC 180 (Post Rd) to SCL															
CLEV00006-H	NC 226 (Earl Rd)	NC 180 (S Post Rd) to SCL Shelby	Cleveland Co	1.4	20	2	45	11,000	5,000	9,000	9,000	40,000	4C	110	B	Reg	
CLEV00006-H	NC 226 (Earl Rd)	SCL Shelby to US 74 (E Dixon Blvd)	Shelby	0.8	24	2	45	13,000	10,500	14,000	14,000	22,000	4C	110	B	Reg	P
		Concurrent with US 74 (Dixon Blvd) to CL															
CLEV00006-H	NC 226 (Polkville Rd)	US 74 (W Dixon Blvd) to CL Shelby	Shelby	0.8	24	2	35	12,000	15,000	16,500	16,500	22,000	4C	110	B	Reg	
CLEV00006-H	NC 226 (Polkville Rd)	CL Shelby to Chatfield Rd (SR 1343)	Cleveland Co	1.1	24	2	55	12,000	11,000	16,500	16,500	40,000	4C	110	B	Reg	
CLEV00006-H	NC 226 (Polkville Rd)	Chatfield Rd (SR 1343) to W Zion Church Rd (SR 1337)	Cleveland Co	1.9	24	2	55	13,000	9,000	16,000	16,000	40,000	4C	110	B	Reg	
CLEV00035-H	NC 226 (Polkville Rd)	W Zion Church Rd (SR 1337) to Yates Rd (SR 1821)	Cleveland Co	2.5	24	2	55	13,000	6,000	11,500	11,500	13,000	2A	60	Maj	Reg	
CLEV00035-H	NC 226 (Polkville Rd)	Yates Rd (SR 1821) to SCL Polkville	Cleveland Co	3.5	24	2	55	13,000	5,000	7,000	7,000	13,000	2A	60	Maj	Reg	
CLEV00035-H	NC 226 (Polkville Rd)	SCL Polkville to Beg C&G (Polkville)	Polkville	0.4	24	2	45	13,000	5,000	7,000	7,000	13,000	2C	50	Maj	Reg	
CLEV00035-H	NC 226 (Polkville Rd)	Beg C&G (Polkville) to NC 182 (W Stage Coach Trail)	Polkville	0.4	40	3	45	14,000	5,000	7,000	7,000	14,000	3A	60	Maj	Reg	
CLEV00035-H	NC 226 (Polkville Rd)	NC 182 (West Stage Coach Trail) to End C&G (Polkville)	Polkville	0.4	40	3	45	14,000	4,200	6,100	6,100	14,000	3A	60	Maj	Reg	B
CLEV00035-H	NC 226 (Polkville Rd)	End C&G (Polkville) to Hollis Rd (SR 1376)	Polkville	0.2	24	2	45	13,000	2,800	3,500	3,500	13,000	ADQ	ADQ	Maj	Reg	B
	NC 226 (Polkville Rd)	Hollis Rd (SR 1376) to NCL Polkville	Polkville	0.1	24	2	45	13,000	2,800	3,500	3,500	13,000	ADQ	ADQ	Maj	Reg	
	NC 226 (Polkville Rd)	NCL Polkville to Mt Zion Church Rd (SR 1529)	Cleveland Co	3.7	24	2	55	13,000	2,000	3,500	3,500	13,000	ADQ	ADQ	Maj	Reg	
	NC 226 (Polkville Rd)	Mt Zion Church Rd (SR 1529) to Rutherford Co.	Cleveland Co	1.4	24	2	55	13,000	1,400	1,500	1,500	13,000	ADQ	ADQ	Maj	Reg	



**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System						Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	
	Bethlehem Rd (SR 2245)	NC 216 (Battleground Ave) to Dixon School Rd (SR 2283)	Cleveland Co	1.2	20	2	55	11,000	1,000	9,000	9,000	11,000	ADQ	ADQ	Min	Sub
	Bethlehem Rd (SR 2245)	Dixon School Rd (SR 2283) to SC Line	Cleveland Co	2.5	18	2	55	9,000	2,000	9,000	9,000	9,000	ADQ	ADQ	Min	Sub
	Boiling Springs W Bypass (Holly Hill Rd, SR 1149)	NC 150 (S Main St) to WCL Boiling Springs	Boiling Springs	0.2	18	2	35	8,000	600	1,300	2,300	8,000	ADQ	ADQ	Min	Sub
	Boiling Springs W Bypass (Holly Hill Rd, SR 1149)	WCL Boiling Springs to Relocated Clyde Wallace Rd	Cleveland Co	0.1	18	2	55	9,000	600	1,300	2,300	9,000	ADQ	ADQ	Min	Sub
CLEV0017-H	Boiling Springs W Bypass (Relocated Clyde Wallace Rd, S)	Holly Hill Rd (SR 1149) to existing Clyde Wallace Rd (SR 1196)	Cleveland Co	0.2	-	-	-	-	-	-	2,300	13,000	2B	ADQ	Min	Sub
CLEV0017-H	Boiling Springs W Bypass (Clyde Wallace Rd)	Relocated Clyde Wallace Rd (south) to relocated Clyde Wallace Rd (north)	Cleveland Co	0.2	18	2	55	9,000	200	1,200	2,300	13,000	2B	ADQ	Min	Sub
CLEV0017-H	Boiling Springs W Bypass (Relocated Clyde Wallace Rd, N)	Existing Clyde Wallace Rd (SR 1196) to College Farm Rd (SR 1195)	Boiling Springs	0.1	-	-	-	-	-	-	2,300	12,500	2B	ADQ	Min	Sub
	Boiling Springs W Bypass (Rockford Rd, SR 1194)	College Farm Rd (SR 1195) to W Homestead Ave Extn	Boiling Springs	0.6	18	2	35	8,500	700	1,500	2,800	8,500	ADQ	ADQ	Min	Sub
CLEV0017-H	W Homestead Ave Extension	Rockford Rd (SR 1194) to Cliffside Rd (SR 1003)	Boiling Springs	0.9	-	-	-	-	-	-	2,800	12,500	2B	60	Min	Sub
	Borders Rd (SR 2047)	US 74 Bus (Marion Ave) to ECL Shelby	Shelby	0.6	22	2	35	11,000	4,400	8,500	8,500	11,000	ADQ	ADQ	Min	Sub
	Borders Rd (SR 2047)	ECL Shelby to Oak Grove Rd (SR 2033)	Cleveland Co	0.6	22	2	55	12,000	4,400	8,500	8,500	11,000	ADQ	ADQ	Min	Sub
	Buffalo St	N Washington St to NC 18 (E Grover St)	Shelby	1.3	18	2	35	8,000	500	800	800	8,000	ADQ	ADQ	Min	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
	Caleb Rd (SR 2201)	US 74 (Dixon Blvd) to Joes Lake Rd (SR 2202)	Cleveland Co	1.2	18	2	60	55	9,000	6,000	6,000	9,000	ADQ	ADQ	Min	Sub	
	Caleb Rd (SR 2201)	Joes Lake Rd (SR 2202) to Pleasant Hill Church Rd (SR 1103)	Cleveland Co	0.7	20	2	60	55	11,000	1,500	1,500	11,000	ADQ	ADQ	Min	Sub	
	Cansler St (SR 2025)	NC 216 (Piedmont Ave) to Barnett St															
	Cansler St (SR 2025)	Barnett St	Cleveland Co	0.8	24	2	60	55	13,000	7,000	7,000	13,000	ADQ	ADQ	Min	Sub	
CLEV0037-H		Barnett St to W Gold St	Kings Mtn	1.2	48	4	80	35	22,000	4,600	7,500	16,000	3B	80	Min	Sub	B, P
	Casar Lawndale Rd (SR 1004)	NC 10 (Casar Rd) to SCL Casar	Casar	0.8	20	2	60	35	9,500	1,500	2,300	9,500	ADQ	ADQ	Min	Sub	
	Casar Lawndale Rd (SR 1004)	SCL Casar to Kistler Rd (SR 1514)	Cleveland Co	3.6	20	2	60	55	11,000	1,300	2,100	11,000	ADQ	ADQ	Min	Sub	
	Casar Lawndale Rd (SR 1004)	Kistler Rd (SR 1514) to NCL Lawndale	Cleveland Co	3.0	20	2	60	55	11,000	2,300	6,000	11,000	ADQ	ADQ	Min	Sub	
	Casar Lawndale Rd (SR 1004)	NCL Lawndale to NC 182 (E Main St)	Lawndale	0.5	20	2	60	35	9,500	3,500	4,600	9,500	ADQ	ADQ	Min	Sub	
CLEV0018-H	Charles Rd (SR 1253)	NC 150 (College Ave) to Beg C&G (Shelby)	Shelby	1.3	24	2	60	45	12,000	3,000	13,000	16,000	3B	80	Min	Sub	
	Charles Rd (SR 1253)	Beg C&G (Shelby) to US 74 (Dixon Blvd)	Shelby	1.0	36	3	60	35	14,000	7,000	15,000	14,000	ADQ	ADQ	Min	Sub	
	Charles Rd (SR 1253)	US 74 (Dixon Blvd) to Warren St	Shelby	0.1	20	2	60	35	8,000	1,700	3,000	8,000	ADQ	ADQ	Min	Sub	
CLEV0019-H	Charles Rd Ext	NC 150 (College Rd ) to NC 18 (S Lafayette St)	Cleveland Co	1.0	-	-	-	-	-	-	5,000	12,000	2A	60	Min	Sub	
	Charlie Elliott Rd (SR 1363)	Rehobeth Church Rd (SR 1350) to NC 226 (Polkville Rd)	Cleveland Co	2.2	18	2	60	55	9,000	800	1,200	9,000	ADQ	ADQ	Min	Sub	
	Chestnut Ridge Rd (SR 2020)	NC 216 (Piedmont Ave) to Gaston Co.	Cleveland Co	0.4	18	2	60	35	8,500	1,000	5,000	8,500	ADQ	ADQ	Min	Sub	



**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System							Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	
CLEV0038-H	Cliffside Rd (SR 1003)	WCL Boiling Springs to McKinney Rd	Cleveland Co	1.3	20	2	60	55	11,000	4,500	10,000	13,000	2A	60	Min	Sub
	Cliffside Rd (SR 1003)	McKinney Rd (SR 1184) to Goodes Grove Ch Rd (SR 1191)	Cleveland Co	2.0	20	2	60	55	11,000	3,000	5,000	11,000	ADQ	ADQ	Min	Sub
	Cliffside Rd (SR 1003)	Goodes Grove Ch Rd (SR 1191) to Rutherford County	Cleveland Co	0.9	20	2	60	55	11,000	1,700	2,200	11,000	ADQ	ADQ	Min	Sub
	Clintland Rd (SR 1908)	Fallston-Waco Rd (SR 1001) to Gaston Co.	Cleveland Co	1.0	18	2	60	55	9,000	1,500	5,500	9,000	ADQ	ADQ	Min	Sub
CLEV0039-H	Country Club Rd (SR 2052)	Kings Rd (SR 2050) to US 74 Bus (E Marion St)	Shelby	1.1	18	2	60	35	8,000	2,700	5,200	12,000	2C	50	Min	Sub
	Crow Rd (SR 2224, 2218)	NC 18 (Lafayette St) to SCL Earl	Cleveland Co	2.4	20	2	60	55	11,000	800	1,800	11,000	ADQ	ADQ	Min	Sub
	Crow Rd (SR 2218)	SCL Earl to Bettis Rd (SR 2225)	Earl	0.5	20	2	60	35	10,500	800	1,800	10,500	ADQ	ADQ	Min	Sub
CLEV0020-H	Crow Rd Ext	Bettis Rd (SR 2225) to NC 198 (Blacksburg Rd)	Earl	< 0.1	-	-	-	-	-	-	2,000	12,500	2C	50	Min	Sub
	Davis Rd (SR 1107)	NC 18 (S Lafayette St) to Ellis Rd (SR 1128)	Cleveland Co	1.5	18	2	60	55	9,000	2,500	3,000	9,000	ADQ	ADQ	Min	Sub
	Davis Rd (SR 1107)	Ellis Rd (SR 1128) to NC 198 (Blacksburg Rd)	Cleveland Co	0.9	18	2	60	55	9,000	3,500	3,000	9,000	ADQ	ADQ	Min	Sub
	Dellinger Rd (SR 1115)	Charles Rd (SR 1253) to NC 18 (S Lafayette St)	Shelby	0.9	20	2	60	35	9,500	2,300	1,500	9,500	ADQ	ADQ	Min	Sub
	Dixon School Rd (SR 2283)	NC 216 (Battleground Ave) to Bethlehem Rd (SR 2245)	Cleveland Co	2.1	18	2	60	55	9,000	1,000	3,200	9,000	ADQ	ADQ	Min	Sub
	Dixon School Rd (SR 2283)	Bethlehem Rd (SR 2245) to I-85	Cleveland Co	1.1	20	2	60	55	11,000	3,000	3,500	11,000	ADQ	ADQ	Min	Sub
	Dixon School Rd (SR 2283)	I-85 to Kings Mountain Blvd (SR 2487)	Cleveland Co	0.4	18	2	60	55	9,000	2,500	7,000	40,000	ADQ	ADQ	Min	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
	Double Shoals Rd (SR 1809)	NC 226 (Polkville Rd) to N Lafayette St SR 1005)	Cleveland Co	3.3	20	2	60	55	11,000	2,000	4,000	4,000	11,000	ADQ	ADQ	Min	Sub	
	Double Shoals Rd (SR 1005, 1808)	N Lafayette St SR 1005) to NC 18 (Fallston Rd)	Cleveland Co	2.5	20	2	60	55	11,000	3,500	5,500	5,500	11,000	ADQ	ADQ	Min	Sub	
	E Gold St	NC 216 (Battleground Rd) to NC 161 (York Rd)	Kings Mtn	0.4	18	2	60	35	8,000	3,700	4,300	6,000	8,000	ADQ	ADQ	Min	Sub	
CLEV0023-H	E Gold St Extension	NC 161 (York Rd) to US 74 Bus (King St)	Kings Mtn	0.1	-	-	-	-	-	-	-	5,000	12,000	2C	50	Min	Sub	
CLEV0040-H	E Homestead Ave (SR 1158)	N Main St (SR 1161) to Skinner Rd (SR 1159)	Boiling Springs	1.5	20	2	60	35	9,500	3,200	7,000	4,800	12,000	2C	50	Min	Sub	
	E Main St (SR 1323)	Artee Rd (SR 1314) to New House Rd (SR 1351)	Lattimore	0.2	18	2	60	25	8,000	900	1,200	1,200	8,000	ADQ	ADQ	Min	Sub	
	E Zion Church Rd (SR 1337)	N Lafayette St (SR 1005) to McBrayer-Springs Rd (SR 1827)	Cleveland Co	1.1	20	2	60	55	11,000	2,700	6,500	6,500	11,000	ADQ	ADQ	Min	Sub	
	E Zion Church Rd (SR 1337)	McBrayer-Springs Rd (SR 1827) to NC 18 (Fallston Rd)	Cleveland Co	1.2	20	2	60	55	11,000	2,200	3,400	2,500	11,000	ADQ	ADQ	Min	Sub	
	Elizabeth Ave (SR 2052)	US 74 Bus (E Marion St) to NC 180 (Post Rd)	Shelby	0.7	18	2	60	35	8,000	4,000	7,500	6,500	8,000	ADQ	ADQ	Min	Sub	B,P
CLEV0021-H	Elizabeth Ave (SR 2052)	NC 180 (Post Rd) to Oak Grove Rd (SR 2033)	Cleveland Co	0.7	24	2	60	45	12,500	7,500	9,000	12,000	16,000	3B	80	Min	Sub	B,P
	Ellis Rd (SR 1128)	Davis Rd (SR 1107) to End	Cleveland Co	1.2	18	2	60	55	9,000	1,500	2,300	2,500	9,000	ADQ	ADQ	Min	Sub	
CLEV0022-H	Ellis Rd Reloc	End to Christopher Rd (SR 1105)	Cleveland Co	0.3	-	-	-	-	-	-	-	2,500	13,000	2B	60	Min	Sub	
	Fallston-Waco Rd (SR 1001)	NC 182 (E Main St) to SCL Fallston	Fallston	0.4	20	2	60	35	9,500	3,600	5,800	5,800	9,500	ADQ	ADQ	Min	Sub	B,P

