2018 Rutherford County
Comprehensive Transportation Plan

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Comprehensive Transportation Plan

Prepared by:

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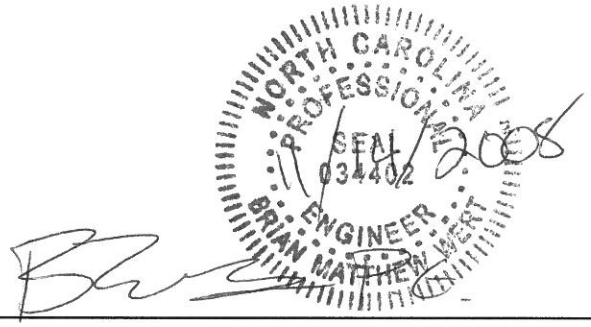
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with:

Rutherford County
Town of Rutherfordton
Town of Spindale
Town of Forest City
Town of Ruth
Town of Bostic
Town of Ellenboro
Isothermal Rural Planning Organization

Published: October 2018



Brian Wert, PE

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Executive Summary

In February of 2015, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and Rutherford County initiated a study to cooperatively develop the Rutherford County Comprehensive Transportation Plan (CTP), which includes the towns of Bostic, Ellenboro, Forest City, Ruth, Rutherfordton and Spindale. This is a long range multi-modal transportation plan that covers transportation needs through 2040. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening and public input, which are detailed in Chapter 1. Figure 1 shows the CTP maps, which were mutually adopted by NCDOT in 2018. Descriptive information and definitions for designations depicted on the CTP maps can be found in Appendix B. Implementation of the plan is the responsibility of Rutherford 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 Rutherford County CTP. The major recommendations for improvements are listed below. More detailed information about these and other recommendations can be found in Chapter 2.

HIGHWAY

- **US 221 Bypass:** Four lane divided freeway from Birch Hutchins Road (SR 2171) to the US 221 widening project (R-2597A) south of Thompson Road (SR 1367).

- **Oak Street (SR 2241) Extension:** New location boulevard from US 221 Alternate to US 74 Business at McCall Drive with pedestrian accommodations.

- **US 74 Alternate (Railroad Avenue):** Upgrade to a three lane facility from US 221 Alternate to US 64.

- **US 221 (R-2597A)**: Upgrade to a four lane boulevard from the proposed US 221 Bypass to the McDowell County line.

PUBLIC TRANSPORTATION & RAIL

- **Park and Ride:** The CTP proposes four new park and ride locations along major routes.

BICYCLE/PEDESTRIAN

- **Thermal Belt Rail Trail:** Projects EB-5730 and EB-5733 in the 2016-2025 STIP propose improving the existing trail by a combination of grading, paving, widening and resurfacing from Oak Springs Road (SR 1531) to Oakland Road (SR 1531).

Adopted by:

Rutherford County
Date: November 6, 2017

Town of Rutherfordton
Date: December 6, 2017

Town of Spindale
Date: November 20, 2017

Town of Forest City
Date: December 18, 2017

Town of Ruth
Date: January 8, 2018

Town of Bostic
Date: December 4, 2017

Town of Ellenboro
Date: January 9, 2018

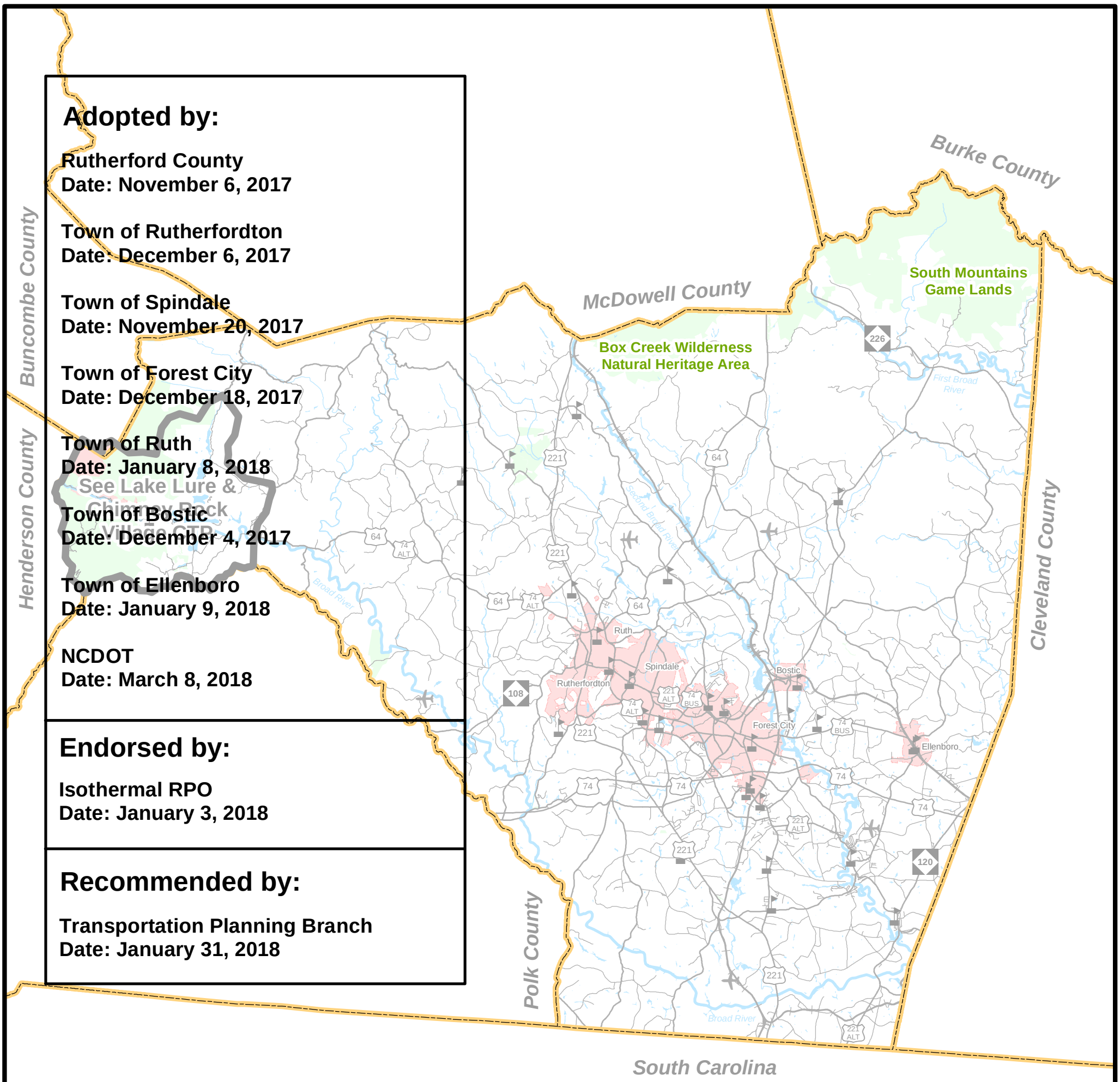
NCDOT
Date: March 8, 2018

Endorsed by:

Isothermal RPO
Date: January 3, 2018

Recommended by:

Transportation Planning Branch
Date: January 31, 2018



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

Legend

- Schools
- Airports
- Roads
- Railroads
- Rivers and Streams
- Planning Boundary
- County Boundary
- Municipal Boundary
- Parks and Game Land

0 1.5 3 6 Miles

N W E S

Sheet 1 of 5

Base map date: January 12, 2015

Refer to CTP document for more details

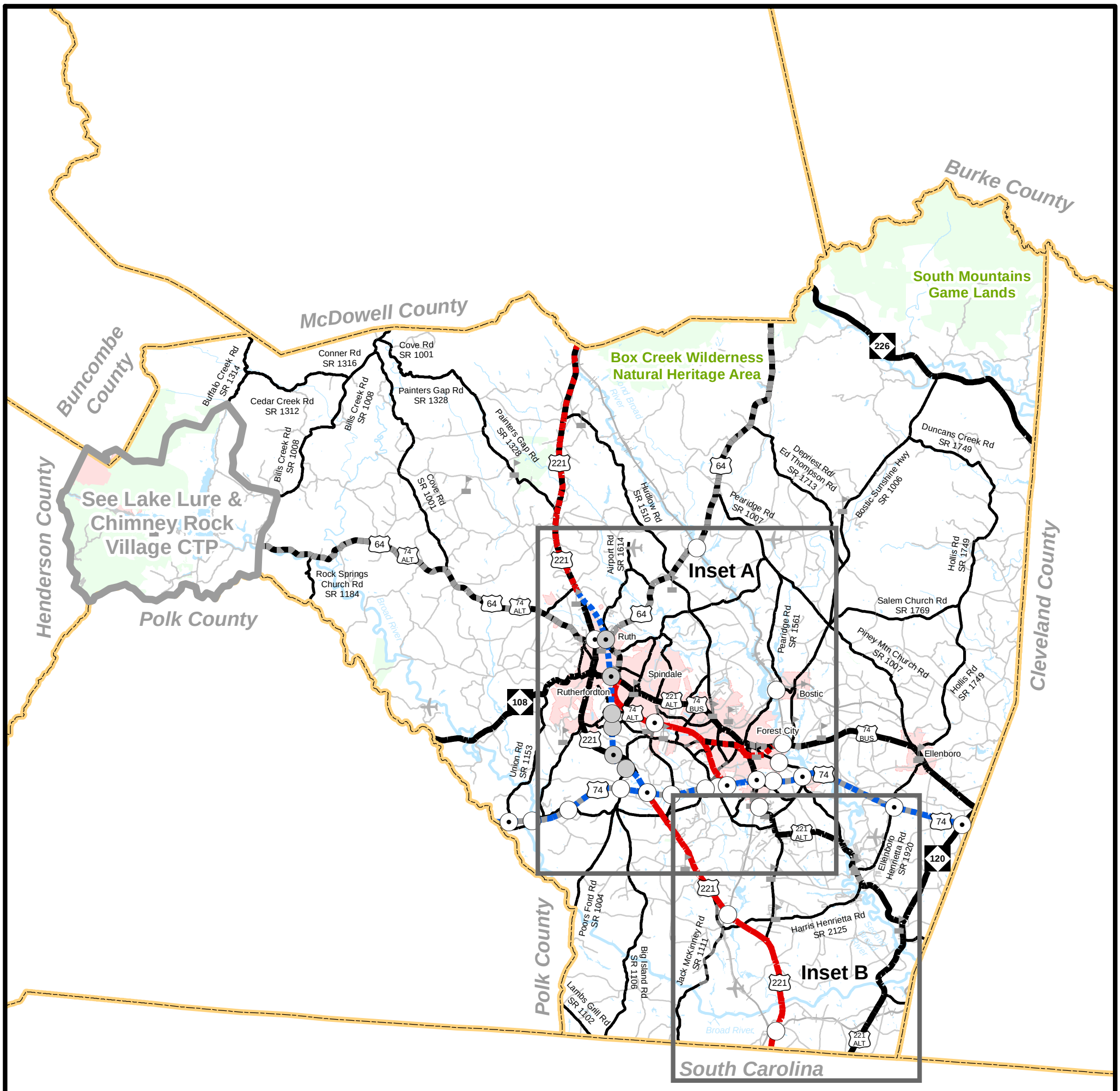
Adoption Sheet

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan date: 9/29/2017



Legend

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
- Interchange Needs Improvement
- Existing Grade Separation
- Proposed Grade Separation

0 2 4 8 Miles

N W E S

Sheet 2 of 5

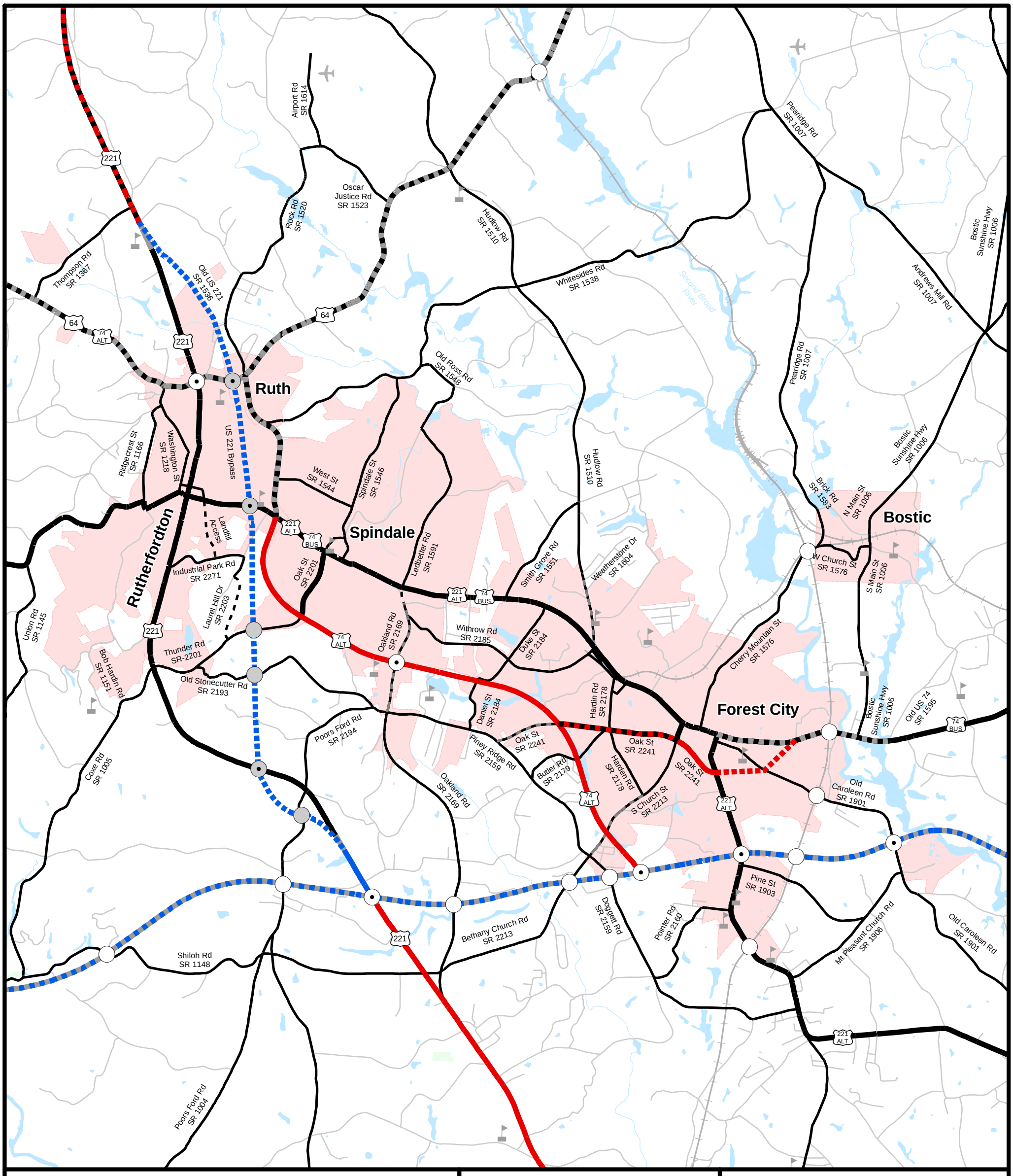
Base map date: January 12, 2015

Refer to CTP document for more details

Highway Map
Rutherford County
North Carolina

Comprehensive Transportation Plan

Plan date: 9/29/2017



Legend

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
- Interchange Needs Improvement
- Existing Grade Separation
- Proposed Grade Separation

0 0.5 1 2 Miles

N W E S

Sheet 2A of 5

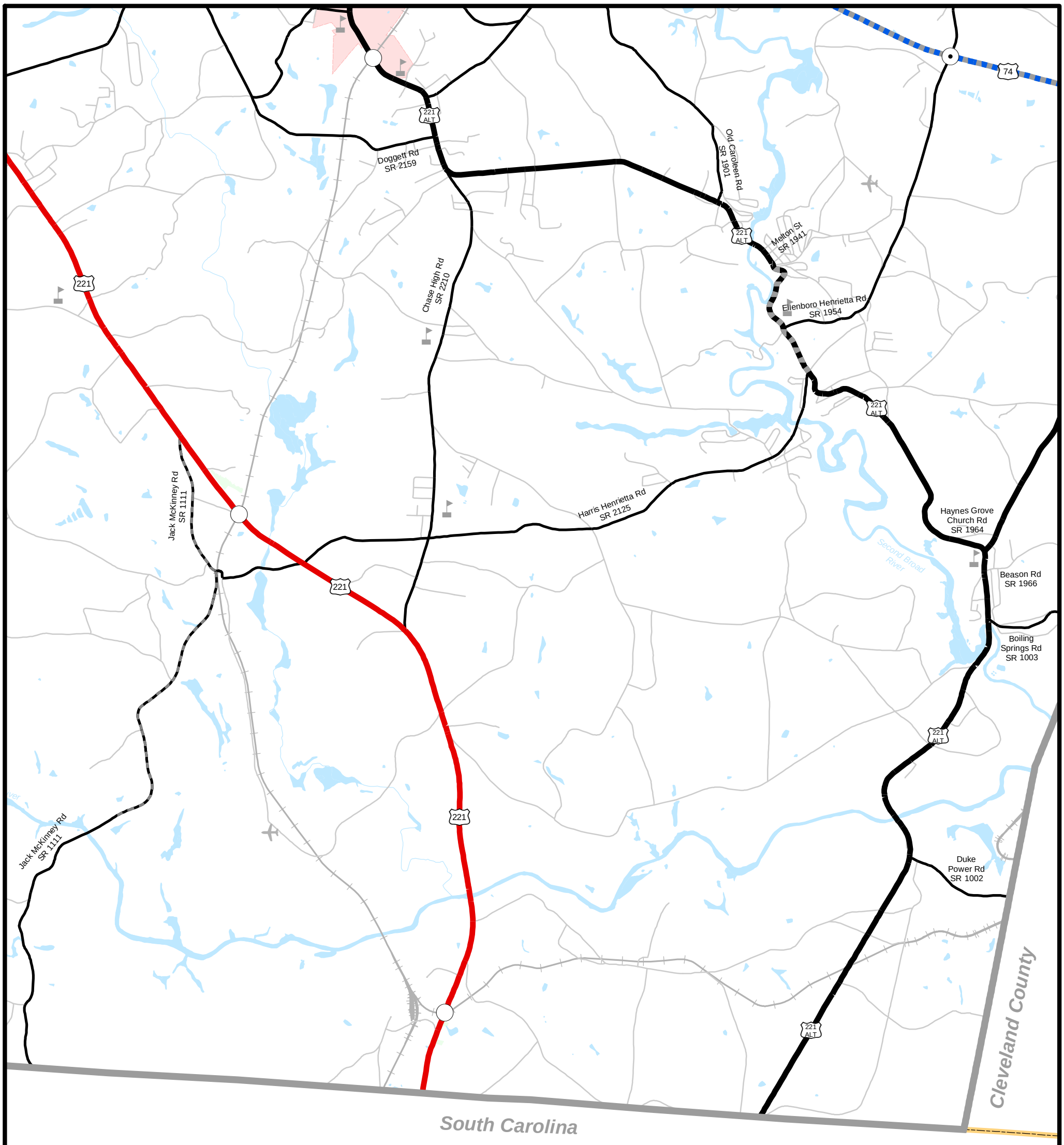
Base map date: January 12, 2015

Refer to CTP document for more details

Highway Map
Inset A
Rutherford County
North Carolina

Comprehensive Transportation Plan

Plan date: 9/29/2017



Legend

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
- Interchange Needs Improvement
- Existing Grade Separation
- Proposed Grade Separation

0 0.25 0.5 1 Miles

N W E S

Sheet 2B of 5

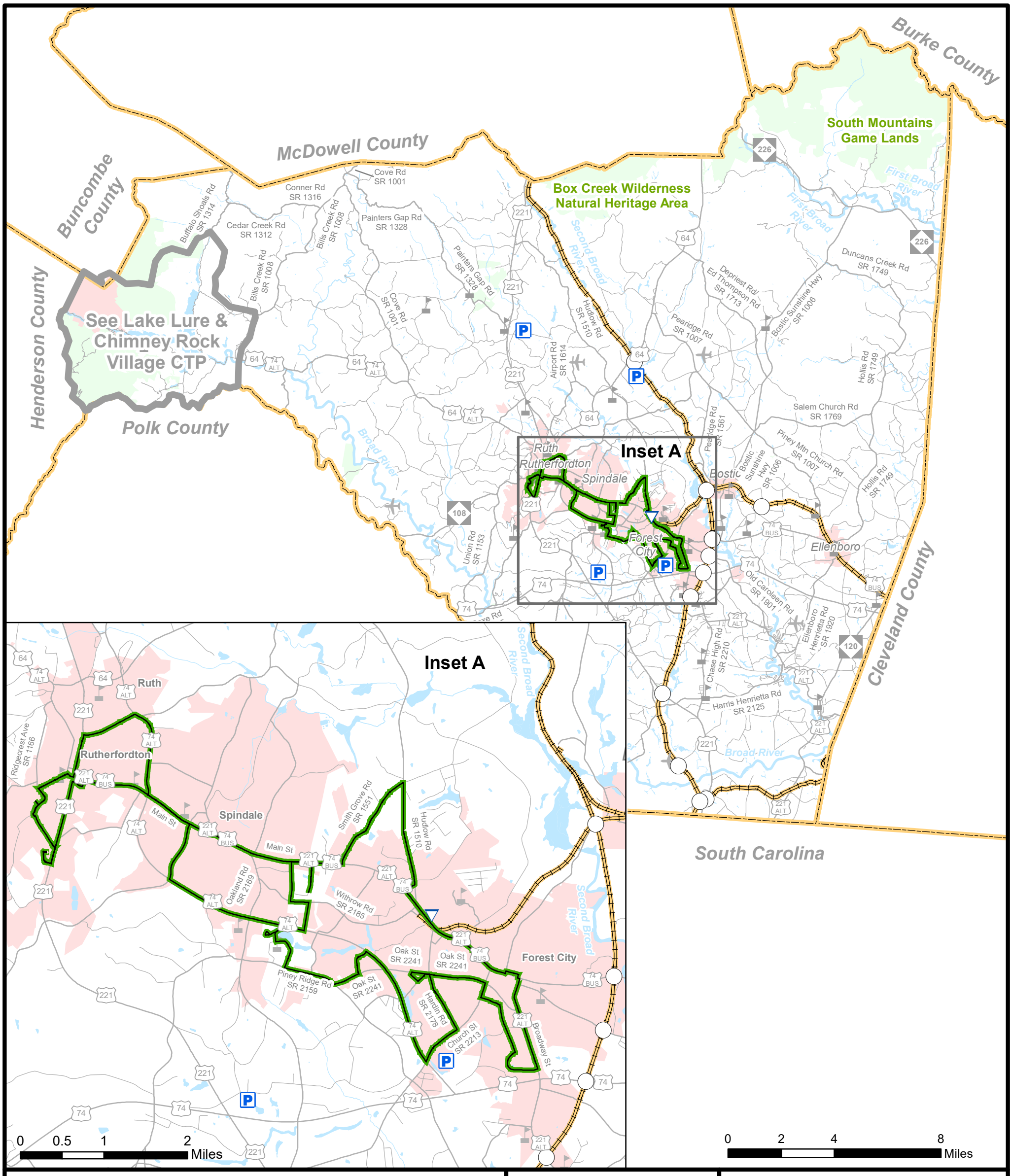
Base map date: January 12, 2015

Refer to CTP document for more details

Highway Map
Inset B
Rutherford County
North Carolina

Comprehensive Transportation Plan

Plan date: 9/29/2017



Legend

Bus Routes
- Existing
- Needs Improvement
- Recommended

Fixed Guideway
- Existing
- Needs Improvement
- Recommended

Operational Strategies
- Existing
- Needs Improvement
- Recommended

Rail Corridor
- Active
- Inactive
- Recommended

High Speed Rail Corridor
- Existing
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

Multimodal Connector
- Existing
- Recommended

Park and Ride Lot
- Existing
- Recommended

N W E S

Sheet 3 of 5

Base map date: January 12, 2015

Refer to CTP document for more details

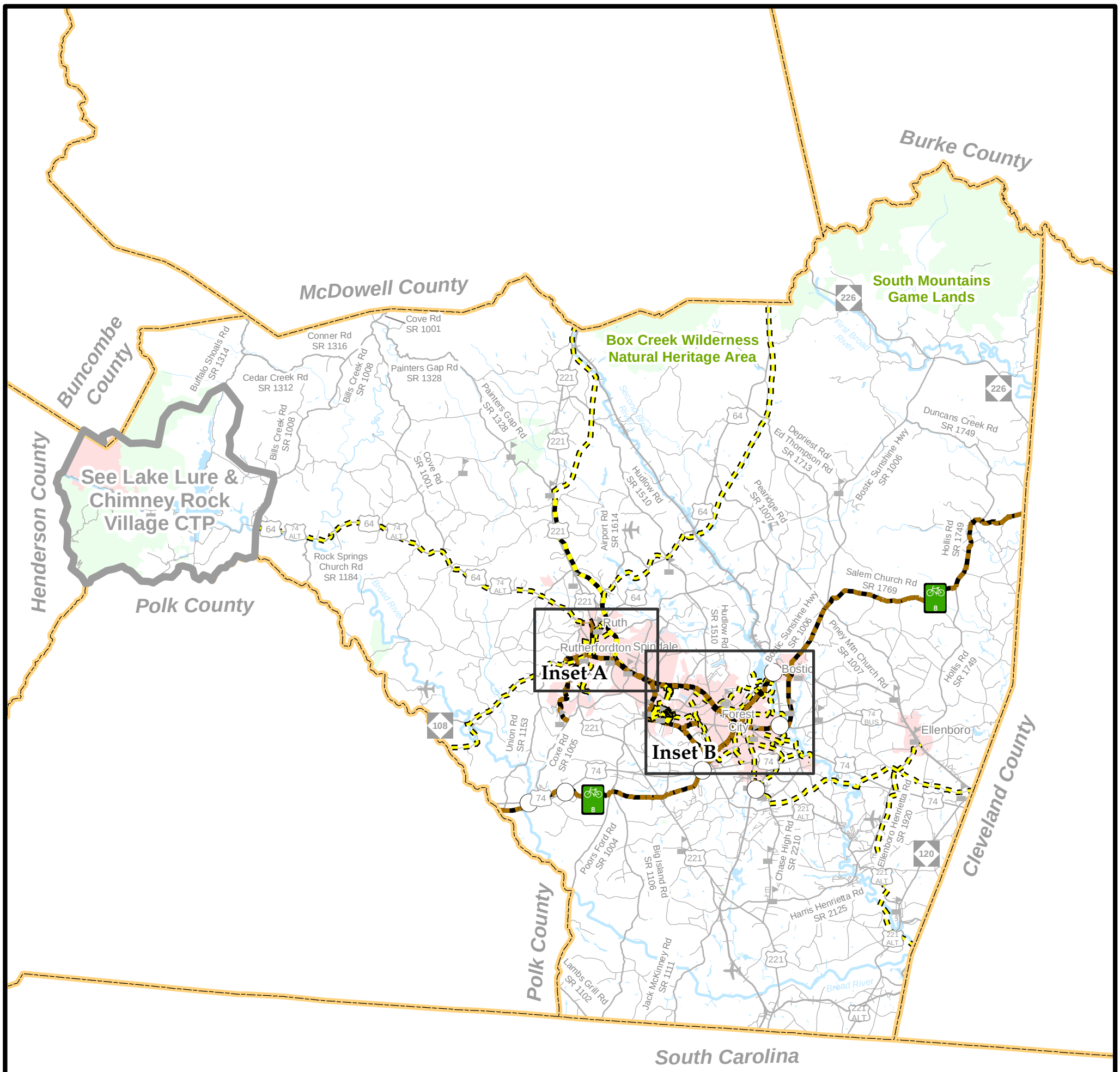
Public Transportation and Rail Map

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

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

0 1.5 3 6 Miles

N W E S

Sheet 4 of 5

Base map date: January 12, 2015

Refer to CTP document for more details

Bicycle Map

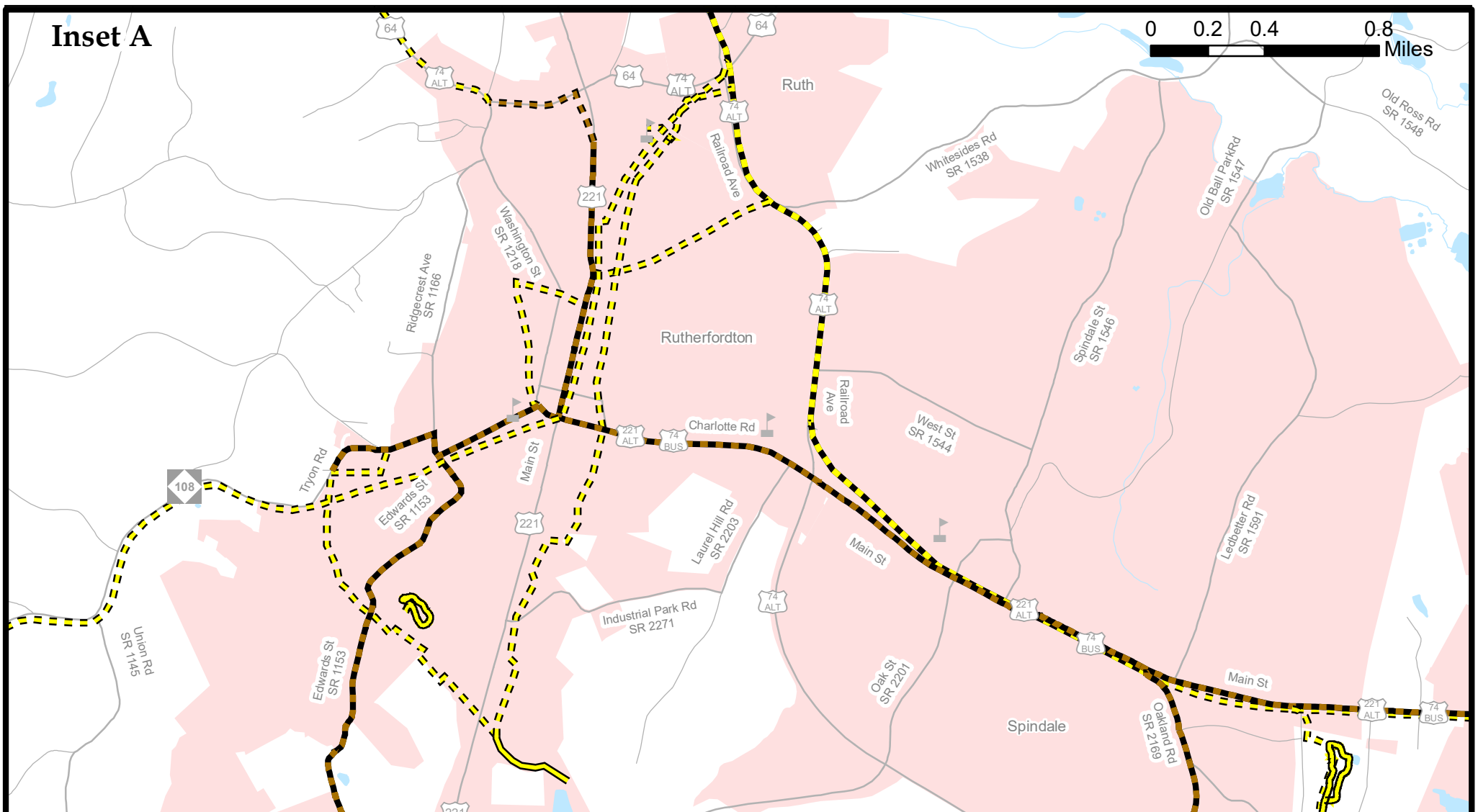
Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

Inset A



Inset B

Legend

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

N W E S

Sheet 4A of 5

Base map date: January 12, 2015

Refer to CTP document for more details

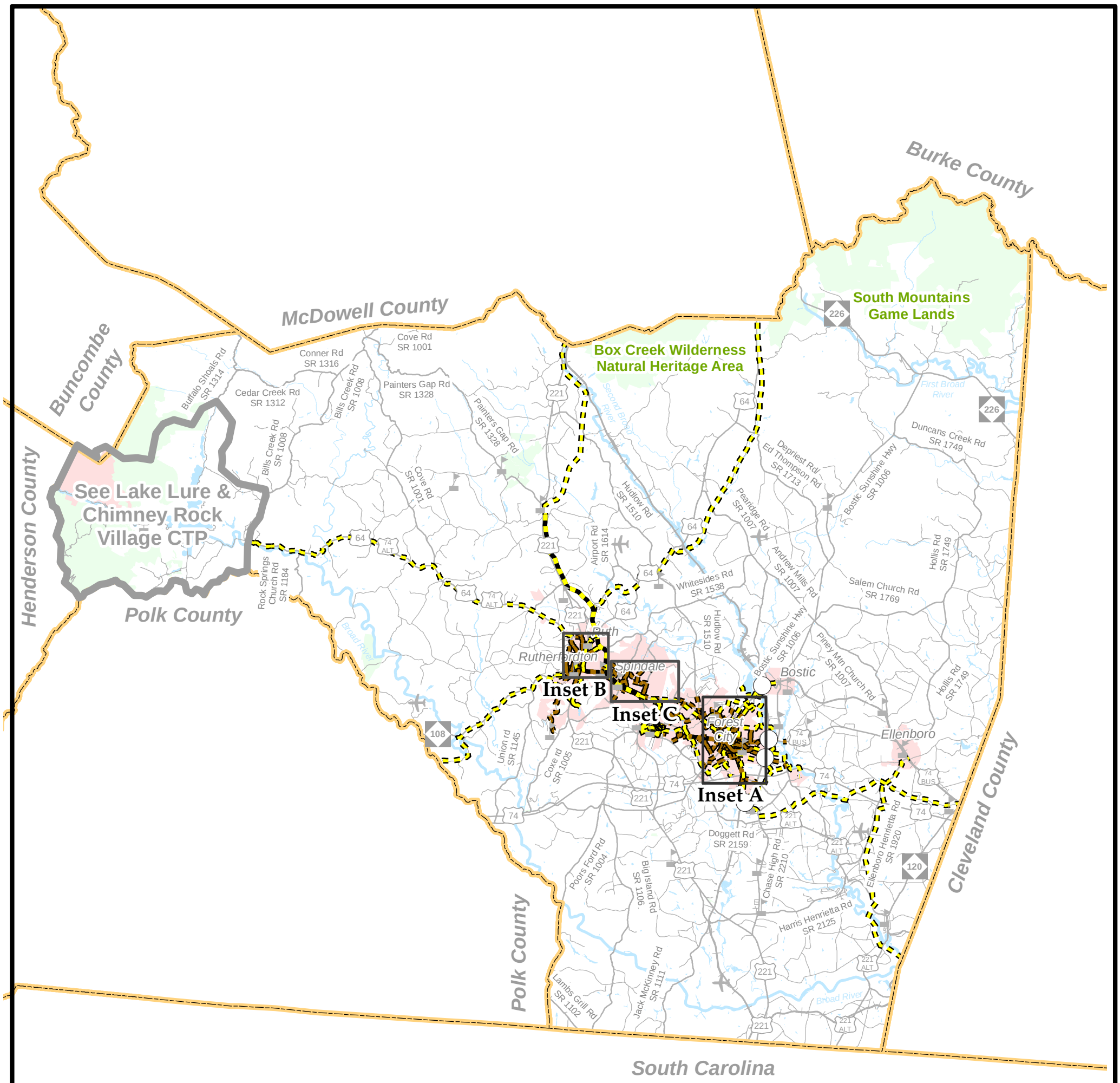
Bicycle Map Insets A & B

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 1.5 3 6 Miles

N W E S

Sheet 5 of 5

Base map date: January 12, 2015

Refer to CTP document for more details

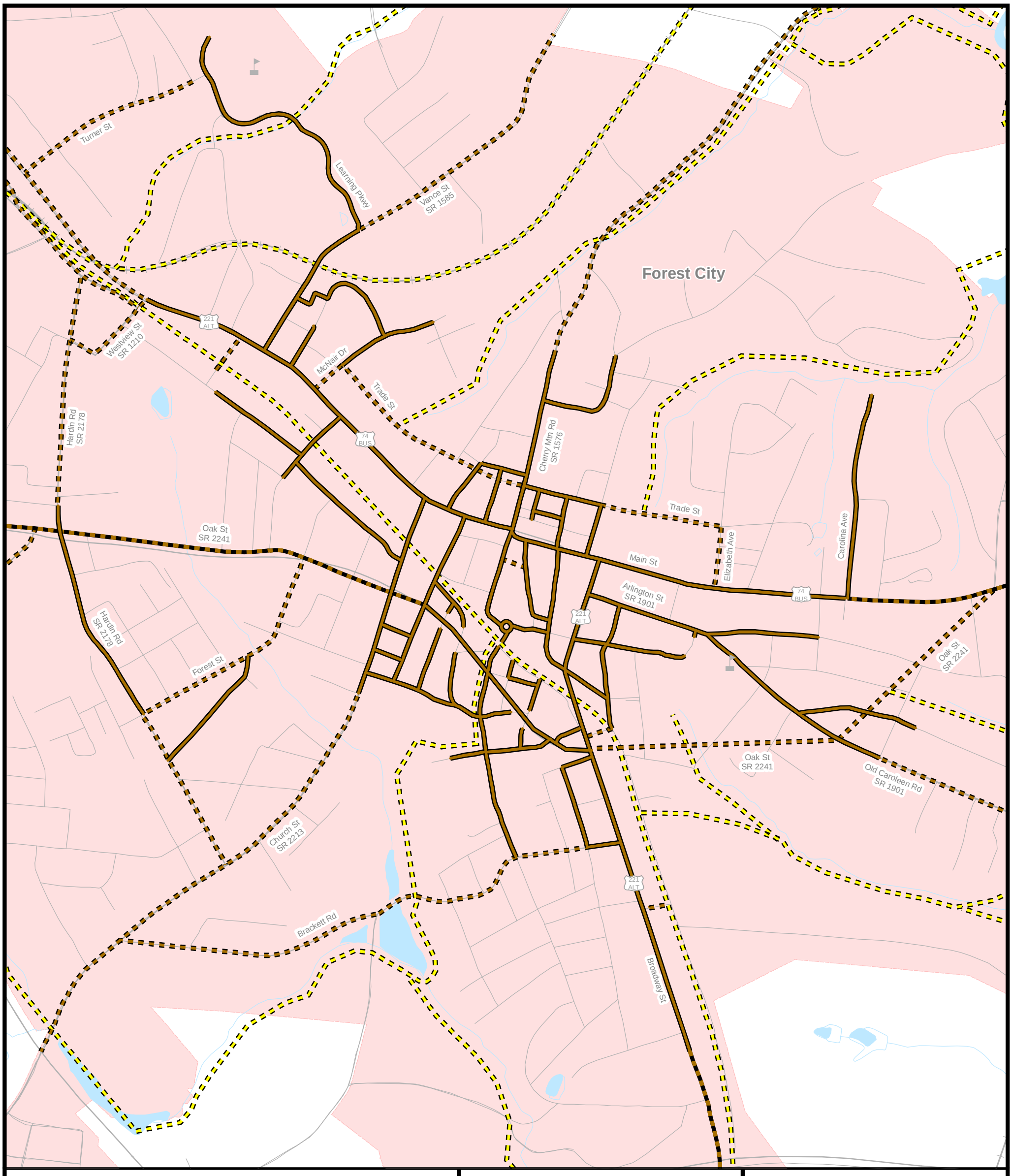
Pedestrian Map

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.1 0.2 0.4 Miles

N W E S

Sheet 5A of 5

Base map date: January 12, 2015

Refer to CTP document for more details

Pedestrian Map Inset A

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

Inset B

0 0.2 0.4 0.8 Miles

Rutherfordton

Whitesides Rd SR 1538
Railroad Ave
Washington St SR 1218
Ridgecrest Ave SR 1166
Charlotte Rd
West St SR 1544
Main St
Tryon Rd
Edwards St SR 1153
Laurel Hill Rd SR 2203
Industrial Park Rd SR 2271
Union Rd SR 1145
Oak St SR 2201

Inset C

0 0.15 0.3 0.6 Miles

Spindale

West St SR 1544
Spindale St SR 1546
Spruce St
Textile Ave
Park St SR 1547
Carver St
Ledbetter Rd SR 1591
Elmore St
Oak St SR 2201
Oakland Rd SR 2169
Main St

Legend

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

N W E S

Sheet 5B of 5

Base map date: January 12, 2015

Refer to CTP document for more details

Pedestrian Map Insets B & C

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

1. Analysis of the Existing and Future Transportation System

A Comprehensive Transportation Plan (CTP) is developed to ensure that the 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.

