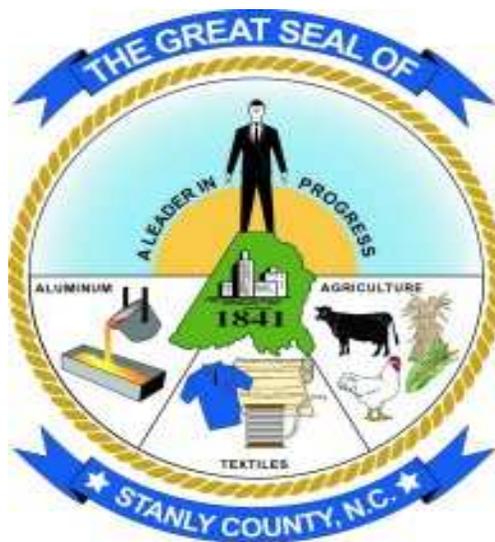




Comprehensive Transportation Plan



Stanly County

May 2012

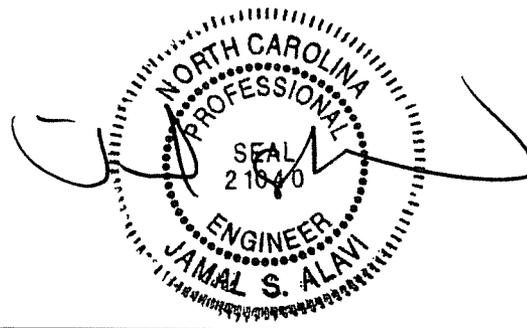
Comprehensive Transportation Plan

Stanly County

Prepared by: Reuben Q. Crummy, Project Engineer
Jamal Alavi, P.E., Metrolina Planning Group Supervisor
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Stanly County
Town of Norwood
Town of Oakboro
Town of Richfield
Town of Stanfield
Village of Misenheimer
Rocky River Rural Planning Organization

May 2012



Jamal Alavi, P.E.
Metrolina Planning Group Supervisor

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Executive Summary

In January of 2009, the Transportation Planning Branch of the North Carolina Department of Transportation and Stanly County initiated a study to cooperatively develop the Stanly County Comprehensive Transportation Plan (CTP), which includes Norwood, Oakboro, Stanfield, Richfield, and Misenheimer. This is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening, and public input. Refer to Figure 1 for the CTP maps, which were mutually adopted in 2012. Implementation of the plan is the responsibility of Stanly 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 Stanly County CTP. The major recommendations for improvements are listed below. More detailed information about these and other recommendations can be found in Chapter 2.

- **US 52 (Part of TIP Project R-2903):** Widen to four lane boulevard from the Albemarle, Badin, and New London Planning Area Boundary (PAB) to Culp Road (SR 1501). It is also recommended that US 52 be extended on new location from Culp Road (SR 1501) northeast around Misenheimer and Pfeiffer University and continuing into Cabarrus County.
- **US 52 (Part of TIP Project R-2320):** Widen to a four lane boulevard from Porter Road (SR 1908) to south of Will Road and from NC 731 to Anson County. It is recommended that a four lane expressway be constructed west of Norwood from NC 731 to existing US 52, south of Bowers Road (SR 1745), utilizing a portion of existing Kendall Street. (Refer to the 2010 Norwood CTP¹ for more details on this recommendation.)
- **NC 24-27 (TIP Project R-0967):** This project has been completed since the adoption of the CTP. The project included widening NC 24-27 to a four lane divided facility. Additional improvements are needed to upgrade the facility to expressway standards from the Red Cross Planning Area to the Albemarle,

¹ The 2010 Norwood CTP can be viewed on-line at:
<http://www.ncdot.gov/doh/preconstruct/tpb/planning/NorwoodCTP.html>

Badin, and New London PAB. Access control measures and the removal of traffic signals are needed to meet expressway standards.

- **NC 49 (Part of TIP Project R-2533):** Widen to a four lane expressway from Rowan County to Cabarrus County.
- **NC 200 (Local ID: STAN0013-H):** Widen to a two lane boulevard from Harvell Road (SR 1125) to the Locust PAB.

Adopted by:

Stanly County Town of Oakboro
Date: August 15, 2011 Date: July 5, 2011

City of Locust Town of Red Cross
Date: Date:

Town of Stanfield Village of Misenheimer
Date: June 30, 2011 Date: July 11, 2011

Town of Norwood Town of Richfield
Date: August 1, 2011 Date: July 25, 2011

NCDOT
Date: January 5, 2012

Endorsed by:

Rocky River RPO
Date: November 17, 2011

Recommended by:

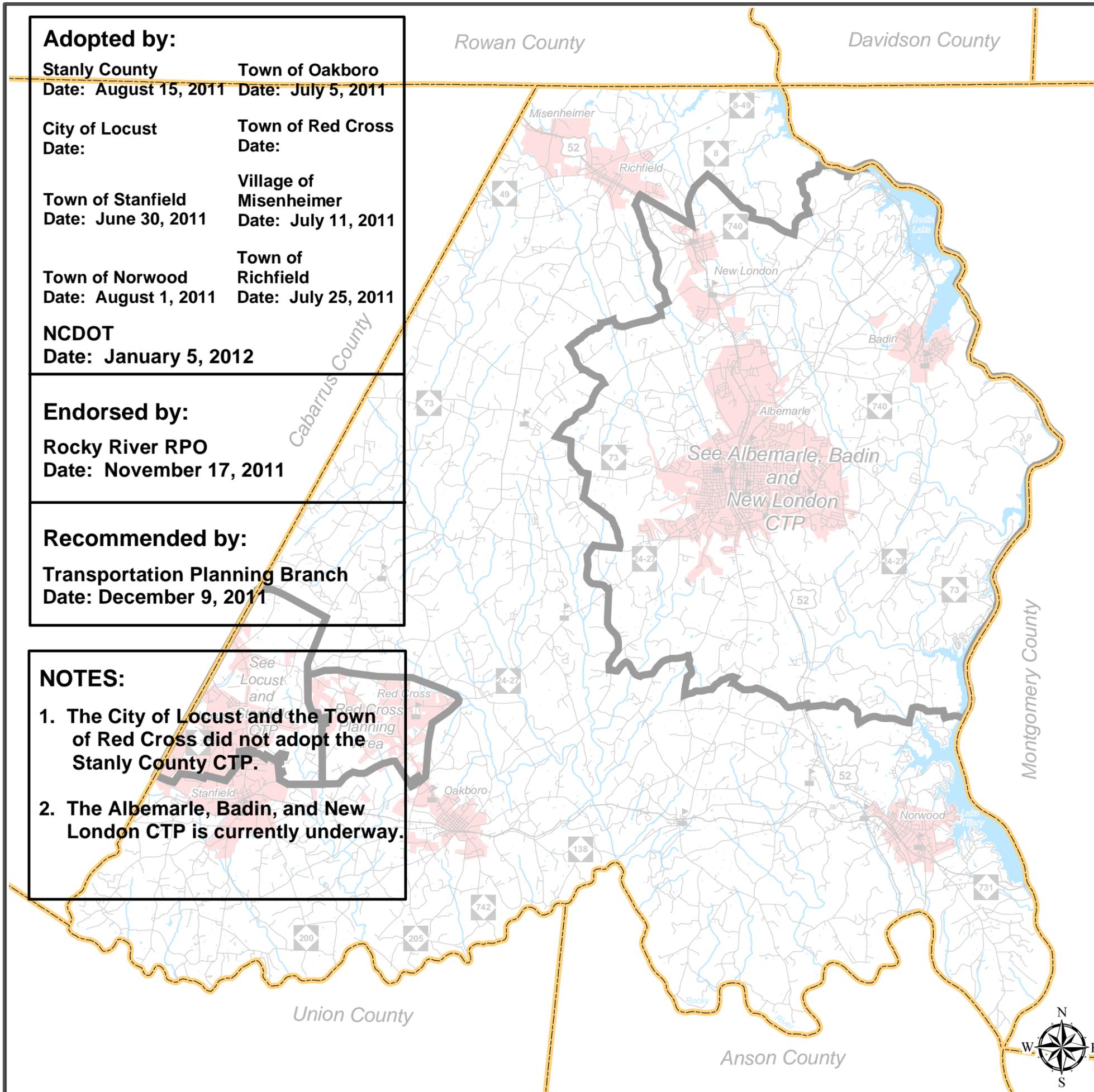
Transportation Planning Branch
Date: December 9, 2011