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System							Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	
	Fallston-Waco Rd (SR 1001)	SCL Fallston to NCL Waco	Cleveland Co	5.4	20	2	55	11,000	6,000	6,000	11,000	ADQ	ADQ	Min	Sub	B,P
	Fallston-Waco Rd (SR 1001)	NCL Waco to Jess Hord Rd (SR 1912)	Waco	0.2	20	2	35	9,500	7,600	7,600	9,500	ADQ	ADQ	Min	Sub	B,P
	Fallston-Waco Rd (SR 1001)	Jess Hord Rd (SR 1912) to NC 150 (Cherryville Rd)	Waco	0.3	28	2	35	12,000	6,900	6,900	12,000	ADQ	ADQ	Min	Sub	B,P
	Flint Hill Church Rd (SR 1148)	Patrick Ave (SR 1149) to NC 150 (S Main St)	Boiling Springs	0.6	18	2	35	8,000	3,000	2,600	8,000	ADQ	ADQ	Min	Sub	B,P
	Forest Hill Dr	Beaumont Ave to Peach St	Shelby	0.6	18	2	35	8,000	6,000	6,000	8,000	ADQ	ADQ	Min	Sub	P
	Gold St	US 74 (Dixon Blvd) to US 74 Bus (W Warren St)	Shelby	0.3	18	2	35	8,000	800*	800*	8,000	ADQ	ADQ	Min	Sub	
	E Graham St (SR 2050)	Beaumont Ave to Kings Rd (SR 2050)	Shelby	0.2	18	2	25	8,000	7,500	5,900	8,000	ADQ	ADQ	Min	Sub	
	E Graham St (SR 2050)	Kings Rd (SR 2050) to NC 150 (Dekalb St)	Shelby	0.3	36	2	35	12,000	9,700	8,600	12,000	ADQ	ADQ	Min	Sub	
	E Graham St (SR 2050)	NC 150 (Dekalb St) to NC 18 (Lafayette St)	Shelby	0.2	60	4	20	18,000	16,000	11,800	18,000	ADQ	ADQ	Min	Sub	
	E Graham St (SR 2050)	NC 18 (Lafayette St) to Morgan St	Shelby	0.1	60	4	20	18,000	2,500	2,500	18,000	ADQ	ADQ	Min	Sub	
	Joel Lake Rd (SR 2202)	NC 226 (Earl Rd) to Caleb Rd (SR 2201)	Cleveland Co	1.2	18	2	55	9,000	1,700	2,000	9,000	ADQ	ADQ	Min	Sub	
CLEV0007-H	Kings Mountain Blvd (SR 2487)	Shelby Rd (US 74 Bus) to Phifer Rd (SR 2263)	Kings Mtn	1.0	24	2	35	12,000	11,000	11,000	24,000	4B	150	B	Sub	
CLEV0007-H	Kings Mountain Blvd (SR 2487)	Phifer Rd (SR 2256) to NC 216 (Battleground Ave)	Cleveland Co	1.0	24	2	55	13,000	8,100	11,000	40,000	4B	150	B	Sub	
CLEV0007-H	Kings Mountain Blvd (SR 2487)	NC 216 (Battleground Ave) to Dixon School Rd (SR 2283)	Cleveland Co	0.6	36	2	55	13,000	4,800	7,000	40,000	4B	150	B	Sub	
CLEV0041-H	Kings Rd (SR 2049)	NC 180 (Post Rd) to County Home Rd (SR 2049)	Shelby	0.3	20	2	35	9,500	8,500	8,500	12,000	2C	50	Min	Sub	

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System						CTP Classification	Tier	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
CLEV0041-H	Kings Rd (SR 2050)	County Home Rd (SR 2049) to Beg C&G	Shelby	1.5	18	2	35	8,000	3,900	4,700	4,700	12,000	2C	50	Min	Sub	
CLEV0041-H	Kings Rd (SR 2050)	Beg C&G to End C&G	Shelby	0.4	24	2	35	12,000	1,000	1,900	2,700	12,000	2C	50	Min	Sub	
CLEV0041-H	Kings Rd (SR 2050)	End C&G to Graham St (SR 2050)	Shelby	0.4	20	2	35	9,500	1,000	1,900	2,700	12,000	2C	50	Min	Sub	
	Kingston Rd (SR 1341)	W Zion Church Rd (SR 1337) to NCL Kingstown	Kingstown	1.7	18	2	35	8,000	800	1,000	1,000	8,000	ADQ	ADQ	Min	Sub	
	Kingston Rd (SR 1341)	NCL Kingstown to Rehobeth Church Rd (SR 1350)	Cleveland Co	0.2	20	2	60	55	11,000	800	1,000	11,000	ADQ	ADQ	Min	Sub	
	Lake Montonia Rd (SR 2292)	NC 161 to Gaston Co	Cleveland Co	1.1	18	2	45	8,500	2,500	5,500	5,500	8,500	ADQ	ADQ	Min	Sub	B
	Lattimore Rd (SR 1168)	Peachtree Rd (SR 1162) to WCL Lattimore	Lattimore	0.3	18	2	35	8,000	900	1,200	1,200	8,000	ADQ	ADQ	Min	Sub	
	Lattimore Rd (SR 1168)	WCL Lattimore to NCL Mooresboro	Cleveland Co	1.5	18	2	60	55	9,000	900	1,200	9,000	ADQ	ADQ	Min	Sub	
	Lattimore Rd (SR 1168)	NCL Mooresboro to US 74 (Dixon Blvd)	Moores-boro	0.5	18	2	60	35	8,000	900	1,200	8,000	ADQ	ADQ	Min	Sub	
	Lavender Rd (SR 2226)	NC 226 (Cleveland Ave) to NC 198 (Blacksburg Rd)	Cleveland Co	4.5	18	2	45	9,000	1,900	5,700	5,700	9,000	ADQ	ADQ	Min	Sub	
	Long Branch Rd (SR 2238)	US 29 (Battleground Ave) to US 74 (Dixon Blvd)	Cleveland Co	6.2	18	2	55	9,000	2,500	3,500	3,500	9,000	ADQ	ADQ	Min	Sub	
	Margrace Rd (SR 2263)	NC 216 (Battleground Ave) to SCL Kings Mt	Kings Mtn	1.0	18	2	35	8,000	4,900	7,800	7,800	8,000	ADQ	ADQ	Min	Sub	
	Margrace Rd (SR 2263)	SCL Kings Mt to Dixon School Rd (SR 2487)	Cleveland Co	0.7	18	2	60	55	9,000	4,900	7,800	9,000	ADQ	ADQ	Min	Sub	
	Margrace Rd (SR 2263)	Dixon School Rd (SR 2487) to Bethlehem Rd (SR 2245)	Cleveland Co	0.7	18	2	60	55	9,000	3,800	5,600	9,000	ADQ	ADQ	Min	Sub	
	Margrace Rd (SR 2263)	Bethlehem Rd (SR 2245) to US 29/NC 216 (Battleground Ave)	Cleveland Co	1.2	18	2	60	55	9,000	1,800	4,200	9,000	ADQ	ADQ	Min	Sub	

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System						CTP Classification	Tier	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
	Marys Grove Church Rd (SR 2002, 2008)	St. Luke Church Rd (SR 2008) to Tobe Bridge Rd (SR 2002)	Cleveland Co	1.8	18	2	60	55	9,000	900	1,700	1,700	9,000	ADQ	ADQ	Min	Sub
	Marys Grove Church Rd (SR)	Tobe Bridge Rd (SR 2002) to Gaston Co.	Cleveland Co	1.6	18	2	60	45	9,000	1,000	4,000	4,000	9,000	ADQ	ADQ	Min	Sub
CLEV0024-H	McBrayer-Homestead Rd (SR 1162)	NCL Boiling Springs to Whitaker Rd (SR 1164)	Cleveland Co	0.2	20	2	60	45	11,000	6,200	12,000	11,000	16,000	3A	60	Min	Sub
CLEV0042-H	McBrayer-Homestead Rd (SR 1162)	Whitaker Rd (SR 1164) to Pleasant Ridge Ch Rd (SR 1161)	Cleveland Co	0.8	20	2	60	45	11,000	5,000	10,000	9,000	13,000	2B	60	Min	Sub
CLEV0042-H	McBrayer-Homestead Rd (SR 1162)	Pleasant Ridge Ch Rd (SR 1161) to US 74	Cleveland Co	1.3	18	2	60	55	9,000	1,000	8,000	8,000	13,000	2A	60	Min	Sub
	Metcalf Rd (SR 1850)	W Zion Church Rd (SR 1337) to NCL Shelby	Cleveland Co	2.9	20	2	60	55	11,000	3,500	6,400	6,500	11,000	ADQ	ADQ	Min	Sub
	Metcalf Rd (SR 1850)	NCL Shelby to N Lafayette St (SR 1005)	Shelby	0.7	20	2	60	35	9,500	2,500	5,500	5,500	9,500	ADQ	ADQ	Min	Sub
	Mooreboro Rd (SR 1327)	US 74 BUS (Ellenboro Rd) to New House Rd (SR 1351)	Cleveland Co	6.3	18	2	60	55	9,000	700	1,000	1,000	9,000	ADQ	ADQ	Min	Sub
	N Dekalb St (SR 1958)	US 74 Bus (E Marion St) to NC 18 (E Grover St)	Shelby	0.7	44	4	80	35	20,000	10,300	18,000	17,000	20,000	ADQ	ADQ	Min	Sub
	N Lafayette St (SR 1005)	E Double Shoals Rd (SR 1809) to NCL Shelby	Cleveland Co	4.9	20	2	60	55	11,000	3,500	6,000	6,000	11,000	ADQ	ADQ	Min	Sub
	N Lafayette St (SR 1005)	NCL Shelby to Beg 45' Pavement	Shelby	0.3	20	2	60	35	9,500	4,200	9,000	9,000	9,500	ADQ	ADQ	Min	Sub
	N Lafayette St (SR 1005)	Beg 45' Pavement to End 45' Pavement	Shelby	0.3	45	2	60	35	12,000	5,000	9,500	9,500	12,000	ADQ	ADQ	Min	Sub
	N Lafayette St (SR 1005)	Beg 28' Pavement to End 28' Pavement	Shelby	0.6	28	2	60	35	12,000	5,000	9,500	9,500	12,000	ADQ	ADQ	Min	Sub



**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
	N Lafayette St (SR 1005)	Beg 36' Pavement to NC 18 (Grover St)	Shelby	0.2	36	2	60	35	12,000	5,000	9,500	ADQ	ADQ	Min	Sub		
CLEV0025-H	N Main St (SR 1161)	NC 150 (College Ave) to NCL Boiling Springs	Boiling Springs	0.9	36	2	60	25	12,000	10,000	11,800	3B	80	Min	Sub		
	N Morgan St	US 74 (W Marion St) to Grover St (SR 1861)	Shelby	0.6	24	2	60	35	12,000	6000*	8000*	ADQ	ADQ	Min	Sub		
	New House Rd (SR 1351)	Rehobeth Church Rd (SR 1350) to NCL Lattimore	Cleveland Co	3.2	20	2	60	55	11,000	1,300	2,000	ADQ	ADQ	Min	Sub		
	New House Rd (SR 1351)	NCL Lattimore to Washburn Rd (SR 1323)	Cleveland Co	0.4	20	2	60	35	9,500	1,200	1,600	ADQ	ADQ	Min	Sub		
	New Prospect Church Rd (SR 1908)	NC 18 (Fallston Rd) to NC 180 (Post Rd)	Cleveland Co	0.7	18	2	60	45	8,500	2,500	5,500	ADQ	ADQ	Min	Sub		
	New Prospect Church Rd (SR 1908)	NC 180 (Post Rd) to AA Barrett Rd (SR 1913)	Cleveland Co	3.8	20	2	60	45	10,500	2,500	6,000	ADQ	ADQ	Min	Sub		
	New Prospect Church Rd (SR 1908)	AA Barrett Rd (SR 1913) to Fallston-Waco Rd (SR 1001)	Cleveland Co	1.5	18	2	60	55	9,000	2,500	5,500	ADQ	ADQ	Min	Sub		
CLEV0007-H	Northwest Connector	US 74 Bus (Shelby Rd ) to US 74	Kings Mtn	1.7	-	-	-	-	-	-	5,000	2A	60	Min	Sub		
CLEV0007-H	Northwest Connector	US 74 to NC 216 (Piedmont Ave)	Cleveland Co	1.8	-	-	-	-	-	-	5,000	2A	60	Min	Sub		
CLEV0026-H	Oak Grove Rd (SR 2026)	US 74 (Dixon Blvd) to Scism Rd (SR 2033)	Cleveland Co	0.7	22	2	60	45	11,500	6,300	10,000	3A	80	Min	Sub		
CLEV0026-H	Oak Grove Rd (SR 2033)	Scism Rd (SR 2033) to New Camp Creek Church Rd (SR 2044)	Cleveland Co	5.0	22	2	60	45	11,500	8,000	10,000	3A	80	Min	Sub		