1.1 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 demand. Emphasis is placed not only on detecting the existing deficiencies, but also on understanding the causes of these deficiencies. Roadway deficiencies may result from inadequacies in pavement widths, intersection geometry, or intersection controls. System deficiencies may result from missing travel links, bypass routes, loop facilities, or radial routes; or improvements needed to meet statewide initiatives.

One of those statewide initiatives is the Strategic Transportation Corridors (STC)[1] adopted by the Board of Transportation on March 4, 2015.
The STC identify a network of critical multimodal transportation corridors considered the backbone of the state's transportation system. These 25 corridors move most of our

[1] *For more information on the STC, go to:*
https://connect.ncdot.gov/projects/planning/Pages/NCTransportationNetwork.aspx

freight and people, link critical centers of economic activity to international air and sea ports, and support interstate commerce. They must operate well to help North Carolina attract new businesses, grow jobs and catalyze economic development.

The primary purpose of the STC is to provide North Carolina with a network of high-priority, multimodal transportation corridors and facilities that connect statewide and regional activity centers to enhance economic development, promote highly-reliable, efficient mobility and connectivity, and support good decision-making. The primary goal to support this purpose is to create a greater consensus towards the development of a genuine vision for each corridor that establishes the statewide or regional importance of facilities and the need for maintaining high capacity and travel speed. During the development of CTPs, the STC network should be cross-referenced to ensure plan consistency. Incorporating the statewide and regional mobility goals set forth in the STC network should be done in a manner that fits with the character and vision for the community or county. If this cannot be achieved through the use of existing facilities, an alternative solution should be sought.

In the development of this plan, travel demand was projected from 2013 to 2040 using a travel demand model in the more urban area of Rutherford County and trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2010. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2040. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were endorsed by the Rutherford County Commissioners (August 1, 2016), Rutherfordton Town Council (July 6, 2016), Spindale Town Council (September 19, 2016), Forest City Town Council (July 18, 2016), Bostic Town Council (December 5, 2016). The town of Ruth and town of Ellenboro were both contacted for endorsement of the established future growth rates, but no responses were received. Refer to Appendix G for more detailed information on growth expectations and the socio-economic data forecasting methodology.

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. The 2040 traffic volumes in Figure 3 are an estimate of the traffic volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2016 – 2025 Transportation Improvement Program[2] (TIP).

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:

[2] *For more information on the TIP, go to:* https://connect.ncdot.gov/projects/planning/Pages/default.aspx

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;
- Access control, including streets and driveways, or lack thereof, along the roadway;
- Development along the road, including residential, commercial, agricultural, and industrial developments;
- Number of traffic signals along the route;
- Peaking characteristics of the traffic on the road;
- Characteristics of side-roads feeding into the road; and
- Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

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

LOS D indicates "practical capacity" of a roadway, or the capacity at which the public begins to experience delay. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using the Transportation Planning Branch's *LOS D Standards for Systems Level Planning*. 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 Assessment

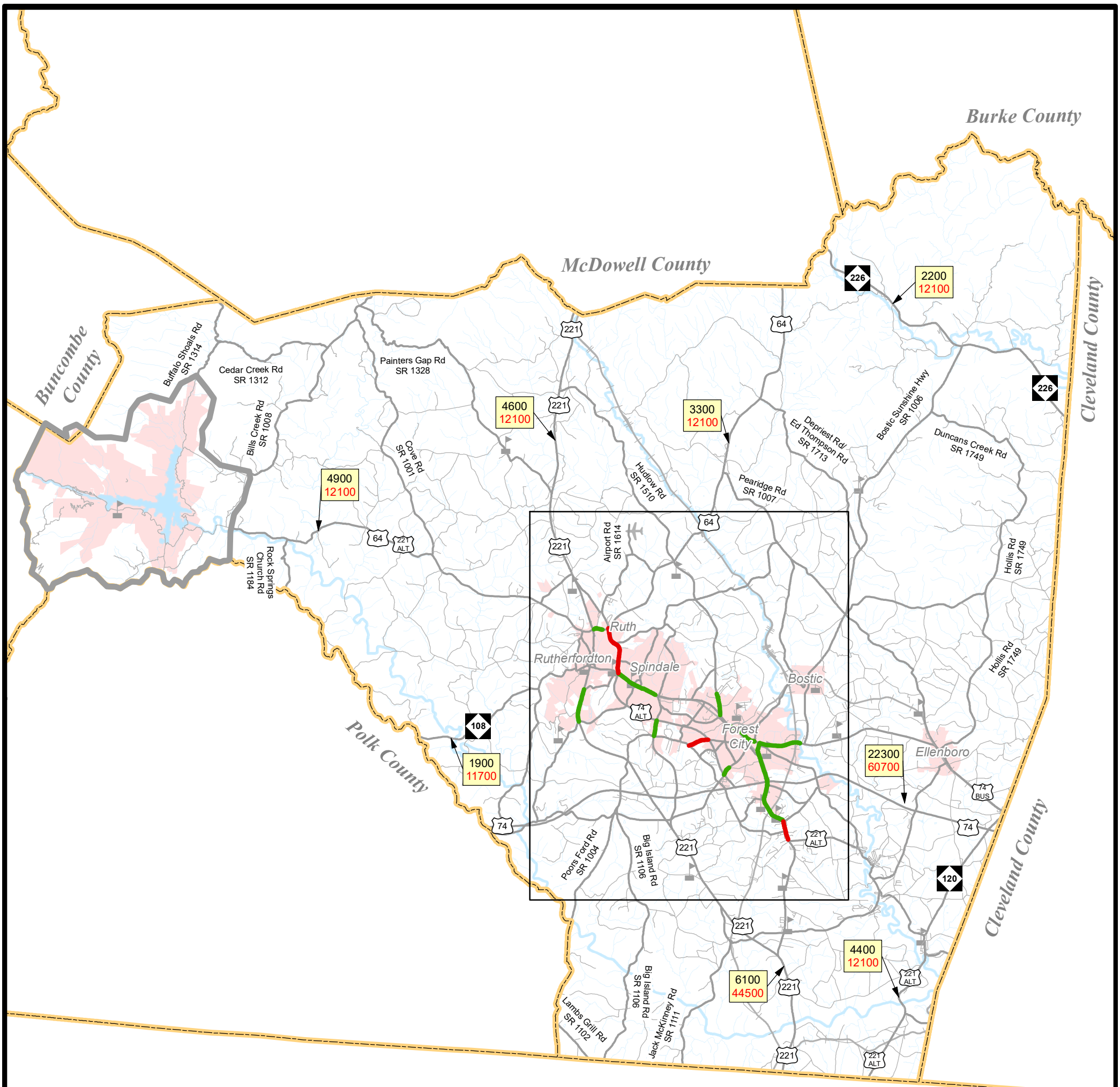
Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. The Traffic Safety Unit of NCDOT's Transportation Mobility and Safety Division identifies high frequency crashes at intersections and along roadway sections during a five year period. The high frequency crash locations examined during the development of the Rutherford County CTP occurred between January 1, 2011 and December 31, 2015. During this period, a total of 118 intersections and 125 roadway sections were identified as having a high frequency of crashes as illustrated in Figure 4. Contact information for the Transportation Mobility and Safety Division can be found in Appendix A.

The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of these locations, or other intersections of concern, contact the Division Traffic Engineer (see Appendix A).

Bridge Deficiency Assessment

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

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as federal and state funds become available. Forty deficient bridges were identified on roads evaluated as part of the CTP and are illustrated in Figure 5. Of these, five are scheduled for replacement in the 2016 – 2025 TIP. Additionally, eleven others occur along roadways recommended for improvement in the CTP. As deficient bridges are replaced, every consideration should be given to proposed CTP recommendation and cross section associated with the recommendation. Table 3 in Appendix F gives a listing of the deficient bridges identified in the CTP and the ID number associated with CTP project proposal. Refer to Appendix F for more detailed bridge deficiency information.



Legend

2013 Volume
2013 Capacity

- Near Capacity
- Over Capacity
- Network Roads
- Other Roads
- Rivers and Streams
- County Boundary
- Municipal Boundary

0 1 2 4 6 Miles

N W E S

FIGURE 2

Sheet 1 of 2

Base map date: January 12, 2015

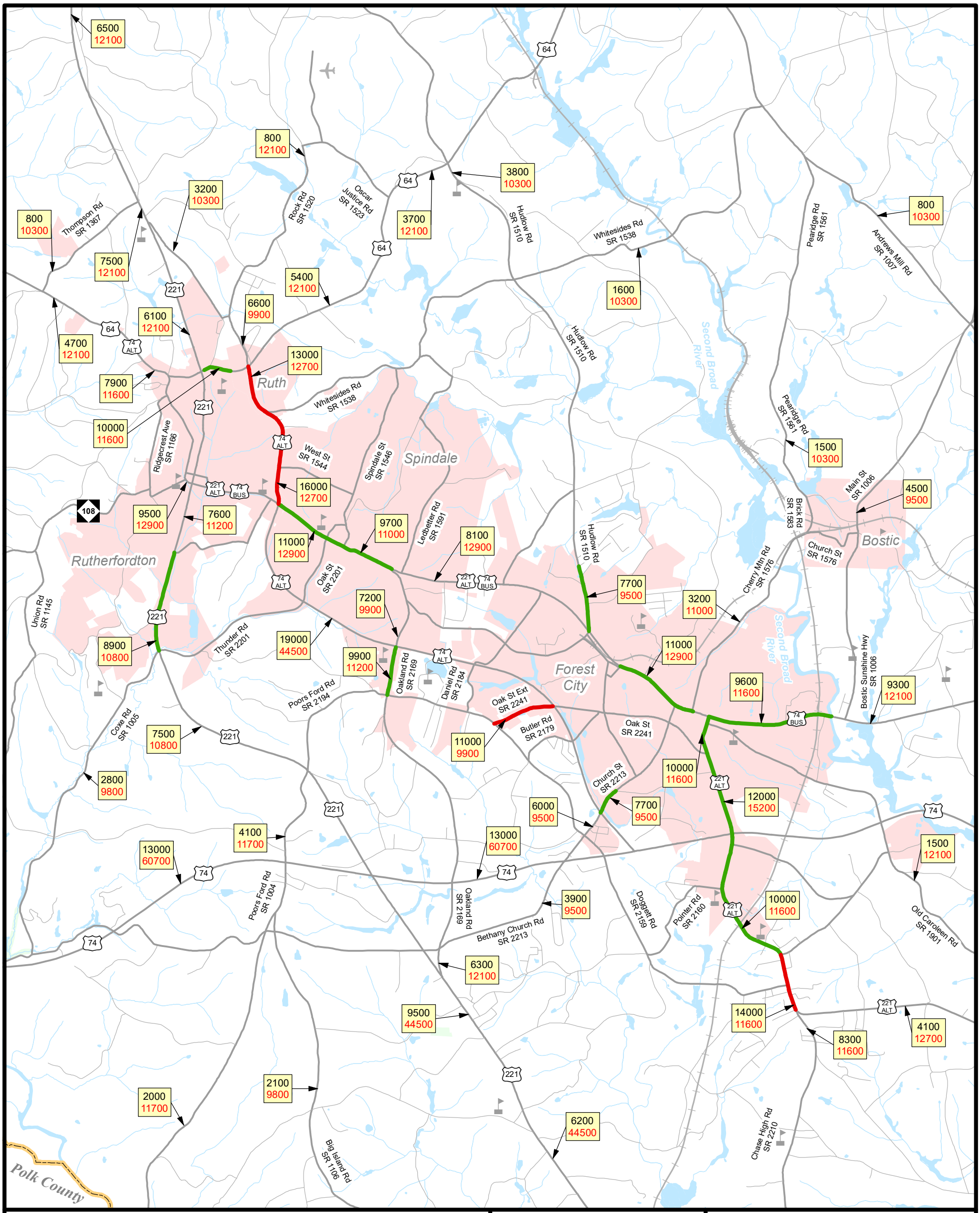
2013 Volume and Capacity Deficiencies

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

2013 Volume
2013 Capacity

- Near Capacity
- Over Capacity
- Network Roads
- Other Roads
- Rivers and Streams
- County Boundary
- Municipal Boundary

0 0.4 0.8 1.6 Miles

N W E S

FIGURE 2

Sheet 2 of 2

Base map date: January 12, 2015

Inset A

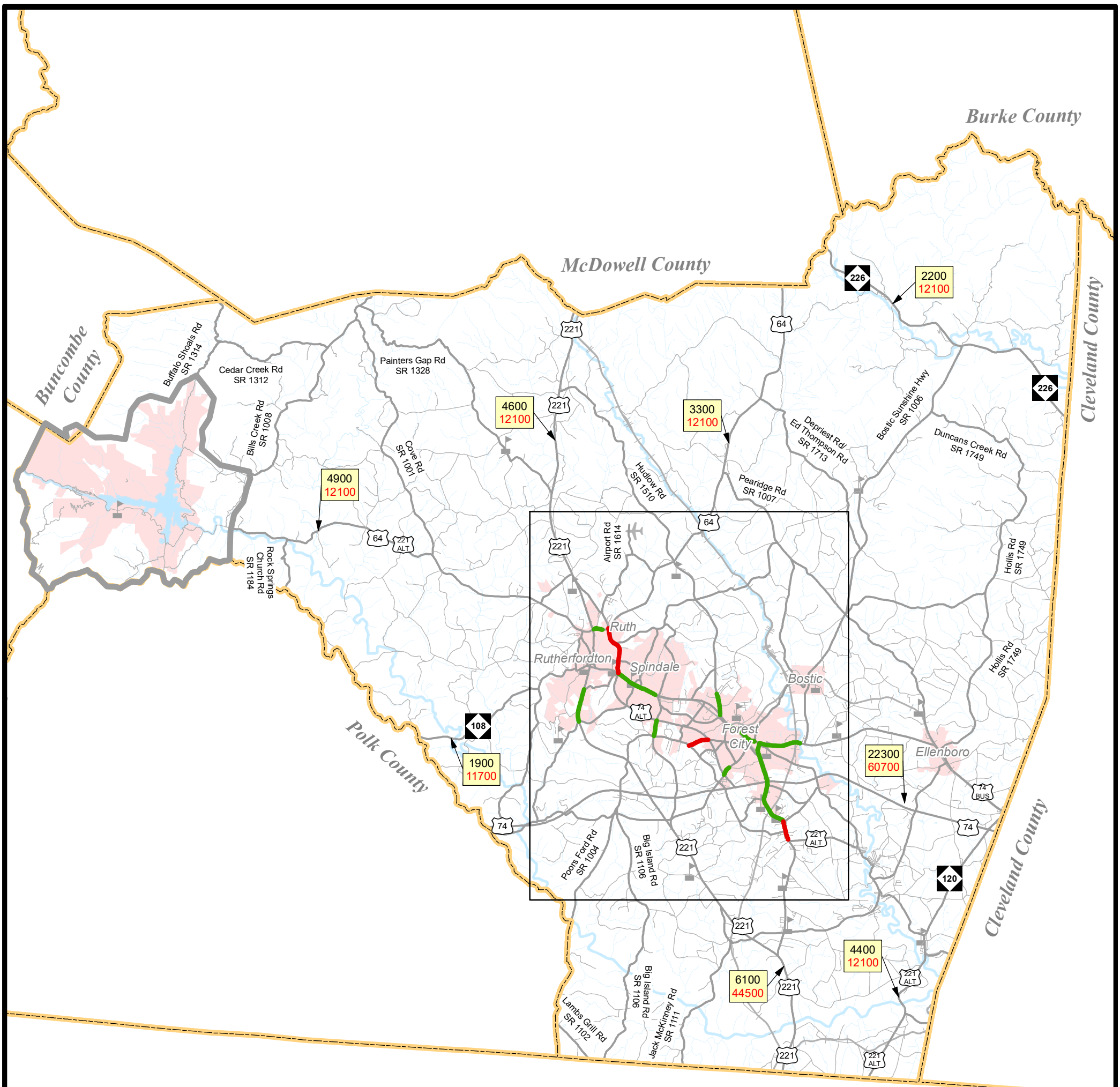
2013 Volume and Capacity Deficiencies

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

2040 Volume
2013 Capacity

- Near Capacity
- Over Capacity
- Network Roads
- Other Roads
- Rivers and Streams
- County Boundary
- Municipal Boundary

Miles
0 1 2 4 6

N W E S

FIGURE 3

Sheet 1 of 2

Base map date: January 12, 2015

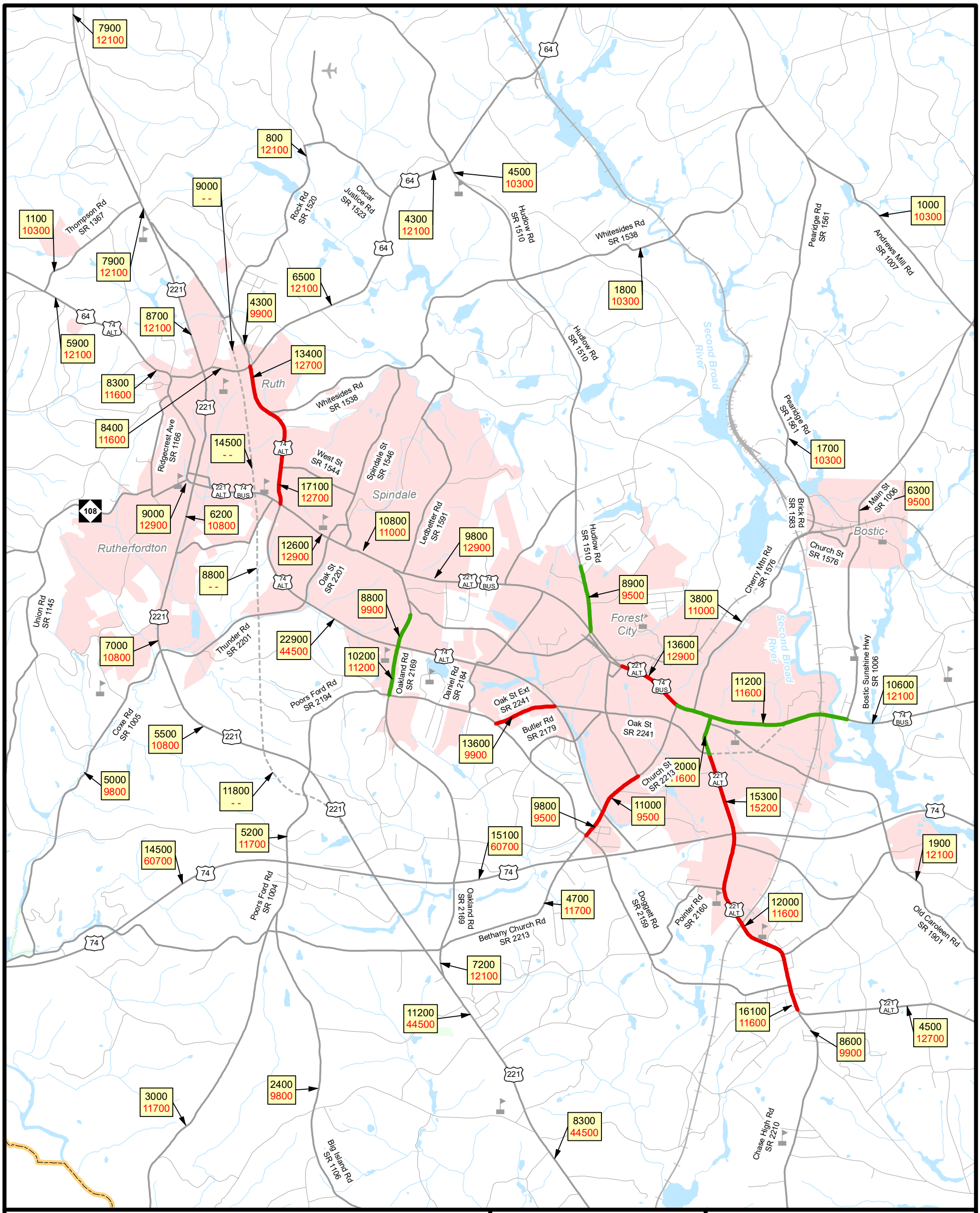
2040 Volume and Capacity Deficiencies

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

2040 Volume
2013 Capacity

- Near Capacity
- Over Capacity
- Network Roads
- Other Roads
- Rivers and Streams
- County Boundary
- Municipal Boundary

0 0.4 0.8 1.6 Miles

N W E S

FIGURE 3

Sheet 2 of 2

Base map date: January 12, 2015

Inset A

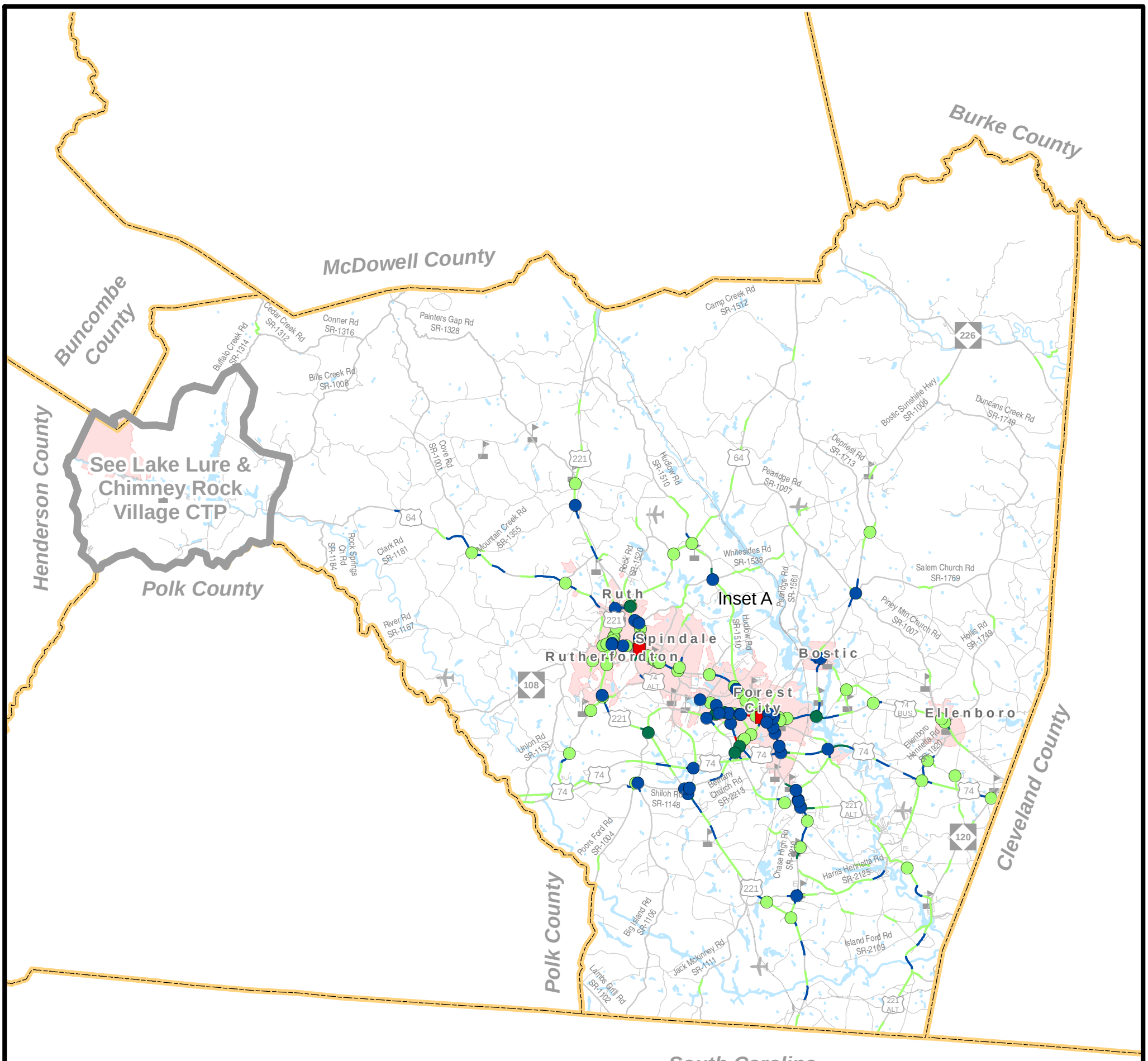
2040 Volume and Capacity Deficiencies

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

Crash Intersections

- 50 and above
- 40 to 49
- 30 to 39
- 20 to 29
- 10 to 19
- 4 to 9

Crash Sections

- 50 and above
- 40 to 49
- 30 to 39
- 20 to 29
- 10 to 19
- 4 to 9

- Roads
- Schools
- Airports
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundaries
- County Boundary

0 1.5 3 6 Miles

N W E S

FIGURE 4

Sheet 1 of 2

Base map date: January 12, 2015

HIGH FREQUENCY CRASH LOCATIONS

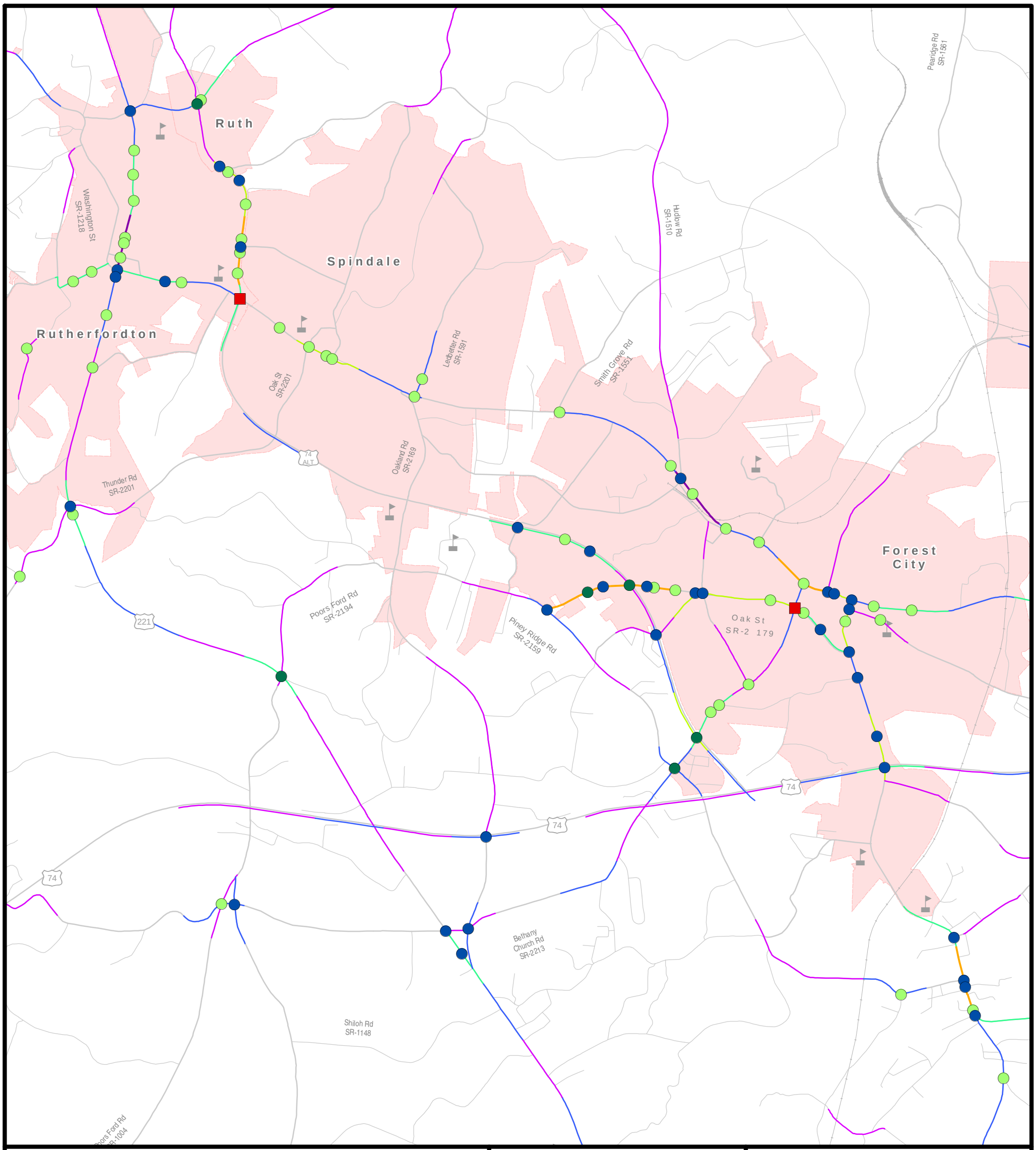
January 1, 2011 to
December 31, 2015

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

Crash Intersections

- 50 and above
- 40 to 49
- 30 to 39
- 20 to 29
- 10 to 19
- 4 to 9

Crash Sections

- 50 and above
- 40 to 49
- 30 to 39
- 20 to 29
- 10 to 19
- 4 to 9

- Roads
- Schools
- Airports
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundaries
- County Boundary

0 0.25 0.5 1 Miles

N W E S

FIGURE 4

Sheet 2 of 2

Base map date: January 12, 2015

HIGH FREQUENCY CRASH LOCATIONS

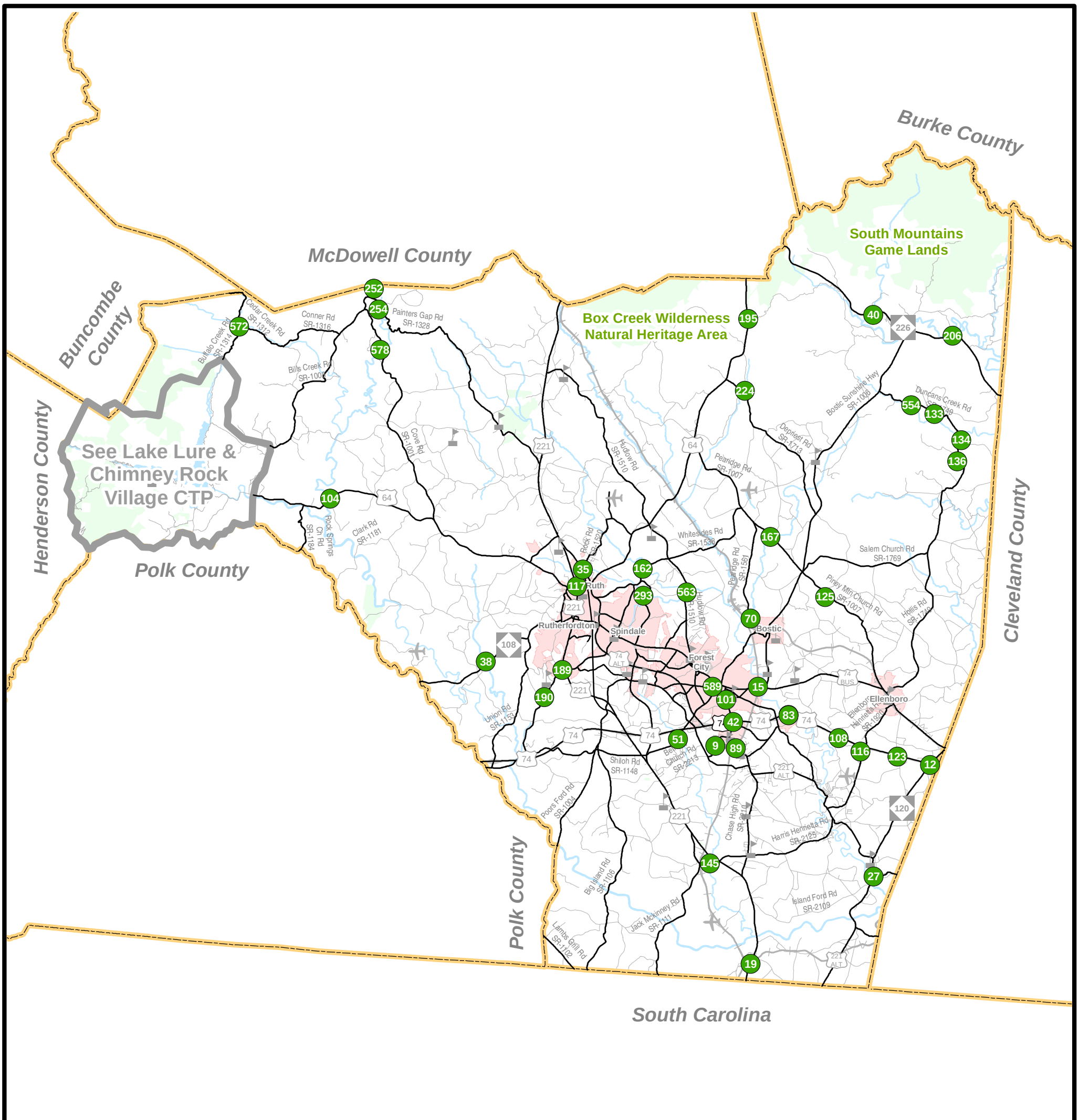
January 1, 2011 to
December 31, 2015

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

- School
- Airport
- Roads
- Railroads
- Deficient Bridges (# - Bridge Number)
- County Boundary
- Municipal Boundary

0 1.5 3 6 Miles

N W E S

FIGURE 5

Base map date: January 12, 2015

Deficient Bridges Map

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

Public Transportation and Rail

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

Public Transportation

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

- Community Transportation - Local transportation efforts formerly centered on assisting clients of human service agencies. Today, the vast majority of rural systems serve the general public as well as those clients.
- Regional Community Transportation - Regional community transportation systems are composed of two or more contiguous counties providing coordinated / consolidated service. Although such systems are not new, single-county systems are encouraged to consider mergers to form more regional systems.
- Urban Transportation – There are currently nineteen urban transit systems operating in North Carolina, from locations such as Asheville and Hendersonville in the west to Jacksonville and Wilmington in the east. In addition, small urban systems provide service 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, Amtrak passenger station and throughout the United States and Canada. Greyhound and Amtrak Thruway service operate 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. Rutherford County Transit serves the general public through a deviated fixed route which runs in Rutherfordton, Spindale, and Forest City. The route runs on a set schedule and allows deviations of a half mile from a set bus stop as long as it is a safe location for the bus to stop. Rutherford County Transit also offers an out of county transportation shuttle service primarily for medical visits. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information for the Public Transportation Division.