NOTES:

1. The City of Locust and the Town of Red Cross did not adopt the Stanly County CTP.
2. The Albemarle, Badin, and New London CTP is currently underway.

Rowan County

Davidson County



Stanly County

North Carolina

Comprehensive Transportation Plan

Plan date: May 24, 2011

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

Legend

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

0 0.5 1 2 3 Miles

Figure 1: Sheet 1 of 5

Base map date: November 2008

Refer to CTP document for more details

Highway Map



Stanly County North Carolina

Comprehensive Transportation Plan

Plan date: May 24, 2011

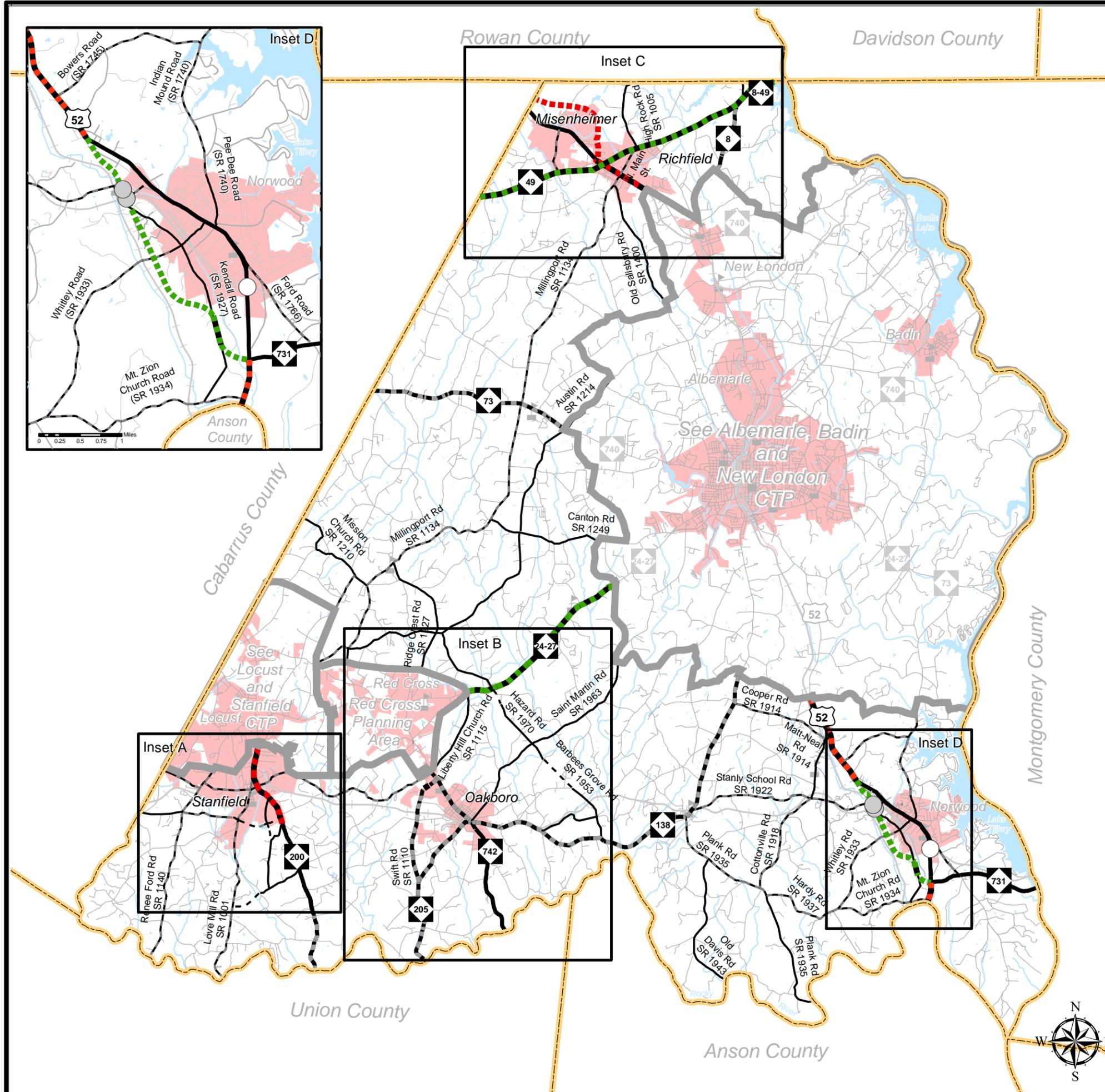
- Freeways**
- Existing
 - Needs Improvement
 - Recommended
- Expressways**
- Existing
 - Needs Improvement
 - Recommended
- Boulevards**
- Existing
 - Needs Improvement
 - Recommended
- Other Major Thoroughfares**
- Existing
 - Needs Improvement
 - Recommended
- Minor Thoroughfares**
- Existing
 - Needs Improvement
 - Recommended
- Interchanges and Grade Separations**
- Existing Interchange
 - Proposed Interchange
 - Existing Grade Separation
 - Proposed Grade Separation



Figure 1: Sheet 2 of 5

Base map date: November 2008

Refer to CTP document for more details



Highway Map Insets A, B, and C



Stanly County North Carolina

Comprehensive Transportation Plan

Plan date: May 24, 2011

- Freeways**
- Existing
 - Needs Improvement
 - Recommended
- Expressways**
- Existing
 - Needs Improvement
 - Recommended
- Boulevards**
- Existing
 - Needs Improvement
 - Recommended
- Other Major Thoroughfares**
- Existing
 - Needs Improvement
 - Recommended
- Minor Thoroughfares**
- Existing
 - Needs Improvement
 - Recommended