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
CLEV0026-H	Oak Grove Rd (SR 2033)	New Camp Creek Church Rd (SR 2044) to Elizabeth Ave (SR 2052)	Cleveland Co	2.2	24	2	60	45	12,500	7,000	16,500	13,000	16,000	3A	80	Min	Sub
	Old Boiling Springs Rd (SR 1123)	NC 150 (College Ave) to Poplar Springs Church Rd (SR 1151)	Cleveland Co														
	Old Boiling Springs Rd (SR 1123)	Poplar Springs Church Rd (SR 1151) to WCL Shelby	Cleveland Co	0.8	22	2	60	55	12,000	4,100	4,800	5,000	12,000	ADQ	ADQ	Min	Sub
	Old Boiling Springs Rd (SR 1123)	WCL Shelby to US 74 (Dixon Blvd)	Shelby	0.7	22	2	60	35	11,000	4,100	4,800	5,000	11,000	ADQ	ADQ	Min	Sub
	Old Home Place (SR 2032)	Scism Rd (SR 2033) to Oak Grove Rd (SR 2026)	Cleveland Co	0.7	20	2	60	55	11,000	1,500	2,000	2,000	11,000	ADQ	ADQ	Min	Sub
	Old Post Rd (SR 2001)	Stony Point Rd (SR 1001) to Tobe Bridge Rd (SR 2002)	Cleveland Co	0.2	18	2	60		9,000	4,700	7,400	7,400	9,000	ADQ	ADQ	Min	Sub
CLEV0027-H	Patrick Ave (SR 1149)	NC 150 (College Ave) to CL Boiling Springs	Cleveland Co	0.8	20	2	60	45	10,500	2,900	6,500	9,700	12,500	2E	60	Min	Sub B,P
CLEV0027-H	Patrick Ave (SR 1149)	CL Boiling Springs to Highland Pine Drive	Boiling Springs	0.1	20	2	60	35	9,500	2,900	6,500	9,700	12,000	2E	60	Min	Sub B,P
	Patrick Ave (SR 1149)	Highland Pine Drive to Flint Hill Church Rd (SR 1148)	Boiling Springs	0.2	39	3	60	35	14,000	2,700	5,800	9,000	14,000	ADQ	ADQ	Min	Sub B,P
CLEV0027-H	Patrick Ave (SR 1149)	Flint Hill Church Rd (SR 1148) to NC 150 (S Main St)	Boiling Springs	0.5	18	2	60	45	10,500	1,500	3,200	5,800	12,500	2E	60	Min	Sub B,P
CLEV0027-H	Patrick Ave Extn	NC 150 (E College Ave) to Skinner Rd (SR 1159)	Cleveland Co	1.1	-	-	-	-	-	-	-	3,200	12,500	2B	60	Min	Sub
	Patterson Rd (SR 2034)	Oak Grove Rd (SR 2026) to WCL Kings Mt	Kings Mtn	0.5	18	2	60	35	8,000	400	1,000	7,300	8,000	ADQ	ADQ	Min	Sub
	Patterson Rd (SR 2034)	WCL Kings Mt to Countryside Rd (SR 2036)	Cleveland Co	2.4	18	2	60	55	9,000	400	1,000	7,300	9,000	ADQ	ADQ	Min	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
	Peach St	Forest Hill Dr to US 74 Bus (E Marion Ave)	Shelby	0.6	18	2	35	8,000	5,400	7,500	6,000	8,000	ADQ	ADQ	Min	Sub	
CLEV0043-H	Peachtree Rd (SR 1162)	US 74 (Dixon Blvd) to SCL Lattimore	Cleveland Co	1.1	18	2	45	8,500	600	2,000	2,000	12,500	2B	60	Min	Sub	
CLEV0043-H	Peachtree Rd (SR 1162)	SCL Lattimore to Lattimore Rd (SR 1168)	Lattimore	0.4	18	2	35	8,000	600	2,000	2,000	12,000	2C	50	Min	Sub	
	Peachtree Rd (SR 1162)	Lattimore Rd (SR 1168) to Price St (SR 1323)	Lattimore	0.1	18	2	35	8,000	1,000	2,500	2,500	8,000	ADQ	ADQ	Min	Sub	
CLEV0028-H	Phifer Rd (SR 2256)	US 74 BUS (King St) to WCL Kings Mt	Kings Mtn	1.2	24	2	35	12,000	5,800	11,000	11,000	14,000	3B	80	Min	Sub	P
CLEV0028-H	Phifer Rd (SR 2256)	WCL Kings Mt to Kings Mountain Blvd (SR 2487)	Cleveland Co	0.5	18	2	55	9,000	3,000	7,300	7,300	14,000	3B	80	Min	Sub	P
	Phifer Rd (SR 2256)	Kings Mountain Blvd (SR 2487) to Bethlehem Rd (SR 2245)	Cleveland Co	1.7	18	2	55	9,000	1,800	4,400	4,400	9,000	ADQ	ADQ	Min	Sub	
	Plato Lee Rd (SR 1315)	US 74 (Dixon Blvd) to Artee Rd (SR 1314)	Cleveland Co	1.1	18	2	55	9,000	2,500	3,000	3,000	9,000	ADQ	ADQ	Min	Sub	
	Plato Lee Rd (SR 1315)	Artee Rd (SR 1314) to Washburn Switch Rd (SR 1313)	Cleveland Co	1.1	18	2	55	9,000	1,500	2,000	2,000	9,000	ADQ	ADQ	Min	Sub	
	Pleasant Hill Church Rd (SR 1103)	Long Branch Rd (SR 2238) to Caleb Rd (SR 2201)	Cleveland Co	2.7	18	2	55	9,000	1,000	1,300	2,500	9,000	ADQ	ADQ	Min	Sub	
	Poplar Springs Church Rd (SR 1151)	US 74 (Dixon Blvd) to WCL Shelby	Shelby	0.4	22	2	35	11,000	2,000	3,000	5,000	11,000	ADQ	ADQ	Min	Sub	
	Poplar Springs Church Rd (SR 1151)	WCL Shelby to Old Boiling Springs Rd (SR 1123)	Cleveland Co	0.7	22	2	45	11,500	2,000	3,000	5,000	11,500	ADQ	ADQ	Min	Sub	

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)				
	Poplar Springs Church Rd (SR 1151)	Old Boiling Springs Rd (SR 1123) to Sheriff Allen Rd (SR 1125)	Cleveland Co	1.1	18	2	60	55	9,000	1,500	2,500	3,000	9,000	ADQ	ADQ	Min	Sub	
	Price St (SR 1323)	Peachtree Rd (SR 1162) to New House Rd (SR 1351)	Lattimore	0.4	18	2	60	25	8,000	900	1,200	1,200	8,000	ADQ	ADQ	Min	Sub	
	Randolph Rd (SR 1308)	Washburn Switch Rd (SR 1313) to Southern Dr (SR 1433)	Shelby	0.8	20	2	60	35	9,500	1,900	3,600	3,600	9,500	ADQ	ADQ	Min	Sub	
	Rehobeth Church Rd (SR 1350)	New House Rd (SR 1351) to Charlie Elliott Rd (SR 1363)	Cleveland Co	1.0	18	2	60	55	9,000	1,000	1,500	1,500	9,000	ADQ	ADQ	Min	Sub	
	Rollingbrook Rd (SR 2015)	Oak Grove Rd (SR 2033) to Goforth Rd (SR 2014)	Cleveland Co	1.2	18	2	60	55	9,000	1,200	1,300	1,300	9,000	ADQ	ADQ	Min	Sub	
	Rollingbrook Rd (SR 2015)	Goforth Rd (SR 2014) to St. Luke Church Rd (SR 2008)	Cleveland Co	1.6	20	2	60	55	11,000	800	1,000	1,000	11,000	ADQ	ADQ	Min	Sub	
	Ross Grove Rd (SR 1827, 1847)	NC 18 (Fallston Rd) to McBrayer Springs Rd (SR 1827)	Shelby	0.2	18	2	60	35	8,000	2,500	3,600	3,200	8,000	ADQ	ADQ	Min	Sub	
	Ross Grove Rd (SR 1827, 1847)	McBrayer Springs Rd (SR 1847) to Frederick St (SR 1848)	Shelby	0.1	18	2	60	35	8,000	2,500	3,600	3,200	8,000	ADQ	ADQ	Min	Sub	
	Ross Grove Rd (SR 1827, 1847)	Frederick St (SR 1848) to Metcalf Rd (SR 1850)	Shelby	1.2	18	2	60	35	8,000	2,200	3,300	2,800	8,000	ADQ	ADQ	Min	Sub	
	S Morgan St (SR 1106)	Christopher Rd (SR 1105) to NC 150 (S Dekalb St)	Cleveland Co	1.4	18	2	60	55	9,000	1,400	1,600	2,800	9,000	ADQ	ADQ	Min	Sub	
	S Morgan St (SR 1106)	NC 18 (S Lafayette St) to US 74 (W Marion St)	Shelby	1.0	24	2	60	35	12,000	5000*	7000*	7000*	12,000	ADQ	ADQ	Min	Sub	
	Sam Lattimore Rd (SR 1121, 1127)	NC 150 (College Ave) to Wesson Rd (SR 1121)	Cleveland Co	0.8	18	2	60	55	9,000	1,700	1,900	2,000	9,000	ADQ	ADQ	Min	Sub	

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System						CTP Classification	Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)		
	Sam Lattimore Rd (SR 1121, 1127)	Wesson Rd (SR 1121) to Poplar Springs Church Rd (SR 1151)	Cleveland Co	0.2	20	2	60	55	11,000	700	800	900	ADQ	ADQ	Min	Sub
	Scism Rd (SR 2033)	Oak Grove Rd (SR 2026) to NC 216 (Piedmont Ave)	Cleveland Co	1.1	20	2	60	55	10,500	1,500	2,000	3,000	ADQ	ADQ	Min	Sub
	Shelby Rd (SR 1813)	Double Shoals Rd (SR 1809) to End C&G	Cleveland Co	2.8	20	2	60	55	11,000	2,600	3,800	11,000	ADQ	ADQ	Min	Sub
	Shelby Rd (SR 1813)	End C&G to NC 182 (Stagecoach Trail)	Lawndale	0.2	28	2	60	35	12,000	2,000	2,600	12,000	ADQ	ADQ	Min	Sub
	Skinner Rd (SR 1159)	NC 150 (College Ave) to Patrick Ave Extn	Cleveland Co	2.5	20	2	60	55	11,000	1,200	2,200	11,000	ADQ	ADQ	Min	Sub
	Skinner Rd (SR 1159)	Patrick Ave Extn to McBrayer-Homestead Ave (SR 1162)	Cleveland Co	0.3		2	60	55	11,000	1,200	2,200	11,000	ADQ	ADQ	Min	Sub
	St. Luke Church Rd (SR 2008)	NC 216 (County Line Rd) to Marys Grove Church Rd (SR 2012)	Cleveland Co	1.9	18	2	60	55	9,000	1,000	1,900	9,000	ADQ	ADQ	Min	Sub
	Stoney Point Rd (SR 1001)	NC 150 (Cherryville Rd) to End C&G (Waco)	Waco	0.4	34	2	60	35	12,000	3,800	7,000	12,000	ADQ	ADQ	Min	Sub
	Stoney Point Rd (SR 1001)	SCL Waco to Old Post Rd (SR 2001)	Cleveland Co	1.0	18	2	60	55	9,000	3,600	6,500	9,000	ADQ	ADQ	Min	Sub
	Stoney Point Rd (SR 1001)	Old Post Rd (SR 2001) to Clifton Oates Rd (SR 2074)	Cleveland Co	1.2	18	2	60	55	9,000	3,600	6,500	9,000	ADQ	ADQ	Min	Sub
	Stoney Point Rd (SR 1001)	Clifton Oates Rd (SR 2074) to Zeb Cline Rd (SR 2159)	Cleveland Co	1.8	18	2	60	55	9,000	4,500	6,500	9,000	ADQ	ADQ	Min	Sub
	Stoney Point Rd (SR 1001)	Zeb Cline Rd (SR 2159) to New Camp Creek Church Rd (SR 2044)	Cleveland Co	1.0	20	2	60	55	11,000	5,100	7,000	11,000	ADQ	ADQ	Min	Sub
	Stoney Point Rd (SR 1001)	New Camp Creek Church Rd (SR 2044) to Oak Grove Rd (SR 2033)	Cleveland Co	1.5	20	2	60	55	11,000	4,100	7,000	11,000	ADQ	ADQ	Min	Sub