Rail

Today North Carolina has 3,245 miles of railroad tracks throughout the state. There are two types of trains that operate in the state, passenger trains and freight trains.

Intercity passenger service is provided by Amtrak which currently operates six passenger services daily in or through North Carolina serving 16 cities across the state. Five of the services are interstate (Crescent, Palmetto, Silver Meteor, Silver Star, and Carolinian passenger trains) and one service (Piedmont passenger train) operates exclusively within North Carolina. In addition to the six passenger services mentioned, Amtrak also operates its Auto Train service which passes through North Carolina but does not make any stops. Amtrak ridership demand has been on a rise in the state. In 2010 ridership was 840,000 and increased to 975,645 passengers in 2013.

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back every day. However, no passenger trains operate over the rail line from High Point that dead ends at Asheboro or over the rail line that runs from Gulf, NC to Greensboro. Combined, the Carolinian and Piedmont carry more than 300,000 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 17 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. Currently, there is no passenger rail service in Rutherford County, but freight service is offered from CSX. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information for the Rail Division.

Bicycles & Pedestrians

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

NCDOT's Bicycle Policy, updated in 1991, clarifies responsibilities regarding the provision of bicycle facilities along the 77,000-mile state-maintained highway system. The policy details guidelines for planning, design, construction, maintenance, and operations pertaining to bicycle facilities and accommodations. All bicycle improvements undertaken by NCDOT are based upon this policy.

The 2000 NCDOT Pedestrian Policy Guidelines specifies that NCDOT will participate with localities in the construction of sidewalks as incidental features of highway improvement

projects. At the request of a locality, state funds for a sidewalk are made available if matched by the requesting locality, using a sliding scale based on population.
NCDOT's administrative guidelines, adopted in 1994, ensure that greenways and greenway crossings are considered during the highway planning process. This policy was incorporated so that critical corridors which have been adopted by localities for future greenways will not be severed by highway construction.

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The Isothermal Regional Trails Plan, the 2015 Forest City: Heart & Sole pedestrian plan, and the updated Town of Forest City Comprehensive Parks and Recreation Plan, 2005 Rutherford County Heritage Development Plan, Overmountain Victory Trail and the Rutherfordton Bike/Ped Plan, Thermal Belt rail trail Master Plan were utilized in the development of these elements of the CTP. The NC 8 - Southern Highlands State Bike Route travels through Rutherford 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 for the Division of Bicycle and Pedestrian Transportation.

Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2014 Rutherford County Land Classification Study (refer to Appendix G) was used to meet this requirement.

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. The highest projected population growth rates in Rutherford County are in the vicinity of the tri-city area (Rutherfordton, Spindale, and Forest City) and southwest of the tri-city area along the US 74 corridor. For employment, the highest projected increases are to the south of the tri-city area, along the US 74 and US 221 corridors.

For detailed information on how land use and growth projections were developed for and applied in the CTP, refer to Appendix G.

1.2 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[3] (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, every effort was made to minimize potential impacts to these features utilizing the best available data. Any potential impacts to these resources were identified as a part of the project recommendations in Chapter 2 of this report. Prior to implementing transportation recommendations of the CTP, a more detailed environmental study would need to be completed in cooperation with the appropriate environmental resource agencies.

A full listing of environmental features that are typically examined as a part of a CTP study is shown in the following tables. Environmental features occurring within Rutherford County are shown in Figure 6 and are shown in bold text in Table 1.

[3] *For more information on NEPA, go to:* https://ceq.doe.gov/.

Table 1 – Environmental Features

- **24k Hydro Lines**
- **303D Streams**
- **Airport Boundaries**
- Anadromous Fish Spawning Areas
- APNEP - Submerged Aquatic Vegetation
- Beach and Waterfront Access
- Benthic Habitat
- **Bicycle Routes**
- Boating Access
- **Churches and Cemeteries**
- **Colleges and Universities (Points)**
- **Conservation Tax Credit Properties**
- **Critical Habitat for Threatened and Endangered Species**
- **Emergency Operation Centers**
- Fish Nursery Areas
- **Hazard Substance Disposal Sites (points & polygons)**
- Hazardous Waste Facilities
- **High Quality Waters and Outstanding Resource Water Management**
- **Historic Resources – National Register and Determined Eligible (points and polygons)**
- **Hospitals**
- **Hydrography - 1:24,000-scale (polygons)**
- **Landscape Habitat Indicator Guilds**
- **Managed Areas**
- **National Wetlands Inventory (polygons)**
- **Natural Heritage Element Occurrences**
- NC-CREWS: N.C. Coastal Region Evaluation of Wetland Significance
- **NCDOT Maintained Mitigation Sites**
- Railroads (1:24,000)
- **Recreation Projects - Land and Water Conservation Fund**
- **Regional Trails**
- **Sanitary Sewer Systems - Treatment Plants**
- **Schools (Public & Non-Public)**
- **Significant Natural Heritage Areas**
- State Natural and Scenic Rivers
- **State Parks**
- **Target Local Watersheds - EEP**
- **Trout Streams (DWQ)**
- **Trout Waters WRC (arcs & polygons)**
- Unique Wetlands
- **Water Distribution Systems – Tanks & Treatment Plants**
- **Water Supply Watersheds**

Archaeological sites were also considered but are not mapped due to restrictions associated with the sensitivity of the data.

1.3 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 Rutherford County Board of Commissioners in September 2014 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

Throughout the course of the study, the NCDOT Transportation Planning Branch cooperatively worked with the Rutherford County CTP Steering Committee, which included representatives from many of the municipalities, county staff, the RPO and others. The committee provided information on current local plans, developed transportation vision and goals, discussed population and employment projections, and developed proposed CTP recommendations. 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 Rutherford County to present the proposed CTP to the public and solicit comments. The first meeting was held on June 22, 2017 at the Spindale House; the second meeting was held on September 5, 2017 at The Rutherford County Administrative Building. No comment forms were submitted during the session held on June 22, 2017 and one comment form was submitted during the session held on September 5, 2017.

A public hearing was held on November 6, 2017 during the Rutherford County Commissioners meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on November 20, 2017 during the Spindale Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on December 4, 2017 during the Bostic Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

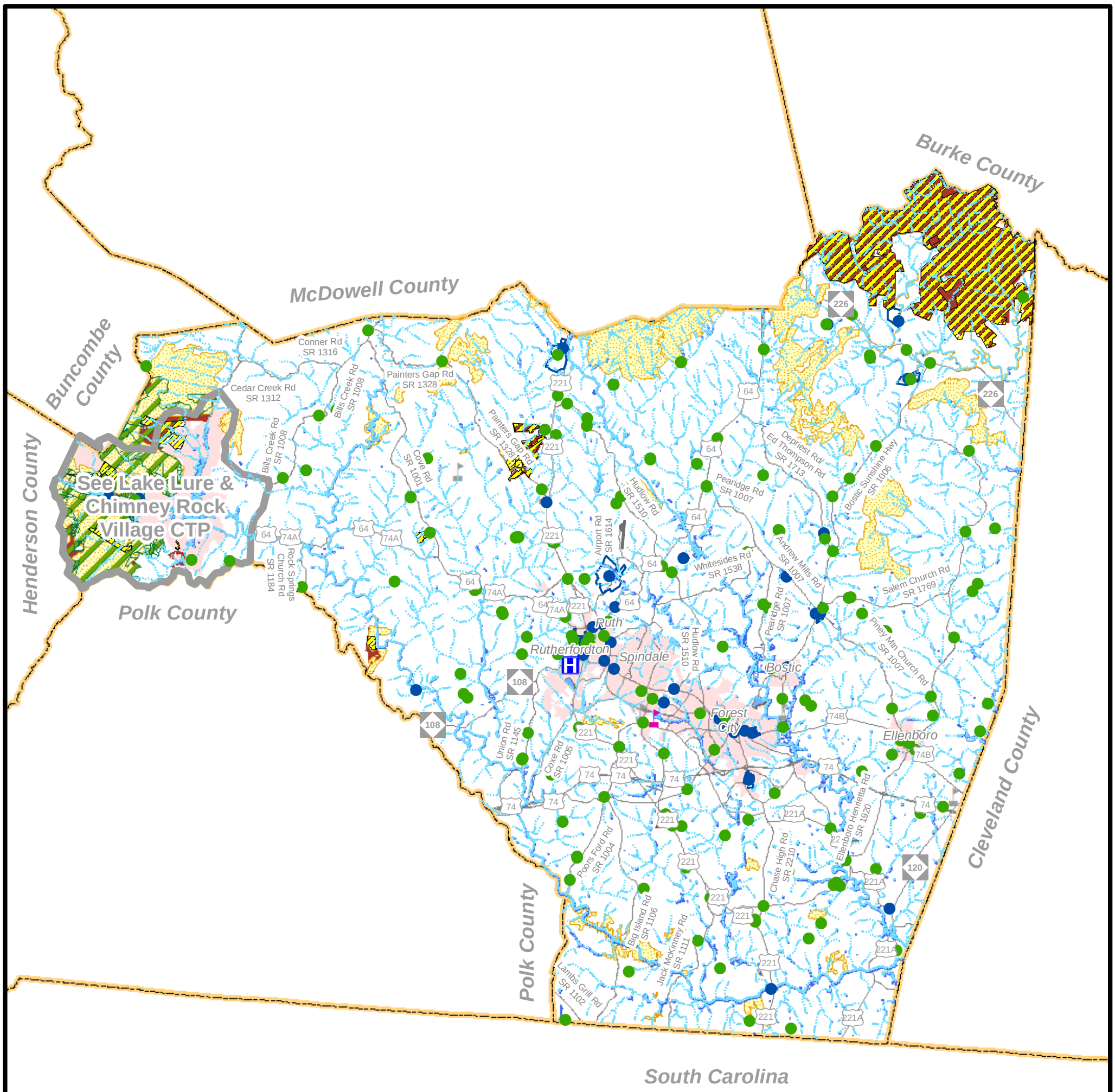
A public hearing was held on December 6, 2017 during the Rutherfordton Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on December 18, 2017 during the Forest City Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on January 8, 2018 during the Ruth Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on January 9, 2018 during the Ellenboro Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

The Isothermal RPO endorsed the CTP on January 3, 2018. The North Carolina Department of Transportation mutually adopted the Rutherford County CTP on March 8, 2018.



Legend

- Churches & Cemeteries
- Collages and Universities
- Hospitals
- Historic Reasource Sites
- 24K Hydro Lines
- Recreation Projects Land & Water
- Critical Habitat
- Airport Boundary
- Conservation Tax Credit Property
- Historic reasource Areas
- Hydrography Areas
- Land & Water Conservation Fund
- National Wetland Inventory
- NCDOT Maintained Mitigation Sites
- State Parks
- Significant Natural Heritage Sites
- Managed Areas
- Rutherford Municipalities
- County Boundaries

0 1.5 3 6 Miles

N W E S

FIGURE 6

Sheet 1 of 4

Base map date: January 12, 2015

Environmental Features Map

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

Burke County

McDowell County

Buncombe County

Henderson County

Polk County

Cleveland County

South Carolina

See Lake Lure & Chimney Rock Village CTP

Conner Rd SR 1316

Cedar Creek Rd SR 1312

Bills Creek Rd SR 1008

Painters Gap Rd SR 1328

Cove Rd SR 1001

Hudlow Rd SR 1510

Airport Rd SR 1614

Depriest Rd/ Ed Thompson Rd SR 1713

Pearidge Rd SR 1007

Bostic Sunshine Hwy SR 1006

Whitesides Rd SR 1538

Andrew Mills Rd SR 1007

Salem Church Rd SR 1769

Piney Mtn Church Rd SR 1007

Ruth

Rutherfordton

Spindale

Bostic

Forest City

Ellenboro

Union Rd SR 1145

Coxe Rd SR 1005

Poors Ford Rd SR 1004

Big Island Rd SR 1106

Jack McKinney Rd SR 1111

Lambs Grill Rd SR 1102

Chase High Rd SR 2210

Ellenboro Henrietta Rd SR 1920

226 64 221 74A 108 74 74B 120 221A

Legend

- Landscape Habitat Indicator Guilds
- Target Local Watersheds
- Rutherford Municipalities
- County Boundaries

0 1.5 3 6 Miles

N W E S

FIGURE 6

Sheet 2 of 4

Base map date: January 12, 2015

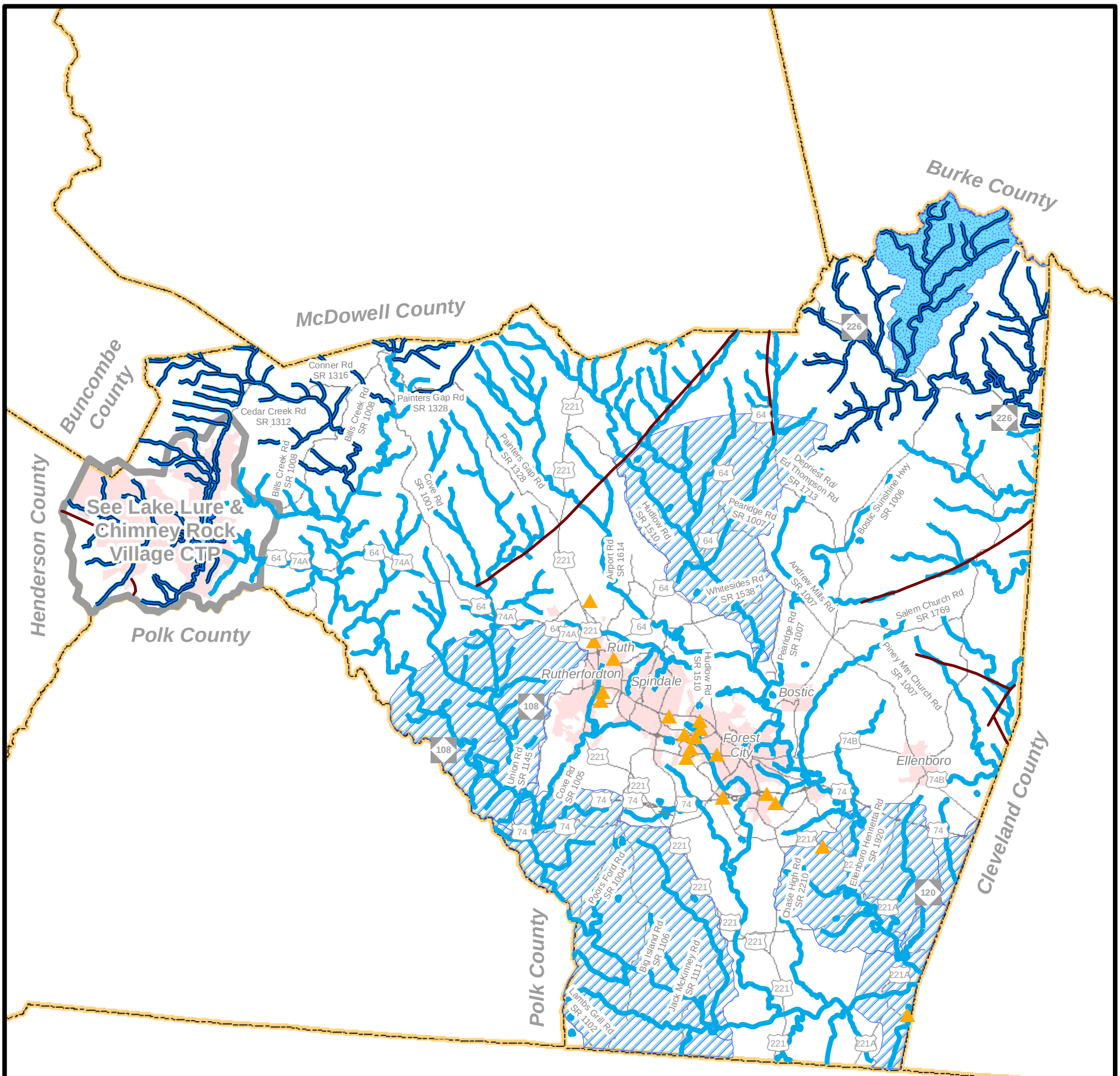
Environmental Features Map

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

- Hazard Substance Disposal Sites
- Fault Lines
- Trout Streams DWQ
- Trout Waters WRC
- Water Supply Watersheds
- Trout Waters WRC
- High Quality Waters
- County Boundaries
- Rutherford Municipalities

0 1.5 3 6 Miles

N W E S

FIGURE 6

Sheet 3 of 4

Base map date: January 12, 2015

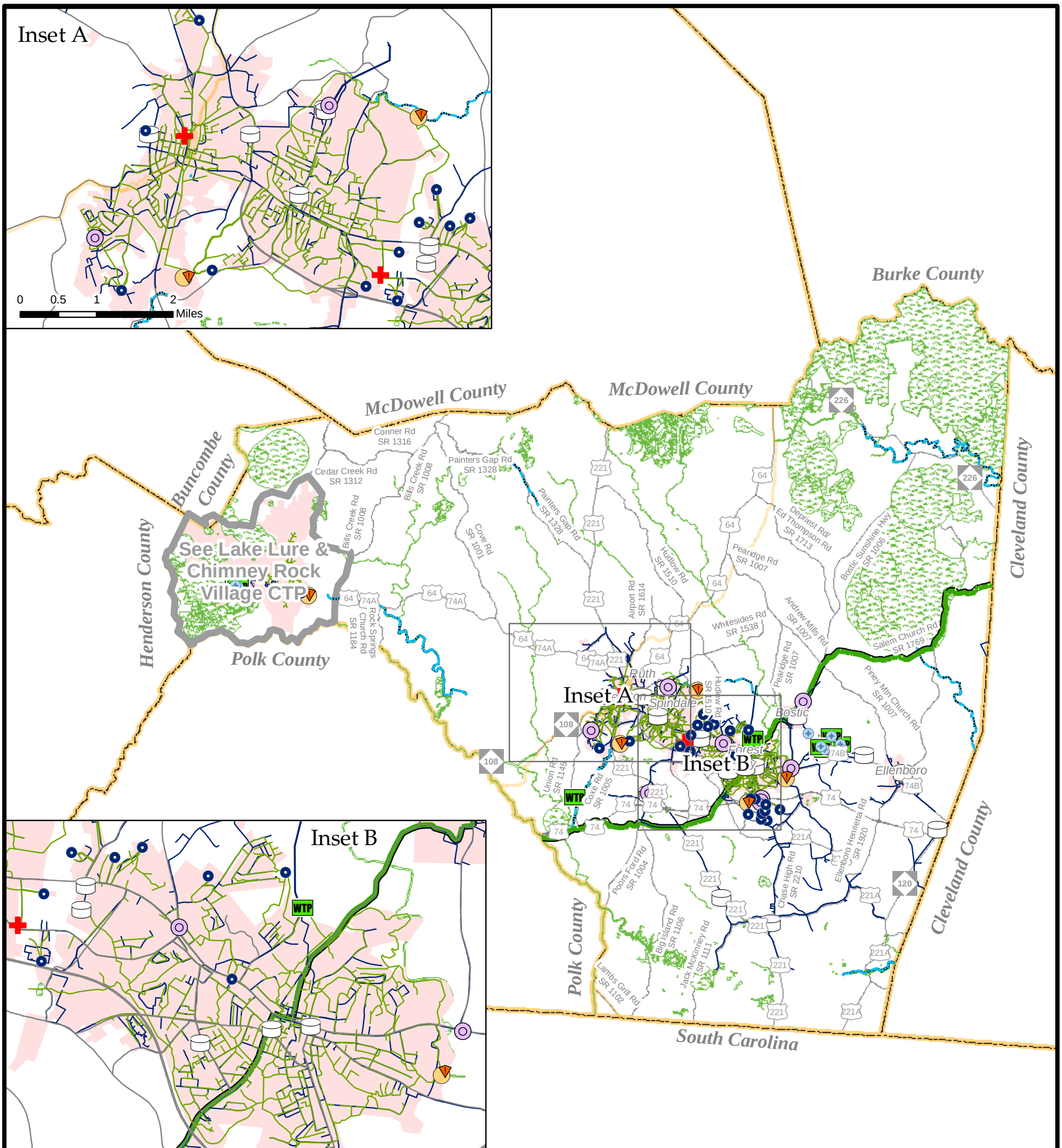
Environmental Features Map

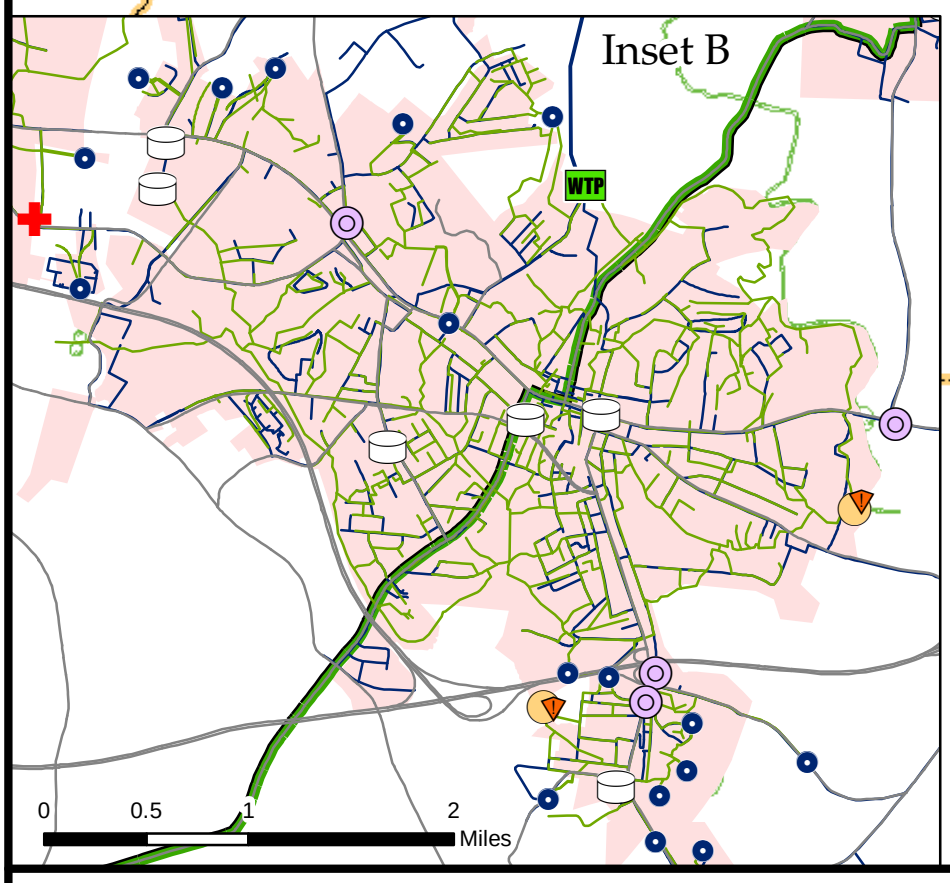
Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017





Legend

- Sanitary Sewer Systems - Discharges
- Sanitary Sewer Systems - Pumps
- Water Distribution Systems - Wells
- Emergency Operration Center
- Water Distribution Treatment Plant
- Water Pumping Station
- Water Distribution Tanks
- Sewer Treatment Plants
- Sanitary Sewer Systems - Pipes
- Water Distribution Systems - Pipes
- Bicycle Routes
- Regional Trails
- 303D Streams
- Natural Heritage Element Occurence
- County Boundaries
- Rutherford Municipalities

0 1.5 3 6 Miles

N W E S

FIGURE 6

Sheet 4 of 4

Base map date: January 12, 2015

Environmental Features Map

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2017 Rutherford County CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C. For information on the Lake Lure and Chimney Rock Village planning area, refer to the 2013 Lake Lure & Chimney Rock Village CTP[1].

NCDOT adopted a "Complete Streets[2]" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the Department will collaborate with cities, towns and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

- making it easier for travelers to get where they need to go;
- encouraging the use of alternative forms of transportation;
- building more sustainable communities;
- increasing connectivity between neighborhoods, streets, and transit systems;
- improving safety for pedestrians, cyclists, and motorists.

Complete streets are streets designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists and individuals of all ages and capabilities. These streets generally include sidewalks, appropriate bicycle facilities, transit stops, right-sized street widths, context-based traffic speeds, and are well-integrated with surrounding land uses. The complete street policy and concepts were utilized in the development of the CTP. The CTP proposes projects that include multi-modal project recommendations as documented in the problem statements within this chapter. Refer to Appendix C for recommended cross sections for all project proposals and Appendix D for more detailed information on the typical cross sections.

2.1 Unaddressed Deficiencies

The following deficiency was identified during the development of the CTP but remains unaddressed.

US 221 Alternate: US 221 Alternate from US 74 Business to Chase High Road (SR 2210) is projected to be over capacity in 2040. This section of US 221 Alternate is a two to three lane facility with a Level of Service (LOS) D capacity of 11600 to 15,200 vehicles per day (vpd). The 2013 annual average daily traffic (AADT) is between 9,800 and 14,000 vpd and the 2040 AADT is projected to be between 10,900 and 16,100 vpd. Because of physical constraints, no method of improvement was found to be acceptable to Forest City at the time. Business storefronts and above ground utilities prevents any

[1] To view the 2013 Lake Lure & Chimney Rock Village CTP, go to: https://connect.ncdot.gov/projects/planning/Pages/Comprehensive-Transportation-Plans.aspx.

[2] For more information on Complete Streets, go to: http://www.completestreetsnc.org/

additions to the current pavement width. This deficiency will be re-evaluated during a subsequent CTP update.

2.2 Implementation

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

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the 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 prioritized locally and submitted to the Isothermal RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on regional prioritization and funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design and construction of the recommended projects.

Recommended improvements shown on the CTP map represents an agreement of identified transportation deficiencies and potential solutions to address the deficiencies. While the CTP does propose recommended solutions, it may not represent the final location or cross section associated with the improvement. All CTP recommendations are based on high level systems analyses that seek to minimize impacts to the natural and human environment. Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act[3] (SEPA). During the NEPA/SEPA process, the specific project location and cross section will be determined based on environmental analysis and public input. This CTP may be used to support transportation decision making and provide transportation planning data in the NEPA/SEPA process.

2.3 Problem Statements

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

[3]*For more information on SEPA, go to: http://www.doa.nc.gov/clearing/faq.aspx.*

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

HIGHWAY

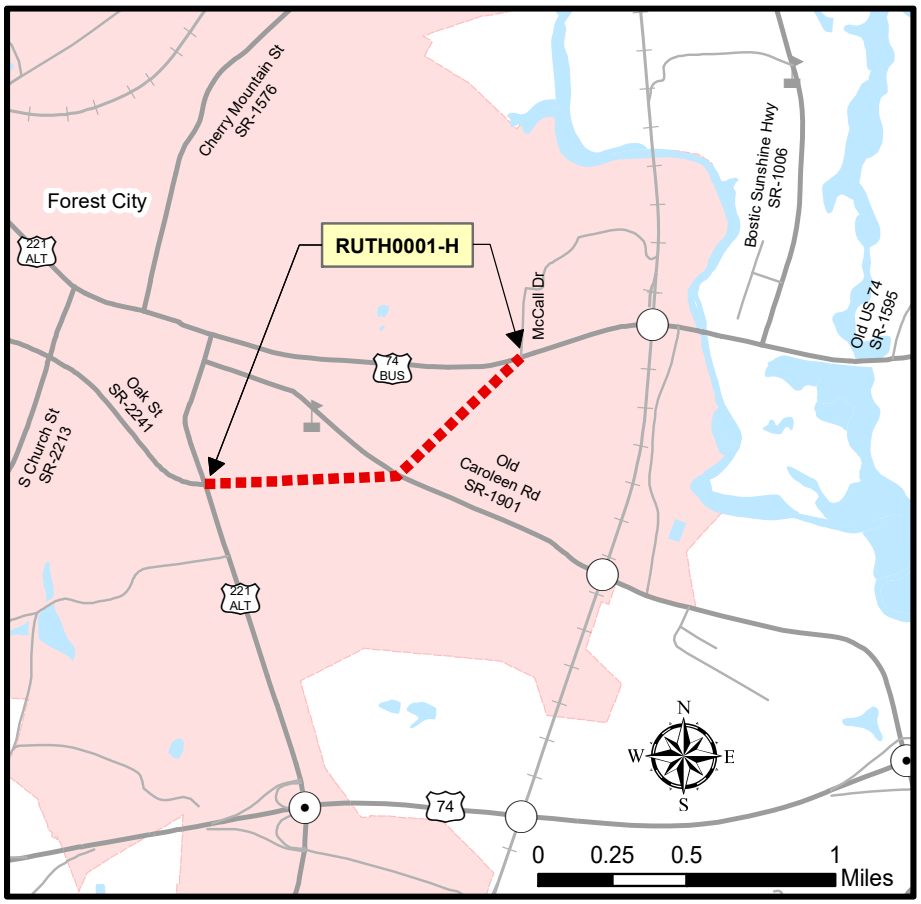
Oak Street, Proposed Extension from US 221 Alternate to US 74 Business

Local ID: RUTH0001-H

Last Updated: 6/19/17

Identified Problem

US 74 Business from US 221 Alternate to Old US 74 Highway (SR 1595) is projected to be over capacity by 2040. The purpose of this project is to accommodate projected traffic volumes in order to maintain a Level of Service (LOS) D.



Justification of Need

This segment of US 74 Business is a two lane, undivided facility with a speed limit ranging from 35 mph to 55 mph and a LOS D capacity ranging from 11,600 vehicles per day (vpd) to 12,700 vpd. The 2013 annual average daily traffic (AADT) ranges from 9,300 to 9,600 vpd and the 2040 AADT is projected to be 10,600 to 12,200 vpd.

Community Vision and Problem History

An objective in Forest City's transportation goals is to establish a safe and efficient multimodal network that accommodates the demand from proposed land uses while preserving its small town atmosphere.

This deficiency was identified in the 1999 Rutherford County Thoroughfare Plan[4].

[4] *To view the 1999 Rutherford County Thoroughfare Plan, go to: https://archive.org/details/rutherfordcounty1999nort.*

CTP Project Proposal

Project Description and Overview

The proposed new facility would serve as an alternate route for existing US 74 Business, which currently goes through the downtown area of Forest City. The proposed facility, from US 221 Alternate to US 74 Business at McCall Drive, is recommended to be built as a boulevard with four 12 foot lanes, a speed limit of 45 mph and includes pedestrian accommodations. This project will allow traffic an alternative route that avoids downtown Forest City by increasing connectivity and mobility between US 74 Alternate and US 74 Business.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: water distribution pipes, sanitary sewer pipes, 24k hydro lines, and trout waters. The proposed project will also impact homes and businesses in the immediate vicinity.

Relationship to Land Use Plans

Current land use in the area of the recommended facility is primarily residential. The Town of Forest City 2012 Comprehensive Land Use Plan shows that future land use classifications in this area will primarily be neighborhood business and residential.

Linkages to Other Plans and Proposed Project History

The 1999 Rutherford County Thoroughfare Plan proposed extending Oak Street past US 221 Alternate to Old Caroleen Road (SR 1901) in order to shift unnecessary traffic from downtown Forest City. It was proposed to be a new five lane facility from Young Street to Old Caroleen Road (SR 1901), but has only been completed to US 221 Alternate. The current CTP project proposal, extending Oak Street to Old Caroleen Road (SR 1901) and continuing to US 74 Business, is viewed as a better alternative since it increases connectivity throughout the corridor.

This project directly connects to and complements the proposed improvements to US 74 Business (see RUTH0005-H).

Multi-modal Considerations

The CTP project recommends consideration for pedestrian accommodations.

Public/ Stakeholder Involvement

Results from the Goals and Objectives (G&O) survey conducted for this CTP showed that US 74 Business was identified as the seventh most congested road in Rutherford County, while Oak Street in Forest City was eighth.

US 64, Local ID: RUTH0002-H

US 64 is one of the major routes that carries traffic in and out of the county and provides access to I-26 and I-40 in neighboring counties. Combined with a large logging company that is located off the route in Rutherford County and a number of other businesses in close proximity, the facility generates a high percentage of truck traffic. The large number of trucks is causing decreased speeds and an increase in travel times as well as safety concerns throughout the corridor. Improvements are needed to address these issues.

The CTP recommends modernization along US 64 from Bills Creek Road (SR 1008) to McDowell County by adding passing lanes and dedicated turn lanes, as needed, where possible.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, national wetland inventory areas, managed areas, trout waters (WRC), water supply watersheds, sanitary sewer systems, water distribution systems, regional trails, impaired and threatened (303D) streams, a geological fault, natural heritage element occurrence areas, and target local watersheds.

US 74, Local ID: RUTH0003-H

US 74 throughout Rutherford County has been identified as one of NCDOT's Strategic Transportation Corridors (Corridor U). The 278 mile Corridor U serves southwest North Carolina from I-26 in Polk County to US 117 in Wilmington, the primary access to the Port at Wilmington, traversing the state's southern tier counties and the Charlotte metropolitan area. US 74 carries high truck volumes for the entire length of the corridor and high passenger volumes from Shelby to Monroe. Corridor U overlaps Corridor H (Future I-74) for 91 miles from Rockingham to Columbus County. The corridor includes the CSX rail line from the state port at Wilmington through Charlotte to its junction with Corridor D in Rutherford County. The corridor is used as both a regional and statewide connection to major employment centers, airports, and health centers.

US 74 is currently a full control of access freeway throughout the county. The goal of this project is to make improvements in order to increase mobility in the region. The CTP project recommends improving the facility to interstate standards throughout Rutherford County. Additionally, there is a local desire to obtain interstate classification on the facility from I-85 to I-26 which was previously identified in former Governor McCrory's 25-Year Vision for transportation.

US 74 Alternate (Railroad Avenue), Local ID: RUTH0004-H

US 74 Alternate (Railroad Avenue) from US 221 Alternate to US 64 is projected to be over capacity by 2040. The purpose of this project is to accommodate projected traffic volumes in order to maintain a Level of Service (LOS) D on the facility.

This section of the existing US 74 Alternate is a two lane, 24 foot undivided facility with a speed limit of 35 mph and LOS D capacity of 12,700 vehicles per day (vpd). The 2013 annual average daily traffic (AADT) ranges from 13,000 to 16,000 vpd and the projected 2040 AADT ranges from 13,400 to 17,100 vpd. Additionally, US 74 Alternate (Railroad Avenue) experienced over 100 crashes from 2011 through 2015.

Railroad Avenue provides school bus access to Rutherfordton-Spindale Middle School, has multiple entrances for a shopping center containing a large grocery store, and several other major businesses and neighborhood entrances. The CTP project proposes improving US 74 Alternate (Railroad Avenue) to a three lane facility with two through lanes and a middle left turn lane from US 221 Alternate to US 64.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, water distribution systems, sanitary sewer systems, a hazard substance disposal site, regional trails, target local watersheds, and historic resource areas.

US 74 Business, Local ID: RUTH0005-H

US 74 Business from US 221 Alternate to Old US 74 Highway (SR 1595) is projected to be over capacity by 2040. The purpose of this project is to accommodate projected traffic volumes in order to maintain a Level of Service (LOS) D.

US 74 Business is a two lane, undivided facility with a speed limit ranging from 35 mph to 55 mph and a LOS D capacity ranging from 11,600 vehicles per day (vpd) to 12,700 vpd. The 2013 annual average daily traffic (AADT) ranges from 9,300 to 9,600 vpd and the 2040 AADT is projected to be 10,600 to 12,200 vpd.