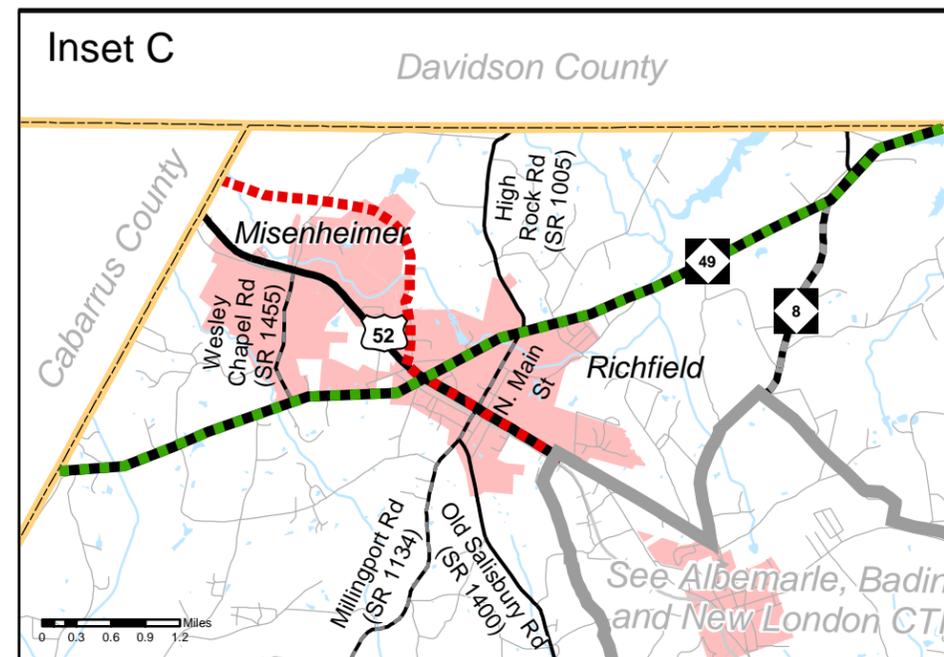
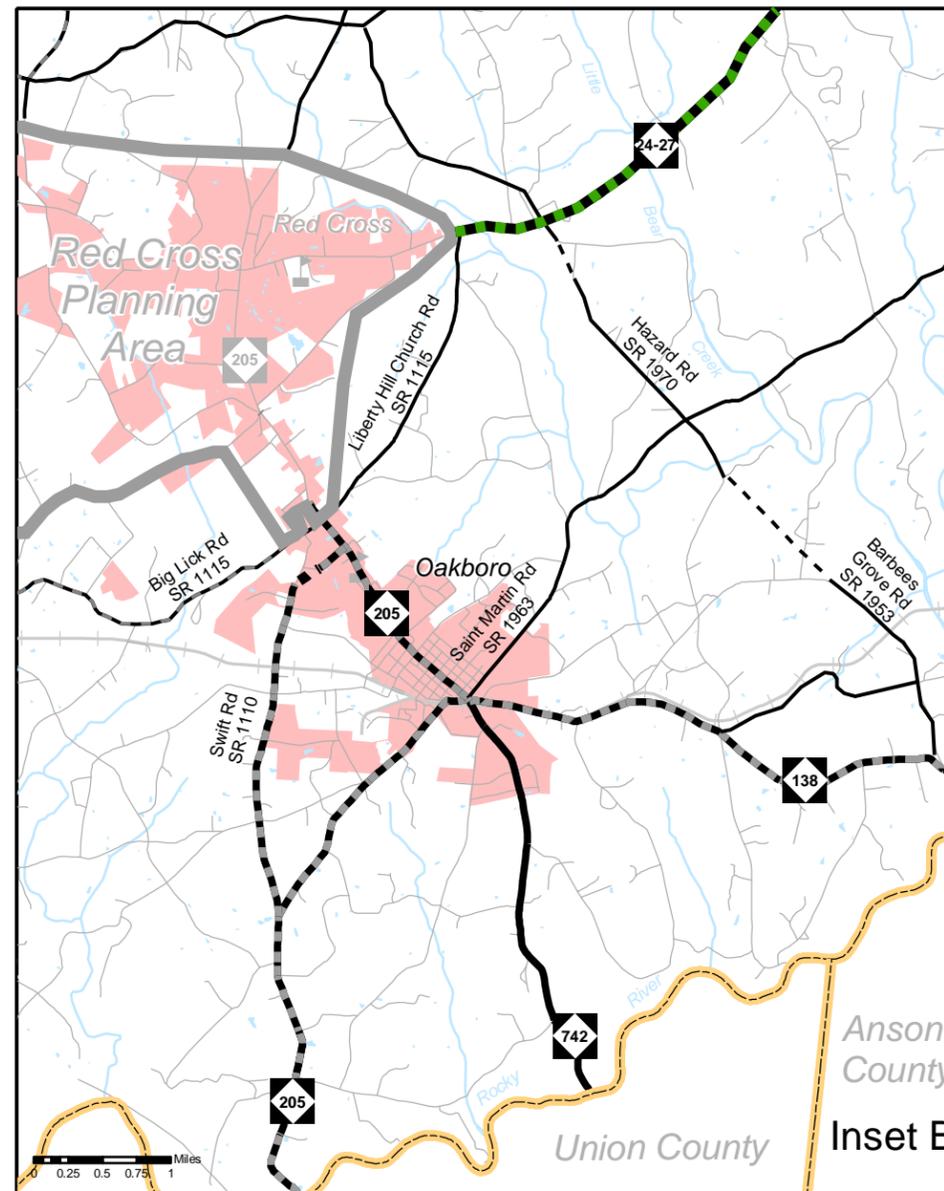
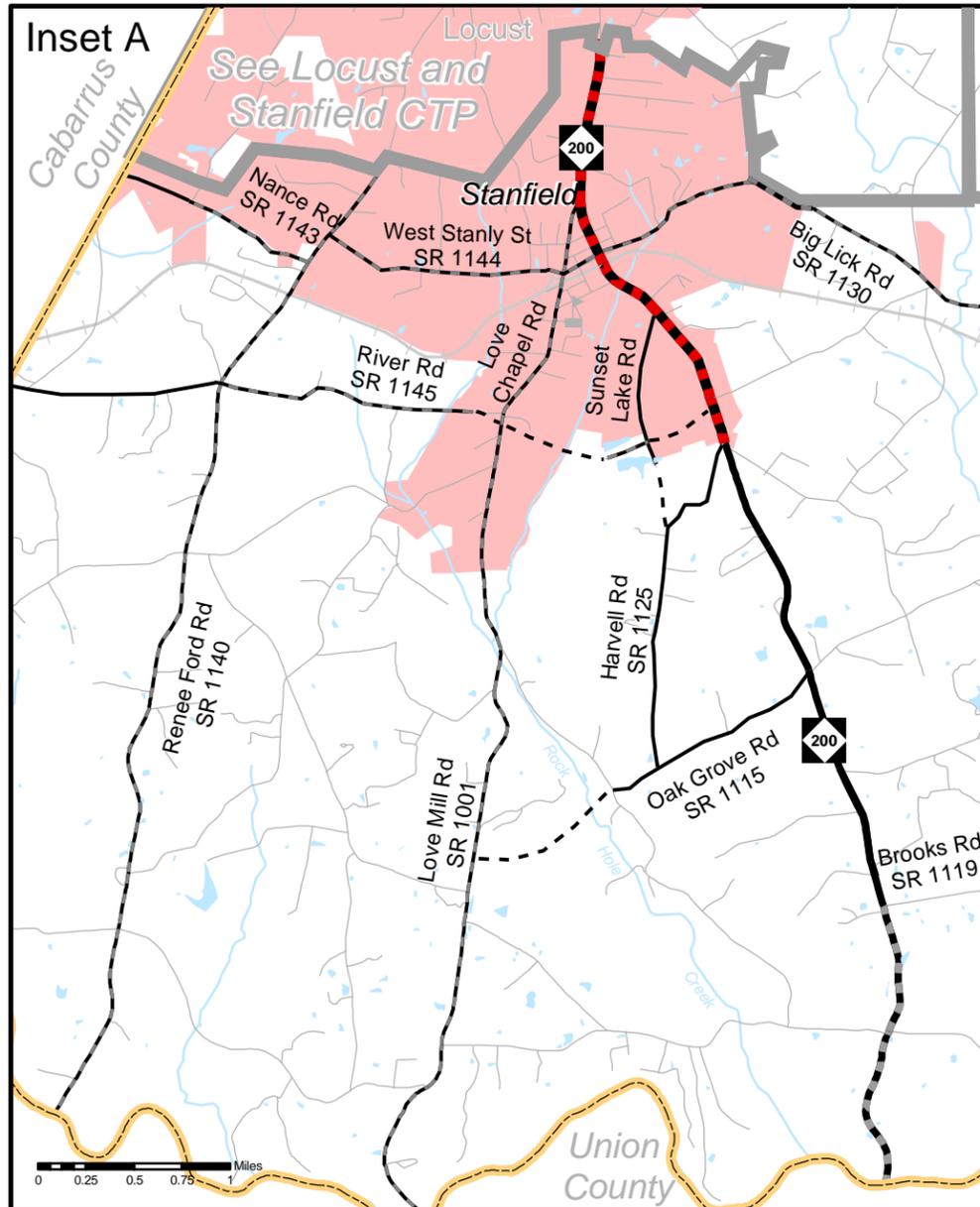
- Existing Interchange
- Proposed Interchange
- Existing Grade Separation
- Proposed Grade Separation