**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY															
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System						Other Modes
					Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	
	<b>Stoney Point Rd (SR 1001)</b>	Oak Grove Rd (SR 2033) to Whetstine Rd (SR 2617)	Cleveland Co	1.1	18	2	60	55	9,000	8,800	9,000	ADQ	ADQ	Min	Sub
	<b>Stoney Point Rd (SR 1001)</b>	Whetstine Rd (SR 2617) to US 74 (E Dixon Blvd)	Cleveland Co	1.1	18	2	60	55	9,000	8,800	9,000	ADQ	ADQ	Min	Sub
CLEV00029-H	<b>Southern Connector</b>	Poplar Springs Church Rd (SR 1151) to Wesson Rd (SR 1121)	Cleveland Co	0.8	-	-	-	-	-	5,000	12,000	2C	50	Min	Sub
CLEV00029-H	<b>Southern Connector</b>	Wesson Rd (SR 1121) to Charles Rd (SR 1253)	Cleveland Co	0.8	-	-	-	-	-	5,000	12,000	2C	50	Min	Sub
	<b>Southern Connector (James Love School Rd)</b>	Charles Rd (SR 1253) to NC 18 (S Lafayette St)	Shelby	0.7	20	2	60	35	9,500	5,000	9,500	ADQ	ADQ	Min	Sub
CLEV00029-H	<b>Southern Connector</b>	NC 18 (Lafayette Rd ) to NC 150 (S Dekalb St)	Shelby	0.3	-	-	-	-	-	5,000	12,000	2C	50	Min	Sub
CLEV00029-H	<b>Southern Connector</b>	NC 150 (S Dekalb St ) to S Morgan St (SR 1106)	Shelby	0.8	-	-	-	-	-	5,000	12,000	2C	50	Min	Sub
CLEV00029-H	<b>Southern Connector</b>	S Morgan St (SR 1106 ) to Sulphur Springs Rd (SR 1100)	Cleveland Co	1.3	-	-	-	-	-	5,000	12,000	2C	50	Min	Sub
	<b>Southern Connector (Pleasant Dr)</b>	Sulphur Springs Rd (SR 1100) to NC 180 (S Post Rd)	Cleveland Co	1.0	18	2	60	55	9,000	5,000	9,000	ADQ	ADQ	Min	Sub
CLEV00029-H	<b>Southern Connector</b>	NC 180 (S Post Rd) to Caleb Rd 2010)	Cleveland Co	1.2	-	-	-	-	-	6,000	12,000	2C	50	Min	Sub
CLEV00030-H	<b>Southern Dr Connector</b>	Randolph Rd (SR 1308) to Walmart Dr (SR 1305)	Shelby	0.4	-	-	-	-	-	3,600	12,000	2A	60	Min	Sub
	<b>Southern Dr Connector</b>	Walmart Dr (1305) to NC 226 (Polkville Rd)	Shelby	0.2	24	2	60	35	12,000	3,600	12,000	ADQ	ADQ	Min	Sub
CLEV00044-H	<b>Sulphur Springs Rd (SR 1100)</b>	NC 226 (Earl Rd) to Hamrick Rd (SR 1104)	Cleveland Co	1.8	18	2	60	55	9,000	7,800	9,000	2B	60	Min	Sub
CLEV00044-H	<b>Sulphur Springs Rd (SR 1100)</b>	Hamrick Rd (SR 1104) to NC 180 (S Post Rd)	Cleveland Co	1.2	18	2	60	55	9,000	5,000	9,000	2B	60	Min	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
	<b>To be Bridges Rd (SR 2002)</b>	Old Post Rd (SR 2001) to Marys Grove Church Rd (SR 2008)	Cleveland Co	1.6	18	2	60	55	9,000	2,000	4,800	4,800	9,000	ADQ	ADQ	Min	Sub
	<b>W Cabiness Rd (SR 1341)</b>	Washburn Switch Rd (SR 1313) to W Zion Church Rd (SR 1337)	Cleveland Co	2.2	18	2	60	55	9,000	800	1,200	1,200	9,000	ADQ	ADQ	Min	Sub
CLEV0031-H	<b>W College Ave (SR 1003)</b>	NC 150 (S Main St) to End C&G Boiling Springs	Boiling Springs	0.7	36	2	60	35	12,000	6,500	11,000	9,400	14,000	3B	80	Min	Sub
CLEV0031-H	<b>W College Ave (SR 1003)</b>	End C&G (Boiling Springs) to WCL Boiling Springs	Boiling Springs	0.4	20	2	60	35	9,500	6,500	11,000	9,700	14,000	3B	80	Min	Sub
	<b>W Gold St</b>	Phifer Rd (SR 2256) to Cansler St (SR 2025)	Kings Mtn	0.8	24	2	60	35	12,000	3,500	4,000	5,000	12,000	ADQ	ADQ	Min	Sub
	<b>W Grover St (SR 1861)</b>	NC 226 (Polkville Rd) to Lee St	Shelby	1.7	24	2	60	35	12,000	6,500	9,000	6,200	12,000	ADQ	ADQ	Min	Sub
	<b>W Grover St (SR 1861)</b>	Lee St to Lafayette St (SR 1005)	Shelby	0.3	44	4	80	35	20,000	8,500	9,500	7,500	20,000	ADQ	ADQ	Min	Sub
	<b>W Homestead Ave (SR 1158)</b>	Cliffside Rd (SR 1003) to WCL Boiling Springs	Cleveland Co	0.7	18	2	60	55	9,000	1,400	3,000	3,000	9,000	ADQ	ADQ	Min	Sub
	<b>W Homestead Ave (SR 1158)</b>	WCL Boiling Springs to McBrayer-Homestead Rd (SR 1162)	Boiling Springs	0.6	18	2	60	35	8,000	1,400	3,000	3,000	8,000	ADQ	ADQ	Min	Sub
	<b>W Main St (SR 1323)</b>	New House Rd (SR 1351) to Price St	Lattimore	0.1	24	2	60	25	12,000	900	1,200	1,200	12,000	ADQ	ADQ	Min	Sub
	<b>W Mountain St</b>	Phifer Rd (SR 2256) to NC 216 (Battleground Ave)	Kings Mtn	0.9	28	2	60	35	12,000	2,500	8,000	5,000	12,000	ADQ	ADQ	Min	Sub
CLEV0007-H	<b>W Patterson Rd Relocated</b>	Northwest Connector to Patterson Rd (SR 2034)	Cleveland Co	0.2	-	-	-	-	-	-	-	6,500	2B	ADQ	ADQ	Min	Sub
	<b>W Patterson Rd (SR 2034)</b>	Relocated W Patterson Rd to Oak Grove Rd (SR 2033)	Cleveland Co	2.4	18	2	60	55	9,000	400	1,000	6,500	9,000	ADQ	ADQ	Min	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)				Cross-Section
	W Stage Coach Trail (SR 1361)	NC 226 (Polkville Rd) to WCL Polkville	Polkville	0.8	18	2	60	35	8,500	1,800	3,000	3,000	8,500	ADQ	ADQ	Min	Sub
	W Stage Coach Trail (SR 1361)	WCL Polkville to New House Rd (SR 1351)	Cleveland Co	4.0	18	2	60	55	9,000	1,800	3,000	3,000	9,000	ADQ	ADQ	Min	Sub
	W Zion Church Rd (SR 1337)	New House Rd (SR 1351) to WCL Kingstown	Cleveland Co	1.9	18	2	60	55	9,000	600	1,000	1,000	9,000	ADQ	ADQ	Min	Sub
	W Zion Church Rd (SR 1337)	WCL Kingstown to W Cabaniss Rd (SR 1341)	Kingstown	0.5	18	2	60	35	8,000	600	1,000	1,000	8,000	ADQ	ADQ	Min	Sub
	W Zion Church Rd (SR 1337)	West Cabaniss Rd (SR 1341) to ECL Kingstown	Kingstown	0.1	18	2	60	35	8,000	2,100	3,000	3,000	8,000	ADQ	ADQ	Min	Sub
	W Zion Church Rd (SR 1337)	ECL Kingstown to Whit-Mar Lake Rd (SR 1345)	Cleveland Co	1.0	20	2	60	55	11,000	2,100	3,000	3,000	11,000	ADQ	ADQ	Min	Sub
	W Zion Church Rd (SR 1337)	Whit-Mar Lake Rd (SR 1345) to NC 226 (Polkville Rd)	Cleveland Co	1.4	20	2	60	55	11,000	2,200	4,100	4,300	11,000	ADQ	ADQ	Min	Sub
	W Zion Church Rd (SR 1337)	NC 226 (Polkville Rd) to N Lafayette St (SR 1005)	Cleveland Co	1.8	20	2	60	45	10,500	2,800	6,200	6,400	10,500	ADQ	ADQ	Min	Sub
	Waco Rd (SR 2026)	Cansler St (SR2025) to Patterson Rd (SR 2026)	Kings Mtn	0.9	18	2	60	45	8,500	2,500	7,800	6,900	8,500	ADQ	ADQ	Min	Sub
	Washburn Switch Rd (SR 1313)	US 74 (Dixon Blvd) to Artee Rd (SR 1314)	Shelby	1.2	24	2	60	35	12,000	4,200	4,500	10,000	12,000	ADQ	ADQ	Min	Sub
	Washburn Switch Rd (SR 1313)	Artee Rd (SR 1314) to W Cabaniss Rd (SR 1341)	Cleveland Co	1.2	24	2	60	55	13,000	4,500	5,000	10,000	13,000	ADQ	ADQ	Min	Sub
	Washburn Switch Rd (SR 1313)	W Cabaniss Rd (SR 1341) to New House Rd (SR 1351)	Cleveland Co	2.2	24	2	60	55	13,000	3,000	5,000	5,000	13,000	ADQ	ADQ	Min	Sub
	Watterson St	Gold St to US 74 Bus (King St)	Kings Mtn	0.2	24	2	60	35	12,000	1,000	4,000	4,000	12,000	ADQ	ADQ	Min	Sub
	Watterson St	US 74 Bus (King St) to Waco Rd (SR 2026)	Kings Mtn	0.6	24	2	60	35	12,000	1,000	8,000	9,500	12,000	ADQ	ADQ	Min	Sub

**Table 3 - CTP INVENTORY AND RECOMMENDATIONS**

HIGHWAY																	
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft)	lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section			
	Wesson Rd (SR 1121)	Charles Road (SR 1253) to End C&G (Shelby)	Shelby	0.3	36	2	60	35	12,000	1,600	1,900	3,000	12,000	ADQ	ADQ	Min	Sub
	Wesson Rd (SR 1121)	END C&G (Shelby) to SCL Shelby	Shelby	0.3	18	2	60	35	8,000	1,600	1,900	3,000	8,000	ADQ	ADQ	Min	Sub
	Wesson Rd (SR 1121)	SCL Shelby to Ronald Dr (SR 1284)	Cleveland Co	0.6	18	2	60	55	9,000	900	1,600	3,000	9,000	ADQ	ADQ	Min	Sub
	Wesson Rd (SR 1121)	Ronald Dr (SR 1284) to Manley Bridges Rd (SR 1124)	Cleveland Co	0.8	20	2	60	55	11,000	900	1,600	2,000	11,000	ADQ	ADQ	Min	Sub
	Wesson Rd (SR 1121)	Manley Bridges Rd (SR 1124) to Sam Lattimore Rd (SR 1127)	Cleveland Co	0.6	20	2	60	55	11,000	700	800	2,000	11,000	ADQ	ADQ	Min	Sub
CLEV0045-H	Woodlake Pkwy (SR 2310)	NC 161 (York Rd) to Gaston County	Kings Mtn	0.7	18	2	60	35	8,000	1000*	2000*	2000*	8,000	2A	60	Min	Sub
	Wyke Rd (SR 1950)	NC 150 (Cherryville Rd) to End 3 lane	Shelby	0.4	36	3	60	35	14,000	8,500	10,500	6,200	14,000	ADQ	ADQ	Min	Sub
	Wyke Rd (SR 1950)	End 3 lane to Beg C&G	Shelby	0.5	24	2	60	35	12,000	8,500	10,500	6,200	12,000	ADQ	ADQ	Min	Sub
	Wyke Rd (SR 1950)	Beg C&G to NC 18 (Fallston Rd)	Shelby	0.2	26	2	60	35	12,000	8,500	10,500	6,200	12,000	ADQ	ADQ	Min	Sub
		* Values estimated. No traffic counts.															

## PUBLIC TRANSPORTATION AND RAIL

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

<sup>1</sup> For documentation of the public transportation system, refer to the Lake Norman RPO Coordinated Comprehensive Public Transportation Plan.

RAIL												
Local ID	Facility/ Route	Section (From - To)	Class	Speed Limit (mph)	Distance (mi)	Existing System			Proposed System			Other Modess
						Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	
	CSX 'SF' Line	Cherryville to Bostic	I	40	21	Freight	--	12-14	--	--	--	--
	NS "Main' Line	Charlotte to Spartanburg	I	79	11	Passenger	--	2	--	--	--	--
	NS "Main' Line	Charlotte to Spartanburg	I	50	11	Freight	--	35	--	--	--	--
	NS 'SB' Line	Blacksburg to Shelby	I	25	10	Freight	--	2-3	--	--	--	--



## BICYCLE AND PEDESTRIAN <sup>1</sup>

BICYCLE									
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes	
				Cross-Section (ft)	lanes	Type	Cross-Section		
CLEV00032-H	NC 150 (Gaffney Road)	South Carolina to end of bike lane	3.6	Concurrent with NC 150 (Gaffney Road) - See Highway Table		Highway Table	See Highway Table	H	
CLEV00033-H	NC 161 (York Road)	US 74 Bus (King Street) to South Carolina	5.7	Concurrent with NC 161 (York Road) - See Highway Table		Highway Table	See Highway Table	H, P	
CLEV00034-H	NC 182 (Stagecoach Trail)	NC 226 (Polkville Road) to Lincoln County	10.8	Concurrent with NC 182 (Stagecoach Trail) - See Highway Table		Highway Table	See Highway Table	H, P	
CLEV00035-H	NC 226 (Polkville Road)	NC 182 (Stagecoach Trail) and Hollis Road (SR 1376)	0.6	Concurrent with NC 226 (Polkville Road) - See Highway Table		Highway Table	See Highway Table	H, P	
CLEV00037-H	Cansler Street (SR 2025)	Gold Street to Barnett Drive	1.2	Concurrent with Cansler Street (SR 2025) - See Highway Table		Highway Table	See Highway Table	H, P	
CLEV00001-B	Hollis Road (SR 1376)	NC 226 (Polkville Road) and Rutherford County	3.5	18	2	On-Road	2A		

PEDESTRIAN									
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes	
				Type	Side of Street	Type	Side of Street		
CLEV00037-H	Cansler Street (SR 2025)	Gold Street to Barnett Drive	1.2	Concurrent with Cansler Street (SR 2025) - See Highway Table		Highway Table	See Highway Table	H, B	
CLEV00033-H	NC 161 (York Road)	US 74 Bus (King Street) to Woodlake Parkway (SR 2310)	1.1	Concurrent with NC 161 (York Road) - See Highway Table		Highway Table	See Highway Table	H, B	

MULTI-USE PATH									
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes	
				Side	Cross-	Side of Street	Cross-Section		
CLEV00004-H	NC 150 (East College Ave)	Patrick Avenue (SR 1149) to NC 18 (S Lafayette Street)	4.8	-	-	-	MA	H, B, P	
CLEV00001-M	College Farm Road (SR 1195)	NC 150 S to Existing Broad River Greenway	2.1	-	-	-	MA	B, P	
CLEV00002-M	Flint Hill Church Road (SR 1148)	NC 150 S to Patrick Avenue (SR 1149)	0.5	-	-	-	MA	B, P	
CLEV00027-H	Patrick Avenue (SR 1149)	NC 150 S to NC 150 E	1.1	-	-	-	MA	H, B, P	

<sup>1</sup> Only major routes and proposals are shown here. For further documentation of bicycle and pedestrian facilities and proposals, refer to the 2009 *Shelby Comprehensive Land Use Plan*, the 2007 *Shelby Comprehensive Pedestrian Plan*, the 2005 *Cleveland County Land Use Plan (Amended 2008)*, the 2006 *Boiling Springs Pedestrian Plan*, and the 2009 *Cleveland County Carolina Thread Trail Plan*.