This section of US 74 Business contains many residential and commercial driveways, causing slowdowns from vehicles making left turns. The CTP project proposes that US 74 Business be widen to a three lane undivided facility with two through lanes and a center left turn lane from US 221 Alternate to Old US 74 Highway. Bicycle and pedestrian improvements are also recommended.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: a national wetland inventory area, 24k hydro lines, historic resource areas, trout waters (WRC), water distribution tank and systems, a water pumping station, sanitary sewer systems, and a natural heritage element occurrence area. There is also an elevated rail crossing (grade separation) over the proposed project.

This project directly connects to and complements the proposed improvements for Oak Street (see RUTH0001-H).

US 221, TIP No. R-2597A

US 221 from the proposed US 221 Bypass to McDowell County does not meet future mobility and connectivity needs to maintain at least boulevard standards for the facility in the county. The purpose of this project is to improve mobility on US 221.

Existing US 221 is a four lane, divided facility from South Carolina to US 74. TIP Project R-2233B will construct US 221 Bypass as a four lane freeway, leaving this existing section as the only remaining two lane section along US 221 in the county. The 2013 McDowell County Comprehensive Transportation Plan and the 2015 City of Marion Comprehensive Transportation Plan also identified the need to upgrade the existing two lane facility to a four lane, divided facility north of the Rutherford County line. The CTP project proposes widening the existing facility to a four lane boulevard. For additional information about this project, contact the NCDOT Project Development and Environmental Analysis (PDEA) Branch.

US 221 Alternate, TIP No. R-3612

US 221 Alternate from Harris Henrietta Road (SR 2125) to Melton Street (SR 1941) is a two lane, 24 foot facility with several sharp curves, causing a safety issue along this section. TIP project R-3612 addresses this issue through modernization of US 221 Alternate. The project calls for horizontal realignment of curves as well as the addition of two foot paved shoulders. This project is not currently funded in the State Transportation Improvement Program. For additional information about this project, including purpose and need, contact the NCDOT Project Development and Environmental Analysis (PDEA) Branch. Refer to Appendix A for contact information.

US 221 Bypass, TIP No. R-2233B

US 221 from Industrial Park Road (SR 2271) to Poors Ford Road (SR 1004) is projected to be near or over capacity by 2040. The 2016-2025 State Transportation Improvement Program (STIP) includes project R-2233B that will addresses this deficiency.

The proposed facility is a north-south route, east of downtown Rutherfordton, from Birch Hutchins Road (SR 2171) to the US 221 widening project (R-2597A) south of Thompson Road (SR 1367) and is recommended to be built as a freeway consisting of four 12 foot lanes with a speed limit of 55 mph. The section of the project from south of US 74 Alternate to south of Thompson Road (SR 1367) is scheduled for construction in State Fiscal Year (SFY) 2020 and the remainder of the project is not currently funded in the STIP. For additional information about this project, contact the NCDOT Division 13 office. Refer to Appendix A for contact information.

Bethany Church Road / S. Church Street (SR 2213), Local ID: RUTH0006-H

Existing Bethany Church Road / S. Church Street (SR 2213) from Doggett Road / Piney Ridge Road (SR 2159) to Hardin Road (SR 2178) is projected to be over capacity in 2040. The purpose of this project is to accommodate projected traffic volumes in order to maintain a Level of Service (LOS) D on the facility.

Bethany Church Road / S. Church Street (SR 2213) is a two lane, 20 foot undivided facility with a speed limit of 35 mph and a LOS D capacity of 9,500 vehicles per day (vpd). The 2013 annual average daily traffic (AADT) ranges from 6,000 to 7,700 vpd and the projected 2040 volumes range from 9,800 to 11,000 vpd. The S. Church Street portion of this corridor contains commercial and residential driveways on both sides of the street including an entrance to a large grocery store. The Bethany Church section contains mainly residential driveways only on the southeast side of the facility.

The CTP project proposes improving S. Church Street to a three lane facility with two through lanes and a middle left turn lane and widening Bethany Church Road from 10 foot to 12 foot lanes and adding dedicated turn lanes where needed.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, a national wetland inventory area, trout waters (WRC), sanitary sewer systems, water distribution systems, and bicycle routes.

Hudlow Road (SR 1510), Local ID: RUTH0007-H

Hudlow Road (SR 1510) from US 221 Alternate to Weatherstone Drive (SR 1604) is projected to be near capacity in 2040. This section of Hudlow Road contains a high number of commercial driveways, causing a lot of turning movements into various businesses and churches. These frequent turns are hindering traffic flow and creating congestion. Improvements are needed on this section to accommodate projected traffic volumes in order to maintain a Level of Service (LOS) D on Hudlow Road (SR 1510).

From US 221 Alternate to Weatherstone Drive, Hudlow Road is a two lane, 20 foot undivided facility with a speed limit ranging from 35 mph to 45 mph and has a LOS D capacity of 9,500 to 11,400 vehicles per day (vpd). The 2013 annual average daily traffic (AADT) is 7,700 vpd and the 2040 volume is projected to be 8,900 vpd, which will be near capacity. The CTP recommends improving Hudlow Road to a three lane facility with two through lanes and a middle left turn lane.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, water pumping station, water distribution systems, and sanitary sewer systems.

Jack McKinney Road (SR 1111), Local ID: RUTH0008-H

The CTP project recommends modernizing Jack McKinney Road (SR 1111) from 9 foot lanes to 12 foot lanes with paved shoulders from the Dan River facility to US 221 to improve mobility and safety.

Laurel Hill Drive Extension, Local ID: RUTH0009-H

The proposed US 221 Bypass project will cross existing Laurel Hill Drive (SR 2203), cutting off access to the Rutherford County Solid Waste Landfill and leaving Industrial Park Road (SR 2271) as the only access route. Industrial Park Road is steep and can become treacherous during winter months when covered in ice, making it an unsafe route for heavy truck traffic attempting to enter and exit the landfill. Industrial Park Road also releases truck traffic exiting the landfill onto a busy section of US 221 (S. Main Street) near downtown Rutherfordton. In order to maintain access to the landfill and industrial properties in the area, the CTP project proposes extending Laurel Hill Drive to connect to Thunder Road (SR 2201). Further study for this improvement will be required to determine the option desired by the county.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, trout waters (WRC), sanitary sewer pump and systems, water distribution systems, and target local watersheds.

Landfill Access, Local ID: RUTH00010-H

This project is being included as an alternate option to the Laurel Hill Drive Extension (RUTH0009-H). Further study for this improvement will be required to determine the option desired by the county.

Oak Street (SR 2241), TIP No. U-5833

Oak Street (SR 2241) from Piney Ridge Road (SR 2159) to US 74 Alternate is currently over capacity. The 2016-2025 Transportation Improvement Program (TIP) includes project U-5833 in that will address this deficiency. This project is scheduled to begin construction in State Fiscal Year 2018. For additional information about this project, contact the NCDOT Division 13 office. Refer to Appendix A for contact information.

Oak Street (SR 2241), Local ID: RUTH0011-H

Oak Street (SR 2241) from US 74 Alternate to Young Street is a five lane facility with four 12 foot through lanes, a center turn lane and a speed limit of 45 mph. Oak Street has heavy commercial land use with many driveway accesses to businesses. The Forest City Fire Department is also located in this corridor, so maintaining easy access onto Oak Street for the Fire Department is an important consideration. This section of Oak Street experienced over 100 crashes from 2011 through 2015.

The CTP proposes improving this section of Oak Street to a boulevard by removing the center turn lane and providing a median in order to limit access and increase safety. Pedestrian improvements are also being recommended for this project. Traffic signals should be considered at major intersections to provide safe access to businesses and should include crosswalks for pedestrian crossing.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, trout waters (WRC), water distribution systems, sanitary sewer systems, a hazard substance disposal site, and regional trails.

Oakland Road (SR 2169), Local ID: RUTH0012-H

Oakland Road (SR 2169) from Poors Ford Road (SR 2194) / Piney Ridge Road (SR 2159) to Withrow Road (SR 2185) is projected to be near capacity in 2040. The purpose of this project is to accommodate projected traffic volumes in order to maintain a Level of Service (LOS) D on Oakland Road. A secondary goal of the project is to increase safety at the intersection of Oakland Road and US 221 Alternate.

South of US 74 Alternate, Oakland Road is a two lane, 22 foot undivided facility with a speed limit of 40 mph and a LOS D capacity of 11,200 vehicles per day (vpd). This section's 2013 annual average daily traffic (AADT) is 9,900 vpd and has a projected 2040 volume of 10,200 vpd. The portion north of US 74 Alternate is a two lane, 20 foot undivided facility with a speed limit of 35 mph and a LOS D capacity of 9,900 vpd. The 2013 traffic volume is 7,200 vpd and is projected to be 8,800 vpd in 2040. Both sections will be near capacity in 2040.

The CTP project recommends improving Oakland Road to a three lane facility with two through lanes and a middle left turn lane from Poors Ford Road (SR 2194) / Piney Ridge Road (SR 2159) to US 221 Alternate. The CTP project also recommends realigning the existing intersection of Oakland Road and US 221 Alternate to tie into US 221 Alternate at Ledbetter Road (SR 1591). Bicycle improvements are also recommended.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: sanitary sewer systems, water distribution systems, and target local watersheds.

Intersection Improvement Projects

US 221 Alternate (Charlotte Road) / NC 108, Local ID: RUTH0013-H

US 221 Alternate / NC 108 from Washington Street (SR 1218) to US 74 Alternate contains three intersections in Rutherfordton that have safety issues. The locations of the three intersections are with Washington Street (SR 1218), US 221, and US 74 Alternate (Railroad Avenue). The intersections at US 221 and US 74 Alternate have experienced 13 and 38 crashes from 2011 through 2015 respectively. Although there is no documentation of crashes at the Washington Street intersection during this timeframe, the intersection is poorly aligned and there are poor sight distances for several of the movements through the intersection. The CTP project recommends intersection improvements at all three of the intersections in order to improve operations and safety. Bicycle and pedestrian recommendations are also being made throughout the corridor.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, trout waters (WRC), water distribution centers, sanitary sewer systems, regional trails, historic resource areas, and target local watersheds.

Bostic Sunshine Highway (SR 1006), Local ID: RUTH0014-H

Bostic Sunshine Highway (SR 1006) has two intersections north of Bostic municipal limits that are posing operational and safety concerns. The two intersections are located at Andrews Mill Road / Piney Mountain Church Road (SR 1007) / Salem Church Road (SR 1769) and Toney Road (SR 1720) / Whiteside Road (SR 1538).

The Andrews Mill Road / Piney Mountain Church Road / Salem Church Road and Bostic Sunshine Highway intersection experienced 17 crashes from 2011 through 2015. It is a five legged intersection that has poor alignment and layout, especially at Salem Church Road. The CTP recommends improving the intersection by realigning Salem Church Road to intersect Bostic Sunshine Highway at a 90 degree angle in a location farther north of the current intersection.

The Toney Road / Whiteside Road and Bostic Sunshine Highway intersection has poor alignment leading to Cedar Grove United Methodist Church and Sunshine Elementary School. The CTP project recommends removing the short connector from Whiteside Road to Bostic Sunshine Highway in order to enhance mobility and operations.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, trout waters (WRC), national wetland inventory areas, regional trails, and historic resource areas.

Coxe Road (SR 1005) / Thunder Road (SR 2201), Local ID: RUTH0015-H

The Coxe Road (SR 1005) / Thunder Road (SR 2201) and US 221 intersection has sight distance issues due to the alignment and steep grades coming into the intersection, causing safety and operational concerns. Realignment of Coxe Road / Thunder Road and either raising the grade of Coxe Road or lowering the grade of the intersection were considered as improvements, however none of these options are feasible with the existing topography. The CTP is recommending an intersection improvement, such as traffic signal control treatments by adding left turn signal phases to both Coxe Road and Thunder Road at US 221 in order to improve safety. Further study for this improvement will be required.

Based on a planning level environmental assessment using available GIS data, the proposed project is in the vicinity (300 feet from centerline) of the following environmental features: 24k hydro lines, trout waters (WRC), impaired and threatened (303 D) streams, and target local watersheds.

PUBLIC TRANSPORTATION AND RAIL

The public transportation and rail elements of the Rutherford County CTP are shown in Figure 1, Sheet 3. There are no recommended improvements associated with the rail mode. However, there are recommendations being made for the public transportation mode including four potential park and ride lots. They are proposed at the following intersections:

- **RUTH0001-T:** US 64 and Parton Road (SR 1556) in Rutherfordton
- **RUTH0002-T:** US 74 and US 221 in Forest City
- **RUTH0003-T:** US 74 Alternate and S Church Street (SR 2213) in Forest City
- **RUTH0004-T:** US 221 and Oak Springs Road in Rutherfordton

Additionally, one location was identified as a potential location for a multimodal connector:

- **RUTH0005-T:** Multimodal connector where the proposed rail trail intersects US 221 Alternate between Withrow Road (SR 2185) and Westview Road (SR 1210)

BICYCLE

During the development of the CTP, the following facilities were identified as recommended bicycle routes and will need improvement. In accordance with American Association of State Highway and Transportation Officials (AASHTO), roadways identified as bicycle routes should incorporate the following standards as roadway improvements are made and funding is available:

- Curb & gutter sections require at minimum 5 foot bike lanes or 14 foot wide shoulder lanes.
- Shoulder sections require a minimum of 4 foot paved shoulder.
- All bridges along the roadways where bike facilities are recommended shall be equipped with 54 inch railings.

Bicycle recommendations from the Isothermal Regional Trails Plan, the 2015 Forest City: Heart & Sole pedestrian plan, and the updated Town of Forest City Comprehensive Parks and Recreation Plan, 2005 Rutherford County Heritage Development Plan, Overmountain Victory Trail and the Rutherfordton Bike/Ped Plan, Thermal Belt rail trail Master Plan were incorporated into the CTP.

Improvement to Existing Facilities:

- **US 74 Business, RUTH0005-H:** from US 221 Alternate to Bostic Sunshine Highway (SR 1006)
- **US 221, RUTH0001-B:** from US 221 Alternate to US 64
- **US 221 Alternate, RUTH0002-B:** from US 221 Alternate (Maple Street) to US 74 Business

- **US 221 Alternate (Charlotte Road), RUTH0022-B**
- **NC 108, RUTH0003-B:** from Della Road (SR 1199) to US 221
- **Bethany Church Road (SR 2213), RUTH0004-B:** from US 221 to US 74 Alternate
- **Bostic Road (SR 1576), RUTH0007-B:** from Second Broad River to Brick Road (SR 1583)
- **Bostic Sunshine Highway (SR 1006), RUTH0008-B:** from Bostic Municipal North Boundary to Salem Church Road (SR 1769)
- **Bostic Sunshine Highway (SR 1006), RUTH0009-B:** from US 74 Business to Bostic Municipal South Boundary
- **Cherry Mountain Street (SR 1576), RUTH0010-B:** from US 221 Alternate to Second Broad River
- **Church Street (SR 2213), RUTH0022-B:** from Hardin Rd. (SR 2178) to Main Street (US 221 ALT)
- **Cleghorn Mill Road (SR 1148), RUTH0011-B:** from Coxe Road (SR 1005) to Poors Ford Road (SR 1004)
- **Coxe Road (SR 1005), RUTH0012-B:** from Polk County to Cleghorn Mill Road (SR 1148)
- **Edwards Street (SR 1153), RUTH0013-B:** from Edwards Street Extension (SR 1153) to Ridgecrest Street (SR 1153)
- **Main Street (SR 1006), RUTH0015-B:** from Bostic Municipal South Boundary to Bostic Municipal North Boundary
- **Oak Street (SR 2241), U-5833:** from Piney Ridge Road (SR 2159) to US 74 Alternate
- **Oakland Road (SR 2169), RUTH0012-H:** from Piney Ridge Road (SR 2159) to US 221 Alternate
- **Piney Ridge Road (SR 2159), RUTH0016-B:** from Oakland Road (SR 2169) to Bethany Church Road (SR 2213)
- **S Church Street (SR 2213), RUTH0018-B:** from US 74 Alternate to US 221 Alternate
- **Salem Church Road (SR 1769), RUTH0019-B:** from Bostic Sunshine Highway (SR 1006) to Hollis Road (SR 1749)
- **Shiloh Road (SR 1148), RUTH0020-B:** from Poors Ford Road (SR 1004) to US 221
- **W Church Street (SR 1576), RUTH0021-B:** from Brick Road (SR 1583) to Main Street (SR 1006)

Multi-Use Path Facilities:

Multi-use paths are facilities physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way. Multi-use paths include bicycle paths, rail trails, or other facilities built for bicycle and pedestrian traffic. Multi-use paths from the Isothermal Regional Trails Plan, the 2015 Forest City: Heart & Sole pedestrian plan, and the updated Town of Forest City Comprehensive Parks and Recreation Plan, 2005 Rutherford County Heritage Development Plan, Overmountain Victory Trail and the Rutherfordton Bike/Ped Plan, Thermal Belt rail trail Master Plan were incorporated into the CTP. Additionally, the following multi-use path projects were identified to serve the needs of Rutherford County:

- ***Thermal Belt Rail Trail 2*, Local ID: EB-5730**
  Project EB-5730 is included in the 2016-2025 STIP. The purpose of the project is to make improvements by grading and paving the existing trail from US 64 to Oakland Road (SR 2169). Project EB-5730 has a scheduled construction year of 2022 in the STIP.

- ***Thermal Belt Rail Trail 1*, Local ID: EB-5733**
  Project EB-5733 is included in the 2016-2025 STIP. The purpose of the project is to improve the existing trail by widening and resurfacing from US 64 and Oak Springs Road (SR 1531). The project has a scheduled construction year of 2023 in the STIP.

PEDESTRIAN

Forest City has an existing pedestrian plan entitled "Forest City: Heart & Sole[5]" that was utilized in the development of the CTP. The Forest City: Heart & Sole plan was developed in 2015 cooperatively by Forest City and NCDOT's Division of Bicycle and Pedestrian Transportation. The Rutherfordton Comprehensive Parks and Recreation Plan and the Town of Spindale Land Use Study 2010 were also incorporated into the CTP. Isothermal Regional Trails Plan, 2005 Rutherford County Heritage Development Plan, Overmountain Victory Trail, the Rutherfordton Bike/Ped Plan, and Thermal Belt rail trail Master Plan were also utilized in the development of the CTP. Additionally, the following projects were recommended during the development of the CTP:

New Facilities:

- **NC 108 (Charlotte Rd) RUTH0001-P:** from Maple St. to Main St.
- **2nd St. RUTH0001-P:** from Middle School Exit to Rail-Trail
- **Allen Street RUTH0003-P:** from US 221 ALT to rail trail
- **Chestnut Street RUTH0004-P:** from US 221 ALT to rail trail
- **Edwards St/ Bob Hardin Rd RUTH0005-P:** from Crestivew St to Coxe Rd
- **Liberty Street RUTH0006-P:** from US 221 ALT to rail trail
- **Pine St RUTH0007-P:** from US-221 Alt. to Rail-Tracks
- **Proposed Oak Street Extension RUTH0001-H:** from US 221 ALT to US 74 BUS
- **R-S Middle School Entrance RUTH0008-P:** from Charlotte Rd to School Entrance
- **Ridgecrest St. RUTH0009-P:** from Court St. to Washington St.
- **Rutherfordton Elementary School Entrance RUTH0010-P:** from Coxe Rd to School entrance
- **Victory Drive RUTH0011-P:** from US 221 ALT to rail trail
- **W Main Dr RUTH0012-P:** from Main to West View St.
- **W Main Dr RUTH0013-P:** from Withrow Rd. to Hardin St.
- **Withrow Rd RUTH0014-P:** from Callahan Koon Rd. to Duke St.

[5] To view this plan, go to: https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/Grant-Recipients-and-Completed-Plans.aspx.

APPENDICES

Appendix A
Resources and Contacts

Local Planning Organization

Isothermal Rural Planning Organization (*www.isothermalrpo.org)*
Contact the RPO for information on long-range multi-modal planning services.
111 W. Court St. Rutherfordton, NC 28139 (828) 351-2331

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) *http://www.ncdot.gov/contact/*

Secretary of Transportation
https://www.ncdot.gov/about-us/our-people/Pages/default.aspx
1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2800

Board of Transportation
https://www.ncdot.gov/about-us/board-offices/boards/board-transportation/Pages/default.aspx
1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2820

Highway Division 13
https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx
55 Orange Street Asheville, NC 28801 (828) 251-6171

Contact the Highway Division with questions concerning NCDOT activities within each Division.

Contact the following NCDOT divisions and units[1] for:

Transportation Planning Division (TPD)	*Information on long-range multi-modal planning services.* 1554 Mail Service Center Raleigh, NC 27699 (919) 707-0900
Strategic Planning Office	*Information concerning prioritization of transportation projects.* 1501 Mail Service Center Raleigh, NC 27699 (919) 707-4740
Environmental Analysis Unit	*Information on environmental studies for projects that are included in the TIP.*

[1] Unit websites are hyperlinked and can also be accessed at *https://connect.ncdot.gov/Pages/default.aspx*.

	1548 Mail Service Center Raleigh, NC 27699 (919) 707-6000
State Asset Management Unit	*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 (919) 707-2500
Program Development Branch	*Information concerning Roadway Official Corridor Maps, Feasibility Studies and the Transportation Improvement Program (TIP).* 1542 Mail Service Center Raleigh, NC 27699 (919) 707-4610
Public Transportation Division	*Information on public transit systems.* 1550 Mail Service Center Raleigh, NC 27699 (919) 707-4670
Rail Division	*Rail information throughout the state.* 1553 Mail Service Center Raleigh, NC 27699 (919) 707-4700
Division of Bicycle and Pedestrian Transportation	*Bicycle and pedestrian transportation information throughout the state.* 1552 Mail Service Center Raleigh, NC 27699 (919) 707-2600
Structures Management Unit	*Information on bridge management throughout the state.* 1581 Mail Service Center Raleigh, NC 27699 (919) 707-6400
Roadway Design Unit	*Information regarding design plans and proposals for road and bridge projects throughout the state.* 1582 Mail Service Center Raleigh, NC 27699 (919) 707-6200
Transportation Mobility and Safety Division	*Information regarding crash data throughout the state.* 1561 Mail Service Center Raleigh, NC 27699 (919) 773-2800

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/cd

Appendix B
Comprehensive Transportation Plan Definitions

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

Highway Map

The "NCDOT Facility Type –Control of Access Definitions" document provides a visual depiction of facility types for the following CTP classification.

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

Public Transportation and Rail Map

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

monorail, trolleybus, aerial tramway, included plane, cable car, automated guideway transit, and ferryboats.

- **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
  - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
  - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
  - Recommended – It is desirable for future rail to be considered to serve an area.
- **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
  - Existing – Corridor where higher-speed rail service (over 79 mph) is provided or a corridor that is officially designated by FRA to run higher speed trains in the future. There is currently one federally designated high-speed rail corridor in North Carolina - The Southeast High Speed Rail Corridor.
  - Recommended – Proposed corridor for higher speed rail service.
- **Rail Stop** – A railroad station or stop along the railroad tracks.
- **Multimodal 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. (NOTE- intermodal refers to two or more modes that transfer the same cargo unit-like 40' shipping container from ship to train or truck); multimodal is the transfer of people/cargo between two or more modes and in NC is used in public transit settings i.e. Charlotte Multimodal Station)
- **Park and Ride Lot** – A strategically located parking lot that provides commuters connections to transit or carpools.
- **Existing Grade Separation** – Locations where existing rail facilities 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 'Total Width (ft)' is the approximate width of the roadway from edge of pavement to edge of pavement and under 'Lane Width (ft)' is the approximate width of a single lane based on centerline/ edge line markings. Listed under 'Lanes' is the total number of lanes, with 'D' if the facility is divided, and 'OW' if it is a one-way facility.
- **Existing ROW:** The estimated existing right-of-way is based on NCDOT's Roadway Characteristics Database. 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 based on the 2000 Highway Capacity Manual using the Transportation Planning Branch's LOS D Standards for Systems Level Planning, as documented in Chapter 1.
- **Existing and Proposed Volumes**, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2040 Volume E+C' is an estimate of the volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2016 - 2025 Transportation Improvement Program (TIP). The '2040 Volume with CTP' is an estimate of the volume in 2040 with all proposed CTP improvements assumed to be in place. The '2040 Volume with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter 1.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended for the given mode 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.
- **Proposals for Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H= highway, T= public transportation, R= rail, B= bicycle, P= pedestrian, and M= multi-use path).

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																				
		Section				2013 Existing System							2040 Proposed System							
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
RUTH0002_H	US 64/US 74 Alternate	Lake Lure CTP Boundary	Rock Springs Ch Rd. (SR 1184)	Rutherford County	1.9	22	2	11	50	55	12100	1900	1900	1900	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	Rock Springs Ch Rd. (SR 1184)	Cove Rd. (SR 1001)	Rutherford County	5.2	22	2	11	50	45	12100	3700	4900	4900	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	Cove Rd. (SR 1001)	Thompson Rd. (SR 1367)	Rutherford County	4.0	22	2	11	50	55	12100	5500	7400	7400	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	Thompson Rd. (SR 1367)	Rutherfordton Town Limits	Rutherford County	1.3	22	2	11	60	45	12100	4700	5900	5900	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	Rutherfordton Town Limits	N. Washington St. (SR 1218)	Rutherfordton	0.3	22	2	12	50	35	11600	7900	8300	8300	11600	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	N. Washington St. (SR 1218)	US 221	Rutherfordton	0.3	24	2	12	40	35	11600	5800	7300	7300	11600	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	US 221	Ruth Town Limits	Rutherfordton	0.2	24	2	12	60	35	11600	10000	8400	8400	11600	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	Ruth Town Limits	Proposed US 221 Bypass	Ruth	0.1	24	2	12	60	35	11600	7900	8400	8400	11600	2A	60	Maj	Reg	
RUTH0002_H	US 64/US 74 Alternate	Proposed US 221 Bypass	US 74 Alternate	Ruth	0.1	24	2	12	60	35	11600	7900	8700	8700	11600	2A	60	Maj	Reg	
RUTH0002_H	US 64	US 74 Alternate	Ruth Town Limits	Ruth	0.2	20	2	10	60	35	11600	5400	6700	6700	11600	2A	60	Maj	Reg	
RUTH0002_H	US 64	Ruth Town Limits	Oscar Justice Rd. (SR 1523)	Rutherford County	2.3	22	2	11	50	55	12100	5400	6500	6500	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64	Oscar Justice Rd. (SR 1523)	Hudlow Rd. (SR 1510)	Rutherford County	0.7	22	2	11	50	55	12100	3700	4300	4300	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64	Hudlow Rd. (SR 1510)	Pearidge Rd. (SR 1007)	Rutherford County	3.3	22	2	11	50	55	12100	4000	4400	4400	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64	Pearidge Rd. (SR 1007)	Ed Thompson Rd. (SR 1713)	Rutherford County	2.7	22	2	11	50	55	12100	3100	3300	3300	12100	2A	60	Maj	Reg	
RUTH0002_H	US 64	Ed Thompson Rd. (SR 1713)	McDowell County Line	Rutherford County	3.8	22	2	11	50	55	12100	2400	2500	2500	12100	2A	60	Maj	Reg	
RUTH0003_H	US 74	Polk County Line	Union Rd. (SR 1145)	Rutherford County	0.5	48	4D	12	170	70	60700	13000	14000	14000	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Union Rd. (SR 1145)	Coxe Rd. (SR 1005)	Rutherford County	0.8	48	4D	12	170	70	60700	13000	14500	14500	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Coxe Rd. (SR 1005)	Cleghorn Mill Rd. (SR 1148)	Rutherford County	1.3	48	4D	12	170	70	60700	13000	14500	14500	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Cleghorn Mill Rd. (SR 1148)	Poors Ford Rd. (SR 1004)	Rutherford County	1.9	48	4D	12	170	70	60700	13000	14500	14500	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Poors Ford Rd. (SR 1004)	US 221	Rutherford County	0.5	48	4D	12	170	70	60700	13000	14500	14500	60700	4A	300	F	Sta	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
RUTH0003_H	US 74	US 221	Oakland Rd. (SR 2169)	Rutherford County	0.4	48	4D	12	170	70	60700	13000	16600	16600	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Oakland Rd. (SR 2169)	Bethany Church Rd. (SR 2213)	Rutherford County	1.1	48	4D	12	170	70	60700	13000	15100	15100	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Bethany Church Rd. (SR 2213)	Doggett Rd. (SR 2159)	Rutherford County	0.3	48	4D	12	170	70	60700	19000	24200	24200	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Doggett Rd. (SR 2159)	US 74 Alternate	Rutherford County	0.2	48	4D	12	150	70	60700	19000	24200	24200	60700	4A	300	F	Sta	
RUTH0003_H	US 74	US 74 Alternate	US 221 Alternate	Forest City	1	48	4D	12	150	70	60700	24000	29800	29800	60700	4A	300	F	Sta	
RUTH0003_H	US 74	US 221 Alternate	Forest City Town Limits	Forest City	0.1	48	4D	12	150	70	60700	19000	22900	22900	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Forest City Town Limits	Old Caroleen Rd. (SR 1901)	Rutherford County	1.3	48	4D	12	150	70	60700	19000	22900	22900	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Old Caroleen Rd. (SR 1901)	Ellenboro Henrietta Rd. (SR 1920)	Rutherford County	3.0	48	4D	12	150	70	60700	19000	22300	22300	60700	4A	300	F	Sta	
RUTH0003_H	US 74	Ellenboro Henrietta Rd. (SR 1920)	NC 120	Rutherford County	1.9	48	4D	12	150	70	60700	18000	20000	20000	60700	4A	300	F	Sta	
RUTH0003_H	US 74	NC 120	Cleveland County Line	Rutherford County	0.3	48	4D	12	150	65	60700	17000	18400	18400	60700	4A	300	F	Sta	
RUTH0004_H	US 74 Alternate	US 64	Whitesides Rd. (SR 1548)	Ruth	0.5	24	2	12	60	45	12700	13000	13400	13400	13800	3A	80	Maj	Reg	
RUTH0004_H	US 74 Alternate	Whitesides Rd. (SR 1548)	West St. (SR 1544)	Rutherfordton	0.7	24	2	12	60	45	12700	13000	13400	13400	13800	3A	80	Maj	Reg	
RUTH0004_H	US 74 Alternate	West St. (SR 1544)	US 221 Alternate	Rutherfordton	0.4	24	2	12	60	45	12700	16000	17100	17100	13800	3A	80	Maj	Reg	
	US 74 Alternate	US 221 Alternate	Spindale Town Limits	Rutherfordton	0.2	48	4D	12	145	45	42900	16000	16400	16400	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Spindale Town Limits	Oak St. and Thunder Rd. (SR 2201)	Spindale	1	48	4D	12	145	55	44500	16000	16400	16400	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Oak St. and Thunder Rd. (SR 2201)	Oakland Rd. (SR 2169)	Spindale	1.1	48	4D	12	145	55	44500	19000	22900	22900	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Oakland Rd. (SR 2169)	Spindale Town Limits	Spindale	0.4	48	4D	12	145	55	44500	19000	22900	22900	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Spindale Town Limits	Forest City Town Limits	Rutherford County	0.2	48	4D	12	145	45	42900	18000	21700	21700	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Forest City Town Limits	Daniel Rd. (SR 2184)	Forest City	0.2	48	4D	12	145	45	42900	18000	22300	22300	ADQ	ADQ	ADQ	B	Reg	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Proposals for Other Modes
	US 74 Alternate	Daniel Rd. (SR 2184)	Oak St. (SR 2241)	Forest City	1	48	4D	12	145	45	42900	20000	24800	24800	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Oak St. (SR 2241)	Butler Rd. (SR 2179)	Forest City	0.4	48	4D	12	145	55	44500	20000	23500	23500	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Butler Rd. (SR 2179)	Bethany Church Rd. and Church St. (SR 2213)	Rutherford County	0.8	48	4D	12	145	55	44500	16000	18300	18300	ADQ	ADQ	ADQ	B	Reg	
	US 74 Alternate	Bethany Church Rd. and Church St. (SR 2213)	US 74	Forest City	0.5	48	4D	12	145	55	44500	12000	14100	14100	ADQ	ADQ	ADQ	B	Reg	
RUTH0005_H	US 74 Business	US 221 Alternate	Forest City Town Limits	Forest City	1.2	24	2	12	60	35	11600	9600	11200	11200	12900	3B	80	Maj	Reg	B
RUTH0005_H	US 74 Business	Forest City Town Limits	Bostic Sunshine Hwy (SR 1006)	Rutherford County	0.2	24	2	12	150	45	12700	9300	10600	10600	13800	3A	80	Maj	Reg	B
RUTH0005_H	US 74 Business	Bostic Sunshine Hwy (SR 1006)	Old US 74 (SR 1595)	Rutherford County	0.3	24	2	12	150	55	12700	9300	10600	10600	15900	3A	80	Maj	Reg	B
	US 74 Business	Old US 74 (SR 1595)	Ellenboro Town Limits	Rutherford County	4	24	2	12	150	55	12100	8300	8800	8800	ADQ	ADQ	ADQ	Maj	Reg	
	US 74 Business	Ellenboro Town Limits	Piney Mtn Church Rd. (SR 1007)	Ellenboro	0.5	24	2	12	60	45	12700	5200	5400	5400	ADQ	ADQ	ADQ	Maj	Reg	
	US 74 Business	Piney Mtn Church Rd. (SR 1007)	Hollis Rd. (SR 1749)	Ellenboro	0.2	24	2	12	60	35	11600	8100	8400	8400	ADQ	ADQ	ADQ	Maj	Reg	
	US 74 Business	Hollis Rd. (SR 1749)	Henrietta St. (SR 1920)	Ellenboro	0.5	24	2	12	60	35	11600	7000	7300	7300	ADQ	ADQ	ADQ	Maj	Reg	
	US 74 Business	Henrietta St. (SR 1920)	Ellenboro Town Limits	Ellenboro	0.4	24	2	12	60	35	11600	5400	5600	5600	ADQ	ADQ	ADQ	Maj	Reg	
	US 74 Business	Ellenboro Town Limits	Cleveland County Line	Rutherford County	2.2	24	2	12	60	55	12100	3600	3800	3800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	South Carolina State Line	Chase High Rd. (SR 2210)	Rutherford County	3.9	40	4D	10	100	55	44500	8000	8900	8900	ADQ	ADQ	ADQ	B	Reg	
	US 221	Chase High Rd. (SR 2210)	Harris Henrietta Rd. (SR 2125)	Rutherford County	0.9	40	4D	10	100	55	44500	5500	6100	6100	ADQ	ADQ	ADQ	B	Reg	
	US 221	Harris Henrietta Rd. (SR 2125)	Jack Mckinney Rd. (SR 1111)	Rutherford County	1.4	40	4D	10	100	55	44500	6100	8100	8100	ADQ	ADQ	ADQ	B	Reg	
	US 221	Jack Mckinney Rd. (SR 1111)	Oakland Rd. (SR 2169)	Rutherford County	2.9	44	4D	11	100	55	44500	9500	11200	11200	ADQ	ADQ	ADQ	B	Reg	
	US 221	Oakland Rd. (SR 2169)	Shiloh Rd. (SR 1148)/Bethany Church Rd. (SR 2213)	Rutherford County	0.3	36	4D	9	60	55	44500	3200	3900	3900	ADQ	ADQ	ADQ	B	Reg	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	US 221	Shiloh Rd. (SR 1148)/Bethany Church Rd. (SR 2213)	US 74	Rutherford County	0.9	36	4D	9	60	55	44500	5000	6200	6200	ADQ	ADQ	ADQ	B	Reg	
	US 221	US 74	Proposed US 221 Bypass	Rutherford County	0.5	36	4D	9	60	55	44500	6200	8300	8300	ADQ	ADQ	ADQ	B	Reg	
	US 221	Proposed US 221 Bypass	Poors Ford Rd. (SR 2194)	Rutherford County	0.7	20	2	10	50	55	11700	6200	9100	9100	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	Poors Ford Rd. (SR 2194)	Proposed US 221 Bypass	Rutherford County	0.6	20	2	10	50	55	11700	7500	4900	4900	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	Proposed US 221 Bypass	Coxe Rd. (SR 1005)/Thunder Rd. (SR 2201)	Rutherford County	1.5	20	2	10	50	55	11700	7500	5500	5500	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	Coxe Rd. (SR 1005)/Thunder Rd. (SR 2201)	Industrial Park Rd. (SR 2271)	Rutherfordton	1	22	2	10	50	35	10800	8900	7000	7000	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	Industrial Park Rd. (SR 2271)	US 221 Alternate	Rutherfordton	0.7	22	2	11	50	35	11200	7600	5000	5000	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	US 221 Alternate	Court St.	Rutherfordton	0.1	30	2	15	50	20	11000	6100	5800	5800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	Court St.	US 64	Rutherfordton	1.1	35	2	17	60	20	11000	6100	4400	4400	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	US 64	Rutherfordton Town Limits	Rutherfordton	0.3	24	2	12	60	35	11600	6100	4400	4400	ADQ	ADQ	ADQ	Maj	Reg	
	US 221	Rutherfordton Town Limits	Proposed US 221 Bypass	Rutherford County	1.4	24	2	12	50	45	12100	7500	4600	4600	ADQ	ADQ	ADQ	Maj	Reg	
R-2597A	US 221	Proposed US 221 Bypass	Thompson Rd. (SR 1367)	Rutherford County	0.2	24	2	12	100	45	12100	7500	11300	11300	42900	4D	110	B	Reg	
R-2597A	US 221	Thompson Rd. (SR 1367)	Painters Gap Rd./Gilkey School Rd. (SR 1328)	Rutherford County	2.7	24	2	12	100	45	12100	6500	7900	7900	42900	4D	110	B	Reg	
R-2597A	US 221	Painters Gap Rd./Gilkey School Rd. (SR 1328)	Hudlow Rd. (SR 1510)	Rutherford County	3.3	24	2	12	100	45	12100	3600	4600	4600	42900	4D	110	B	Reg	
R-2597A	US 221	Hudlow Rd. (SR 1510)	McDowell County Line	Rutherford County	2.5	24	2	12	100	55	12100	3000	3600	3600	44500	4D	110	B	Reg	
	US 221 Alternate	US 221	S Cleghorn St.	Rutherfordton	0.2	52	5	10	80	35	26000	12000	12300	12300	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	S Cleghorn St.	Proposed US 221 Bypass	Rutherfordton	0.5	52	5	10	80	35	26000	12000	12300	12300	ADQ	ADQ	ADQ	Maj	Reg	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	US 221 Alternate	Proposed US 221 Bypass	US 74 Alternate	Rutherfordton	0.3	52	5	10	80	35	26000	12000	12300	12300	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	US 74 Alternate	Spindale Town Limits	Rutherfordton	0.1	36	3	12	80	35	12900	11000	12600	12600	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Spindale Town Limits	Oak St. (SR 2201)	Spindale	0.5	36	3	12	80	35	12900	11000	12600	12600	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Oak St. (SR 2201)	Spindale St. (SR 1546)	Spindale	0.2	28	2	14	60	20	11000	9700	10800	10800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Spindale St. (SR 1546)	Oakland Rd. (SR 2169)	Spindale	0.6	28	2	14	60	20	11000	9700	10800	10800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Oakland Rd. (SR 2169)	Ledbetter Rd. (SR 1591)	Spindale	0.1	36	3	12	60	35	12900	8100	9800	9800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Ledbetter Rd. (SR 1591)	Spindale Town Limits	Spindale	0.7	36	3	12	100	35	12900	8100	9800	9800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Spindale Town Limits	Smith Grove Rd. (SR 1551)	Rutherford County	0.4	36	3	12	100	35	12900	8400	9900	9900	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Smith Grove Rd. (SR 1551)	Duke St. (SR 2184)	Forest City	0.4	36	3	12	100	35	12900	8400	9900	9900	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Duke St. (SR 2184)	Withrow Rd. (SR 2185)/Hudlow Rd. (SR 1510)	Forest City	0.7	36	3	12	60	35	12900	7600	9200	9200	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Withrow Rd. (SR 2185)/Hudlow Rd. (SR 1510)	Westview St. (SR 2183)	Forest City	0.5	36	3	12	60	35	12900	9700	10300	10300	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Westview St. (SR 2183)	Vance St. (SR 1585)	Forest City	0.3	36	3	12	60	35	12900	11000	13600	13600	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Vance St. (SR 1585)	S Church St. (SR 2213)	Forest City	0.4	36	3	12	60	35	12900	11000	13600	13600	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	S Church St. (SR 2213)	Cherry Mountain St. (SR 1576)	Forest City	0.2	90	3	12	100	20	12900	11000	11300	11300	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Cherry Mountain St. (SR 1576)	US 74 Business	Forest City	0.2	90	3	12	100	20	12900	9100	10700	10700	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	US 74 Business	Arlington St. (SR 1901)	Forest City	0.1	34	2	17	60	35	11600	9800	10900	10900	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Arlington St. (SR 1901)	Oak St. (SR 2241)	Forest City	0.3	34	2	17	60	35	11600	10000	11400	11400	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Oak St. (SR 2179)	Washington St. (SR 2241)	Forest City	0.2	30	3	10	100	35	15200	11000	**15300**	--	--	--	--	Maj	Reg	
	US 221 Alternate	Washington St. (SR 2173)	US 74	Forest City	0.7	30	3	10	100	35	15200	12000	**15300**	--	--	--	--	Maj	Reg	
	US 221 Alternate	US 74	Pine St. (SR 1903)	Forest City	0.1	24	2	12	100	35	11600	11000	13400	13400	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Pine St. (SR 1903)	Pointer Rd. (SR 2160)	Forest City	0.5	32	2	16	100	35	11600	10000	12000	12000	ADQ	ADQ	ADQ	Maj	Reg	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	US 221 Alternate	Pointer Rd. (SR 2160)	Forest City Town Limits	Forest City	0.7	24	2	12	100	35	11600	10000	12000	12000	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Forest City Town Limits	Mt Pleasant Church Rd. (SR 1906)	Rutherford County	0.3	24	2	12	100	35	11600	10000	12000	12000	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Mt Pleasant Church Rd. (SR 1906)	Doggett Rd. (SR 2159)	Rutherford County	0.3	24	2	12	100	35	11600	10000	11800	11800	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Doggett Rd. (SR 2159)	Chase High Rd. (SR 2210)	Rutherford County	0.3	24	2	12	100	35	11600	14000	16100	16100	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Chase High Rd. (SR 2210)	Old Caroleen Rd (SR 1901)	Rutherford County	2.2	24	2	12	100	45	12700	4100	4500	4500	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Old Caroleen Rd (SR 1901)	Melton Street (SR 1941)	Rutherford County	0.7	24	2	12	100	35	11600	4400	5400	5400	ADQ	ADQ	ADQ	Maj	Reg	
R-3612	US 221 Alternate	Melton Street (SR 1941)	Ellensboro Henrietta Rd. (SR 1954)	Rutherford County	0.6	24	2	12	100	35	11600	4400	5400	5400	11200	2B	60	Maj	Reg	
R-3612	US 221 Alternate	Ellensboro Henrietta Rd. (SR 1954)	Harris Henrietta Rd. (SR 2125)	Rutherford County	0.4	24	2	12	100	35	11600	2600	2800	2800	11200	2B	60	Maj	Reg	
	US 221 Alternate	Harris Henrietta Rd. (SR 2125)	NC 120	Rutherford County	2.3	24	2	12	100	35	11600	2300	2500	2500	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	NC 120	Boiling Springs Rd. (SR 1003)	Rutherford County	0.5	24	2	12	100	35	11600	4300	5300	5300	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Boiling Springs Rd. (SR 1003)	Duke Power Rd. (SR 1002)	Rutherford County	2.2	22	2	11	100	55	12100	4200	4400	4400	ADQ	ADQ	ADQ	Maj	Reg	
	US 221 Alternate	Duke Power Rd. (SR 1002)	South Carolina State Line	Rutherford County	2.4	22	2	11	100	55	12100	2600	2700	2700	ADQ	ADQ	ADQ	Maj	Reg	
R-2233B	US 221 Bypass	US 221	Poors Ford Rd. (SR 1004)	Rutherford County	0.5	-	-	-	-	-	-	-	16900	16900	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	Poors Ford Rd. (SR 1004)	US 221	Rutherford County	0.8	-	-	-	-	-	-	-	16900	16900	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	US 221	Thunder Rd. (SR 2201)	Rutherford County	1.4	-	-	-	-	-	-	-	18300	18300	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	Thunder Rd. (SR 2201)	Spindale Town Limits	Spindale	0.3	-	-	-	-	-	-	-	23400	23400	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	Spindale Town Limits	Laurel Hill Dr. (SR 2203)	Rutherford County	0.7	-	-	-	-	-	-	-	23400	23400	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	Laurel Hill Dr. (SR 2203)	US 221 Alternate	Rutherfordton	0.3	-	-	-	-	-	-	-	23400	23400	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	US 221 Alternate	US 64	Rutherfordton	1.3	-	-	-	-	-	-	-	19800	19800	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	US 64	Water Works Rd. (SR 1537)	Rutherfordton	0.5	-	-	-	-	-	-	-	8300	8300	60700	4A	300	F	Reg	