Figure 1: Sheet 2A of 5

Base map date: November 2008

Refer to CTP document for more details



Rowan County

Davidson County

Bicycle Map



Stanly County North Carolina

Comprehensive Transportation Plan

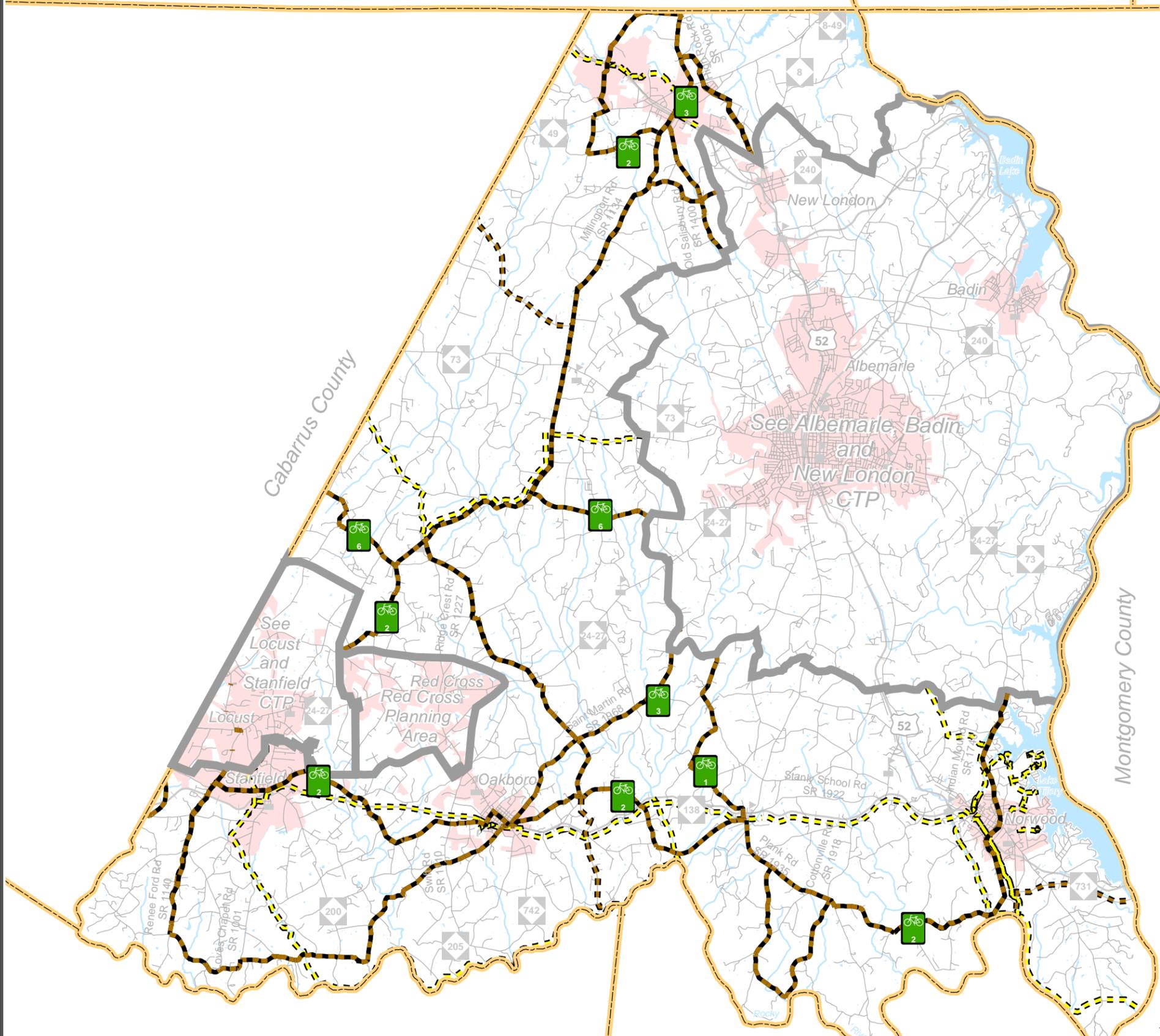
Plan date: May 24, 2011

Cabarrus County

Montgomery County

Union County

Anson County



- On-road**
- Existing
 - Needs Improvement
 - Recommended

- Off-road**
- Existing
 - Needs Improvement
 - Recommended

- Multi-Use Paths**
- Existing
 - Needs Improvement
 - Recommended

- Existing Grade Separation
- Proposed Grade Separation



Figure 1: Sheet 4 of 5

Base map date: November 2008

Refer to CTP document for more details

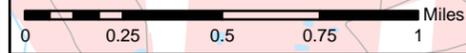
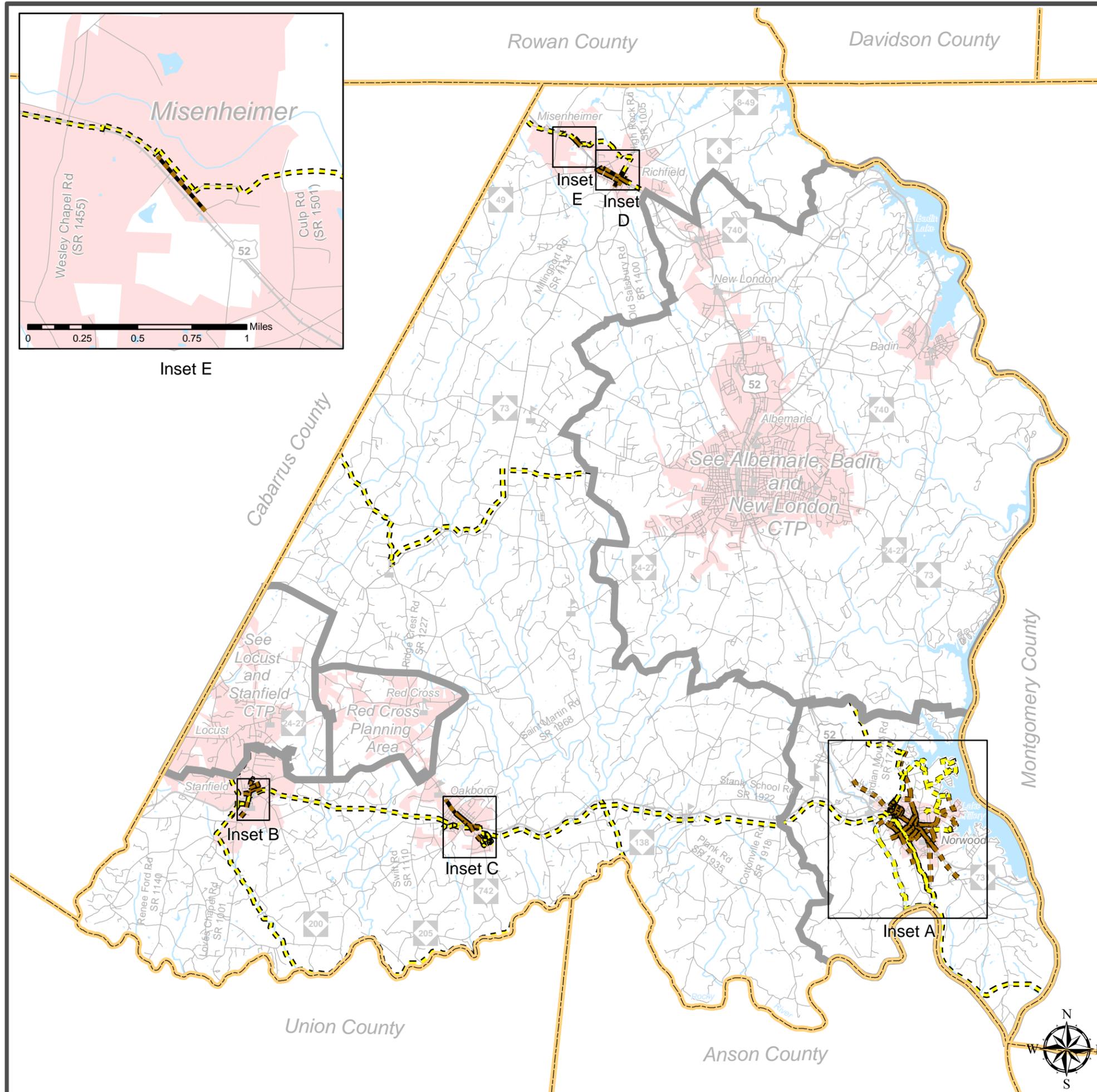
Pedestrian Map