## **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" 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, and
- roadways where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment.
- roadways which may need to accommodate an additional transportation mode.

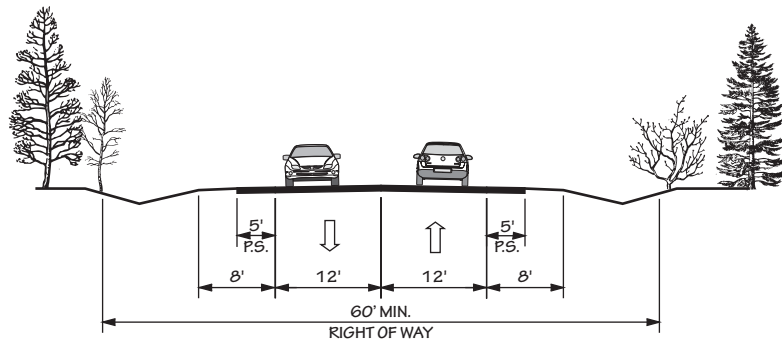
FIGURE 9

# TYPICAL HIGHWAY CROSS SECTIONS

## 2 LANES

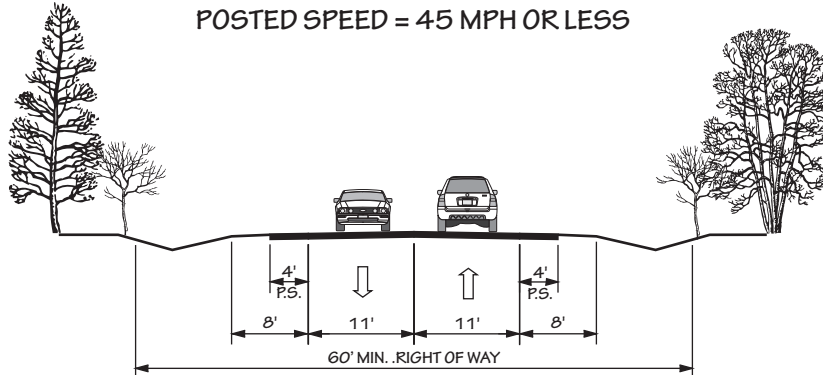
2 A

WIDE PAVED SHOULDERS  
POSTED SPEED = 55 MPH



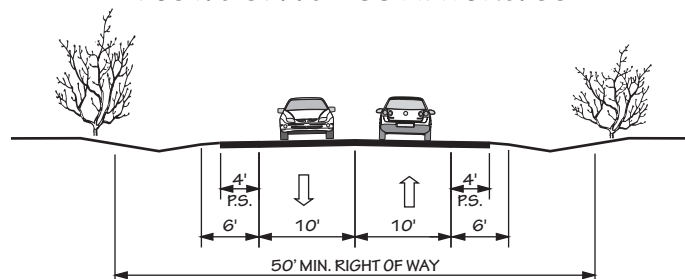
2 B

WIDE PAVED SHOULDERS  
POSTED SPEED = 45 MPH OR LESS



2 C

WIDE PAVED SHOULDERS  
POSTED SPEED = 35 MPH OR LESS

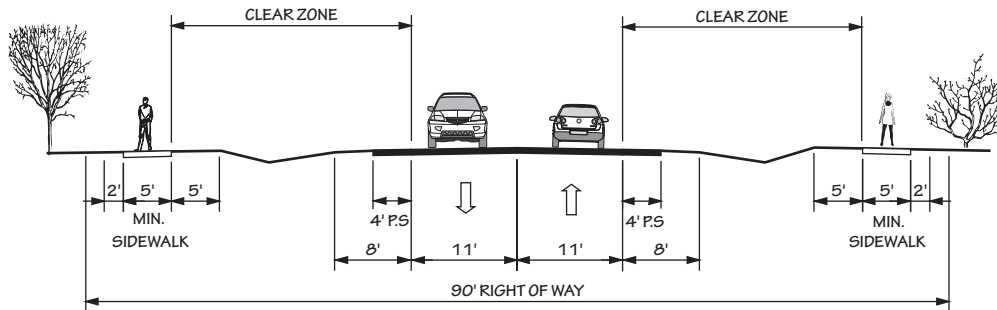


# TYPICAL HIGHWAY CROSS SECTIONS

## 2 LANES

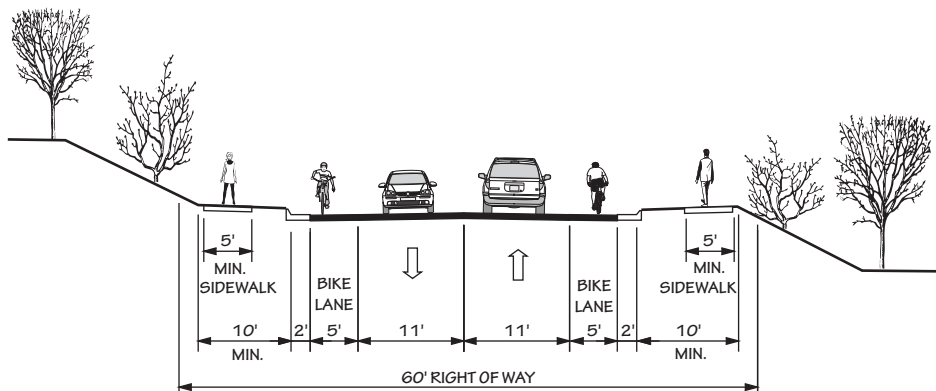
### 2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



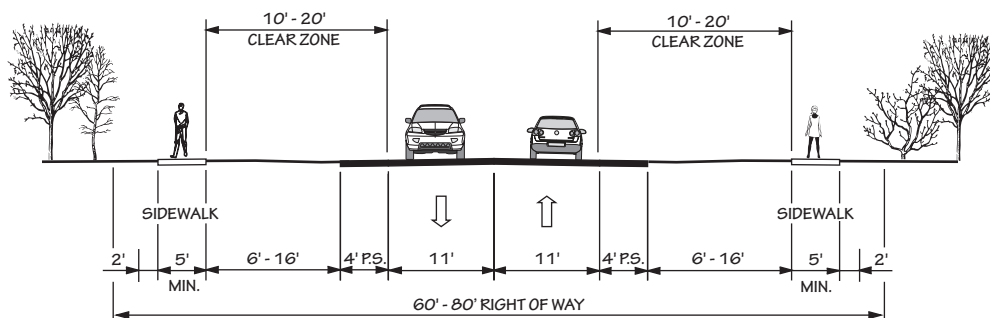
### 2 E

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)

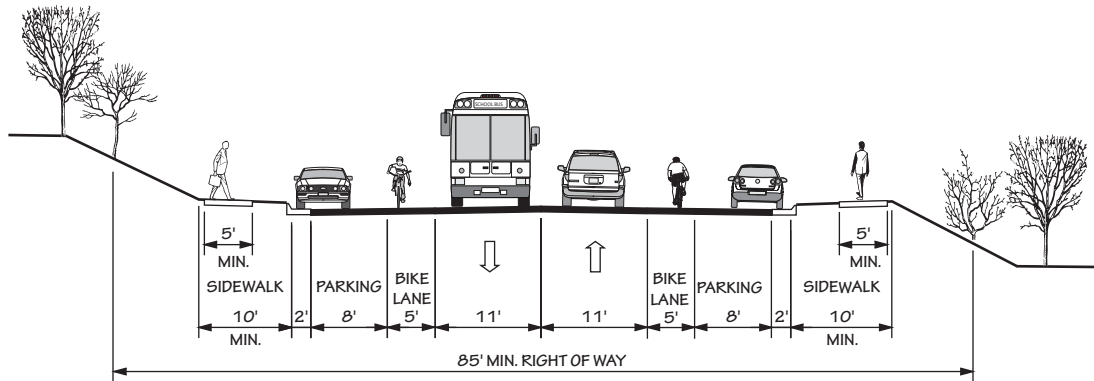


# TYPICAL HIGHWAY CROSS SECTIONS

## 2 LANES

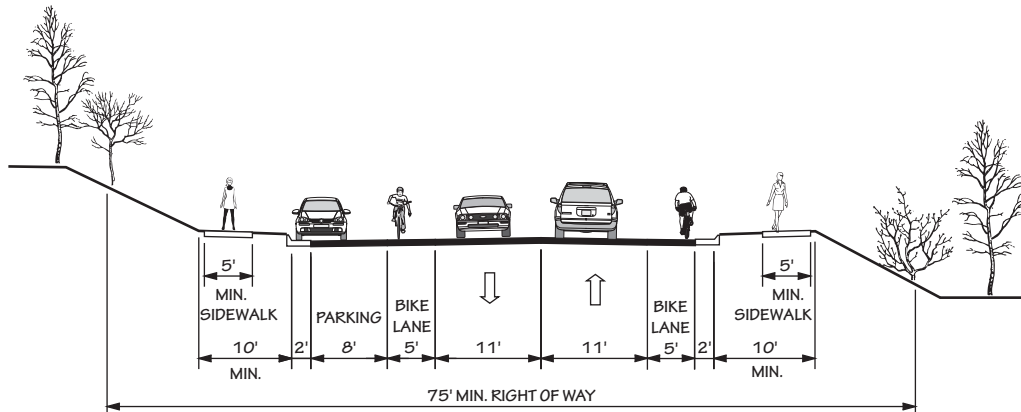
2 G

CURB & GUTTER - PARKING ON EACH SIDE



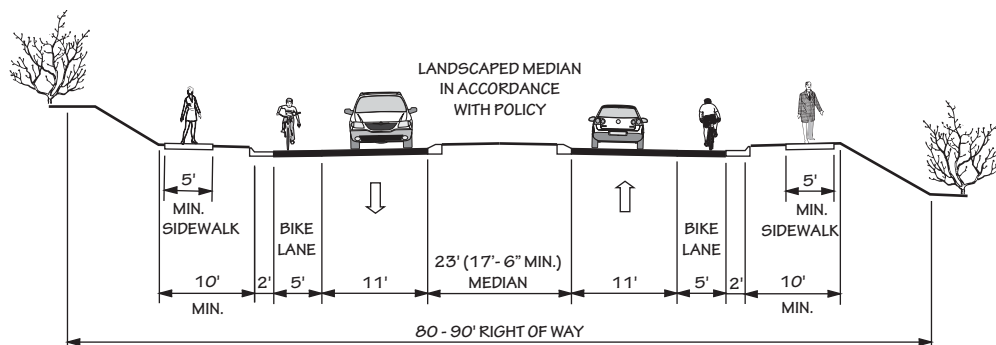
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER