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		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
R-2233B	US 221 Bypass	Water Works Rd. (SR 1537)	Rutherfordton Town Limits	Rutherfordton	0.6	-	-	-	-	-	-	-	8300	8300	60700	4A	300	F	Reg	
R-2233B	US 221 Bypass	Rutherfordton Town Limits	US 221	Rutherford County	0.7	-	-	-	-	-	-	-	8300	8300	60700	4A	300	F	Reg	
	NC 108	Polk County Line	Union Rd. (SR 1145)	Rutherford County	4.4	20	2	10	60	55	11700	1500	1900	1900	ADQ	ADQ	ADQ	Maj	Reg	
	NC 108	Union Rd. (SR 1145)	Rutherfordton Town Limits	Rutherford County	1.2	20	2	10	60	45	11700	4200	4400	4400	ADQ	ADQ	ADQ	Maj	Reg	
	NC 108	Rutherfordton Town Limits	S Ridgecrest Ave. (SR 1166)	Rutherfordton	0.3	20	2	10	50	35	10800	4200	4400	4400	ADQ	ADQ	ADQ	Maj	Reg	
	NC 108	S Ridgecrest Ave. (SR 1166)	Hospital Circle	Rutherfordton	0.1	22	2	11	50	35	11200	5500	5800	5800	ADQ	ADQ	ADQ	Maj	Reg	
	NC 108	Hospital Circle	S Washington St. (SR 1218)	Rutherfordton	0.4	22	2	11	50	35	11200	5500	7600	7600	ADQ	ADQ	ADQ	Maj	Reg	
	NC 108	S Washington St. (SR 1218)	US 221	Rutherfordton	0.1	36	3	12	80	35	12900	12000	12500	12500	ADQ	ADQ	ADQ	Maj	Reg	
	NC 120	US 221 Alternate	US 74	Rutherford County	3.9	18	2	9	60	45	10300	2600	2900	2900	ADQ	ADQ	ADQ	Maj	Reg	
	NC 120	US 74	Cleveland County Line	Rutherford County	0.8	18	2	9	60	35	10300	1200	1300	1300	ADQ	ADQ	ADQ	Maj	Reg	
	NC 226	McDowell County Line	Bostic Sunshine Hwy (SR 1006)	Rutherford County	5.9	22	2	11	100	55	12100	2000	2200	2200	ADQ	ADQ	ADQ	Maj	Reg	
	NC 226	Bostic Sunshine Hwy (SR 1006)	Cleveland County Line	Rutherford County	4.5	22	2	11	100	55	12100	2100	2300	2300	ADQ	ADQ	ADQ	Maj	Reg	
	Airport Rd. (SR 1614)	Oscar Justice Rd. (SR 1523)	Rutherford County Airport	Rutherford County	1	20	2	10	60	55	9800	1600	1800	1800	ADQ	ADQ	ADQ	Min	Sub	
	Andrews Mill Rd. (SR 1007)	Pearidge Rd. (SR 1007)	Bostic Sunshine Hwy (SR 1006)	Rutherford County	2.5	18	2	9	60	55	10300	800	1000	1000	ADQ	ADQ	ADQ	Min	Sub	
	Arlington St. (SR 1901)	US 221 Alternate	Old Caroleen Rd. (SR 1901)	Forest City	0.2	30	2	15	40	35	10200	2900	3700	3700	ADQ	ADQ	ADQ	Min	Sub	
	Bethany Church Rd. (SR 2213)	US 221	Oakland Rd. (SR 2169)	Rutherford County	0.1	20	2	10	50	55	11700	3900	4800	4800	ADQ	ADQ	ADQ	Min	Sub	
	Bethany Church Rd. (SR 2213)	Oakland Rd. (SR 2169)	US 74	Rutherford County	1.6	20	2	10	50	35	9500	3900	4700	4700	ADQ	ADQ	ADQ	Min	Sub	
	Bethany Church Rd. (SR 2213)	US 74	Forest City Town Limits	Rutherford County	0.3	20	2	10	50	55	11700	4500	5400	5400	ADQ	ADQ	ADQ	Min	Sub	
	Bethany Church Rd. (SR 2213)	Forest City Town Limits	Doggett Rd. (SR 2159)	Forest City	0.1	20	2	10	50	35	9500	4500	5400	5400	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
RUTH0006-H	Bethany Church Rd. (SR 2213)	Doggett Rd. (SR 2159)	US 74 Alternate	Forest City	0.3	20	2	10	50	35	9500	6000	9800	9800	11900	2A	60	Min	Sub	
	Big Island Rd. (SR 1106)	South Carolina State Line	Shiloh Rd. (SR 1148)	Rutherford County	8.7	18	2	9	60	55	9800	2100	2400	2400	ADQ	ADQ	ADQ	Min	Sub	
	Big Island Rd. (SR 1106)	Shiloh Rd. (SR 1148)	Poors Ford Rd. (SR 1004)	Rutherford County	0.2	18	2	9	60	55	9800	1800	2200	2200	ADQ	ADQ	ADQ	Min	Sub	
	Bills Creek Rd. (SR 1008)	Lake Lure CTP Boundary	Conner Rd. (SR 1316)	Rutherford County	5.6	18	2	9	50	45	9800	1400	1800	1800	ADQ	ADQ	ADQ	Min	Sub	
	Bills Creek Rd. (SR 1008)	Conner Rd. (SR 1316)	Cove Rd. (SR 1001)	Rutherford County	1.3	18	2	9	50	55	9800	1000	1300	1300	ADQ	ADQ	ADQ	Min	Sub	
	Boiling Springs Rd. (SR 1003)	US 221 Alternate	Cleveland County Line	Rutherford County	0.9	20	2	10	40	35	9500	1800	1900	1900	ADQ	ADQ	ADQ	Min	Sub	
	Bostic Sunshine Hwy (SR 1006)	US 74 Business	Bostic Town Limits	Rutherford County	1.6	20	2	10	60	55	11700	3800	4200	4200	ADQ	ADQ	ADQ	Min	Sub	
	Bostic Sunshine Hwy (SR 1006)	Bostic Town Limits	Piney Mountain Church Rd./Andrew Mills Rd. (SR 1007)	Rutherford County	1.9	20	2	10	60	45	11400	3600	4200	4200	ADQ	ADQ	ADQ	Min	Sub	
	Bostic Sunshine Hwy (SR 1006)	Piney Mountain Church Rd./Andrew Mills Rd. (SR 1007)	Depriest Rd. (SR 1713)	Rutherford County	2.1	24	2	12	60	55	11700	2100	2300	2300	ADQ	ADQ	ADQ	Min	Sub	
	Bostic Sunshine Hwy (SR 1006)	Depriest Rd. (SR 1713)	Duncans Creek Rd. (SR 1749)	Rutherford County	5.3	24	2	12	60	55	11700	2400	2800	2800	ADQ	ADQ	ADQ	Min	Sub	
	Bostic Sunshine Hwy (SR 1006)	Duncans Creek Rd. (SR 1749)	NC 226	Rutherford County	2.3	20	2	10	60	55	11700	1700	2000	2000	ADQ	ADQ	ADQ	Min	Sub	
	Brick Rd. (SR 1583)	Cherry Mountain St./W Church St. (SR 1576)	Pearidge Rd. (SR 1007)	Bostic	0.4	18	2	9	40	35	9200	1000	1200	1200	ADQ	ADQ	ADQ	Min	Sub	
	Buffalo Creek Rd. (SR 1314)	Lake Lure CTP Boundary	Cedar Creek Rd. (SR 1312)	Rutherford County	1.5	20	2	10	50	55	13600	1300	1600	1600	ADQ	ADQ	ADQ	Min	Sub	
	Butler Rd (SR 2179)	Piney Ridge Rd. (SR 2159)	US 74 Alternate	Rutherford County	0.6	20	2	10	50	35	9500	2000	2500	2500	ADQ	ADQ	ADQ	Min	Sub	
	Butler Rd (SR 2179)	US 74 Alternate	Oak St. (SR 2241)	Forest City	0.4	20	2	10	50	35	9500	2400	2700	2700	ADQ	ADQ	ADQ	Min	Sub	

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		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Cedar Creek Rd. (SR 1312)	Buncombe County Line	Buffalo Creek Rd. (SR 1314)	Rutherford County	2.1	18	2	9	50	55	10300	1300	1600	1600	ADQ	ADQ	ADQ	Min	Sub	
	Cedar Creek Rd. (SR 1312)	Buffalo Creek Rd. (SR 1314)	Conner Rd. (SR 1316)	Rutherford County	1.6	18	2	9	50	55	10300	1300	1600	1600	ADQ	ADQ	ADQ	Min	Sub	
	Chase High Rd. (SR 2210)	US 221	Harris Henrietta Rd. (SR 2125)	Rutherford County	0.8	22	2	11	60	35	9900	2700	2900	2900	ADQ	ADQ	ADQ	Min	Sub	
	Chase High Rd. (SR 2210)	Harris Henrietta Rd. (SR 2125)	Old Henrietta Rd. (SR 2129)	Rutherford County	2.5	22	2	11	60	45	11800	7000	7400	7400	ADQ	ADQ	ADQ	Min	Sub	
	Chase High Rd. (SR 2210)	Old Henrietta Rd. (SR 2129)	Walker Dr.	Rutherford County	0.2	22	2	11	60	45	11800	8300	9200	9200	ADQ	ADQ	ADQ	Min	Sub	
	Chase High Rd. (SR 2210)	Walker Dr.	US 221 Alternate	Rutherford County	0.4	22	2	11	50	35	11600	8300	8600	8600	ADQ	ADQ	ADQ	Min	Sub	
	Cherry Mountain St. (SR 1576)	US 221 Alternate	Forest City Town Limits	Forest City	1.1	18	2	9	60	35	9200	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Cherry Mountain St. (SR 1576)	Forest City Town Limits	Brick Rd. (SR 1583)	Rutherford County	1.2	18	2	9	60	45	11000	3200	3800	3800	ADQ	ADQ	ADQ	Min	Sub	
RUTH0006-H	Church St. (SR 2213)	US 74 Alternate	Hardin Rd. (SR 2178)	Forest City	0.5	20	2	10	40	35	9500	7700	11000	11000	11900	3C	80	Min	Sub	
	Church St. (SR 2213)	Hardin Rd. (SR 2178)	Oak St. (SR 2179)	Forest City	0.7	20	2	10	40	35	9500	4000	5000	5000	ADQ	ADQ	ADQ	Min	Sub	
	Church St. (SR 2213)	Oak St. (SR 2179)	US 221 Alternate	Forest City	0.2	52	4	13	80	35	23500	8700	10800	10800	ADQ	ADQ	ADQ	Maj	Sub	
	Cleghorn Mill Rd. (SR 1148)	Coxe Rd. (SR 1005)	US 74	Rutherford County	1	18	2	9	40	55	9800	700	800	800	ADQ	ADQ	ADQ	Min	Sub	
	Cleghorn Mill Rd. (SR 1148)	US 74	Poors Ford Rd. (SR 1004)	Rutherford County	1.8	18	2	9	40	55	9800	1000	1100	1100	ADQ	ADQ	ADQ	Min	Sub	
	Conner Rd. (SR 1316)	Cedar Creek Rd. (SR 1312)	Bills Creek Rd. (SR 1008)	Rutherford County	2.4	22	2	11	50	55	12100	300	400	400	ADQ	ADQ	ADQ	Min	Sub	
	Court St.	N Washington St. (SR 1218)	US 221	Rutherfordton	0.1	24	2	12	50	20	9200	500	600	600	ADQ	ADQ	ADQ	Min	Sub	
	Court St.	US 221	S Cleghorn St.	Rutherfordton	0.1	24	2	12	40	20	9200	500	600	600	ADQ	ADQ	ADQ	Min	Sub	
	Cove Rd. (SR 1001)	US 64	Bills Creek Rd. (SR 1008)	Rutherford County	8.7	18	2	9	40	55	9800	1600	1900	1900	ADQ	ADQ	ADQ	Min	Sub	
	Cove Rd. (SR 1001)	Bills Creek Rd. (SR 1008)	Painters Gap Rd. (SR 1328)	Rutherford County	0.5	18	2	9	40	45	9800	1000	1200	1200	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
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Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Cove Rd. (SR 1001)	Painters Gap Rd. (SR 1328)	McDowell County Line	Rutherford County	0.7	18	2	9	40	45	9800	800	1000	1000	ADQ	ADQ	ADQ	Min	Sub	
	Coxe Rd. (SR 1005)	Polk County Line	Union Rd. (SR 1145)	Rutherford County	0.2	18	2	9	50	55	9800	1000	1000	1000	ADQ	ADQ	ADQ	Min	Sub	
	Coxe Rd. (SR 1005)	Union Rd. (SR 1145)	US 74	Rutherford County	0.9	20	2	9	50	55	9800	1500	1600	1600	ADQ	ADQ	ADQ	Min	Sub	
	Coxe Rd. (SR 1005)	US 74	Cleghorn Mill Rd. (SR 1148)	Rutherford County	0.4	18	2	9	50	55	9800	1500	1600	1600	ADQ	ADQ	ADQ	Min	Sub	
	Coxe Rd. (SR 1005)	Cleghorn Mill Rd. (SR 1148)	US 221	Rutherford County	3.7	18	2	9	50	55	9800	2800	5000	5000	ADQ	ADQ	ADQ	Min	Sub	
	Daniel Rd. (SR 2184)	Piney Ridge Rd. (SR 2159)	US 74 Alternate	Forest City	0.5	20	2	10	60	35	9500	5100	6000	6000	ADQ	ADQ	ADQ	Min	Sub	
	Daniel Rd. (SR 2184)	US 74 Alternate	Withrow Rd. (SR 2185)	Forest City	0.4	20	2	10	50	35	9500	3400	4500	4500	ADQ	ADQ	ADQ	Min	Sub	
	Depriest Rd. (SR 1713)	Ed Thompson Rd. (SR 1713)	Bostic Sunshine Hwy (SR 1006)	Rutherford County	4.1	18	2	9	60	55	10300	400	500	500	ADQ	ADQ	ADQ	Min	Sub	
	Doggett Rd. (SR 2159)	Bethany Church Rd. (SR 2213)	US 74	Rutherford County	0.3	24	2	12	60	45	12200	4700	5400	5400	ADQ	ADQ	ADQ	Min	Sub	
	Doggett Rd. (SR 2159)	US 74	Pointer Rd. (SR 2160)	Rutherford County	1.1	22	2	11	50	45	11800	4700	5400	5400	ADQ	ADQ	ADQ	Min	Sub	
	Doggett Rd. (SR 2159)	Pointer Rd. (SR 2160)	US 221 Alternate	Rutherford County	1.6	22	2	11	50	35	9900	3700	4300	4300	ADQ	ADQ	ADQ	Min	Sub	
	Duke Power Rd. (SR 1002)	US 221 Alternate	Cleveland County Line	Rutherford County	0.9	20	2	10	40	35	9500	2600	3000	3000	ADQ	ADQ	ADQ	Min	Sub	
	Duke St. (SR 2184)	Withrow Rd. (SR 2185)	US 221 Alternate	Forest City	0.7	20	2	10	50	35	9500	2100	2800	2800	ADQ	ADQ	ADQ	Min	Sub	
	Duncans Creek Rd. (SR 1749)	Bostic Sunshine Hwy (SR 1006)	Hollis Rd. (SR 1749)	Rutherford County	5.8	18	2	9	100	55	9800	500	600	600	ADQ	ADQ	ADQ	Min	Sub	
	Ed Thompson Rd. (SR 1713)	US 64	Depriest Rd. (SR 1713)	Rutherford County	2.7	18	2	9	60	55	10300	200	300	300	ADQ	ADQ	ADQ	Min	Sub	
	Ellenboro Henrietta Rd. (SR 1920)	US 221 Alternate	US 74	Rutherford County	2.8	18	2	9	60	45	10300	3600	4000	4000	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Ellenboro Henrietta Rd. (SR 1920)	US 74	Ellenboro Town Limits	Rutherford County	1.4	18	2	9	60	45	10300	3900	4400	4400	ADQ	ADQ	ADQ	Min	Sub	
	Ellenboro Henrietta Rd. (SR 1920)	Ellenboro Town Limits	Henrietta St. (SR 1920)	Ellenboro	0.2	32	2	16	40	35	10200	2000	2300	2300	ADQ	ADQ	ADQ	Min	Sub	
	Gilkey School Rd.	Painters Gap Rd.	US 221	Rutherford County	0.2	18	2	9	50	55	10300	100	200	200	ADQ	ADQ	ADQ	Min	Sub	
	Hardin Rd. (SR 2178)	S Church St. (SR 2213)	Oak St. (SR 2241)	Forest City	0.7	20	2	10	40	35	9500	1900	4500	4500	ADQ	ADQ	ADQ	Min	Sub	
	Hardin Rd. (SR 2178)	Oak St. (SR 2241)	Westview St.	Forest City	0.4	20	2	10	40	35	9500	4500	5300	5300	ADQ	ADQ	ADQ	Min	Sub	
	Hardin Rd. (SR 2178)	Westview St.	W Main Dr. (SR 2183)	Forest City	0.1	20	2	10	50	35	9500	4500	5300	5300	ADQ	ADQ	ADQ	Min	Sub	
	Harris Henrietta Rd. (SR 2125)	Hogan Rd. (SR 1116)	US 221	Rutherford County	0.7	20	2	10	60	35	9500	800	900	900	ADQ	ADQ	ADQ	Min	Sub	
	Harris Henrietta Rd. (SR 2125)	US 221	Chase High Rd. (SR 2210)	Rutherford County	1.1	20	2	10	60	35	9500	1900	2200	2200	ADQ	ADQ	ADQ	Min	Sub	
	Harris Henrietta Rd. (SR 2125)	Chase High Rd. (SR 2210)	US 221 Alternate	Rutherford County	3.7	20	2	10	60	35	9500	2800	3200	3200	ADQ	ADQ	ADQ	Min	Sub	
	Henrietta St. (SR 1920)	Ellenboro Henrietta Rd. (SR 1920)	US 74 Business	Ellenboro	0.3	32	2	16	50	35	10200	2000	2300	2300	ADQ	ADQ	ADQ	Min	Sub	
	Hogan Rd. (SR 1116)	Jack McKinney Rd. (SR 1111)	Harris Henrietta Rd. (SR 2125)	Rutherford County	0.1	20	2	10	60	55	11700	900	1100	1100	ADQ	ADQ	ADQ	Min	Sub	
	Hollis Rd. (SR 1749)	US 74 Business	Ellenboro Town Limits	Ellenboro	0.5	20	2	10	100	35	9500	1100	1300	1300	ADQ	ADQ	ADQ	Min	Sub	
	Hollis Rd. (SR 1749)	Ellenboro Town Limits	Salem Church Rd. (SR 1769)	Rutherford County	5.6	20	2	10	100	55	11700	1100	1300	1300	ADQ	ADQ	ADQ	Min	Sub	
	Hollis Rd. (SR 1749)	Salem Church Rd. (SR 1769)	Duncans Creek Rd. (SR 1749)	Rutherford County	2.7	20	2	10	100	55	11700	500	600	600	ADQ	ADQ	ADQ	Min	Sub	
RUTH0007-H	Hudlow Rd. (SR 1510)	US 221 Alternate	Forest City Town Limits	Forest City	0.6	20	2	10	100	35	9500	7700	8900	8900	11900	3A	80	Min	Sub	
RUTH0007-H	Hudlow Rd. (SR 1510)	Forest City Town Limits	Weatherstone Dr. (SR 1604)	Rutherford County	0.1	20	2	10	100	45	11400	7700	8900	8900	12300	3A	80	Min	Sub	
	Hudlow Rd. (SR 1510)	Weatherstone Dr. (SR 1604)	Smith Grove Rd (SR 1551)	Rutherford County	0.8	20	2	10	100	45	11400	3800	4300	4300	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Hudlow Rd. (SR 1510)	Smith Grove Rd (SR 1551)	Whitesides Rd. (SR 1538)	Rutherford County	2.4	18	2	9	100	55	10300	3800	4300	4300	ADQ	ADQ	ADQ	Min	Sub	
	Hudlow Rd. (SR 1510)	Whitesides Rd. (SR 1538)	US 64	Rutherford County	1.5	18	2	9	100	55	10300	3800	4500	4500	ADQ	ADQ	ADQ	Min	Sub	
	Hudlow Rd. (SR 1510)	US 64	Centennial Rd. (SR 1504)	Rutherford County	5.8	22	2	11	50	55	12100	2000	2300	2300	ADQ	ADQ	ADQ	Min	Sub	
	Hudlow Rd. (SR 1510)	Centennial Rd. (SR 1504)	US 221	Rutherford County	1.6	22	2	11	50	35	9900	1400	1900	1900	ADQ	ADQ	ADQ	Min	Sub	
	Industrial Park Rd. (SR 2771)	US 221	Laurel Hill Dr. (SR 2203)	Rutherfordton	0.8	20	2	10	60	35	9500	1100	1700	1700	ADQ	ADQ	ADQ	Min	Sub	
	Jack McKinney Rd. (SR 1111)	South Carolina State Line	Dan River Facility	Rutherford County	2.6	18	2	9	50	55	10300	800	900	900	ADQ	ADQ	ADQ	Min	Sub	
RUTH0008-H	Jack McKinney Rd. (SR 1111)	Dan River Facility	Hogan Rd. (SR 1116)	Rutherford County	2.2	18	2	9	50	55	10300	1000	1200	1200	12100	2B	60	Min	Sub	
RUTH0008-H	Jack McKinney Rd. (SR 1111)	Hogan Rd. (SR 1116)	US 221	Rutherford County	1.1	18	2	9	40	45	10300	900	1100	1100	12100	2B	60	Min	Sub	
	Lambs Grill Rd. (SR 1102)	Polk County Line	South Carolina State Line	Rutherford County	1.6	20	2	10	40	55	11700	1100	1300	1300	ADQ	ADQ	ADQ	Min	Sub	
RUTH0010-H	ProposedLandfill Access	Industrial Park Rd. (SR 2271)	US 221 Alternate	Rutherfordton	-	-	-	-	-	-	-	-	-	-	10200	2B	60	Min	Sub	
	Laurel Hill Dr. (SR 2203)	Rutherford County Landfill	Industrial Park Rd. (SR 2771)	Rutherford County	0.5	20	2	10	60	35	9500	1900	2200	2200	ADQ	ADQ	ADQ	Min	Sub	
RUTH0009-H	Laurel Hill Dr. Ext. (SR 2203)	Thunder Rd. (SR 2201)	Laurel Hill Dr. (SR 2203)	Rutherford County	-	-	-	-	-	-	-	-	-	-	10200	2B	60	Min	Sub	
	Ledbetter Rd. (SR 1591)	US 221 Alternate	Shenandoah Dr. (SR 1553)	Spindale	1	22	2	11	40	35	9900	3400	4100	4100	ADQ	ADQ	ADQ	Min	Sub	
	Ledbetter Rd. (SR 1591)	Shenandoah Dr. (SR 1553)	Old Ballpark Rd. (SR 1547)	Spindale	0.8	18	2	9	60	35	9200	600	700	700	ADQ	ADQ	ADQ	Min	Sub	
	Main St. (SR 1006)	Bostic Town Limits	W Church St. (SR 1576)	Bostic	0.4	24	2	12	60	35	10200	3200	3600	3600	ADQ	ADQ	ADQ	Min	Sub	
	Main St. (SR 1006)	W Church St. (SR 1576)	Bostic Town Limits	Bostic	0.6	20	2	10	60	35	9500	4500	6300	6300	ADQ	ADQ	ADQ	Min	Sub	
	Maple Creek Rd. (SR 1178)	N Ridgecrest Ave. (SR 1166)	N Washington St. (SR 1218)	Rutherfordton	0.1	22	2	11	40	35	9900	2900	3500	3500	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Mt Pleasant Church Rd. (SR 1906)	US 221 Alternate	Rollins Rd. (SR 1907)	Rutherford County	0.6	18	2	9	40	35	9200	2000	2400	2400	ADQ	ADQ	ADQ	Min	Sub	
	Mt Pleasant Church Rd. (SR 1906)	Rollins Rd. (SR 1907)	Pine St. (SR 1903)	Rutherford County	0.4	18	2	9	40	55	10300	2000	2500	2500	ADQ	ADQ	ADQ	Min	Sub	
	Mt Pleasant Church Rd. (SR 1906)	Pine St. (SR 1903)	Old Caroleen Rd. (SR 1901)	Rutherford County	0.6	18	2	9	40	55	10300	2700	3300	3300	ADQ	ADQ	ADQ	Min	Sub	
	Oak St. (SR 2201)	US 74 Alternate	US 221 Alternate	Spindale	0.7	48	4	12	80	45	29300	3300	3600	3600	ADQ	ADQ	ADQ	Maj	Sub	
	Oak St. (SR 2201)	US 221 Alternate	Shuttle Ave.	Spindale	0.2	24	2	12	50	20	10000	1000	1100	1100	ADQ	ADQ	ADQ	Min	Sub	
U-5833	Oak St. (SR 2241)	Piney Ridge Rd. (SR 2159)	US 74 Alternate	Forest City	0.6	22	2	11	100	35	9900	11000	13600	13600	12700	3B	80	Min	Sub	B
RUTH0011-H	Oak St. (SR 2241)	US 74 Alternate	Butler Rd (SR 2179)	Forest City	0.5	60	5	12	150	45	27600	12000	15300	15300	41400	4D	110	B	Sub	
RUTH0011-H	Oak St. (SR 2241)	Butler Rd (SR 2179)	Hardin Rd. (SR 2178)	Forest City	0.1	60	5	12	120	45	27600	12000	14800	14800	41400	4D	110	B	Sub	
RUTH0011-H	Oak St. (SR 2241)	Hardin Rd. (SR 2178)	S Church St. (SR 2213)	Forest City	0.7	60	5	12	80	45	27600	11000	13900	13900	41400	4D	110	B	Sub	
RUTH0011-H	Oak St. (SR 2241)	S Church St. (SR 2213)	Young St.	Forest City	0.1	60	5	12	80	45	27600	11000	14000	14000	41400	4D	110	B	Sub	
	Oak St. (SR 2241)	Young St.	US 221 Alternate	Forest City	0.5	36	4D	9	150	45	41400	8400	10300	10300	ADQ	ADQ	ADQ	B	Sub	
RUTH0001-H	Proposed Oak St. (SR 2241) Ext	US 221 Alternate	Old Caroleen Rd. (SR 1901)	Forest City	-	-	-	-	-	-	-	-	-	-	41400	4D	110	B	Sub	P
RUTH0001-H	Proposed Oak St. (SR 2241) Ext	Old Caroleen Rd. (SR 1901)	US 74 Business	Forest City	-	-	-	-	-	-	-	-	-	-	41400	4D	110	B	Sub	P
	Oakland Rd. (SR 2169)	US 221	Bethany Church Rd. (SR 2213)	Rutherford County	0.3	22	2	11	80	45	12100	6300	7200	7200	ADQ	ADQ	ADQ	Min	Sub	
	Oakland Rd. (SR 2169)	Bethany Church Rd. (SR 2213)	US 74	Rutherford County	0.7	22	2	11	80	45	12100	4400	5200	5200	ADQ	ADQ	ADQ	Min	Sub	
	Oakland Rd. (SR 2169)	US 74	Spindale Town Limits	Rutherford County	1.8	22	2	11	80	45	12100	4400	5200	5200	ADQ	ADQ	ADQ	Min	Sub	
	Oakland Rd. (SR 2169)	Spindale Town Limits	Poors Ford Rd. (SR 2194)/Piney Ridge Rd. (SR 2159)	Spindale	0.6	22	2	11	40	40	11200	3800	4300	4300	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
RUTH0012-H	Oakland Rd. (SR 2169)	Poors Ford Rd. (SR 2194)/Piney Ridge Rd. (SR 2159)	US 74 Alternate	Spindale	0.5	22	2	11	40	40	11200	9900	10200	10200	12700	3A	80	Min	Sub	B
RUTH0012-H	Oakland Rd. (SR 2169)	US 74 Alternate	Withrow Rd. (SR 2185)	Spindale	0.5	20	2	10	40	35	9900	7200	8800	8800	12700	3A	80	Min	Sub	B
RUTH0012-H	Oakland Rd. (SR 2169)	Withrow Rd. (SR 2185)	US 221 Alternate	Spindale	0.4	20	2	10	40	35	9900	5900	5700	5700	12700	3A	80	Min	Sub	B
	Old Ballpark Rd. (SR 1547)	Ledbetter Rd. (SR 1591)	Spindale Town Limits	Spindale	0.2	20	2	10	40	35	9500	700	800	800	ADQ	ADQ	ADQ	Min	Sub	
	Old Ballpark Rd. (SR 1547)	Spindale Town Limits	Old Ross Rd. (SR 1548)	Rutherford County	0.4	20	2	10	40	55	11700	700	800	800	ADQ	ADQ	ADQ	Min	Sub	
	Old Caroleen Rd. (SR 1901)	Arlington St. (SR 1901)	Forest City Town Limits	Forest City	0.9	24	2	12	60	35	10200	4200	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Old Caroleen Rd. (SR 1901)	Forest City Town Limits	US 74	Rutherford County	1	24	2	12	60	45	12100	4200	5200	5200	ADQ	ADQ	ADQ	Min	Sub	
	Old Caroleen Rd. (SR 1901)	US 74	Mt Pleasant Church Rd. (SR 1906)	Rutherford County	0.3	18	2	9	60	45	12100	4700	7100	7100	ADQ	ADQ	ADQ	Min	Sub	
	Old Caroleen Rd. (SR 1901)	Mt Pleasant Church Rd. (SR 1906)	US 221 Alternate	Rutherford County	2.4	18	2	9	60	45	12100	1500	1900	1900	ADQ	ADQ	ADQ	Min	Sub	
	Old Ross Rd. (SR 1548)	Whitesides Rd. (SR 1538)	Park St. (SR 1547)	Rutherford County	0.4	20	2	10	60	55	11700	1600	2000	2000	ADQ	ADQ	ADQ	Min	Sub	
	Old Stonecutter Rd. (SR 2193)	Thunder Rd. (SR 2201)	Poors Ford Rd. (SR 2194)	Rutherford County	2.1	18	2	9	60	35	10300	1200	1500	1500	ADQ	ADQ	ADQ	Min	Sub	
	Old US 221 (SR 1536)	US 221	Water Works Rd. (SR 1537)	Rutherford County	1.3	18	2	9	60	45	10300	3200	3500	3500	ADQ	ADQ	ADQ	Min	Sub	
	Oscar Justice Rd. (SR 1523)	Rock Rd. (SR 1520	Airport Rd. (SR 1614)	Rutherford County	0.2	20	2	10	60	55	11700	1600	2000	2000	ADQ	ADQ	ADQ	Min	Sub	
	Oscar Justice Rd. (SR 1523)	Airport Rd. (SR 1614)	US 64	Rutherford County	0.9	20	2	10	60	55	11700	1000	1200	1200	ADQ	ADQ	ADQ	Min	Sub	
	Painters Gap Rd. (SR 1328)	Cove Rd. (SR 1001)	Gilkey School Rd.	Rutherford County	10.4	18	2	9	60	55	10300	2100	3200	3200	ADQ	ADQ	ADQ	Min	Sub	
	Pearidge Rd. (SR 1007)	US 64	Whitesides Rd. (SR 1538)	Rutherford County	3.1	18	2	9	40	55	10300	700	800	800	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Pearidge Rd. (SR 1007)	Whitesides Rd. (SR 1538)	Andrews Mill Rd. (SR 1007)	Rutherford County	0.7	18	2	9	40	55	10300	1000	1100	1100	ADQ	ADQ	ADQ	Min	Sub	
	Pearidge Rd. (SR 1007)	Andrews Mill Rd. (SR 1007)	Brick Rd. (SR 1583)	Rutherford County	3.7	18	2	9	40	55	10300	1500	1700	1700	ADQ	ADQ	ADQ	Min	Sub	
	Pine St. (SR 1903)	US 221 Alternate	Forest City Town Limits	Forest City	0.5	18	2	9	60	35	9200	2600	3200	3200	ADQ	ADQ	ADQ	Min	Sub	
	Pine St. (SR 1903)	Forest City Town Limits	Mt Pleasant Church Rd. (SR 1906)	Rutherford County	0.9	18	2	9	60	45	10300	1200	1500	1500	ADQ	ADQ	ADQ	Min	Sub	
	Piney Mtn Church Rd. (SR 1007)	Bostic Sunshine Hwy (SR 1006)	Ellenboro Town Limits	Rutherford County	4.7	18	2	9	50	55	10300	1100	1200	1200	ADQ	ADQ	ADQ	Min	Sub	
	Piney Mtn Church Rd. (SR 1007)	Ellenboro Town Limits	US 74 Business	Ellenboro	0.8	18	2	9	50	35	9200	3100	3300	3300	ADQ	ADQ	ADQ	Min	Sub	
	Piney Ridge Rd. (SR 2159)	Oakland Rd. (SR 2169)	Daniel Rd. (SR 2184)	Rutherford County	0.9	18	2	9	60	35	10300	7300	8100	8100	ADQ	ADQ	ADQ	Min	Sub	
	Piney Ridge Rd. (SR 2159)	Daniel Rd. (SR 2184)	Oak St. (SR 2241)	Rutherford County	0.3	18	2	9	60	45	10300	2200	2600	2600	ADQ	ADQ	ADQ	Min	Sub	
	Piney Ridge Rd. (SR 2159)	Oak St. (SR 2241)	Butler Rd. (SR 2179)	Rutherford County	0.5	18	2	9	60	35	10300	4900	5600	5600	ADQ	ADQ	ADQ	Min	Sub	
	Piney Ridge Rd. (SR 2159)	Bulter Rd. (SR 2179)	Bethany Church Rd. (SR 2213)	Rutherford County	0.9	18	2	9	60	35	10300	5700	6400	6400	ADQ	ADQ	ADQ	Min	Sub	
	Pointer Rd. (SR 2160)	Doggett Rd. (SR 2159)	Forest City Town Limtis	Rutherford County	1	18	2	9	45	35	9200	1800	2200	2200	ADQ	ADQ	ADQ	Min	Sub	
	Pointer Rd. (SR 2160)	Forest City Town Limtis	US 221 Alternate	Forest City	0.3	18	2	9	30	35	9200	1800	2200	2200	ADQ	ADQ	ADQ	Min	Sub	
	Poors Ford Rd. (SR 1004)	Polk County Line	Shiloh Rd. and Cleghorn Mill Rd. (SR 1148)	Rutherford County	3.8	20	2	10	30	55	11700	2000	3000	3000	ADQ	ADQ	ADQ	Min	Sub	
	Poors Ford Rd. (SR 1004)	Shiloh Rd. and Cleghorn Mill Rd. (SR 1148)	Big Island Rd. (SR 1106)	Rutherford County	0.2	20	2	10	30	45	11700	2100	2600	2600	ADQ	ADQ	ADQ	Min	Sub	
	Poors Ford Rd. (SR 1004)	Big Island Rd. (SR 1106)	US 74	Rutherford County	0.5	20	2	10	30	45	11700	4100	5000	5000	ADQ	ADQ	ADQ	Min	Sub	
	Poors Ford Rd. (SR 1004)	US 74	US 221	Rutherford County	1.1	20	2	10	35	45	11700	4100	5200	5200	ADQ	ADQ	ADQ	Min	Sub	
	Poors Ford Rd. (SR 2194)	US 221	Spindale Town Limits	Rutherford County	1.4	20	2	10	45	35	11700	4600	5200	5200	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Poors Ford Rd. (SR 2194)	Spindale Town Limits	Oakland Rd. (SR 2169)	Spindale	0.1	20	2	10	45	35	11700	4600	5200	5200	ADQ	ADQ	ADQ	Min	Sub	
	Ridgecrest Ave. (SR 1166)	NC 108	Court St.	Rutherfordton	0.3	24	2	12	40	35	10200	2400	2500	2500	ADQ	ADQ	ADQ	Min	Sub	
	Ridgecrest Ave. (SR 1166)	Court St.	Maple Creek Rd. (SR 1178)	Rutherfordton	0.7	20	2	10	35	35	9500	2400	2600	2600	ADQ	ADQ	ADQ	Min	Sub	
	Rock Rd. (SR 1520	US 64	Ruth Town Limits	Ruth	0.3	22	2	11	40	35	9900	6000	6600	6600	ADQ	ADQ	ADQ	Min	Sub	
	Rock Rd. (SR 1520	Ruth Town Limits	Water Works Rd. (SR 1537)	Rutherford County	0.3	22	2	11	40	35	9900	6000	6600	6600	ADQ	ADQ	ADQ	Min	Sub	
	Rock Rd. (SR 1521	Water Works Rd. (SR 1537)	Broyhill Rd. (SR 1535)	Rutherford County	0.5	22	2	11	40	35	9900	3900	4300	4300	ADQ	ADQ	ADQ	Min	Sub	
	Rock Rd. (SR 1521	Broyhill Rd. (SR 1535)	Oscar Justice Rd. (SR 1523)	Rutherford County	1.6	22	2	11	40	55	12100	800	900	900	ADQ	ADQ	ADQ	Min	Sub	
	Rock Springs Church Rd. (SR 1184)	Polk County Line	US 64	Rutherford County	1.9	18	2	9	60	55	9800	400	500	500	ADQ	ADQ	ADQ	Min	Sub	
	S. Cleghorn St.	Court St.	US 221 Alternate	Rutherfordton	0.1	24	2	12	30	25	10000	1200	1500	1500	ADQ	ADQ	ADQ	Min	Sub	
	Salem Church Rd. (SR 1769)	Bostic Sunshine Hwy (SR 1006)	South Mountain Rd. (SR 1713)	Rutherford County	1.8	18	2	9	45	45	10300	1000	1200	1200	ADQ	ADQ	ADQ	Min	Sub	
	Salem Church Rd. (SR 1769)	South Mountain Rd. (SR 1713)	Hollis Rd. (SR 1749)	Rutherford County	3.1	18	2	9	45	55	10300	700	800	800	ADQ	ADQ	ADQ	Min	Sub	
	Shiloh Rd. (SR 1148)	Poors Ford Rd. (SR 1004)	Big Island Rd. (SR 1106)	Rutherford County	0.1	18	2	9	45	55	11700	2500	2900	2900	ADQ	ADQ	ADQ	Min	Sub	
	Shiloh Rd. (SR 1148)	Big Island Rd. (SR 1106)	US 221	Rutherford County	1.6	20	2	10	45	55	11700	2500	2900	2900	ADQ	ADQ	ADQ	Min	Sub	
	Shuttle Ave.	Oak St. (SR 2201)	Spindale St. (SR 1546)	Spindale	0.1	24	2	12	60	20	10000	900	1100	1100	ADQ	ADQ	ADQ	Min	Sub	
	Smith Grove Rd (SR 1551)	US 221 Alternate	Forest City Town Limits	Forest City	0.4	18	2	9	35	35	9200	2100	2400	2400	ADQ	ADQ	ADQ	Min	Sub	
	Smith Grove Rd (SR 1551)	Forest City Town Limits	Hudlow Rd. (SR 1510)	Rutherford County	0.9	18	2	9	35	55	10300	2100	2400	2400	ADQ	ADQ	ADQ	Min	Sub	
	Spindale St. (SR 1546)	US 221 Alternate	Shuttle Ave.	Spindale	0.2	30	2	15	40	35	10200	3200	4000	4000	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Spindale St. (SR 1546)	Shuttle Ave.	West St. (SR 1544)	Spindale	0.3	28	2	14	40	35	10200	1600	1900	1900	ADQ	ADQ	ADQ	Min	Sub	
	Spindale St. (SR 1546)	West St. (SR 1544)	Whitesides Rd. (SR1538)	Spindale	1.4	20	2	10	60	35	9500	1100	1400	1400	ADQ	ADQ	ADQ	Min	Sub	
	Thompson Rd. (SR 1367)	US 64	US 221	Rutherford County	1.4	18	2	9	40	45	10300	800	1100	1100	ADQ	ADQ	ADQ	Min	Sub	
	Thunder Rd. (SR 2201)	US 221	Rutherfordton Town Limits	Rutherford County	0.4	20	2	10	60	55	13600	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Thunder Rd. (SR 2201)	Rutherfordton Town Limits	Old Stonecutter Rd. (SR 2193)	Rutherfordton	0.1	20	2	10	60	35	9500	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Thunder Rd. (SR 2201)	Old Stonecutter Rd. (SR 2193)	Rutherfordton Town Limts	Rutherfordton	0.2	20	2	10	60	35	9500	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Thunder Rd. (SR 2201)	Rutherfordton Town Limts	Spindale Town Limits	Rutherford County	0.5	20	2	10	60	55	13600	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Thunder Rd. (SR 2201)	Spindale Town Limits	Proposed US 221 Bypass	Spindale	0.1	20	2	10	60	35	9500	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Thunder Rd. (SR 2201)	Proposed US 221 Bypass	US 74 Alternate	Spindale	0.5	20	2	10	60	35	9500	4400	5500	5500	ADQ	ADQ	ADQ	Min	Sub	
	Union Rd. (SR 1145)	Coxe Rd. (SR 1005)	US 74	Rutherford County	0.2	18	2	9	60	45	10300	1400	1500	1500	ADQ	ADQ	ADQ	Min	Sub	
	Union Rd. (SR 1145)	US 74	NC 108	Rutherford County	5	18	2	9	60	45	10300	700	800	800	ADQ	ADQ	ADQ	Min	Sub	
	W. Church St. (SR 1576)	Brick Rd. (SR 1583)	Bostic Town Limits	Rutherford County	0.1	18	2	9	60	35	9800	2000	2400	2400	ADQ	ADQ	ADQ	Min	Sub	
	W. Church St. (SR 1576)	Bostic Town Limits	Main St. (SR 1006)	Bostic	0.6	18	2	9	60	35	9800	2000	2400	2400	ADQ	ADQ	ADQ	Min	Sub	
	W. Main Dr.	Withrow Rd. (SR 2185)	W Main Dr. Exd	Forest City	0.2	18	2	9	30	35	9200	4200	5000	5000	ADQ	ADQ	ADQ	Min	Sub	
	W. Main Dr.	W Main Dr. Exd	Hardin Rd. (SR 2178)	Forest City	0.2	18	2	9	30	35	9200	4200	5000	5000	ADQ	ADQ	ADQ	Min	Sub	
	W. Main Dr.	Hardin Rd. (SR 2178)	Westview St.	Forest City	0.1	18	2	9	30	35	9200	6000	7200	7200	ADQ	ADQ	ADQ	Min	Sub	
	W. Main Dr. Ext.	Withrow Rd. (SR 2185)	W Main Dr.	Forest City	0.2	18	2	2	40	35	9200	4200	5000	5000	ADQ	ADQ	ADQ	Min	Sub	
	Washington St. (SR 1218)	US 64	Maple Creek Rd. (SR 1178)	Rutherfordton	0.2	22	2	11	60	35	9900	6100	6400	6400	ADQ	ADQ	ADQ	Min	Sub	