Stanly County
North Carolina

Comprehensive Transportation Plan

Plan date: May 24, 2011



Inset E

- On-road**
- Existing
 - Needs Improvement
 - Recommended

- Off-road**
- Existing
 - Needs Improvement
 - Recommended

- Multi-Use Paths**
- Existing
 - Needs Improvement
 - Recommended

- Existing Grade Separation
- Proposed Grade Separation



Figure 1: Sheet 5 of 5

Base map date: November 2008

Refer to CTP document for more details

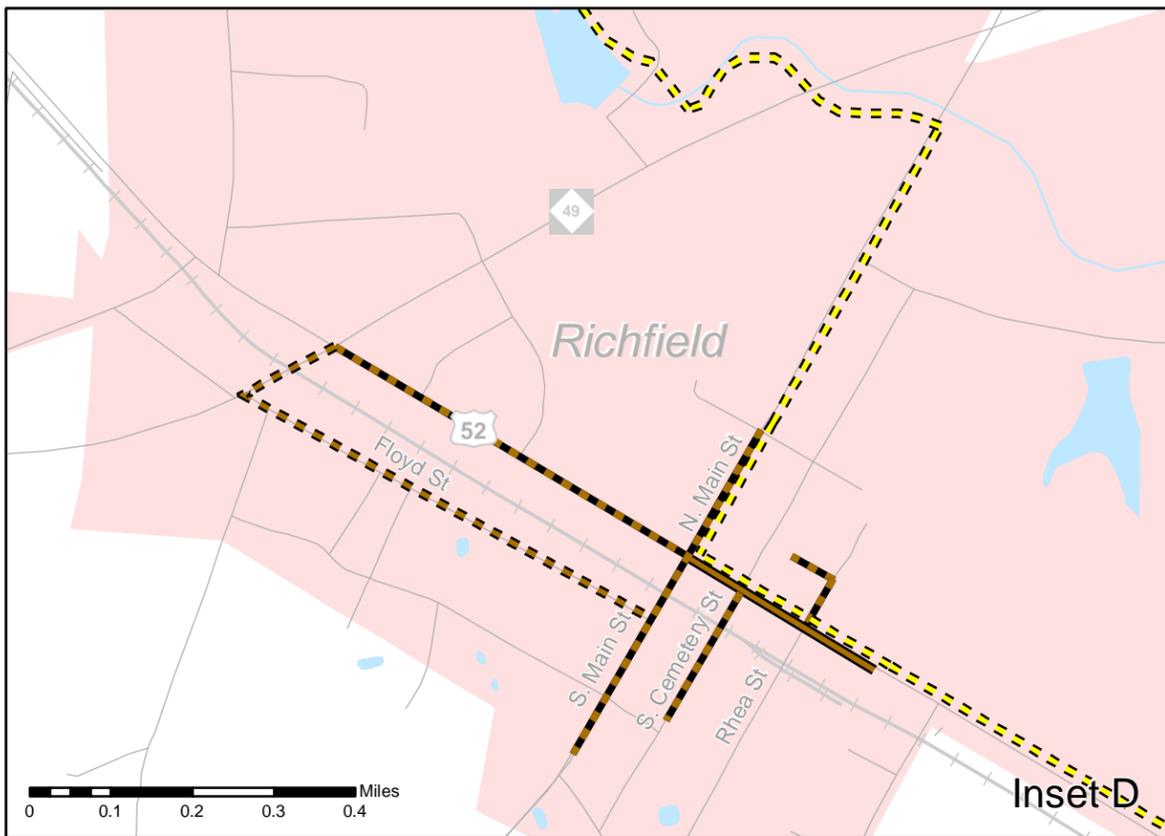
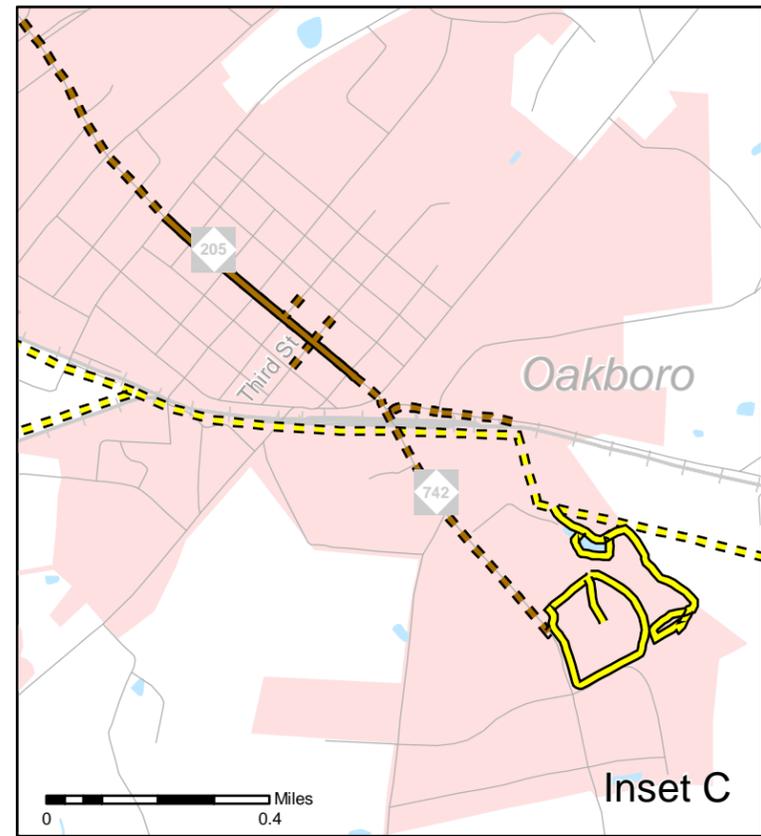
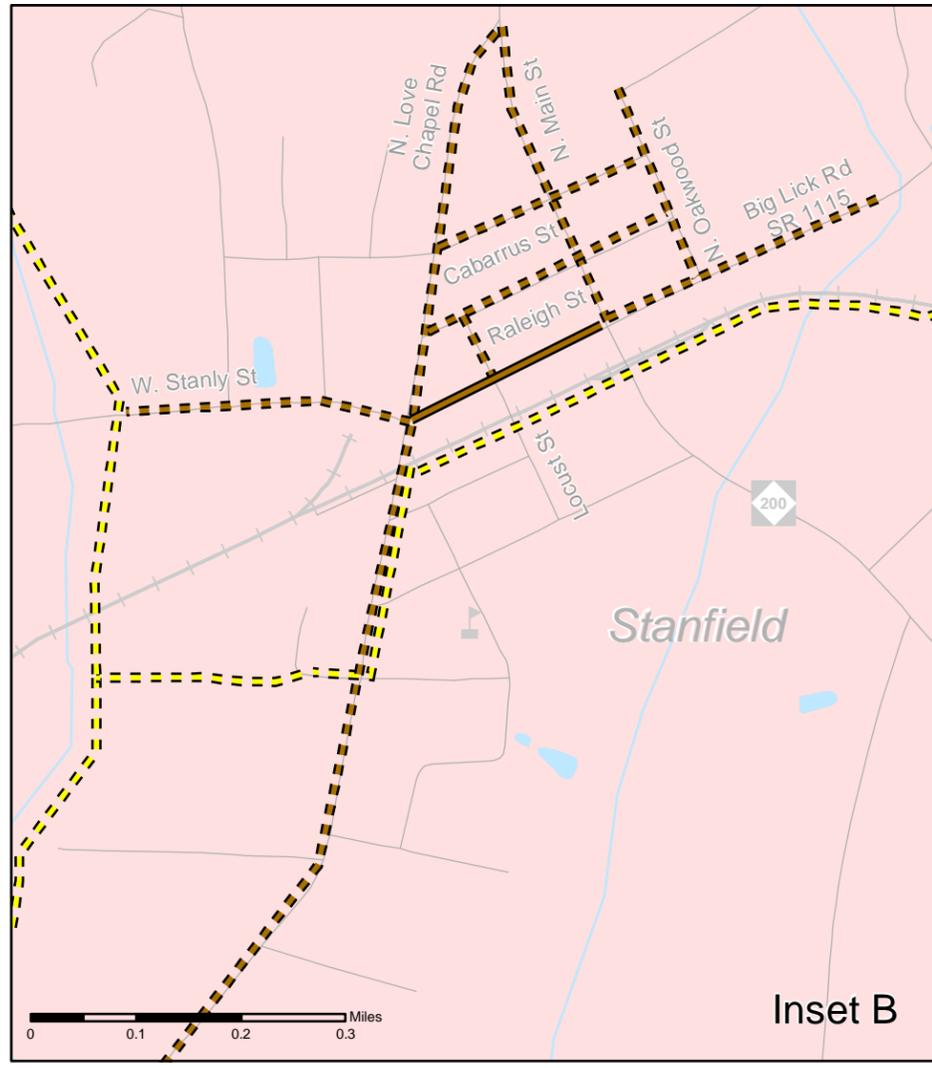
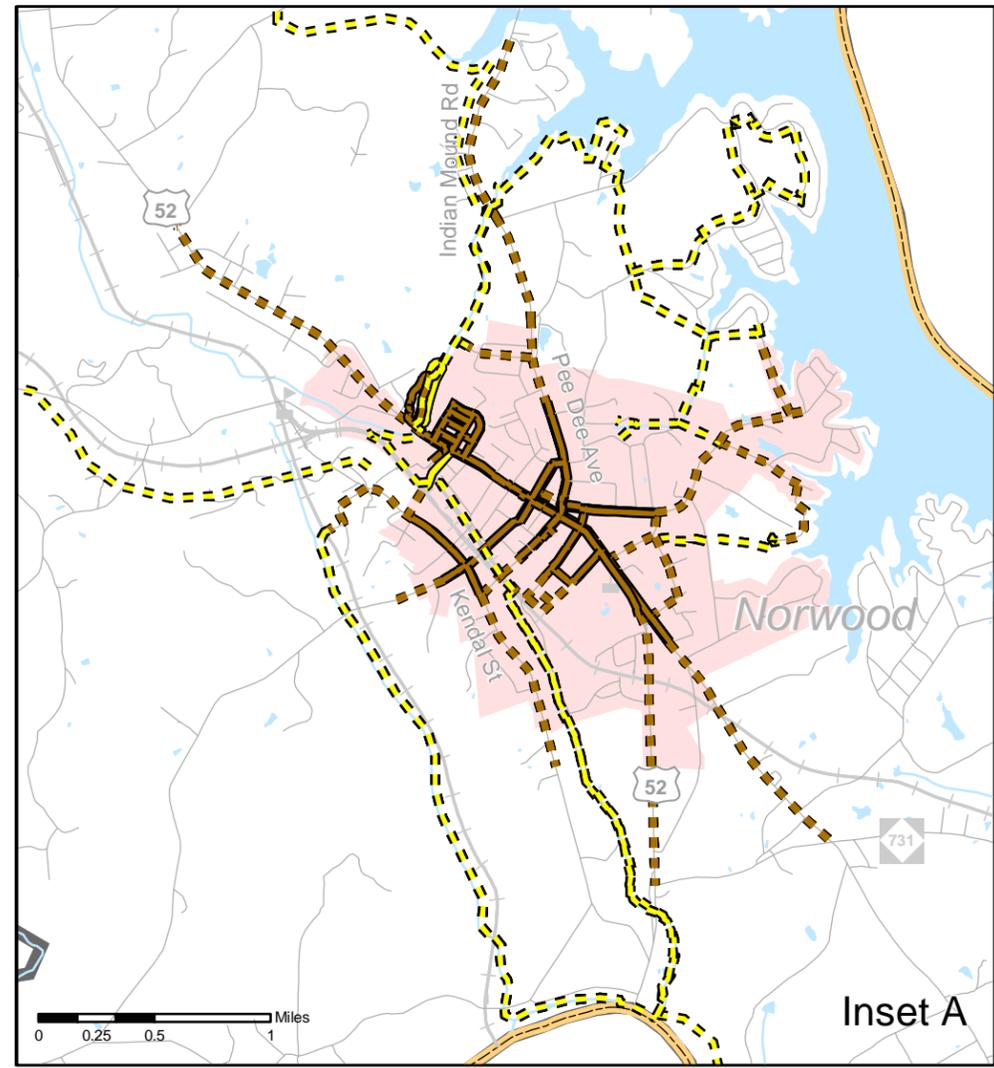
Pedestrian Map
Insets A, B, C, and D