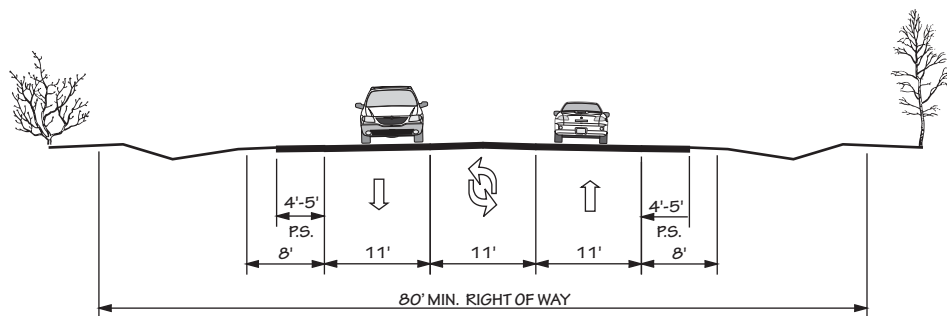


# TYPICAL HIGHWAY CROSS SECTIONS

## 3 LANES

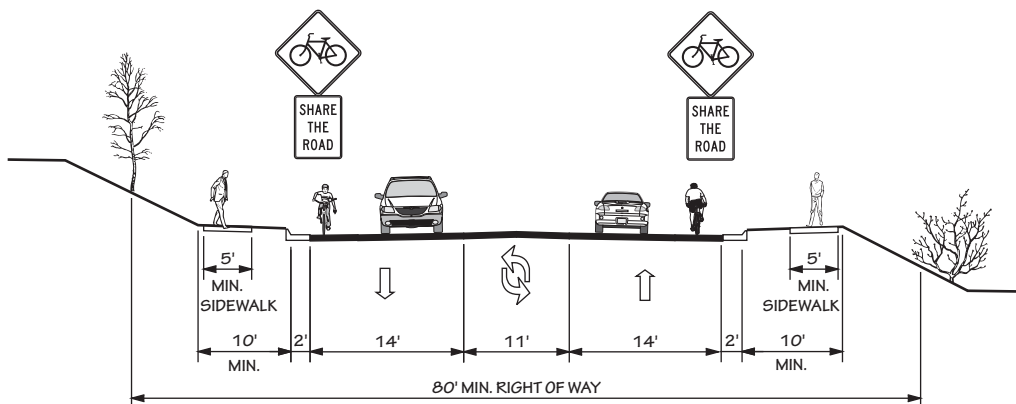
### 3 A

WIDE PAVED SHOULDERS



### 3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



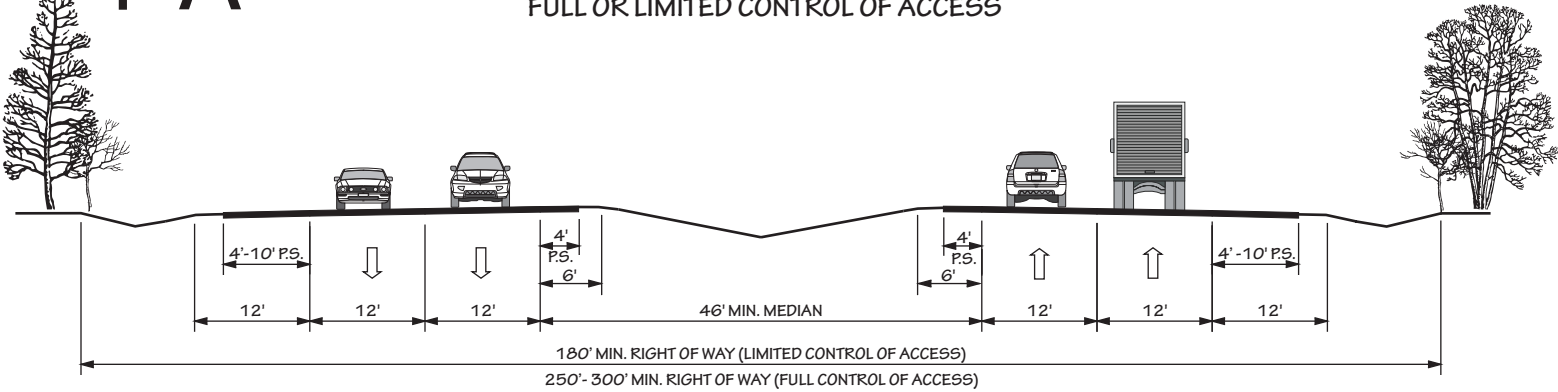


# TYPICAL HIGHWAY CROSS SECTIONS

## 4 LANES

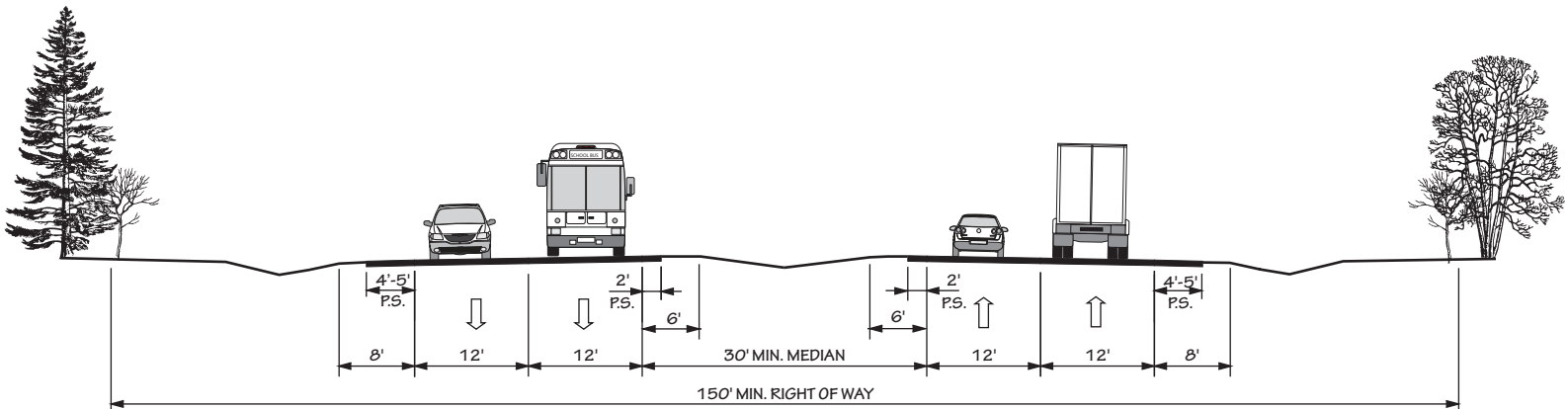
4 A

DIVIDED WITH MEDIAN  
FULL OR LIMITED CONTROL OF ACCESS



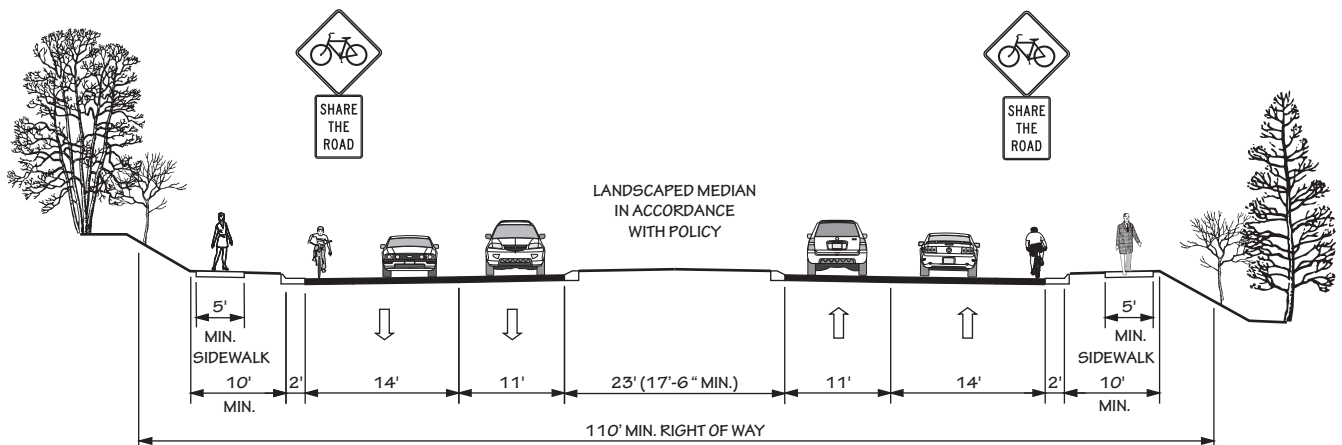
4 B

DIVIDED WITH MEDIAN - NO CURB & GUTTER  
PARTIAL CONTROL OF ACCESS



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS

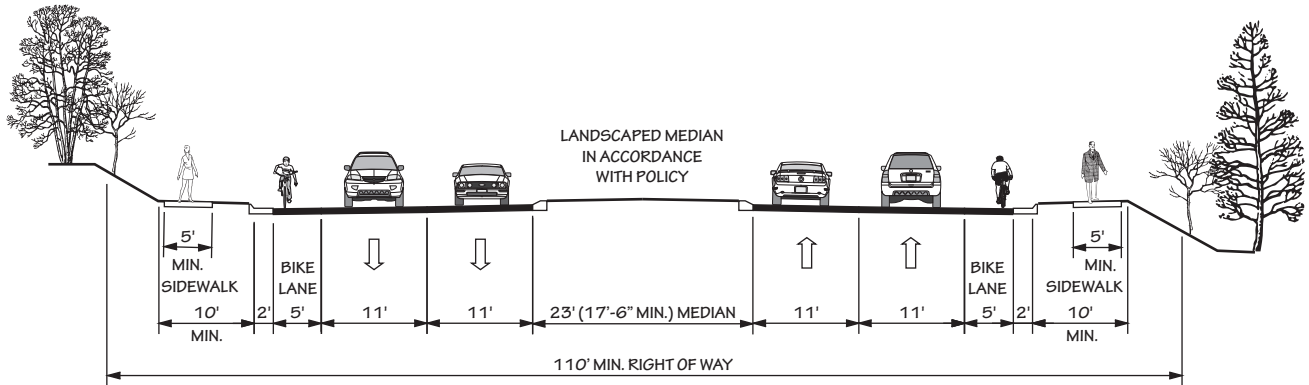


# TYPICAL HIGHWAY CROSS SECTIONS

## 4 LANES

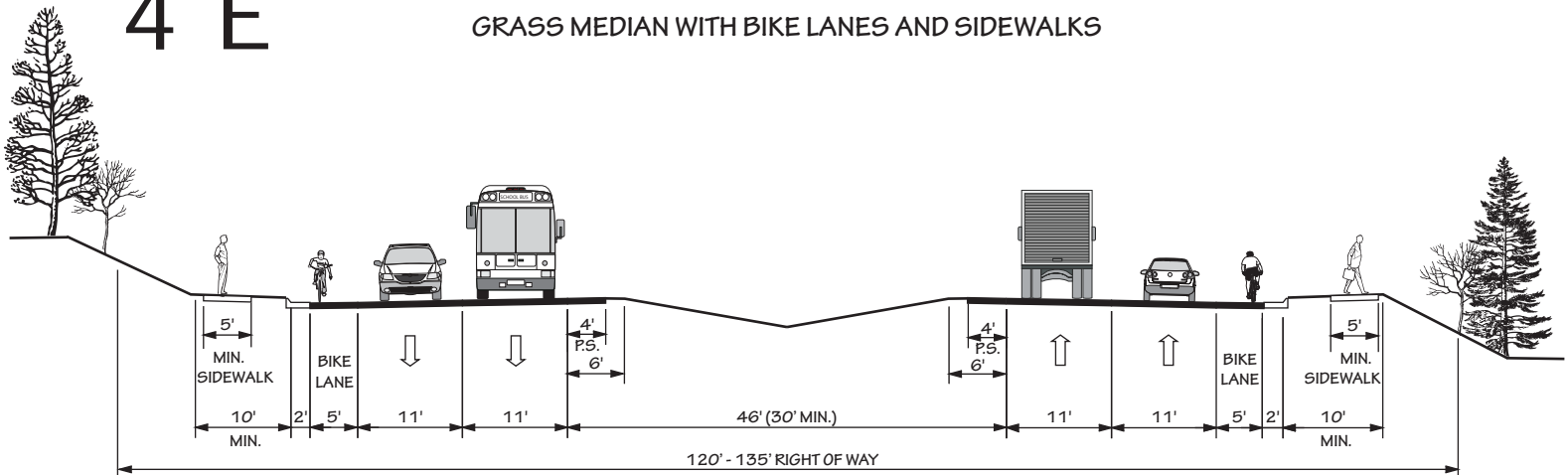
### 4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



### 4 E

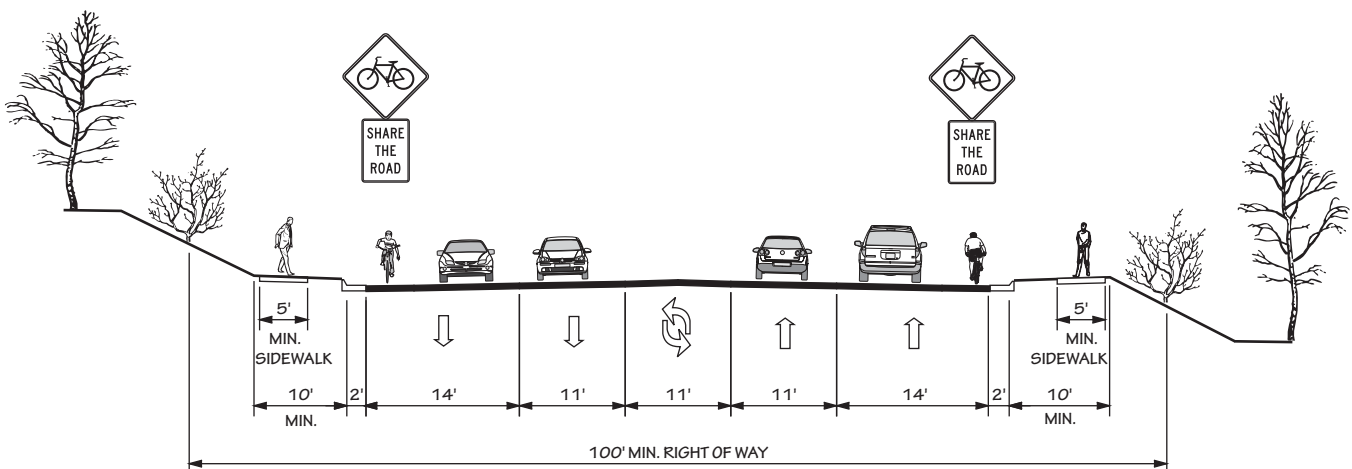
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