HIGHWAY																					
		Section				2013 Existing System							2040 Proposed System								
Local ID	Facility	From	To	Jurisdiction	Dist. (mi)	Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Proposals for Other Modes
	Washington St. (SR 1218)	Maple Creek Rd. (SR 1178)	Court St.	Rutherfordton	0.9	24	2	12	45	35	10000	5400	5700	5700	ADQ	ADQ	ADQ	Min	Sub	
	Washington St. (SR 1218)	Court St.	NC 108	Rutherfordton	0.1	30	2	15	45	35	10000	5400	5700	5700	ADQ	ADQ	ADQ	Min	Sub	
	Water Works Rd. (SR 1537)	Old US 221 N (SR 1536)	Rock Rd. (SR 1520)	Rutherford County	0.1	18	2	9	50	35	9200	1400	1700	1700	ADQ	ADQ	ADQ	Min	Sub	
	West St. (SR 1544)	US 74 Alternate	Spindale St. (SR 1546)	Spindale	0.8	18	2	9	50	35	9200	2500	3100	3100	ADQ	ADQ	ADQ	Min	Sub	
	Westview St.	Hardin Rd. (SR 2178)	W Main Dr.	Forest City	0.2	18	2	9	50	35	9200	4800	6000	6000	ADQ	ADQ	ADQ	Min	Sub	
	Westview St.	W Main Dr.	US 221 Alternate	Forest City	0.1	18	2	9	40	35	9200	4800	6000	6000	ADQ	ADQ	ADQ	Min	Sub	
	Whitesides Rd. (SR1538)	US 74 Alternate	Ruth Town Limits	Ruth	0.2	18	2	9	40	35	10200	3200	3400	3400	ADQ	ADQ	ADQ	Min	Sub	
	Whitesides Rd. (SR1538)	Ruth Town Limits	Spindale St. (SR 1546)	Rutherford County	1.3	18	2	9	40	45	10300	3200	3400	3400	ADQ	ADQ	ADQ	Min	Sub	
	Whitesides Rd. (SR1538)	Spindale St. (SR 1546)	Old Ross Rd. (SR 1548)	Rutherford County	0.3	18	2	9	40	55	10300	1500	1600	1600	ADQ	ADQ	ADQ	Min	Sub	
	Whitesides Rd. (SR1538)	Old Ross Rd. (SR 1548)	Hudlow Rd. (SR 1510)	Rutherford County	1.5	18	2	9	40	55	10300	1300	1400	1400	ADQ	ADQ	ADQ	Min	Sub	
	Whitesides Rd. (SR1538)	Hudlow Rd. (SR 1510)	Pearidge Rd. (SR 1007)	Rutherford County	3.7	20	2	10	40	55	10300	1600	1800	1800	ADQ	ADQ	ADQ	Min	Sub	
	Withrow Rd. (SR 2185)	Oakland Rd. (SR 2169)	Spindale Town Limits	Spindale	0.5	18	2	9	40	35	9200	3800	4700	4700	ADQ	ADQ	ADQ	Min	Sub	
	Withrow Rd. (SR 2185)	Spindale Town Limits	Forest City Town Limits	Rutherford County	0.5	18	2	9	40	35	9200	3800	4700	4700	ADQ	ADQ	ADQ	Min	Sub	
	Withrow Rd. (SR 2185)	Forest City Town Limits	Daniel Rd. and Duke St. (SR 2184)	Forest City	0.2	18	2	9	40	35	9200	3800	4700	4700	ADQ	ADQ	ADQ	Min	Sub	
	Withrow Rd. (SR 2185)	Daniel Rd. (SR 2184) and Duke St. (SR 2184)	W Main Dr. Exd	Forest City	0.9	18	2	9	40	35	9200	5700	7100	7100	ADQ	ADQ	ADQ	Min	Sub	
	Withrow Rd. (SR 2185)	W Main Dr. Exd	W Main Dr.	Forest City	0.1	18	2	9	40	35	9200	5700	6400	6400	ADQ	ADQ	ADQ	Min	Sub	
	Withrow Rd. (SR 2185)	W Main Dr.	US 221 Alternate	Forest City	0.1	18	2	9	60	35	9200	5700	6400	6400	ADQ	ADQ	ADQ	Min	Sub	

PUBLIC TRANSPORTATION AND RAIL

PUBLIC TRANSPORTATION[1]						
		Speed		Existing System	Proposed System	
Local ID	Facility/ Route	Limit (mph)	Distance (mi)	Type	Type	Other Modes
RUTH0001-T	US 64 and Parton Road (SR 1556) in Rutherfordton	-	-	-	Park and Ride	
RUTH0002-T	US 74 and US 221 in Forest City	-	-	-	Park and Ride	
RUTH0003-T	US 74 Alternate and S Church Street (SR 2213) in Forest City	-	-	-	Park and Ride	
RUTH0004-T	US 221 and Oak Springs Road in Rutherfordton	-	-	-	Park and Ride	

[1] Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to *Chapter 1 of this report*

RAIL												
						Existing System			Proposed System			
Local ID	Facility/ Route	Section	Class	Speed Limit (mph)	Distance (mi)	Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	Other Modes

BICYCLE AND PEDESTRIAN [1]

BICYCLE								
				Existing System		Proposed System		
				Cross-Section				
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	(ft)	lanes	Type	Cross-Section	Other Modes
RUTH0005-H	US 74 BUS	US 221 ALT to Bostic Sunshine Hwy	6.6	22	2	On Road	2A	H
RUTH0001-B	US 221	US 64 to US 221 ALT (Charlotte Road)	1.2	30	2	On Road	2A	
RUTH0001-B	US 221	US 221 ALT (Maple Street) to US 74 BUS					2A	
RUTH0003-B	NC 108	Della Road (SR 1199) to Charlotte Road	0.9	20-22	2	On Road	2A	
RUTH0004-B	Bethany Church Road (SR 2213)	US 221 to US 74 BUS	3.9	20	2	On Road	2A	
RUTH0007-B	Bostic Road (SR 1576)	Second Broad River to Brick Road (SR 1583)	0.5	21	2	On Road	2A	
RUTH0008-B	Bostic Sunshine Hwy	Bostic Municipal North Boundary to Salem Church Road (SR 1769)	1.9	20	2	On Road	2A	
RUTH0009-B	Bostic Sunshine Hwy	Church Street (SR 1576) to US 74 BUS	2	20	2	On Road	2A	
RUTH0002-B	US 221 ALT	Maple Street (NC 108) to US 74 ALT	1	52	5	On Road	5A	P
RUTH0010-B	Cherry Mountain Street (SR 1576)	US 221 ALT to Second Broad River	1.8	20	2	On Road	2A	
RUTH0011-B	Cleghorn Mill Road (SR 1148)	Coxe Road (SR 1005) to Poors Ford Road (SR 1004)	2.7	18	2	On Road	2A	
RUTH0012-B	Coxe Road (SR 1005)	Polk County to Cheghorn Mill Road (SR 1148)	1.5	18	2	On Road	2A	
RUTH0013-B	Edwards Street (SR 1153)	Bob Hardin Road (SR 1151) to Maple Street (NC 108)	1.9	18	2	On Road	2A	P
RUTH0015-B	Main Street (SR 1006)	Bostic Municipal South Boundary to Bostic Municipal North Boundary	1	20-24	2	On Road	2A	
U-5833	Oak Street Extension (SR 2241)	Piney Ridge Road (SR 2159) to US 74 ALT	0.6	63	2	On Road	2A	P
RUTH0012-H	Oakland Road (SR 2169)	Piney Ridge Road (SR 2159) to E Main Street (US 221 ALT)	1.4	20-22	2	On Road	2A	H, P
RUTH0016-B	Piney Ridge Road (SR 2159)	Oakland Road (SR 2169) to Bethany Church Road (SR 2213)	2.7	18	2	On Road	2A	
RUTH0018-B	S Church Street (SR 2213)	US 74 ALT to US 221 ALT	1.4	24-52	2-4	On Road	2E- 4D	
RUTH0019-B	Salem Church Road (SR 1769)	Bostic Sunshine Highway (SR 1006) to Hollis Road (SR1749)	4.9	18	2	On Road	2A	
RUTH0020-B	Shiloh Road (SR 1148)	Poors Ford Road (SR 1004) to US 221	1.6	18-20	2	On Road	2A	
RUTH0021-B	W Church Street (SR 1576)	Brick Road (SR 1583) to Main Street (SR 1006)	0.7	18	2	On Road	2A	

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
RUTH0001-P	NC 108 (Charlotte Rd)	Maple St. to Main St.	0.1	--	--	Sidewalk	Both	
RUTH0002-P	2nd St.	Middle School Exit to Rail-Trail	0.1	--	--	Sidewalk	Both	
RUTH0003-P	Allen Street	US 221 ALT to rail trail	0.0	--	--	Sidewalk	Both	
RUTH0004-P	Chestnut Street	US 221 ALT to rail trail	0.1	--	--	Sidewalk	Both	
RUTH0005-P	Edwards St/ Bob Hardin Rd	Crestivew St to Coxe Rd	1.9	--	--	Sidewalk	Both	
RUTH0006-P	Liberty Street	US 221 ALT to rail trail	0.1	--	--	Sidewalk	Both	
RUTH0007-P	Pine St	US-221 Alt. to Rail-Tracks	0.5	--	--	Sidewalk	Both	
RUTH0001-H	Proposed Oak Street Extension	US 221 ALT to US 74 BUS	0.9	--	--	Sidewalk	Both	
RUTH0008-P	R-S Middle School Entrance	Charlotte Rd to School Entrance	0.1	--	--	Sidewalk	Both	
RUTH0009-P	Ridgecrest St.	Court St. to Wasghinton St.	0.8	--	--	Sidewalk	Both	
RUTH0010-P	Rutherfordton Elementary Scool Entrance	Coxe Rd to School entrance	0.1	--	--	Sidewalk	Both	H
RUTH0011-P	Victory Drive	US 221 ALT to rail trail	0.1	--	--	Sidewalk	Both	
RUTH0012-P	W Main Dr	Main to West View St.	0.3	--	--	Sidewalk	Both	
RUTH0012-P	W Main Dr	Withrow Rd. to W. Main Dr. Ext.	0.2	--	--	Sidewalk	Both	
RUTH0013-P	Westview St	Hardin St. to Main St.	0.2	--	--	Sidewalk	Both	
RUTH0014-P	Withrow Rd	Callahan Koon Rd. to Duke St.	0.7	--	--	Sidewalk	Both	

MULTI-USE PATH								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Side of Street	Cross-Section	Side of Street	Cross-Section	Modes
EB-5730	Thermal Belt Rail Trail 2	US 64 to Oakland Road (SR 2169)	3.2	--	--	--	--	--
EB-5733	Thermal Belt Rail Trail 1	US 64 to Oak Springs Road (SR 1531)	6	--	--	--	--	--

[1] Only major routes and proposals are shown here. For further documentation of bicycle and pedestrian facilities and proposals, refer to *Isothermal Regional Trails Plan, the 2015 Forest City: Heart & Sole pedestrian plan, 2005 Rutherford County Heritage Development Plan,Overmountain Victory Trail, the Rutherfordton Bike/Ped Plan, Thermal Belt rail trail Master Plan and the updated Town of Forest City Comprehensive Parks and Recreation 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 comprehensive planning and design "typical" highway cross sections, as depicted on the following pages, were updated on May 5, 2014 in response to the Strategic Transportation Investments[1] (STI) law (House Bill 817) and are also consistent with SPOTOn!ine (used for project prioritization[2]), NCDOT's GIS-based web application for providing automated, near real-time prioritization scores and project costs. This guidance establishes design elements that emphasize safety, mobility, complete streets[3], and accessibility for multiple modes of travel. These "typical" highway cross sections should be used as 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[4] (NEPA) documentation and through final design preparation.

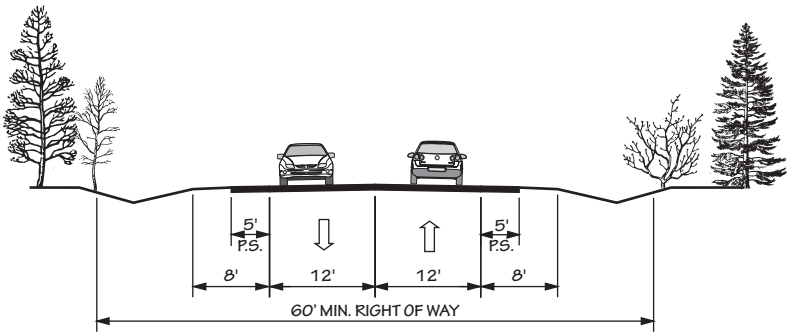
On all existing and proposed roadways delineated on the CTP, adequate right-of-way should be protected or acquired for the recommended cross sections. In addition to cross section and right-of-way recommendations for improvements, Appendix C may recommend ultimate needed right-of-way for the following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

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

[1] *For more information on STI, go to:* http://www.ncdot.gov/strategictransportationinvestments/.
[2] *For more information on prioritization, go to:* https://connect.ncdot.gov/projects/planning/Pages/StrategicPrioritization.aspx.
[3] *For more information on Complete Streets, go to:* http://www.completestreetsnc.org/.
[4] *For more information on NEPA, go to:* http://ceq.hss.doe.gov/.

FIGURE 7
"TYPICAL" HIGHWAY CROSS SECTIONS

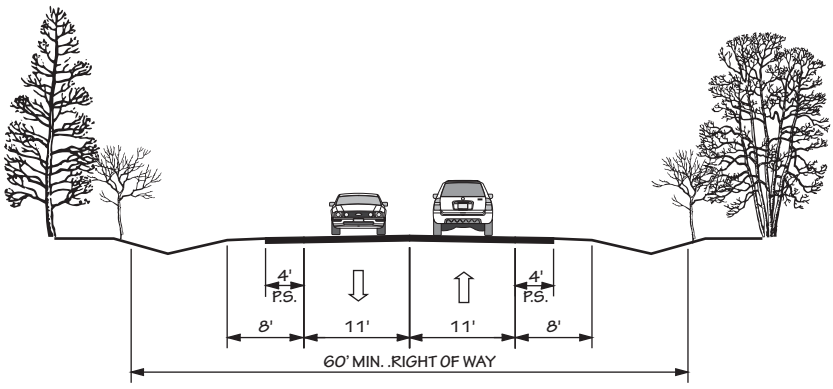
2A



2 LANE UNDIVIDED WITH PAVED SHOULDERS

POSTED SPEED 55 MPH

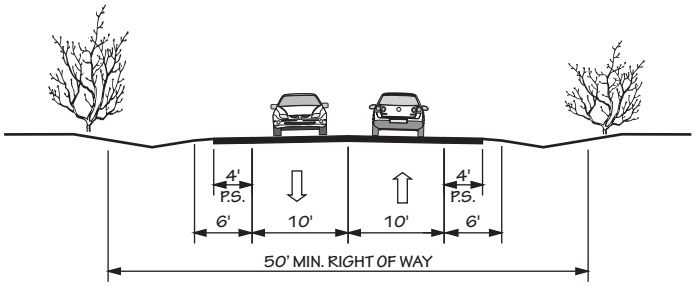
2B



2 LANES UNDIVIDED

POSTED SPEED 45 MPH OR LESS

2C



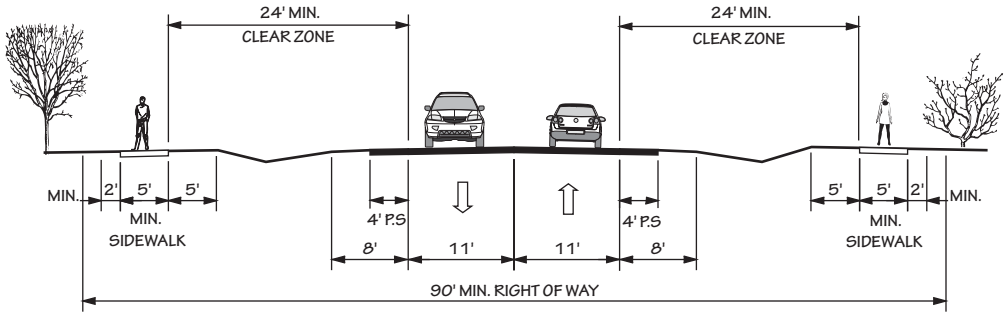
2 LANE UNDIVIDED WITH PAVED SHOULDERS

POSTED SPEED 25 - 35 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

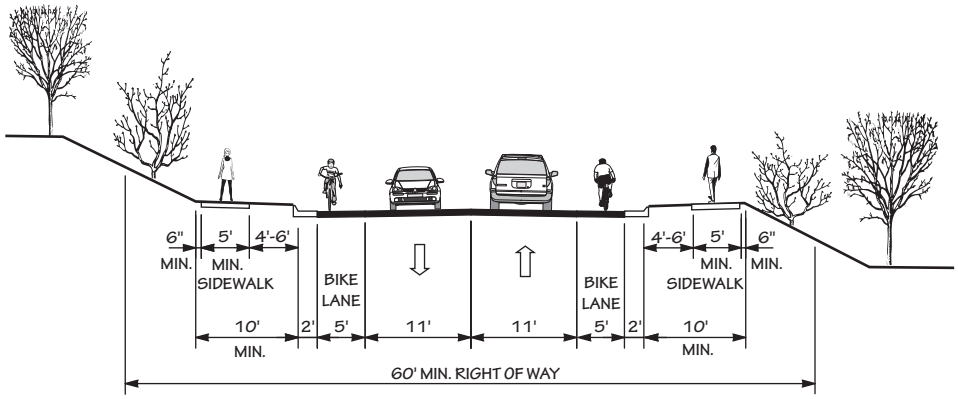
2D



2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 25-45 MPH

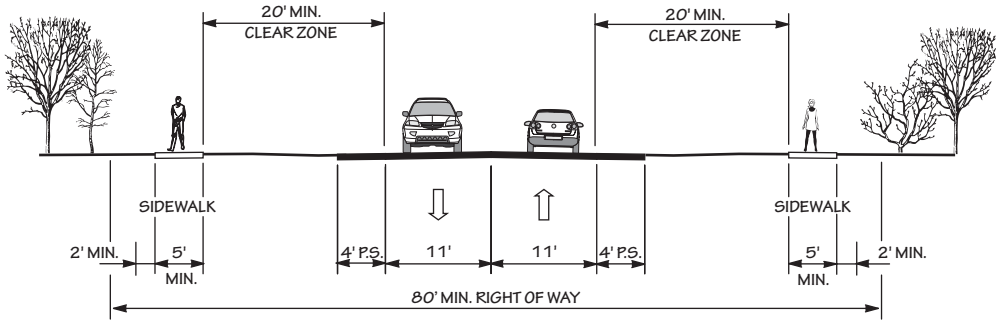
2E



2 LANE UNDIVIDED WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

2F



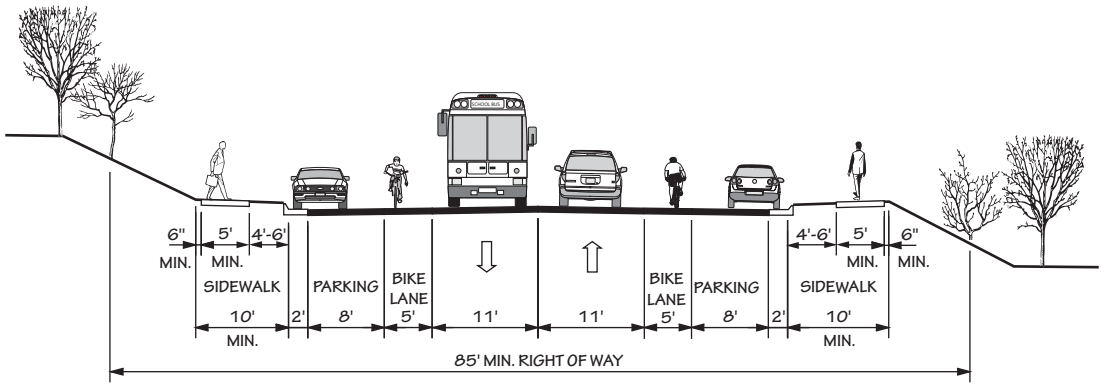
2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS
IN CAMA COUNTIES

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

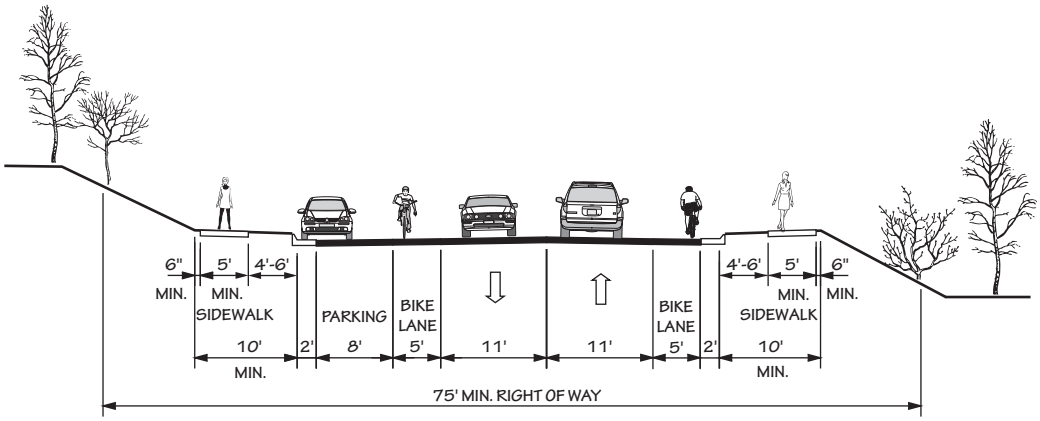
2G



2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING BOTH SIDES, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