Stanly County
 North Carolina

**Comprehensive
 Transportation Plan**

Plan date: May 24, 2011



- 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



I. Analysis of the Existing and Future Transportation System

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

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

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

Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

One of those statewide initiatives is the Strategic Highway Corridor (SHC) Vision Plan¹ adopted by the Board of Transportation on September 2, 2004 and last revised on July 10, 2008. The SHC Vision Plan represents a timely initiative to protect and maximize the mobility and connectivity on a core set of highway corridors throughout North Carolina, while promoting environmental stewardship through maximizing the use of existing facilities to the extent possible, and fostering economic prosperity through the quick and efficient movement of people and goods.

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

In the development of this plan, travel demand was projected from 2009 to 2035 using a travel demand model (Metrolina Regional Model MRM11v1). Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2035. In addition, local land use plans and growth expectations were used to develop future growth rates and patterns. The established future growth rates were endorsed by the Stanly County CTP Focus Group on November 9, 2009.

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

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

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

¹ For more information of SHC, visit: <http://www.ncdot.gov/doh/preconstruct/tpb/SHC/>

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

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

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

Traffic Crash Analysis

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Stanly County CTP for crashes occurring in the planning area between April 20, 2006 and April 20, 2009. During this period, a total of four intersections were identified as having a high number of crashes as illustrated in Figure 4. Refer to Appendix F for a detailed crash analysis.

Bridge Deficiency Assessment

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

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as Federal and State funds become available. Nine deficient bridges were identified on roads evaluated within the CTP and are illustrated in Figure 5. Refer to Appendix G for more detailed information.

**Figure 3
2035 Volumes and
Capacity Deficiency**



Stanly County

North Carolina

Comprehensive Transportation Plan

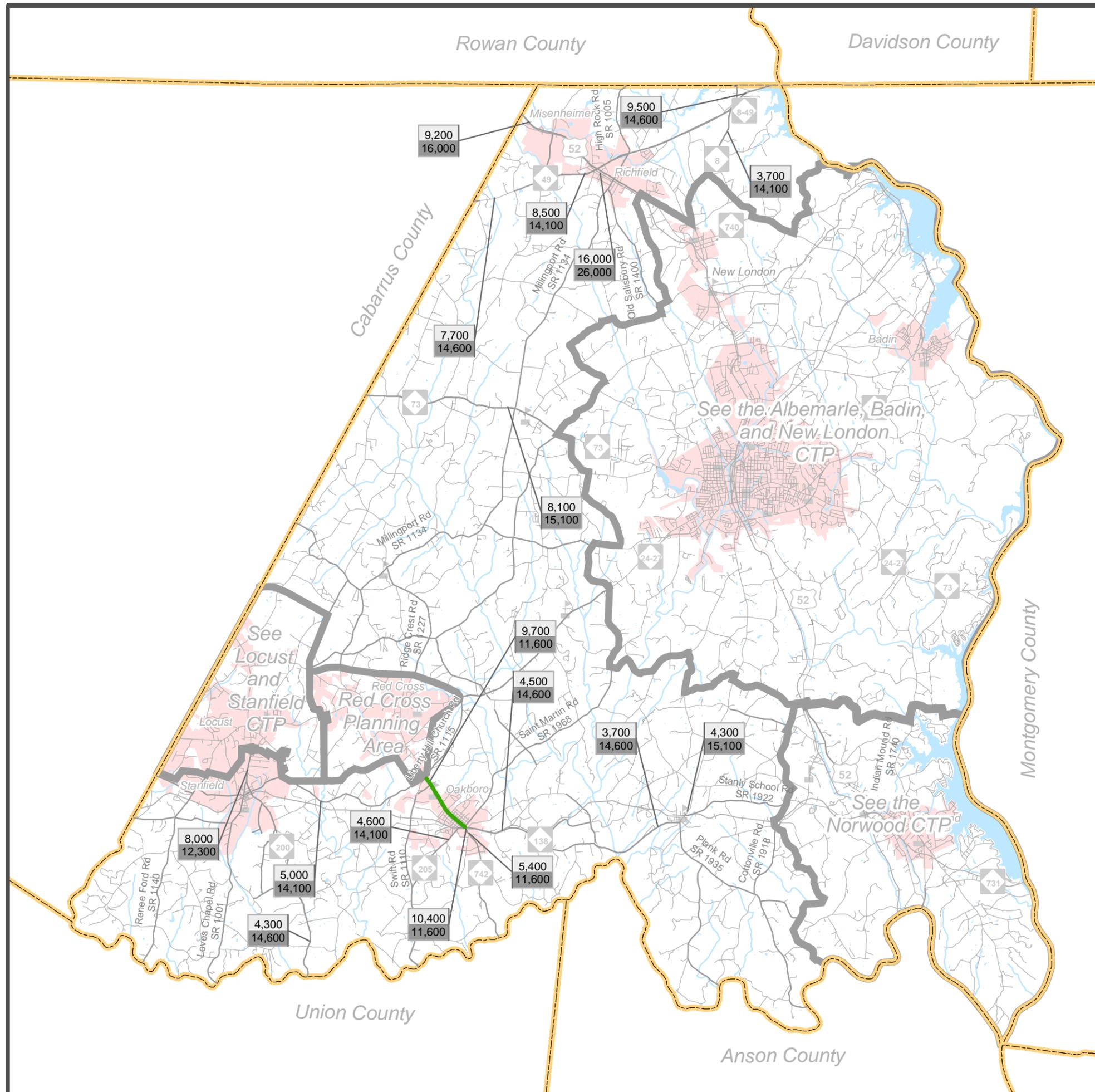
Legend

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



0 0.5 1 2 3 Miles

Base map date: November 2008



Public Transportation and Rail

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

Public Transportation

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

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

There are no existing or planned fixed public transportation routes within the planning area. Stanly County Umbrella of Services Association (SCUSA) provides community transportation services responsive to the current and changing needs of Stanly County residents. Services are provided utilizing vans and buses through subscription and demand response routes. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information.