## 5 LANES

### 5 A

WIDE OUTSIDE LANES

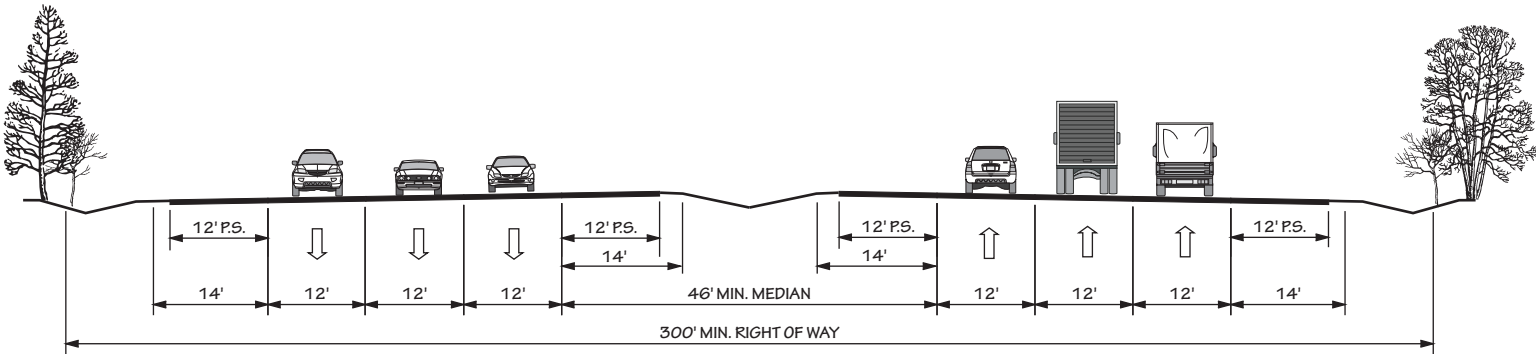


# TYPICAL HIGHWAY CROSS SECTIONS

## 6 LANES

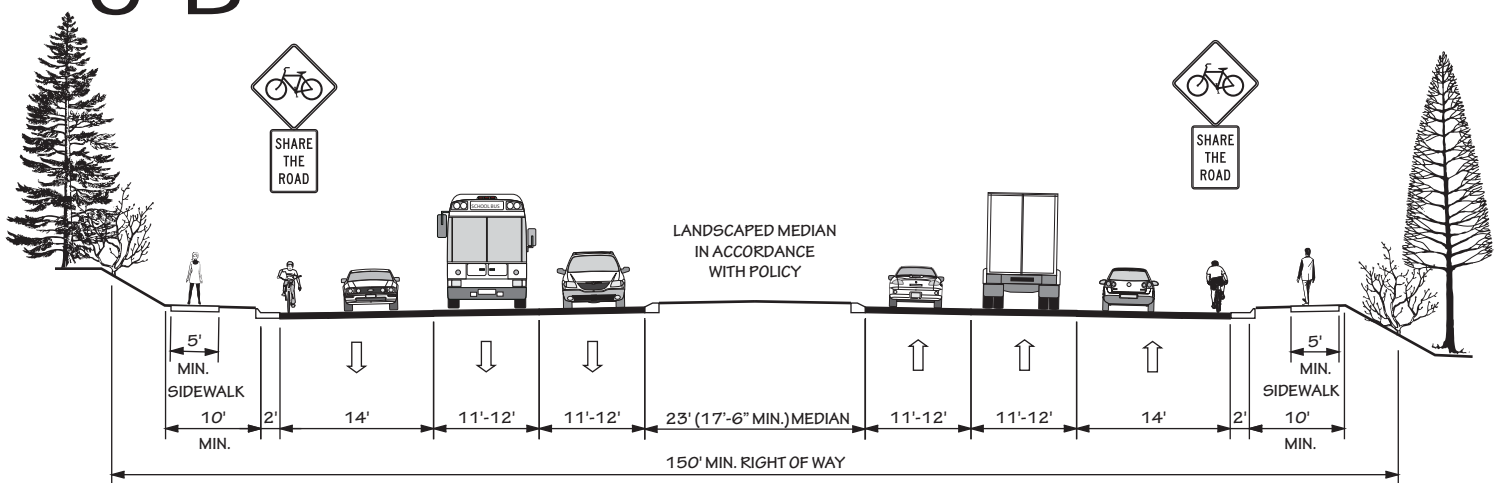
### 6 A

DIVIDED WITH GRASS MEDIAN



### 6 B

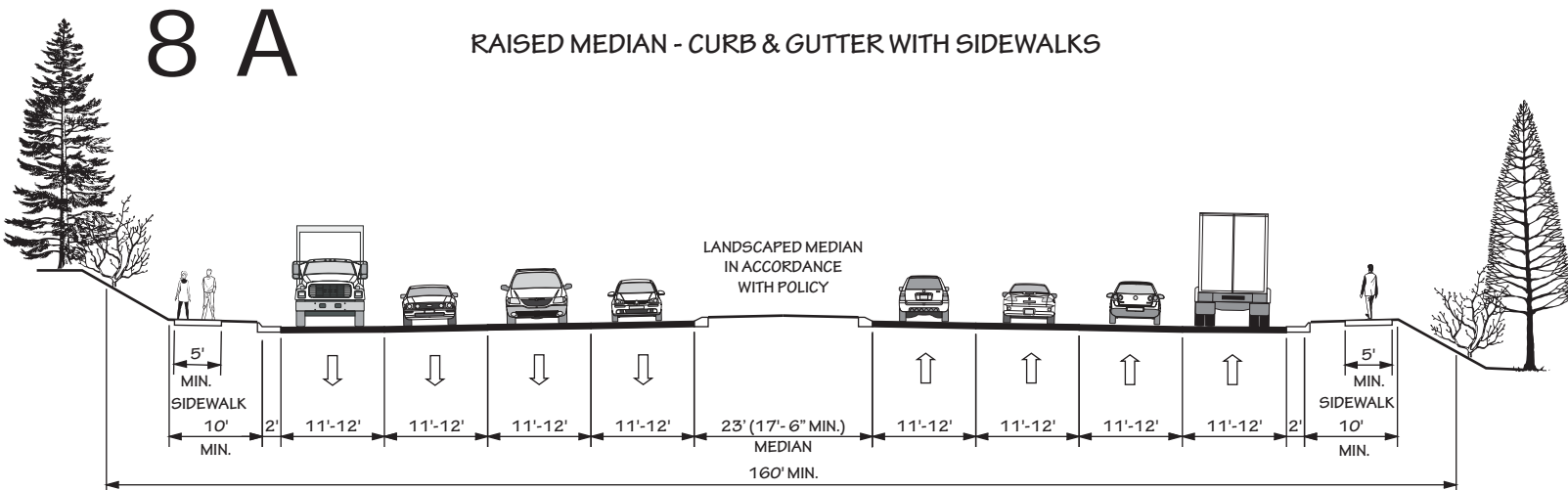
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



## 8 LANES

### 8 A

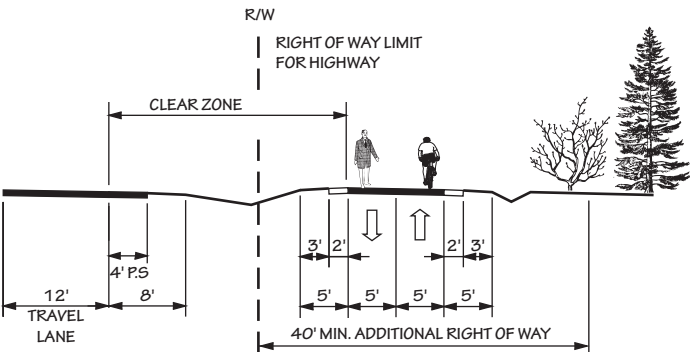
RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS



# TYPICAL MULTI - USE PATH

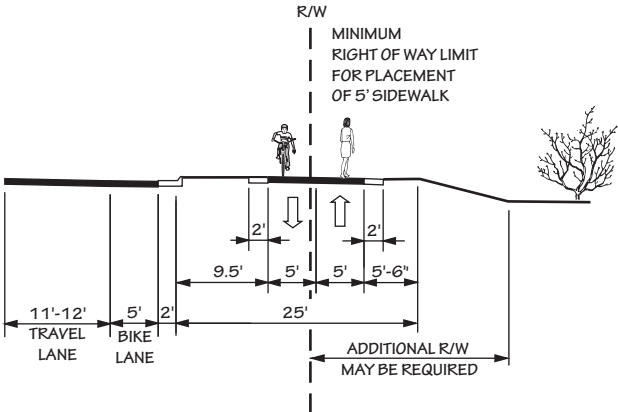
MULTI - USE PATH  
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



## 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 primarily free flow conditions. The motorist experiences a high level of physical and psychological comfort. The effects of minor incidents of breakdown are easily absorbed. Even at the maximum density, the average spacing between vehicles is about 528 ft, or 26 car lengths.
- **LOS B:** Represents reasonably free flow conditions. The ability to maneuver within the traffic stream is only slightly restricted. The lowest average spacing between vehicles is about 330 ft, or 18 car lengths.
- **LOS C:** Provides for stable operations, but flows approach the range in which small increases will cause substantial deterioration in service. Freedom to maneuver is noticeably restricted. Minor incidents may still be absorbed, but the local decline in service will be great. Queues may be expected to form behind any significant blockage. Minimum average spacing is in the range of 220 ft, or 11 car lengths.
- **LOS D:** Borders on unstable flow. Density begins to deteriorate somewhat more quickly with increasing flow. Small increases in flow can cause substantial deterioration in service. Freedom to maneuver is severely limited, and the driver experiences drastically reduced comfort levels. Minor incidents can be expected to create substantial queuing. At the limit, vehicles are spaced at about 165 ft, or 9 car lengths.
- **LOS E:** Describes operation at capacity. Operations at this level are extremely unstable, because there are virtually no usable gaps in the traffic stream. Any disruption to the traffic stream, such as a vehicle entering from a ramp, or changing lanes, requires the following vehicles to give way to admit the vehicle. This can establish a disruption wave that propagates through the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate any disruption. Any incident can be expected to produce a serious breakdown with extensive queuing. Vehicles are spaced at approximately 6 car lengths, leaving little room to maneuver.

- **LOS F:** Describes forced or breakdown flow. Such conditions generally exist within queues forming behind breakdown points.

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Figure 10 - Level of Service Illustrations

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Source: 2000 Highway Capacity Manual



## Appendix F

### Traffic Crash Analysis

A crash analysis performed for the Cleveland County CTP factored 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 47.7 times more severe than one involving only property damage and a crash resulting in minor injury is 11.8 times more severe than one with only property damage. In general, a higher severity index indicates more severe accidents. Listed below are levels of severity for various severity index ranges.

<u>Severity</u>	<u>Severity Index</u>
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, 2006 and December 31, 2008. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's 2008 severity index of 4.73. 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**

<b>Map Index</b>	<b>Intersection</b>	<b>Average Severity</b>	<b>Total Crashes</b>
1	US 74 & NC 161(Cleveland Ave)	3.81	43
2	NC 180 (Post Rd) & NC 226 (Earl Rd)	4.38	27
3	NC 150 (College Ave) & N Main St (SR 1167)	2.71	26
4	US 74 Bus (E King St) & NC 161 (Cleveland Ave)	5.39	24
5	NC 150 (Dekalb St) & Interchange Blvd	2.68	22
6	NC 150 (Dekalb St) & Gidney St	3.35	22
7	NC 150 (Dekalb St) & E Warren St	2.41	21
8	NC 18 (Lafayette St) & W Warren St	4.92	17
9	NC 150 (Cherryville Hwy) & US 74 Bus (E Marion St)	3.78	16
10	NC 18 (Lafayette St) & US 74 Bus (E Marion St)	3.31	16
11	US 74 (Dixon Blvd) & US 74 Bus (E Marion St)	3.77	40
12	US 74(Dixon Blvd) & NC 226 (Earl Rd)	5.30	40
13	NC 18 (Fallston Rd) & Wyke Rd (SR 1950)	5.23	14
14	NC 226 (Pokville Rd) & W Zion Church Rd (SR 1337)	5.55	13
15	Kings Rd (SR 2050) & NC 180 (Post Rd)	4.42	13
16	US 74 Bus (E Marion St) & NC 180 (Post Rd)	2.71	13
17	NC 18 (Fallston Rd) & NC 180 (Post Rd)	4.98	13
18	US 74 & Oak Grove Rd (SR 2035)	2.23	12
19	Charles Rd (SR 1253) & NC 150 (College Ave)	3.47	12
20	US 74 (Dixon Blvd) & NC 180 (Post Rd)	3.77	48
21	Interchange Blvd & NC 18 (Lafayette St)	2.85	12
22	NC 18 (Grover St) & N Washington St (SR 1284)	1.01	12
23	US 74 & Long Branch Rd (SR 2238)	3.47	12
24	NC 18 (Lafayette St) & E Sumpter St	4.36	11
25	US 74 (Dixon Blvd) & Grove St	2.35	11
26	Margrace Rd (SR 2263) & Kings Mountain Blvd (SR 2487)	12.61	11
27	NC 150 (Cherryville Hwy) & Main St Waco	3.02	11
28	US 74 & Lattimore Rd (SR 1168)	3.57	23
29	NC 180 (Post Rd) & Airport Rd (SR 1926)	3.22	10
30	Cherokee St & Gold St	1.74	10
31	NC 150 (Dekalb St) & E Elm St	4.71	10
32	N Dekalb St (SR 1958) & NC 18 (Grover St)	3.22	10
33	Frederick St (SR 1848) & NC 18 (Grover St)	3.22	10
34	US 74 Dixon Blvd) & NC 226 (Polkville Rd)	2.01	22
35	US 74 & Pleasant Ridge Church Rd (SR 1161)	3.96	10
36	I-85 & NC 161 (York Rd)	4.38	51
37	US 74 & Stoney Point Rd (SR 2052)	4.97	34
38	NC 150 (Cherryville Hwy) & NC 180 (Post Rd)	4.24	16
39	US 74 & Plato Lee Rd (SR 1315)	4.17	14
40	US 74 (Dixon Blvd) & NC 150 (Dekalb St)	3.47	46
41	US 74 (Dixon Blvd) & Pine St	3.17	17
42	US 74 & N Piedmont Ave	1.95	31
43	NC 18 (Lafayette St) & Shoal Creek Church Rd (SR 1130)	6.28	14
44	US 74 (Dixon Blvd) & Hamrick St	2.48	21
45	Elizabeth Ave (SR 2052) & US 74 Bus (E Marion St)	2.41	21