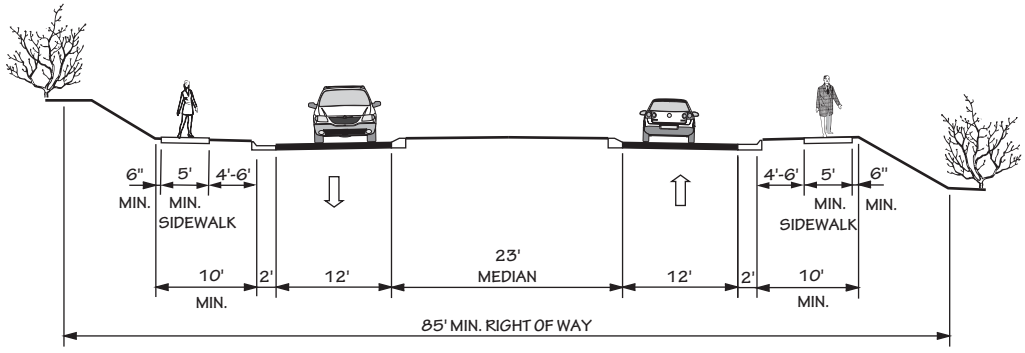
2H



2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING ONE SIDE, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

2I



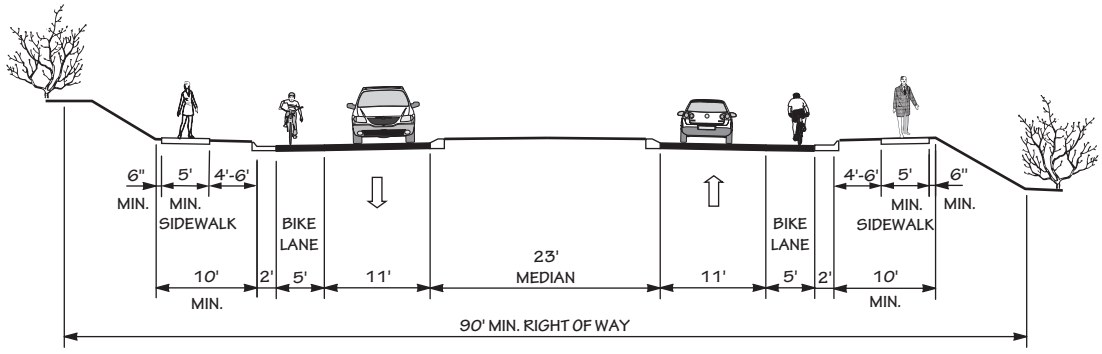
2 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER AND SIDEWALKS

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

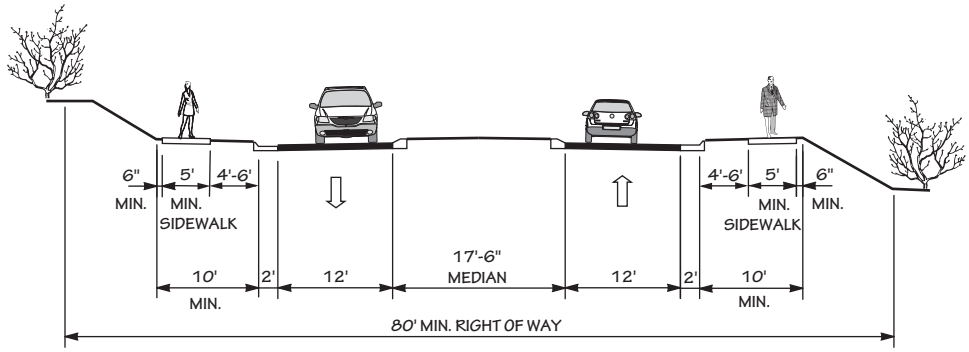
2J



2 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

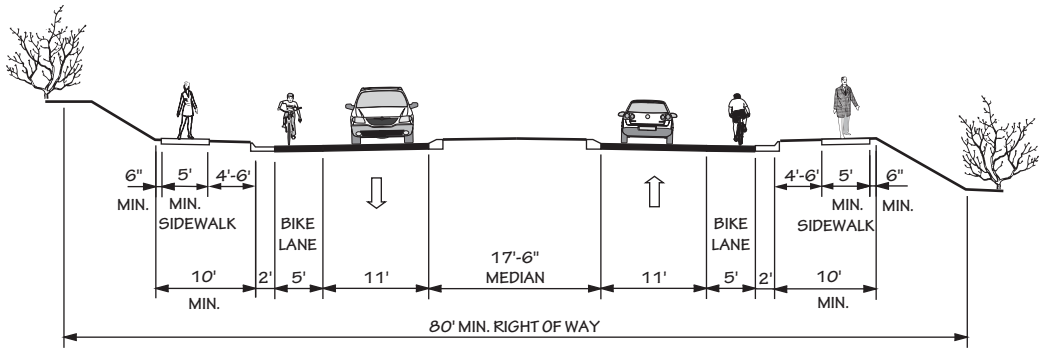
2K



2 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER AND SIDEWALKS

POSTED SPEED 25-45 MPH

2L



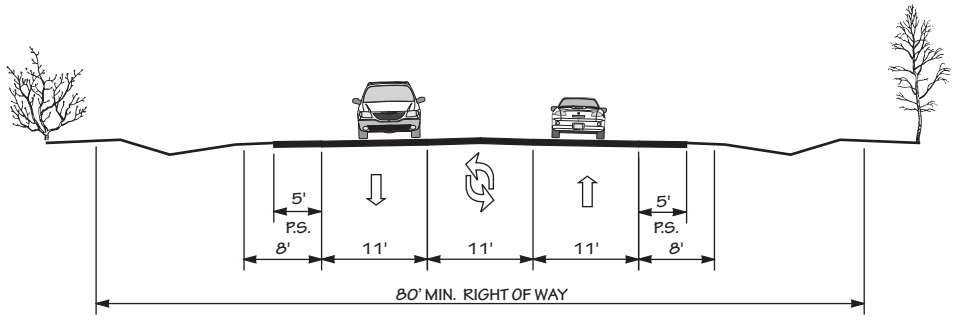
2 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

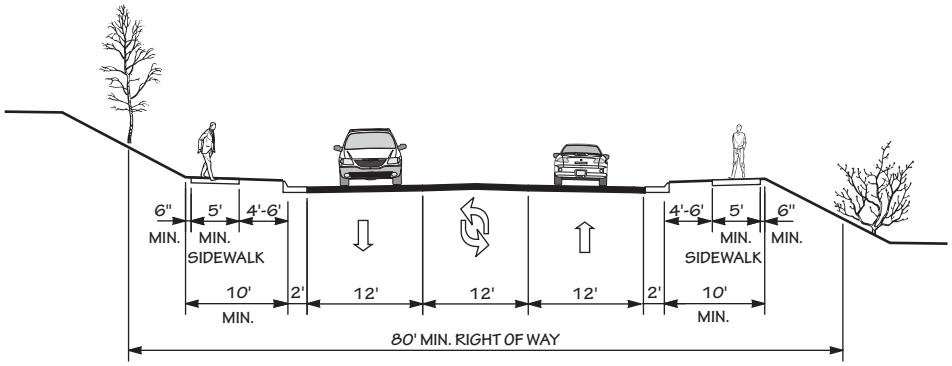
3A



2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS

POSTED SPEED 25-55 MPH

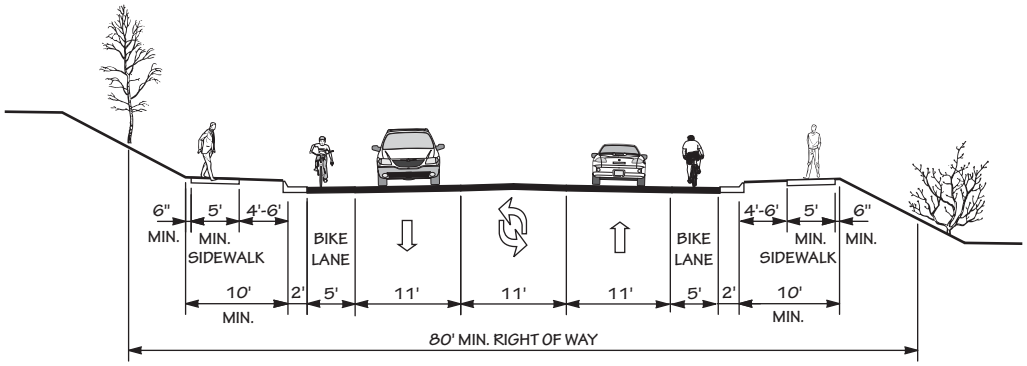
3B



2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS

POSTED SPEED 25-45 MPH

3C

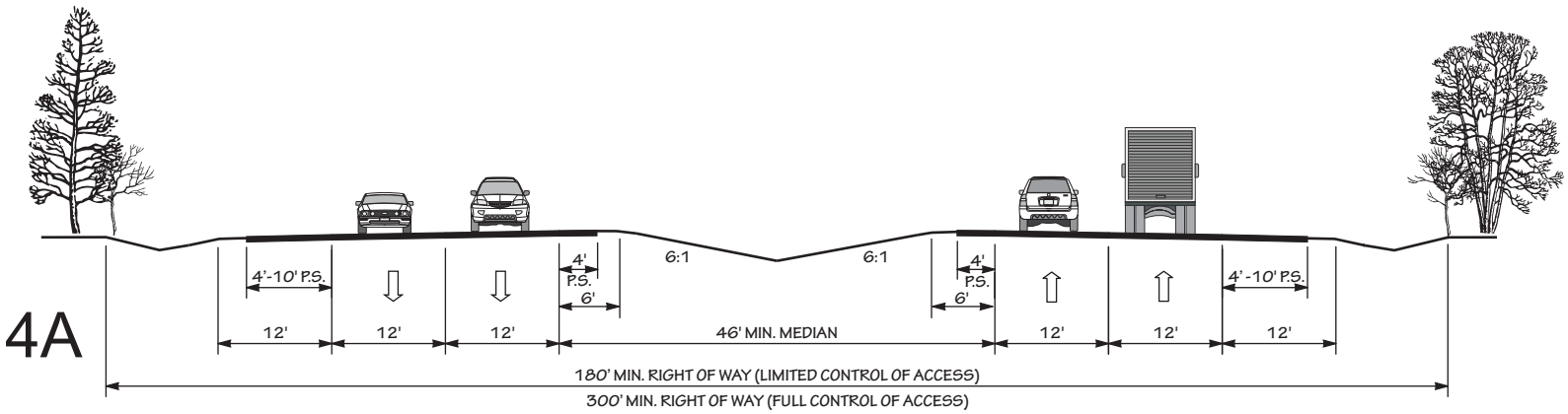


2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 25-45 MPH

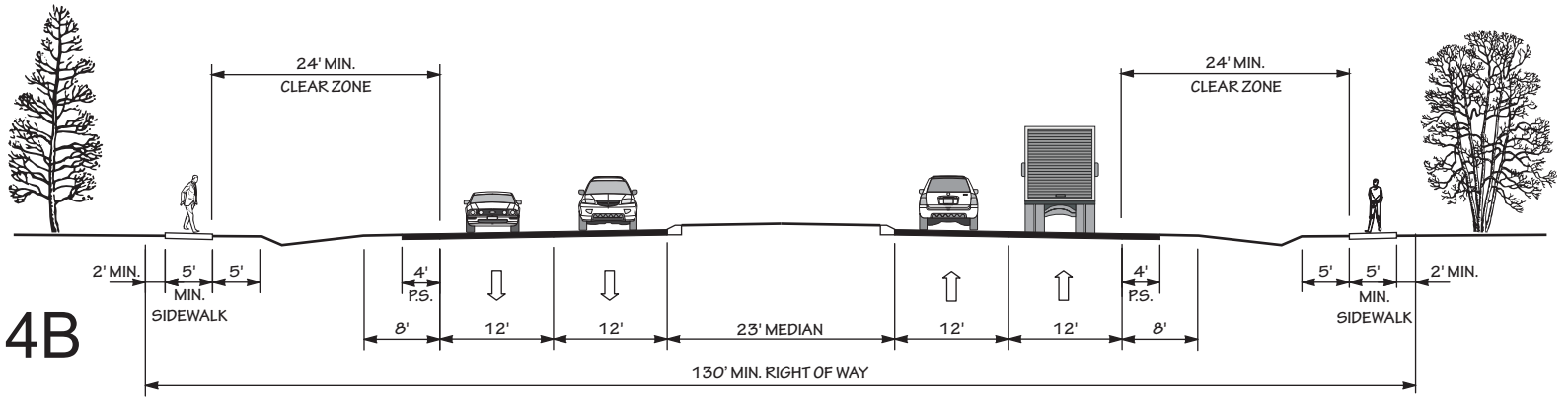
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



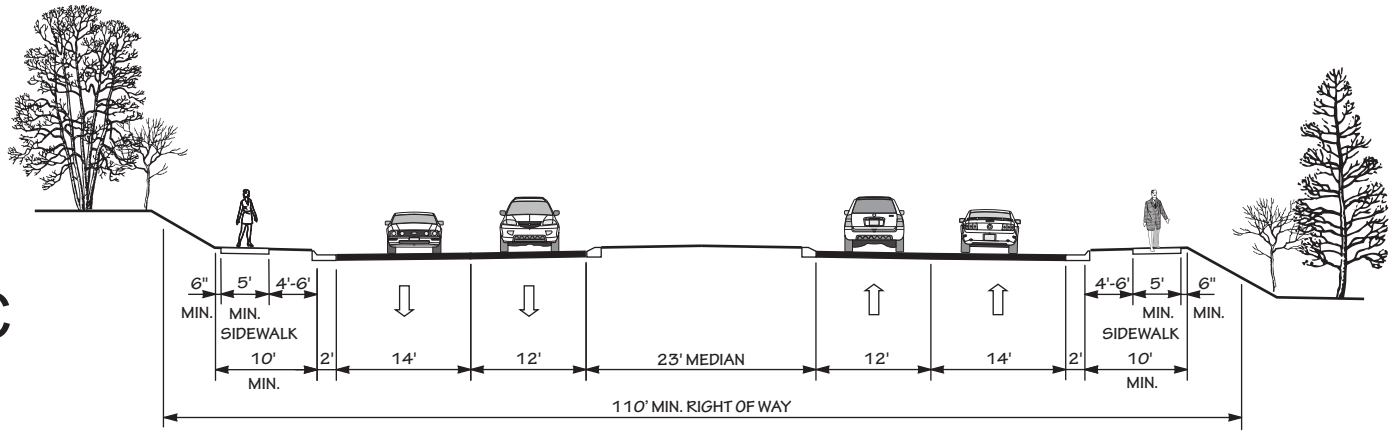
4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS

POSTED SPEED 45-70 MPH



4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 35-55 MPH



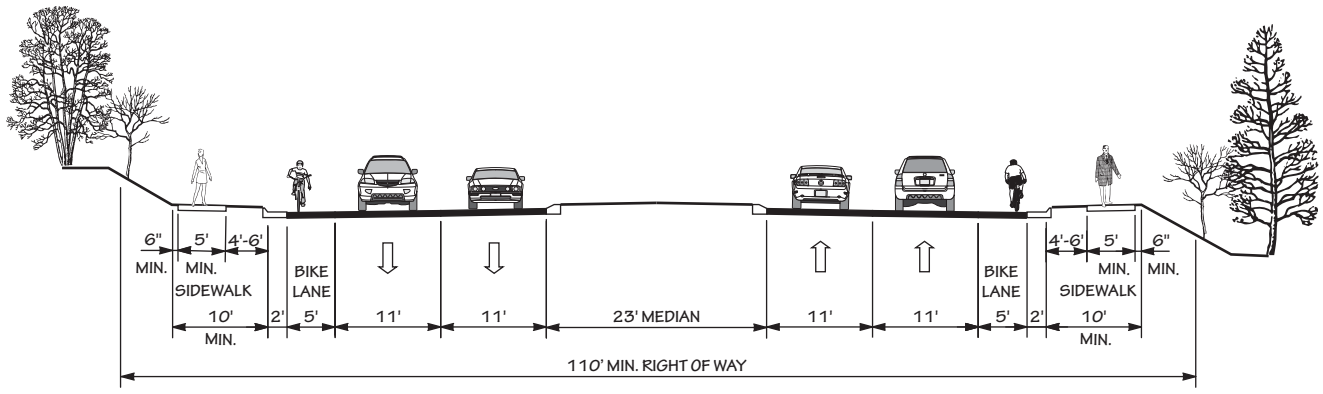
4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

"Typical" Highway Cross Sections

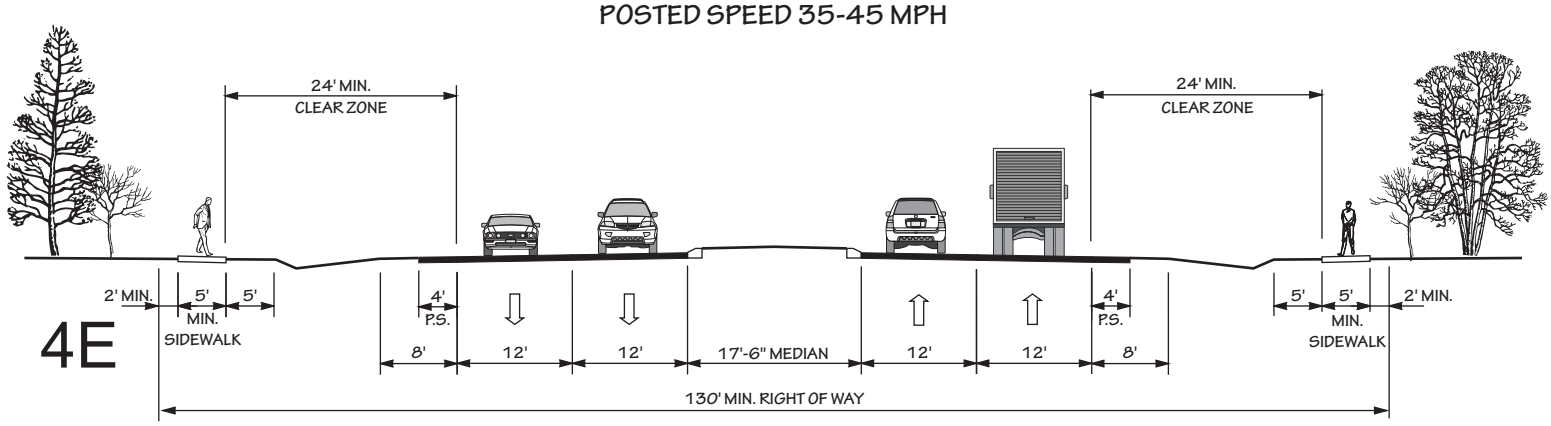
4D



4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES AND SIDEWALKS

POSTED SPEED 35-45 MPH

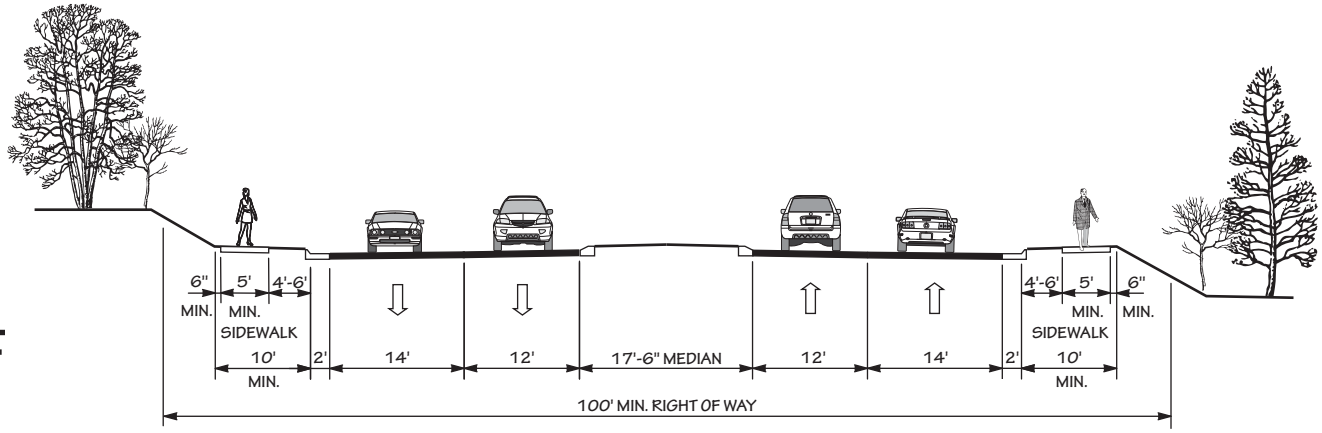
4E



4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS

POSTED SPEED 35-55 MPH

4F



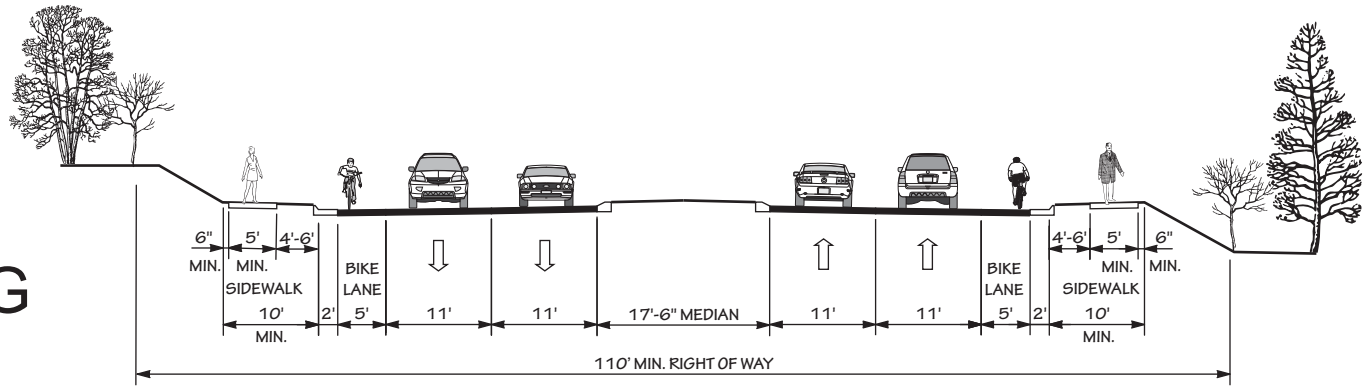
4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES AND SIDEWALKS

POSTED SPEED 35-45 MPH

Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS

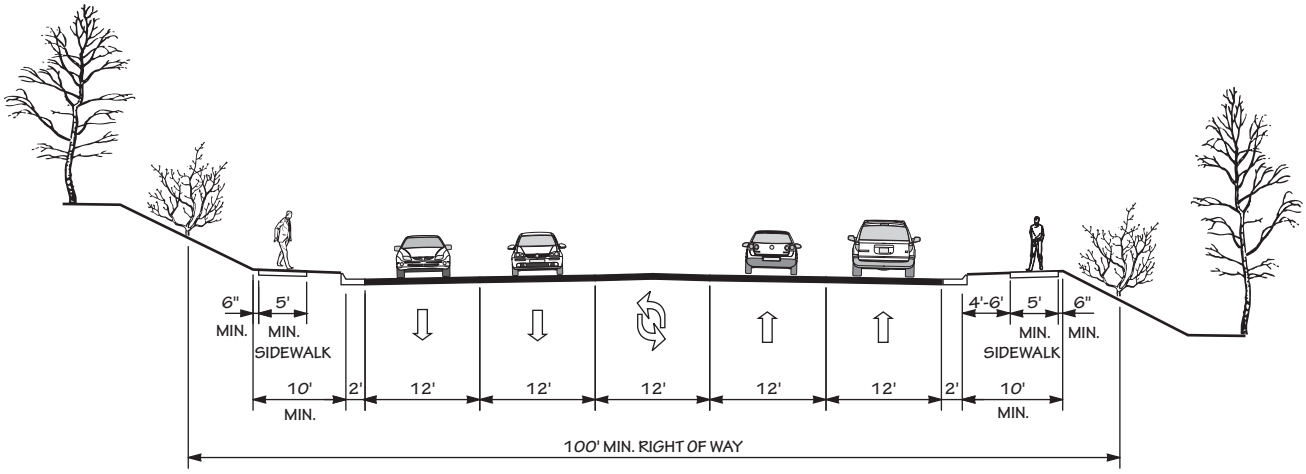
4G



4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

5A

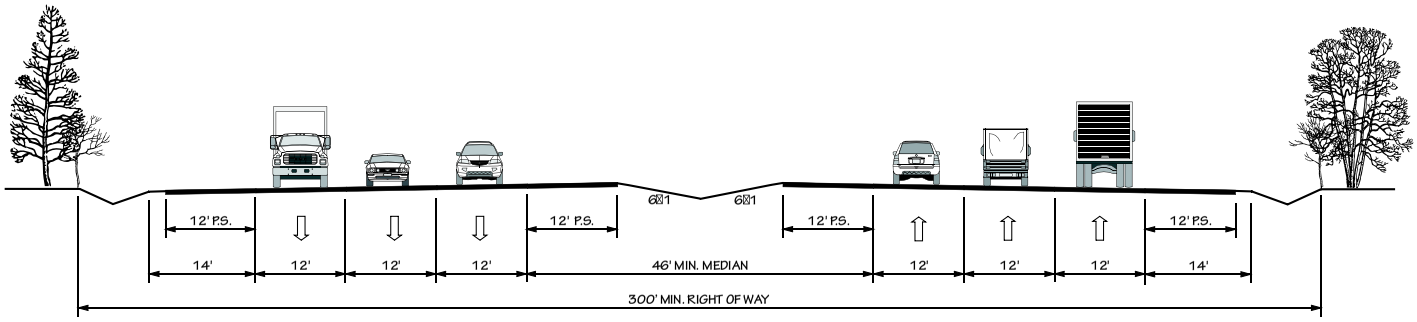


4 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS

POSTED SPEED 35-45 MPH

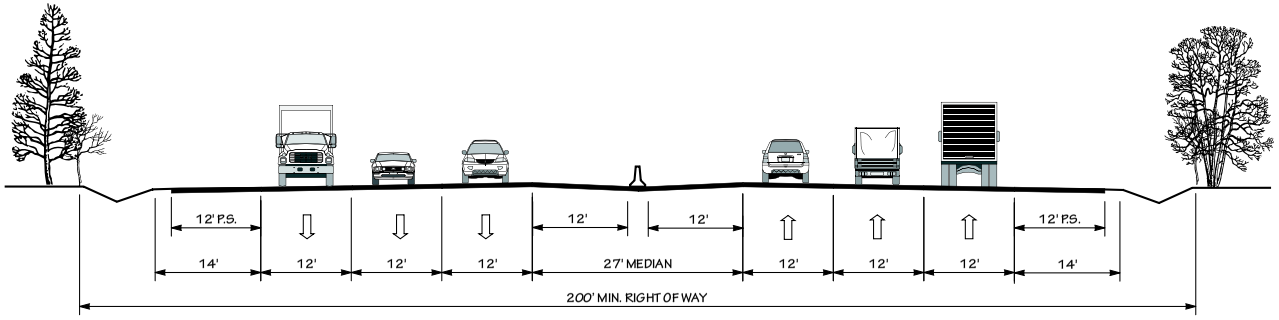
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



6A 6 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS

POSTED SPEED 45-70 MPH

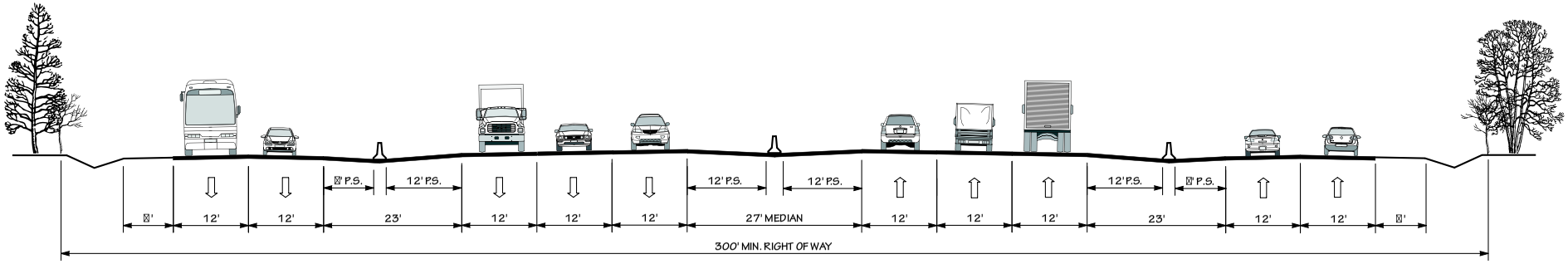


6B 6 LANE DIVIDED (27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS

POSTED SPEED 55-70 MPH

Revised 05/05/2014

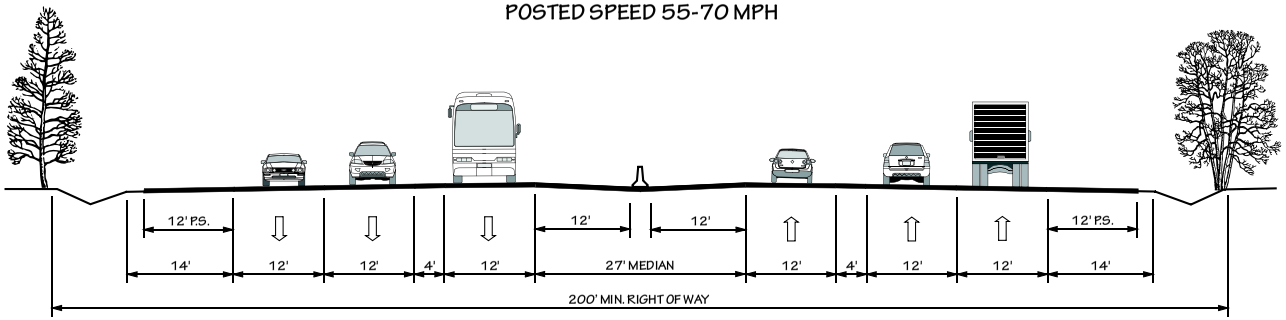
"TYPICAL" HIGHWAY CROSS SECTIONS



6C

6 LANE FREEWAY (27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS AND 2 LANE ONE-WAY SERVICE ROADS EACH SIDE

POSTED SPEED 55-70 MPH



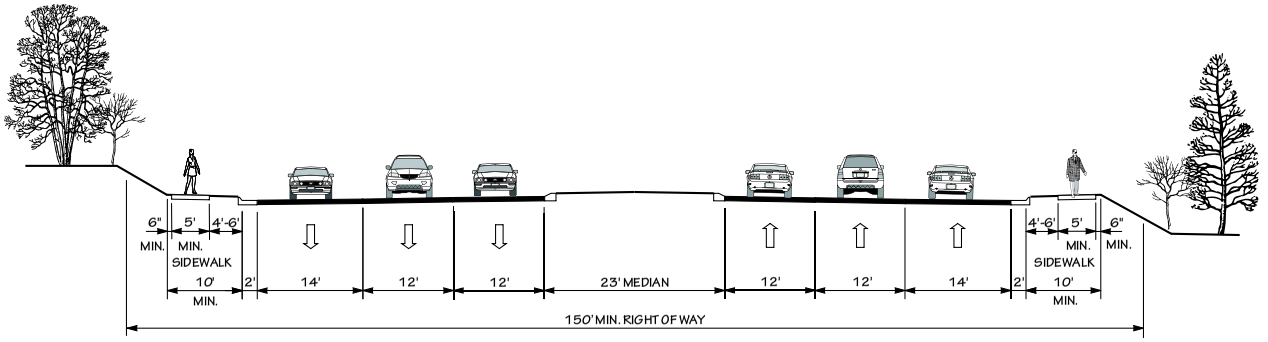
6D

6 LANE FREEWAY (4 GENERAL PURPOSE LANES, 2 MANAGED LANES, AND 27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS

POSTED SPEED 55-70 MPH

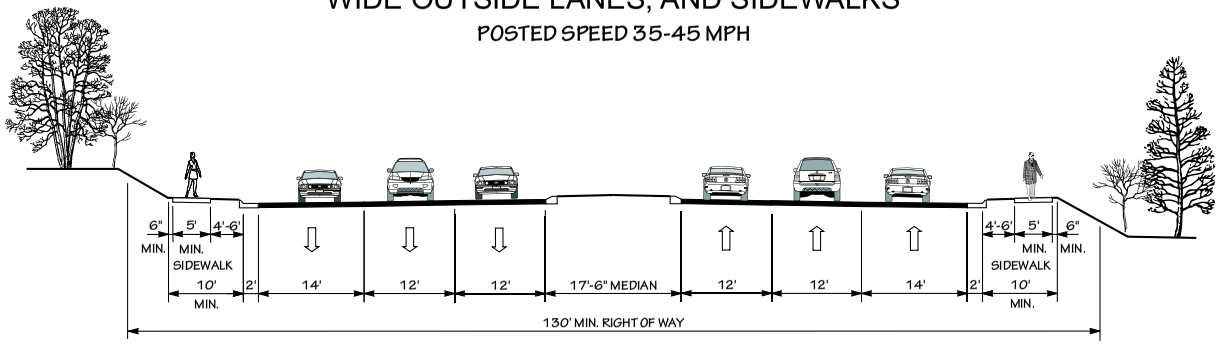
Revised 05/05/2014

"TYPICAL" HIGHWAY CROSS SECTIONS



6E 6 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

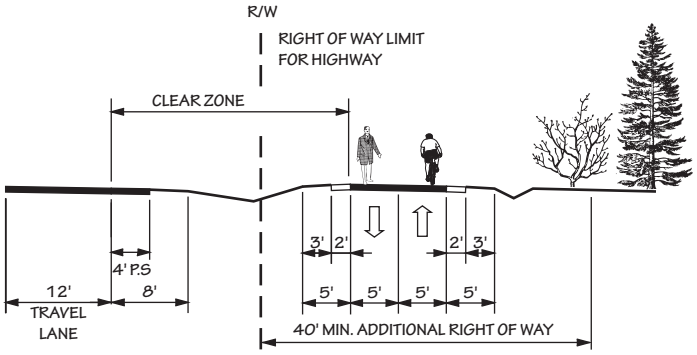


6F 6 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS

POSTED SPEED 35-45 MPH

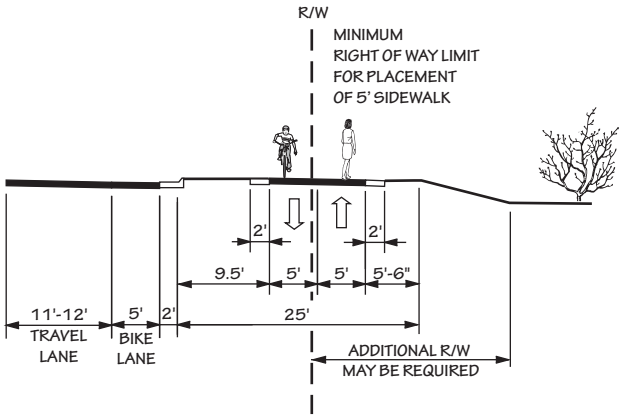
"TYPICAL" HIGHWAY CROSS SECTIONS

M A



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

M B



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

Revised 05/05/2014

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 8.

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

Figure 8 - Level of Service Illustrations

Source: 2010 Highway Capacity Manual, Exhibit 11-4

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

A bridge must be classified as deficient in order to qualify for federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges located on roads evaluated as a part of the CTP are listed in Table 3. For more details on deficient bridges within the planning area, contact the Structures Management Unit using the information in Appendix A.

Table 3 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
9	Pointer Road (SR 2160)	Creek	FO	
12	NC 120	US 74 BYP	SD & FO	RUTH0003-H
15	Clinchfield RR	US 74 BUS	FO	RUTH0005-H
19	CC & O RR	US 221	FO	
27	US 221 ALT	Second Broad River.,Priv.Dr	FO	
35	Rock Road (SR 1520)	Hollands Creek	FO	
38	NC 108	Mountain Creek	SD & FO	
40	NC 226	N Fork First Broad Creek	SD & FO	
42	Southern RR	US 74 BYP	FO	RUTH0003-H
51	Bethany Church Road (SR 2213)	Floyds Creek	SD & FO	B-5397
70	Pearidge Road (SR 1561)	Robinson Creek	SD	
83	US 74 BYP EBL	Second Broad River	SD & FO	B-5876
84	US 74 BYP WBL	Second Broad River	SD & FO	B-5876
89	US 221 ALT	Clinchfield RR	FO	
101	US 221 ALT	Southern RR	FO	
104	US 64	Cove Creek	FO	RUTH0002-H
108	Southern RR	US 74 BYP	FO	RUTH0003-H
116	SCL. RR	US 74 BYP	FO	RUTH0003-H
117	US 64	US 221	FO	RUTH0002-H
123	Race Path Church Road (SR 1921)	US 74 BYP	FO	
125	Piney Mountain Church Road (SR 1007)	Puzzle Creek	FO	
133	Duncans Creek Road (SR 1749)	Isham Fork Creek	FO	
134	Duncans Creek Road (SR 1749)	Duncans Creek	SD & FO	
136	Duncans Creek Road (SR 1749)	Branch	FO	
145	Harris Henrietta Road (SR 2125)	Floyds Creek	FO	
162	Whitesides Road (SR 1538)	Catheys Creek	FO	
167	Andrews Mill Road (SR 1007)	Roberson Creek	SD & FO	
189	Coxe Road (SR 1005)	Cleghorn Creek	FO	
190	Coxe Road (SR 1005)	Cleghorn Creek	FO	
195	Cane Creek Mountain Road (SR 1700)	Cane Creek	FO	
206	Crow Woods Road (SR 1734)	First Broad River	FO	
224	Ed Thompson Road (SR 1713)	Cane Creek	SD & FO	
252	Cove Road (SR 1001)	Greasy Creek	FO	
254	Painters Gap Road (SR 1328)	Stone Creek	FO	
293	Old Ballpark Road (SR 1547)	Hollands Creek	SD & FO	
554	Duncans Creek Road (SR 1749)	Branch	FO	
563	Hudlow Road (SR 1510)	Cathey's Creek	FO	
572	Cedar Creek Road (SR 1312)	Cedar Creek	FO	
578	Cove Road (SR 1001)	Cove Creek	FO	
589	S Church Street (SR 2213)	Southern Railroad	FO	B-5397

Appendix G
Socio-Economic Data Forecasting Methodology

In the development of the Rutherford County CTP, existing and anticipated deficiencies were determined through an analysis of the transportation system looking at both current and future travel patterns. Two analysis methods were used: one for the non-modeled/rural areas and another for the more urbanized area around Rutherfordton, Spindale, Forest City, Ruth, Ellenboro and Bostic.