## **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 within the planning area are listed in Table 5.

**Table 5 - Deficient Bridges**

<b>Bridge Number</b>	<b>Facility</b>	<b>Feature</b>	<b>Condition</b>	<b>Local ID</b>
1	NC 18	Boween River	Functionally Obsolete	CLEV0002-H
2	NC 18	Branch First Broad River	Functionally Obsolete	CLEV0002-H
7	US 29 NBL	I-85 SBL	Functionally Obsolete	CLEV0001-H
9	US 74 Bus	Seaboard Coastline RR	Functionally Obsolete	
12	SR 1337	Creek	Functionally Obsolete	
15	NC 180	Seaboard Coastline RR	Functionally Obsolete	CLEV0005-H
16	NC 182	First Broad River	Functionally Obsolete	CLEV0034-H
18	NC 150	Broad River	Functionally Obsolete	CLEV0032-H
22	I-85 NBL	NC 216	Functionally Obsolete	CLEV0001-H
25	SR 2033	Buffalo Creek	Functionally Obsolete	CLEV0026-H
27	SR 1001	SCL RR	Functionally Obsolete	
31	SR 2002	Muddy Fork Creek	Structurally Deficient	B-5390
34	SR 2033	Muddy Fork Creek	Functionally Obsolete	CLEV0026-H
38	NC 182	Buffalo Creek	Functionally Obsolete	CLEV0034-H
40	SR 1001	Potts Creek	Functionally Obsolete	
42	NC 150	Beaverdam Creek	Functionally Obsolete	CLEV0004-H
56	NC 226	Seaboard Coastline RR	Functionally Obsolete	CLEV0006-H
57	NC 18	Seaboard RR	Functionally Obsolete	CLEV0002-H
58	SR 2245	I-85	Functionally Obsolete	CLEV0001-H
67	SR 2245	Beason Creek	Functionally Obsolete	CLEV0016-H
70	SR 2238	Beason Creek	Functionally Obsolete	
73	US 74 EBL	Brushy Creek	Functionally Obsolete	R-2222
75	NC 226	Hinton Creek	Functionally Obsolete	
79	US 74 EBL	First Broad River	Functionally Obsolete	R-2222
86	NC 150	Muddy Fork Creek	Structurally Deficient	
103	US 74 Bus	Southern RR	Functionally Obsolete	
107	US 74 Bus	US 74	Functionally Obsolete	
139	SR 1314	Beaverdam Creek	Structurally Deficient	B-1135
140	SR 1161	Seaboard Coastline RR	Functionally Obsolete	
144	SR 1327	Sandy Run Creek	Structurally Deficient	B-4468
190	SR 1005	Magness Creek	Structurally Deficient	
218	SR 1363	Brushy Creek	Structurally Deficient	
261	SR 1005	Creek	Structurally Deficient	
356	SR 1159	Creek	Functionally Obsolete	
389	SR 1167	SCL RR	Structurally Deficient	

## Appendix H

### Public Involvement

This appendix includes a listing of committee members, vision statements with objectives and measures of effectiveness (MOEs), a goals and objectives survey with a summation of results; and a summary of each public involvement opportunity including the types of information presented, number of attendees, and any major/potentially controversial issues.

#### Cleveland County CTP Steering 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. A listing of steering committee members for the Cleveland County CTP is given below.

- Don Allen, Cleveland County
- Jim Allen, Public Relations Counselors, Inc.
- Tim Allen, GDS Cleveland
- Robert Arey, Arey Oil Company
- Bill Chambless, Carolinas Commercial Real Estate
- Thomas (Tom) Crider, Transportation Administration of Cleveland County
- David Dear, Cleveland County
- Charles Earley, Cleveland County
- Kristin Fletcher, Cleveland County Chamber of Commerce
- Tom Fletcher, FNB
- Larry Hamrick, Jr., Warlick and Hamrick Insurance
- Bjorn Hansen, Lake Norman RPO
- Ronnie Hawkins, Mountain View Real Estate
- Max Hopper, Town of Earl
- Rick Howell, City of Shelby
- Kitty Hoyle, Wellington-Hamrick, Inc
- Johnny Hutchins, County Commissioners
- Steve Killian, City of Kings Mountain
- Joshua King, Isothermal RPO
- Leon Leonhardt, Cleveland Chamber
- B. F. Maner, Maner Real Estate Agency, Inc.
- Bill McCarter, Cleveland County Planning Director
- Joe Morgan, Poly-Recycling, Inc.
- Jack Palmer, Palmer Mortuary
- Marilyn Sellers, City of Kings Mountain
- Kip Smith, Cleveland County
- Stephen R. Smith, Curtiss-Wright Corporation
- Gary Spangler, NCDOT
- Sullens Trucking Company, Inc.
- L. Steve Thornburg, Cleveland Community College
- Zach Trogon, Town of Boiling Springs
- Sam Wilson, Wilson Real Estate
- Johnny Wise, Walmart Supercenters
- Oscar Zamora, Boiling Springs

## **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 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.

### **Vision Statement:**

Produce and maintain a Comprehensive Transportation Plan to preserve and promote the quality of life and economic vitality of Cleveland County and all its municipalities. This will be accomplished by providing an accessible, integrated, efficient, safe, and environmentally responsible multi-modal transportation system.

### **Objectives:**

1. Preserve, protect, and enhance the natural and human environment.
2. Improve the safety, connectivity, and mobility of the transportation system, for people and freight, for all modes of transportation in and through the region.
3. Maintain and enhance the quality and performance of the transportation system in Cleveland County through efficient congestion management and operations techniques.
4. Promote and enhance connectivity between Cleveland County and the surrounding region and metropolitan areas.
5. Improve the security of the transportation system in Cleveland County for all modes and users.

### **MOEs:**

1. All improvements shall be planned and designed for minimal impact to the natural and human environment.
2. Improvements shall be coordinated with local land use policies to the extent possible, and to minimize adverse cumulative and indirect effects.
3. Improvements shall contribute to lower travel costs by reducing congestion and travel times.
4. Improvements shall promote and enhance connectivity between Cleveland County and the surrounding region and metropolitan areas.
5. Improvements shall address the needs of both passenger and freight transportation.



6. Improvements shall be evaluated for their effects on pedestrians, bicyclists, transit users, and railroads.
7. Improvements shall address issues of both local and through traffic.
8. Improvements shall be compatible with efficient congestion management and operations techniques.
9. Improvements shall contribute to the safety and security of the transportation system in Cleveland County for all modes and users.
10. Improvements shall be clearly documented and published so as to:
  - a. Promote coordination with subdivision and commercial developments, potentially reducing the cost of street improvements to the public.
  - b. Enable local citizens to plan their actions with full knowledge of public intent.
  - c. Minimize disruption and displacement of people and businesses.

## 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.

For the Cleveland County survey, there were eighteen survey questions – twelve for the general public and five for businesses only. There were 507 responses<sup>1</sup> received both on paper and 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.

Cleveland County has a dichotomy of opinions. There are areas of the county that are very rural and areas of the county that are very urban. These two attitudes were reflected in the comments from the survey. The vast majority of the comments in all categories deal with the existing US 74 (Dixon Boulevard) or the construction of the US 74 Bypass.

## Transportation Planning Goals

1. Which of the following transportation goals are important?

Goal	Responses	Percent
Improve Bicycle and Pedestrian Facilities	223	44
Improve Transit Services and Facilities	226	45
Urban and Rural Character Preservation	315	62

<sup>1</sup> View complete survey responses at <http://www.ncdot.gov/doh/preconstruct/tpb/PLANNING/ClevelandCTP.html>.

Reduce Congestion and Travel Times	361	71
Other	48	

### Road Congestion and Capacity

2. What methods should be used to alleviate traffic congestion?

Method	Responses	Percent
Enhance alternative modes	250	50
Build new roads	174	35
Better access management	139	28
Improve intersections & signal timing	396	79
Widen existing roads	256	51
Other	44	

### Improvement Possibilities for US 74 (Dixon Boulevard)

3. Although a new bypass is planned for US 74 to the north of Shelby, improvements may still be needed to the existing US 74 (Dixon Boulevard). What improvements would you suggest?

Improvement	Responses	Percent
Widen to three lanes in each direction	234	48
Add or extend turn lanes at intersections	284	58
Coordinate Signals	306	63
Limit the number of driveways and intersections	159	33
Build overpasses and interchanges to replace some current intersections	216	44

### Alternative Modes

4. Cleveland County Transit operates the Shelby Circulator bus route which began service in 1999. Are there any improvements to bus service which would cause you to ride more frequently?

Improvement	Responses	Percent
More frequent bus service	128	38
Longer operating hours	109	33
More routes and stops	184	55
Vanpools to work	67	20
Buses which connect to other transit systems	208	62

### Congestion and Delay

5. Where do congestion and delay occur in the county? The top locations are given below.

Location
Better synchronization or reduction of signals on US 74 (Dixon Blvd)
Build the US 74 Bypass
Increase the rural speed limits back to 55 mph
NC 18 (East Grover Street) and Dekalb Street (SR 1958)
East Marion Street and NC 150 (Cherryville Road)

### Safety Concerns

6. Please list roads, intersections, and bridges about which you have safety concerns. Also list some solutions to your concerns. The top responses are given below.

Response
Turning traffic all along US 74 (Dixon Boulevard) especially at the Walmart signal
Trucks get stuck at at-grade railroad crossings in Kings Mountain
Realignment of intersections such as NC 226 (Earl Road) and NC 180 (Post Road), NC 226 (Polkville Road) and Zion Church Road (SR 1337), US 74 (Dixon Boulevard) and NC 226 (Earl Road)
NC 150 (Dekalb Street) and Morgan Street (SR 1106)
Kings Mountain Boulevard (SR 2487) and Margrace Road (SR 2263)

### Bicycling and Walking

7. What improvements are needed to support safe and comfortable walking and bicycling to school, to work, to shopping, and to other destinations?

Improvement	Responses	Percent
Add new sidewalks, bike lanes and shoulders	330	75
Improve existing facilities	249	57
Add crosswalks and pedestrian signals	243	55
Add streetlights	166	38
Other	160	

### Transportation Problems

8. What other transportation problems exist in Cleveland County? The top responses are given below.

Response
Enhanced transit services –express bus to Charlotte and Gastonia
Add more sidewalks and bike lanes in all downtowns especially to major traffic generators like the Hospital, the Community College, the regional mall, the YWCA in Boiling Springs, and all the schools

### Transportation Funding Sources

9. What do you believe are good sources to fund transportation improvements?

Source	Responses	Percent
Increase to county sales tax	86	19
Mileage tax (paid annually based on the amount you drive)	69	15
Impact fees for development	124	27
None of the above – continue relying on current sources	248	54

### Respondent Cross Section

10. What is your age?

Range	Responses	Percent
Under 18	39	8
18 to 39	128	25
40 to 64	282	55

65 or over	61	12
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11. Do you have access to a car?

Answer	Responses	Percent
Yes	476	96
No	18	4

12. Please enter the 5-digit zip code of your Cleveland County residence.

Zip Code	Responses	Percent
27616	1	0.2
28016	1	0.2
28017	15	3.0
28020	9	1.8
28021	12	2.4
28027	1	0.2
28038	2	0.4
28042	4	0.8
28073	9	1.8
28086	74	15.0
28089	1	0.2
28090	23	4.7
28114	8	1.6
28150	185	37.6
28151	2	0.4
28152	143	29.1
28169	2	0.4

The following questions were **FOR BUSINESS ONLY**:

13. Is public transportation (bus) service adequate for the needs of current and potential employees?

Answer	Responses	Percent
Yes	28	43
No	37	57

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

Mode	Responses	Yes	No
Truck	49	86	14
Rail	48	65	35
Air	47	68	32

15. Is there anything which hinders access to your business by current or potential customers? The top responses are given below.

Response
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Streetlights throughout all three major municipalities
Parking meters at spaces in Shelby

16. What other transportation issues exist in Cleveland County which affects your business? The top responses are given below.

<b>Response</b>
Sidewalks between adjacent businesses
Commuter transit
Employees need more access to public transportation
Only a few hotels for out of town business people to stay at
More on street parking
Transit connection to the county airport business park
Add rail access to major business sites

17. How many employees work at your Cleveland County business location?

<b>Range</b>	<b>Responses</b>	<b>Percent</b>
1 to 9	27	47
10 to 24	8	14
25 to 99	11	19
100 or more	12	21

18. Please enter the 5-digit zip code of your Cleveland County business.

<b>Location</b>	<b>Responses</b>	<b>Percent</b>
20806	1	1.8
28017	1	1.8
28073	2	3.6
28086	7	12.7
28090	1	1.8
28114	1	1.8
28150	33	60.0
28152	9	16.4

## Public Meetings

Brief summaries of public meetings held within the county are given below.

Two public workshops were held on November 10, 2010. One was held at the Shelby City Park and the other at the Lawndale Community Center. The 2009 and 2035 deficiency maps, Draft CTP maps, a draft list of recommended improvements, and sample cross sections were presented at the workshops. Comments during the workshops were minimal. Fewer than ten citizens participated in total.

Each jurisdiction in the county held at least one public hearing before they voted to adopt the CTP. The 2009 and 2035 deficiency maps, Draft CTP maps, a draft list of recommended improvements and sample cross sections were presented during each

public hearing. Each jurisdiction either voted to adopt the plan at the same meeting at which the public hearing was held or on the next scheduled meeting date. Public hearing and adoption dates are given below.

<b>Jurisdiction</b>	<b>Public Hearing Date</b>	<b>Adoption Date</b>
Cleveland County	February 1, 2011	February 15, 2011
Boiling Springs	January 4, 2011	January 4, 2011
Kings Mountain	January 25, 2011	January 25, 2011
Shelby	February 7, 2011	February 21, 2011
Belwood	December 7, 2010	December 7, 2010
Casar	February 8, 2011	February 8, 2011
Earl	January 24, 2011	January 24, 2011
Fallston	January 4, 2011	January 4, 2011
Grover	January 3, 2011	January 3, 2011
Kingstown	December 13, 2010	December 13, 2010
Lattimore	December 13, 2010	February 14, 2011
Lawndale	January 13, 2011	January 13, 2011
Mooresboro	February 14, 2011	March 14, 2011
Patterson Springs	January 3, 2011	January 3, 2011
Polkville	December 2, 2010	December 2, 2010
Waco	January 17, 2011	February 21, 2011

Major comments from the meetings included the following:

- Polkville wanted W Stagecoach Trail (SR 1361) widened at least to the town limits.
- Grover expressed concerns about the train traffic through town creating long turn lanes on US 29.
- Waco expressed concerns about the grade separation with the railroad and Main Street (SR 1001) since it is the only rail crossing in town.
- Fallston expressed concern about widening NC 18 as a boulevard through town.
- Lattimore was concerned that Westlee Road (SR 1161) would be cut off as part of the US 74 Bypass (R-2707) project.
- Boiling Springs expressed concerns about potential impacts of the proposed Patrick Avenue extension on neighborhoods northeast of town.