For the non-modeled/rural portion of Rutherford County travel demand was projected from 2013 to 2040 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2010. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. For this CTP, the 2014 Rutherford County Land Classification Study and the 2013 Rutherford County Growth Management Plan were used and are illustrated in Figures 9 and 10, respectively.

It is more difficult to predict future travel patterns in urban areas where there are more alternative route options. Therefore, for Rutherfordton, Spindale, Forest City, Ruth, Ellenboro, Bostic and the surrounding area, travel demand was projected from 2013 to 2040 using a computerized travel demand model. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2040. Additionally, travel demand models require a broad range of socio-economic input data such as population and employment. These inputs are available from sources like the U.S. Census Bureau for the year 2010, but data for 2040 is also required.

The CTP Steering Committee worked with NCDOT to estimate population growth, economic development potential, and land use trends to determine the potential impacts on the future transportation system in 2040. This data was endorsed by the Rutherford County Commissioners on August 1, 2016.

Below is a description of the methodology used in the analysis.

Population

Population counts and projections were taken from the 2013 Rutherford County Growth Management Plan. By comparing the 1980 value and the 2015 estimate the CTP Committee reached consensus on a 2013 estimate of 69,500. The 2040 population was projected by analyzing available data from the Office of State Budget and Management (OSBM) and the Growth Management Plan. An annual growth rate of 0.8% was used to project this data to the 2040 population estimate of 86,000.

The CTP Steering Committee identified areas in Rutherford County that would experience growth rates higher and lower than the county average. The urbanized area was divided into Traffic Analysis Zones (TAZs) and each TAZ was identified as high,

medium, or low growth potential. Accordingly, those with high growth potential attracted more trip than those identified as low growth areas.

Employment

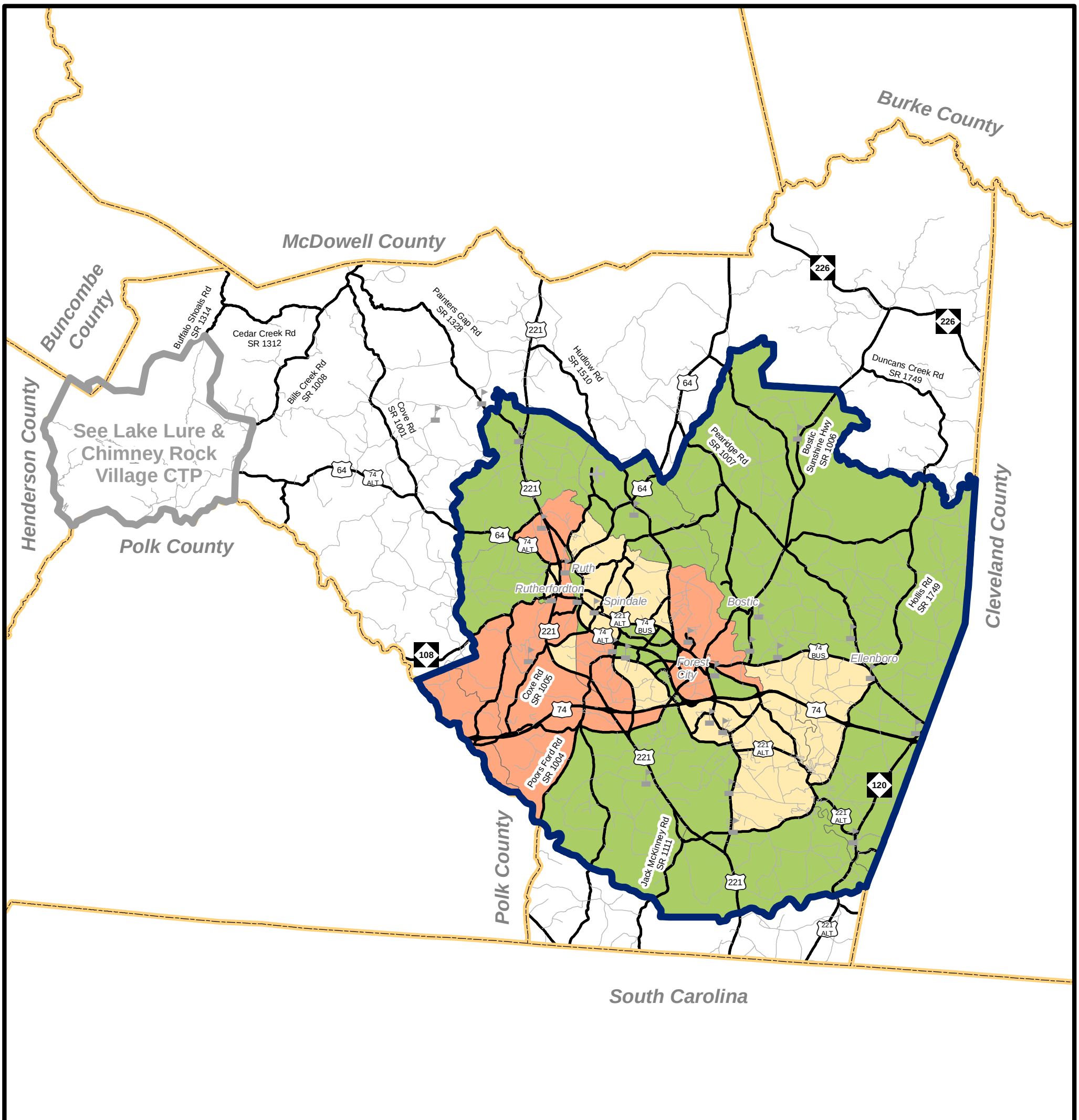
Future employment conditions within Rutherford County were approved by the CTP Steering Committee. This included approximate locations and intensity for proposed employment centers. Any anticipated heavy demand on the future transportation system as a result of these proposals is accounted for in projected traffic volumes. Because of the natural volatility of employment statistics, the CTP Committee analyzed the last five years of data from the Bureau of Economic Analysis to establish a base value to plan from. The estimated county employment in 2013 was 26,500. An annual growth rate of 1.4% was used to project employment data from 2013 to 2040 giving a total projected employment of 39,000 in 2040.

Table 4 – Socio-Economic Data

Year	2013	2040	Compound Annual Growth Rate
Population	69,500	86,000	0.8%
Employment	26,500	39,000	1.4%

Table 5 – Compound Annual Growth Rate 2010-2040

Projection	Population	Employment
High	1.3%	1.6%
Medium	0.8%	1.4%
Low	0.5%	0.5%



Legend

- School
- Airport
- Network Roads
- Other Roads
- Railroads
- Model Area
- County Boundary

Population Growth Rates

- High - 1.3% Growth*
- Medium - 0.8% Growth*
- Low - 0.5% Growth*

***Compound Annual Growth Rate**

0 1 2 4 6 Miles

N W E S

FIGURE 9

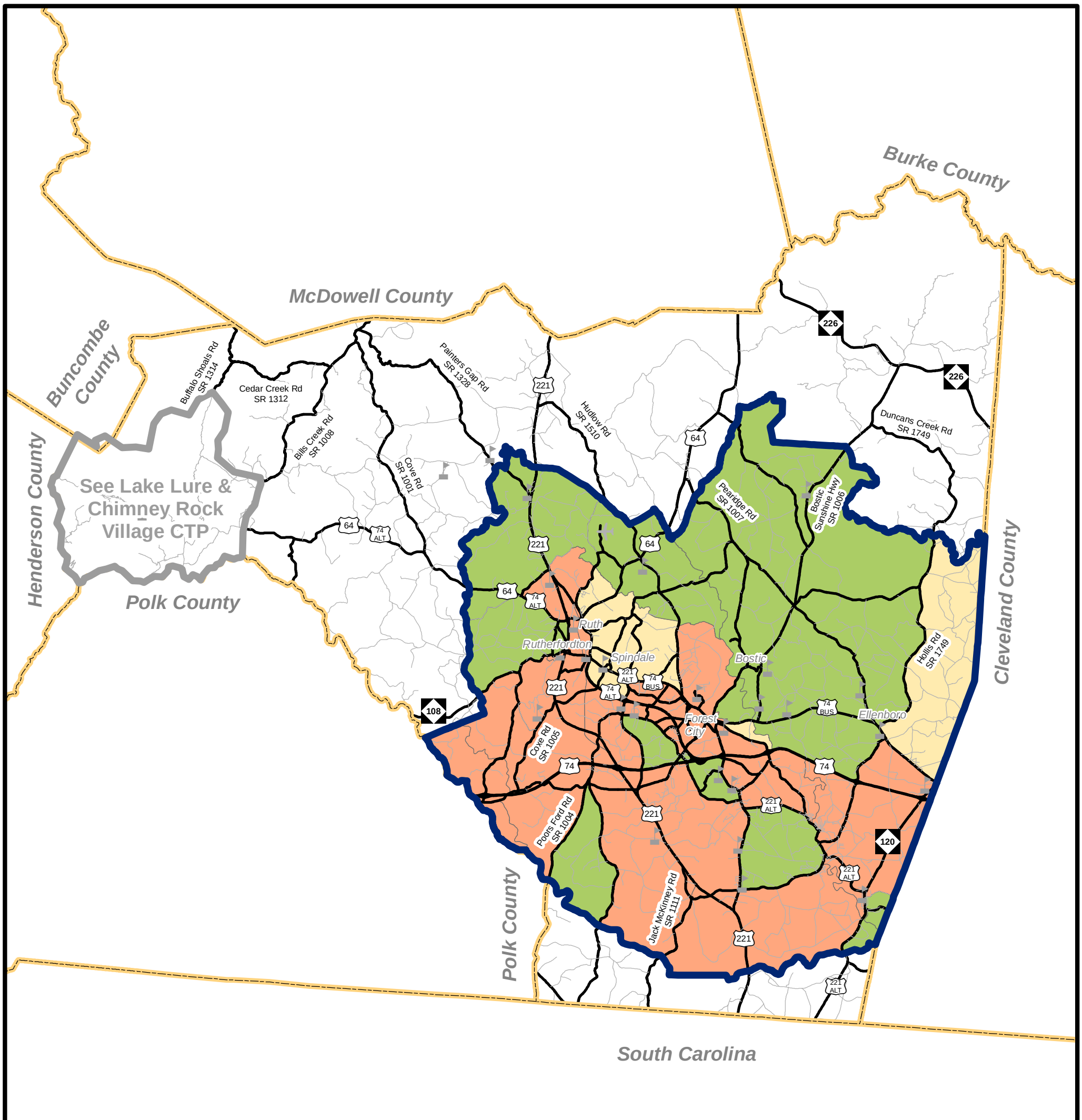
Base map date: January 12, 2015

Projected Population Growth for the Modeled Area 2013-2040

Rutherford County

Comprehensive Transportation Plan

Plan Date: 9/29/2017



Legend

- School
- Airport
- Network Roads
- Other Roads
- Railroads
- Model Area
- County Boundary

Employment Growth Rates

- High - 1.6% Growth*
- Medium - 1.4% Growth*
- Low - 0.5% Growth*

Compround Annual Growth Rate

0 1 2 4 6 Miles

N W E S

FIGURE 10

Base map date: January 12, 2015

Projected Employment Growth for the Modeled Area 2013-2040

Rutherford County

North Carolina

Comprehensive Transportation Plan

Plan Date: 9/29/2017

Strategic Locations for Future Growth

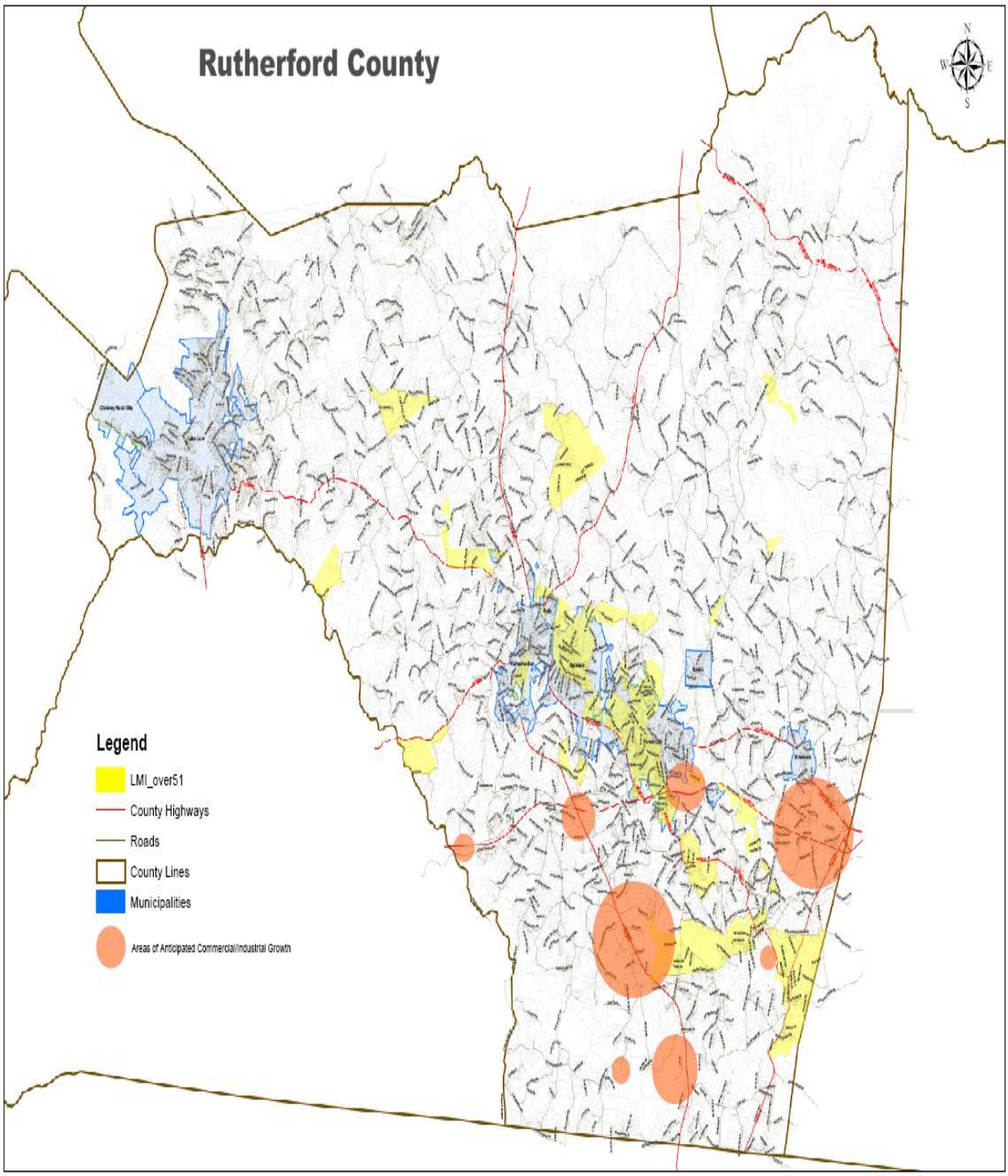


Figure 11

Appendix H
Public Involvement

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

List of CTP 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 Rutherford County CTP is given below.

- Shannon Baldwin, Lake Lure Community Development Director
- Tim Anderson, NCDOT Division 13 - District 1 Engineer
- Doug Barrick, Rutherfordton Town Manager
- Mickey Bland, Mayor of Spindale
- Amy Bridges, Forest City Community & Downtown Development
- Heather Britt, Isothermal Planning & Development Commission
- Carl Classen, Rutherford County Manager
- Aubrey Clay, Rutherford County Project Manager
- John Condrey, Forest City Town Manager
- Jimmy Dancy, Mayor of Rutherfordton
- David Eaker, Forest City Board of Commissioners
- Ben Farmer, Isothermal Planning & Development Commission
- Karyl Fuller, Isothermal Rural Planning Organization
- Steve Garrison, Rutherford County Manager
- Kerry Giles, Rutherford County Transportation Services Director
- Christopher Guffey, NCDOT Division 13 - District 1 Engineer
- Bob Keith, Mayor of Lake Lure
- Brendan Merithew, NCDOT Division 13 Planning Engineer
- Clark Poole, Rutherford County Chamber of Commerce Director
- Danny Searcy, Rutherford County Planner
- Mary Smith, Active Routes to School Coordinator
- Jerry Stensland, Rutherford Outdoor Coalition
- Kristina Solberg, NCDOT Division 13 Planning Engineer
- Scott Webber, Spindale Town Manager

CTP Vision, Goals, Objectives and MOEs

The CTP vision, goals and objectives are developed as part of the public involvement process and help identify how the people within an area would like to develop the transportation system (all modes). The CTP committee develops the draft vision, goals,

objectives, and MOEs which are further refined with input from citizens via the CTP Goals & Objectives (G&O) survey. These products become the official guide for the CTP being developed.

The vision statement, goals and objectives reflect what is important for the area and defines any local preferences concerning the transportation system and community assets. The vision statement is the framework for the area's strategic planning. Goals and objectives document how the area plans to fulfill its vision. The goals break down the vision statement into themes, while the objectives document how the area plans to make progress towards achieving each goal. MOEs are established to enable the area to track the progress of each objective.

Rutherford County Vision Statement:

Rutherford County provides a safe, efficient, well-connected, accessible, multi-modal transportation system that enhances the mobility of the transportation network, supports economic development and a healthy lifestyle while preserving Rutherford County's natural beauty and heritage.

Goal: Provide a safe transportation system

1. Objective – Reduce crash severity for 20 intersections with highest crash severity
2. Objective – Separate bicycles and pedestrians from motor vehicles whenever possible
3. Objective – Widen steep, narrow roads that have a history of crashes where narrow lane width is a primary factor
4. Objective – Provide safe access to transit facilities (i.e. bus shelters)
5. Objective – Provide safe access roads to schools

Goal: Provide an efficient transportation system that is well-connected

1. Objective – Add, improve, and enhance connections for improved emergency service accessibility

Goal: Provide a transportation network that is accessible to all users

1. Objective – Ease navigation for residents and visitors through the strategic location and increased quantity of road signs (particularly for the various versions of the US 74 and US 221 highways)
2. Objective – Improve ease of access for residents for daily needs and for visitors
3. Objective – Provide access and effective means of transportation to food and services for people with low income, who are disadvantaged, disabled, elderly residents, or do not own a car
    - Strategically build park and ride lots in the "tri-city" area to provide transportation for lower income Tryon Equestrian employees who live in the "tri-city" area

- Objective – Provide better access to the Rutherford Regional Medical Center for both citizens and emergency responders, especially by improving the NC 108 (Maple Street) - Washington Street intersection

Goal: Provide transportation facilities that accommodate all modes of transportation and provides opportunities to live a healthy lifestyle

1. Objective – Sidewalks to connect residential areas 2 miles to schools and to the downtown area within municipal boundaries
2. Objective – Support freight rail line improvements
3. Objective – Provide and improve bicycle/pedestrian (sidewalk, bike lanes, wide shoulders, multi-use path) facilities between key destinations
4. Objective – Better connect multiple modes of transportation (i.e. provide bike racks and bike repair shelters at strategic locations)
5. Objective – Better provide shuttle and vanpool service to airports and other major facilities outside of the county
6. Objective – Provide complete pedestrian connection between Rutherfordton, Spindale, and Forest City by:
    - Fully connecting sidewalks along US 74 Business (Main St) for the full length of the "tri-city" municipal limits (and make the sidewalks aesthetically appealing through means such as curb and gutter)
    - Fully extending the Thermal Belt Rail Trail from proposed location in Spindale to south of Forest City
    - Connecting the Main St sidewalks to the Thermal Belt Rail Trail and other off road paths in the area

Goal: Enhance the mobility of the transportation system

1. Objective – Alleviate congestion from downtown roads by providing alternative routes for traffic to take around downtown (particularly freight traffic)
2. Objective – Provide alternative north to south facility for US 221 that alleviates high traffic volumes and freight traffic in Downtown Ruth and provides a connection to an Interstate
3. Objective – Improve mobility for the underserved central/northern Rutherford County residents by providing an east to west connecting route that is north of the "tri-city" area
4. Objective – All future roadway or bridge projects should consider complete street principles in the project design (bicycle and pedestrian facilities) and implement where feasible

Goal: Provide a transportation system that supports economic development opportunities

1. Objective – Improve east to west mobility and support economic development for the county by upgrading US 74 to an Interstate
2. Objective – Improve freight access to interstates I-26, I-40, I-85, and US 74

3. Objective – Support tourism by improving aesthetics along US 74 and the following "gateway" entrance routes that connect off of US 74:
    - Union Rd
    - US 221
    - US 74A
    - US 221A (Broadway St)
    - Old Caroleen Rd
    - Ellenboro Henrietta Rd
    - NC 120
4. Objective – Continually maintain and improve the Rutherford County Airport to be a quality facility (add 1000 feet to runway length and add more commercial/industrial development at the site in the short term)

Goal: Consider history, heritage, and the natural environment during project evaluation and selection

1. Objective – Always consider appropriate road designs that fit the natural surrounding
2. Objective – Ensure that all of US 64 in Rutherford County (outside of Ruth and Rutherfordton town limits) maintains and enhances its rural character (especially the Black Mountain Rag Scenic Byway portion and the portion from Ruth to Morganton)

The following objectives are not CTP specific but came from the CTP Committee and should be taken into consideration during the appropriate planning phase:

1. Objective – Rutherford County supports the US 74 bypass around Shelby (R-2707)
2. Objective – Improve synchronization between technology & transportation (i.e. navigational system to international visitors and help with wayfinding)

Goals and Objectives Survey

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

1. Do you live in Rutherford County?

Answer Options	Response Percent	Response Count
Yes, full time	90%	510
No, but I work in Rutherford County	6%	31
Yes, part time	4%	22
No, I'm a visitor	1%	5
Answered Question		**568**
Skipped Question		**0**

2. Please provide the zip code of your local residence (if part time resident, enter zip code of house owned in Rutherford County):

Answer Options	Response Percent	Response Count
28043 - Forest City, Alexander Mills, Chase High area	29%	163
28139 - Rutherfordton & western Rutherford County	28%	156
28018 - NE Rutherford Co (Bostic to Golden Valley)	10%	56
28040 - Ellenboro area	8%	47
28746 - Lake Lure area	8%	44
28114 - SE Rutherford Co & SW Cleveland Co	5%	28
28167 - North Rutherford Co (Thermal City area)	3%	16
28160 - Spindale	3%	15
28152 - South Cleveland Co	1%	8
28720 - Chimney Rock	1%	5
28024 - Cliffside	1%	3
28150 - Central Cleveland Co	1%	3
28076 - Henrietta	1%	3
28019 - Caroleen	0%	2
28090 - North Cleveland Co	0%	2
Other	1%	8
Answered Question		**559**
Skipped Question		**9**

3. What is your primary reason for regular, daily travel?

Answer Options	Response Percent	Response Count
Work	64%	359
School	27%	153
Recreation	3%	15
Shopping	2%	13
I do not have regular, daily travel	2%	12
Medical Needs	2%	9
Other	0%	2
Answered Question		**563**
Skipped Question		**5**

4. What county do you work in (or regularly travel to daily for another reason)?

Answer Options	Response Percent	Response Count
Rutherford	89%	500
Cleveland	3%	15
Spartanburg County, SC	1%	8
Buncombe	1%	7
Henderson	1%	5
Mecklenburg	1%	4
Greenville County, SC	1%	3
Polk	1%	3
McDowell	0%	2
Gaston	0%	1
Other	2%	13
Answered Question		**561**
Skipped Question		**7**

5. If you work in Rutherford County, where more specifically do you work (or regularly travel to daily for another reason)?

Answer Options	Response Percent	Response Count
Forest City	32%	173
Rutherfordton	20%	108
Bostic	11%	59
Spindale	10%	54
Ellenboro	5%	25
Lake Lure	4%	24
Cliffsdale	4%	21
Gilkey	3%	17
Henrietta	2%	11
Chimney Rock	1%	7
Chase	1%	5
Harris	1%	4
Other	7%	40
Answered Question		**534**
Skipped Question		**34**

6. What is the primary route you take to work (or to the destination of your regular daily travel)? Select all that apply.

Top Responses	Response Percent	Response Count
US 221	19%	170
US 74	14%	127
Main St (Forest City)	11%	96
US 74 Business	8%	75
US 64	7%	60
US 221 Alternate	6%	55
Main St (Spindale)	5%	48
US 74 Alternate	4%	39
Oak St (Forest City)	4%	32
Bostic-Sunshine Highway	3%	31
Whitesides Rd	1%	12
Other Responses	17%	148
	Total Routes Identified	**893**

7. How do you typically commute?

Answer Options	Response Percent	Response Count
Car	93%	522
Bus	4%	21
Walk	2%	9
Carpool	1%	7
Bicycle	0%	2
	Answered Question	**561**
	Skipped Question	**7**

8. What one road is the most congested in Rutherford County?

Top Responses	Response Percent	Response Count
US 74	14%	58
US 221 (Includes Main St in Rutherfordton)	12%	52
Railroad Ave	10%	41
US 64	8%	32
Main St (Forest City)	7%	29
Main St (Town Unspecified)	5%	21
US 74 Business	4%	18
Chase High Rd	4%	16
US 74 Alternate	4%	16
Oak St (Forest City)	4%	16
US 221 Alternate	3%	14
Broadway St	2%	10
Main St (Spindale)	1%	3
Other or Not Applicable	23%	98
	Total Routes Identified	**424**

9. Would you use the following transportation facilities in your daily commute instead of your personal vehicle if they were convenient to access?

Answer Options	Yes	No	Already use	Response Count	% Yes	% No
Off-road trails or greenways for walking and biking	210	301	12	523	40%	58%
Rail Service (throughout the county and to nearby towns)	191	309	3	503	38%	61%
Sidewalks	175	305	34	514	34%	59%
Bus/Transit Service	142	348	14	504	28%	69%
On-road bike facilities (i.e. bike lanes or wide shoulders)	130	360	6	496	26%	73%
			Answered Question	**547**		
			Skipped Question	**21**		

10. What improvements would need to be made to the transit system to make it a desirable choice for transportation?

Top Responses	Response Percent	Response Count
More, better, or more convenient bus stop locations	8%	23
Lack of accessibility outside of urban areas	6%	17
Better bus sanitation, aesthetics, or accommodations (i.e. food, air conditioning, Wi-Fi, bathroom)	5%	15
More Accessible or Available	5%	13
Unaware of transit system (either unaware of entire system or of accessibility for general public)	4%	10
More sidewalks or better sidewalk connections	3%	9
Safer bus stops, parking, & sidewalks to bus stops	2%	7
More reliable bus schedule (buses need to arrive on time)	2%	6
Faster commute times to destinations	2%	6
Uses buses instead of vans (or bigger vans)	2%	6
More affordable or no charge to ride	2%	5
Desire passenger train service	1%	4
Convienence	1%	4
More or Better Routes	1%	4
Frequency	1%	3
Access to commuters who live in other counties	1%	3
Better bus schedule	1%	2
More buses	1%	2
Pick you up at your house	1%	2
Other or Not Applicable	50%	140
Total Improvement Ideas Identified		**281**

11. What are locations you currently use or would like to use for a park and ride lot for carpooling or transit facilities? Select all that apply.

Answer Options	Response Percent	Response Count
I have no interest in using a park and ride lot.	80%	378
I currently use an informal location as a park and ride lot [please describe location in comment section].	5%	26
Locations identified as being used as an informal park and ride lot or as a location for a potential park and ride lot:		
Forest City	1%	7
Downtown Rutherfordton	1%	5
Lake Lure	1%	5
Ingles Parking Lot	1%	5
Bostic	1%	3
Spindale (Spindale House 2 of those responses)	1%	3
Food Lion Parking Lot	0%	2
Crestview Park	0%	2
Tri-City Mall	0%	2
Wal-Mart	0%	2
US 74 & US 221	0%	2
Cliffside	0%	2
Other or Not Applicable	6%	29
	Total Responses	**473**

12. How many people live in your household, including yourself?

Answer Options	Response Percent	Response Count
2	28%	156
4	28%	154
3	19%	108
5	13%	70
1	6%	35
6	3%	18
7+	3%	17
	Answered Question	**558**
	Skipped Question	**10**

13. How many total vehicles do the people in your household own?

Answer Options	Response Percent	Response Count
2	34%	189
3	28%	156
4	15%	84
5+	11%	62
1	11%	59
0	1%	3
	Answered Question	**553**
	Skipped Question	**18**

14. Which destinations would you bike to if safe bicycle facilities were provided? Select all that apply.

Answer Options	Response Percent	Response Count
Parks	48%	250
Still would not bike	39%	203
Shopping	18%	92
School	17%	89
Work	15%	78
Leisure in General	3%	16
Thermal Belt Rail Trail	1%	5
Church	1%	4
Restaurants	1%	4
Too long of distance from places to bike	1%	3
Short Trips into Town	1%	3
Mooneyham Library	0%	1
Other or Not Applicable	1%	6
	Answered Question	**524**
	Skipped Question	**44**

15. Please identify any sidewalks or greenways that need improvement:

Top Responses	Response Percent	Response Count
Forest City	5%	10
US 74 Business/Main St (Forest City & Spindale)	5%	10
Everywhere in the County	5%	10
Spindale	5%	9
Thermal Belt Rail Trail (includes better maintenance of existing trail)	5%	9
Connect Lake Lure to Chimney Rock	4%	7
Cliffside	3%	5
Chimney Rock	2%	4
US 221	2%	3
Bostic	2%	3
Broadway St (Forest City)	2%	3
Main St (Rutherfordton)	2%	3
Charlotte Rd	2%	3
Main St (town unspecified)	2%	3
Various Other Locations or Not Applicable	58%	112
Total Locations Identified		**194**

16. Are you concerned with safety or crash problems at a specific location?

Top Responses	Response Percent	Response Count
No	63%	318
Yes - US 74 Business & Bostic-Sunshine Hwy Intersection	3%	16
Yes - Roads and parking lots around Wal-Mart & Tri-City Mall	3%	13
Yes - US 221	2%	9
Yes - Railroad Ave & Charlotte Rd/Main St Intersection (and driveways nearby)	1%	6
Yes - Railroad Ave	1%	5
Yes - areas around schools	1%	3
Yes - Harris Henrietta Rd & Chase High Rd Intersection	1%	3
Yes - Whitesides Rd, Engineer Rd, & Brooks Rd Intersection	1%	3
Yes - Oak St & Church St Intersection	1%	3
Yes - Arlington St (intersections with Old Caroleen Rd & US 221A)	1%	3
Yes- various other locations	21%	104
Yes - no location specified	4%	21
Total Locations Identified		**507**

17. Is truck traffic a problem in the area?

Top Responses	Response Percent	Response Count
No	80%	421
Yes - US 221	2%	13
Yes - US 64	1%	7
Yes - Hudlow Rd	1%	5
Yes - Lake Lure & Chimney Rock	1%	5
Yes - Chase High Rd	1%	4
Yes - Railroad Ave	1%	4
Yes - US 221 Alternate	1%	3
Yes- various other locations	7%	37
Yes - no location specified	5%	28
Answered Question		**527**
Skipped Question		**48**

18. How can transportation for business and industry be improved in Rutherford County?

Top Responses	Response Percent	Response Count
Improve the public transportation system	7%	14
Finish US 221 widening and bypass	6%	12
Better road maintenance and paving	6%	11
Keep trucks off of roads	3%	6
Improve accessibility of roads	2%	4
Wider travel lanes (one response mentioned for trucks)	2%	3
More pedestrian and bicycling facilities	2%	3
Provide more places to park	2%	3
Remove stop lights from wider "bypass" roads	2%	3
Other or Not Applicable	70%	139
Answered Question		**198**
Skipped Question		**370**

19. Do you believe that multiple routes named US 74 or US 221 cause confusion? If so, what could be done to improve getting around the county?

Answer Options	Response Percent	Response Count
No, it is not confusing.	38%	203
Yes, need to change highway names.	25%	130
Yes, need more signs.	19%	98
Yes, need special wayfinding signs.	14%	73
Yes - Other	5%	25
Answered Question		**529**
Skipped Question		**40**

20. Other than confusion over US 74 or US 221, how could navigation for a visitor be improved?

Top Responses	Response Percent	Response Count
More and/or Better Signs (road signs, destination signs, wayfinding signs were all mentioned)	44%	97
Visitor center with brochures & maps	5%	10
Provide county maps to visitors	2%	5
Change road names	2%	5
Build interstates or wider roads in general	2%	5
Other or Not Applicable	45%	100
	Answered Question	**222**
	Skipped Question	**348**

21. Do you have any other comments or concerns regarding the transportation system in Rutherford County?

Top Responses	Response Percent	Response Count
Need new or better sidewalks and/or bike facilities	4%	7
Finish construction of US 221 or do not like project	3%	5
Need better bus service for people with low income	3%	5
Other Improvements to transit system	3%	5
Would like passenger rail service	2%	4
Need better bus service for residents outside of Tri-City area	1%	2
Other or Not Applicable	85%	155
	Answered Question	**183**
	Skipped Question	**381**

22. What race or ethnicity do you most identify with? Please check all that apply.

Answer Options	Response Percent	Response Count
White	93%	490
African American	8%	40
Hispanic	4%	21
Asian	3%	13
Native American	2%	11
Other	2%	12
	Answered Question	**529**
	Skipped Question	**39**

23. What was your household income last year?

Answer Options	Response Percent	Response Count
$30,000-$49,999	28%	129
$90,000 or above	22%	103
$50,000-$69,999	21%	96
$70,000-$89,999	15%	71
Below $30,000	15%	68
	Answered Question	**467**
	Skipped Question	**101**

24. What is your age?

Answer Options	Response Percent	Response Count
45-64	40%	212
Under 18	23%	124
35-44	17%	90
25-34	10%	54
18-24	6%	31
65-74	3%	18
Over 74	2%	8
	Answered Question	**537**
	Skipped Question	**31**

25. How did you find out about this survey?

Answer Options	Response Percent	Response Count
E-mail	86%	465
Internet	8%	45
Word of Mouth	3%	15
Town Hall	2%	10
Social Media	1%	4
Newspaper	0%	2
Radio	0%	1
Library	0%	0
	Answered Question	**542**
	Skipped Question	**26**

Public Meetings

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

Public Workshop # 1

A public drop-in session was held in Rutherford County on June 22, 2017 at the Spindale House. The purpose of this session was to present the proposed Comprehensive Transportation Plan to the public and solicit comments. No comment

forms were submitted during this session or received through email or phone during the comment period.

Public Workshop # 2

A public drop-in session was held on September 5, 2017 at the Rutherford County Administrative Building. The purpose of this second session was to again present the proposed Comprehensive Transportation Plan to more of the public and solicit comments. One comment was submitted during this session, which expressed the need to preserve, protect and develop the Overmountain Victory Trail especially at the proposed crossing of the recommended US 221 Bypass.

Public Hearings

A public hearing was held on November 6, 2017 during the Rutherford County Commissioners meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on November 20, 2017 during the Spindale Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on December 4, 2017 during the Bostic Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on December 6, 2017 during the Rutherfordton Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on December 18, 2017 during the Forest City Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on January 8, 2018 during the Ruth Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

A public hearing was held on January 9, 2018 during the Ellenboro Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

The Isothermal RPO endorsed the CTP on January 3, 2018. The North Carolina Department of Transportation mutually adopted the Rutherford County CTP on March 8, 2018.