Rail

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

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back everyday. Combined, the Carolinian and Piedmont carry more than 200,000 passengers each year.

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

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. There are currently two active rail lines in the planning area. Norfolk Southern (NS) operates two to three freight trains per day with no passenger service. NS has stopped rail service on the spur known as the WF-line. Aberdeen Carolina and Western (ACWR) is a shortline railroad which operates on track leased from Norfolk Southern Railway. The ACWR NS-line operates two to three freight trains per day with no passenger service. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

Bicycles & Pedestrians

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

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The proposed Central Park/Uwharrie Lakes Region Bicycle Plan (2011) recommendations, the 2000 Bicycling Stanly County map (NCDOT), the 2005 Norwood Pedestrian Plan, the 2010 Oakboro Pedestrian Plan, the 2010 Stanfield Sidewalk Improvements map, the 2012 Richfield Pedestrian Plan, and the 2010 Misenheimer Pedestrian Plan were utilized in the development of these elements of the CTP. NC Bicycle Route 6 (Piedmont Spur) along with three regional signed county routes (Routes 1 – 3) travel throughout Stanly County. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information.

Land Use

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

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

- **Residential**: Land devoted to the housing of people, with the exception of hotels and motels which are considered commercial.
- **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.

Stanly County remains one of the leading agricultural counties in North Carolina. The agricultural economy was for decades augmented by a strong industrial sector based on the textile and aluminum industries, among others. In addition, tourism has emerged as an important industry for the county. Stanly County lies at the edge of the growing Charlotte metropolitan region, a region that now extends into Cabarrus and Union Counties, both of which share Stanly County's western border. While indications are already apparent that parts of western Stanly County are experiencing increased development activity, it is expected that major infrastructure projects—among them the completion of the eastern leg of the Interstate 485 Charlotte Loop, and the widening of NC 24/27 to four lanes from the county line to Albemarle—will speed the rate of development and growth in the county.

Stanly County primarily anticipates growth in the urban/small urban areas, which encompass residential, commercial and public land uses. These areas tend to be established populated areas and are located throughout the County, typically along major routes. Substantial residential and commercial growth is expected in the western part of the County.

Legend

-  Major Roads
-  Commercial
-  Parks, Recreation & Open Space
-  Public / Semi-Public
-  Residential
-  Woodlands
-  Industrial
-  Agricultural
-  Water
-  Study Area Boundary

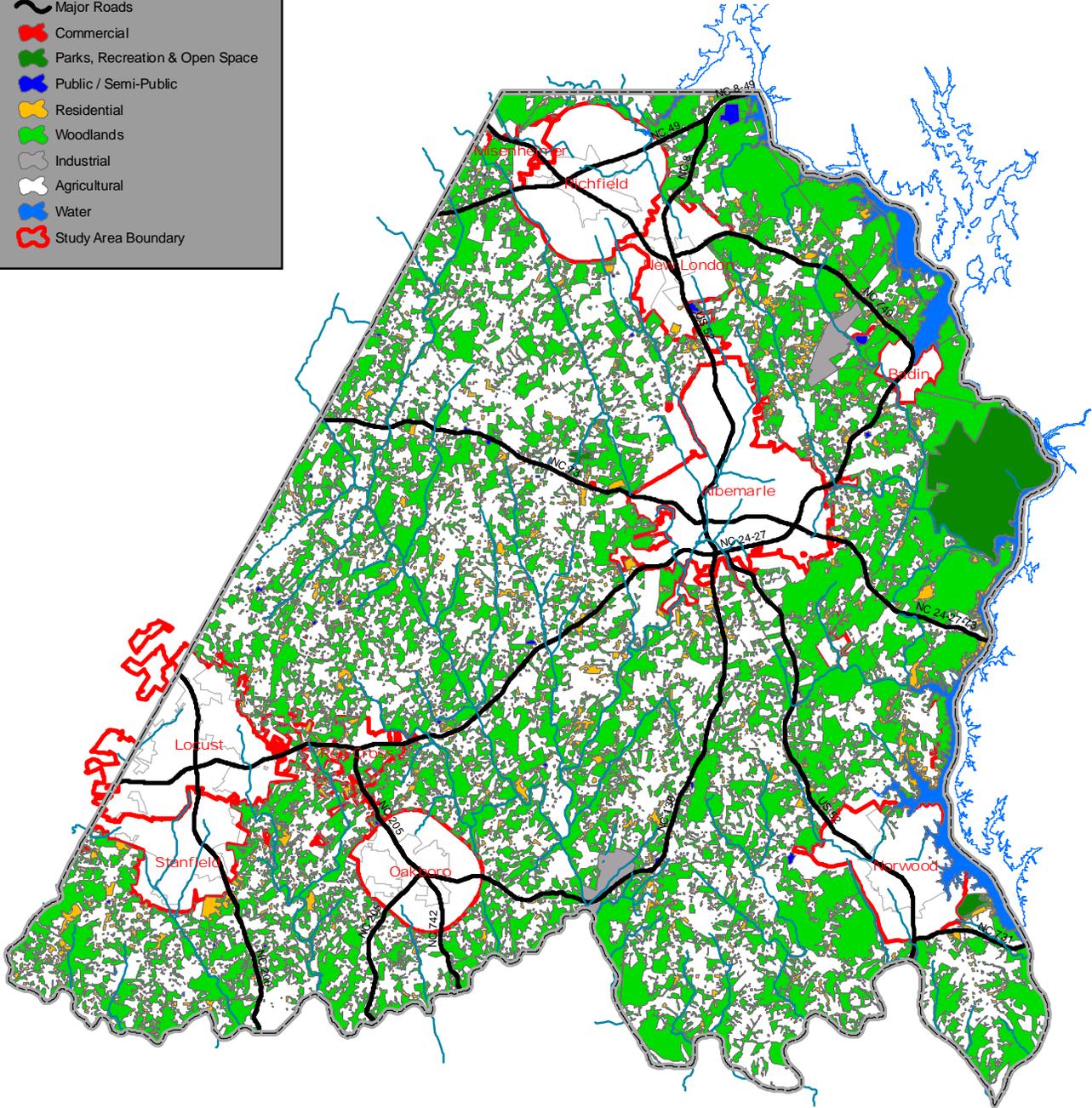
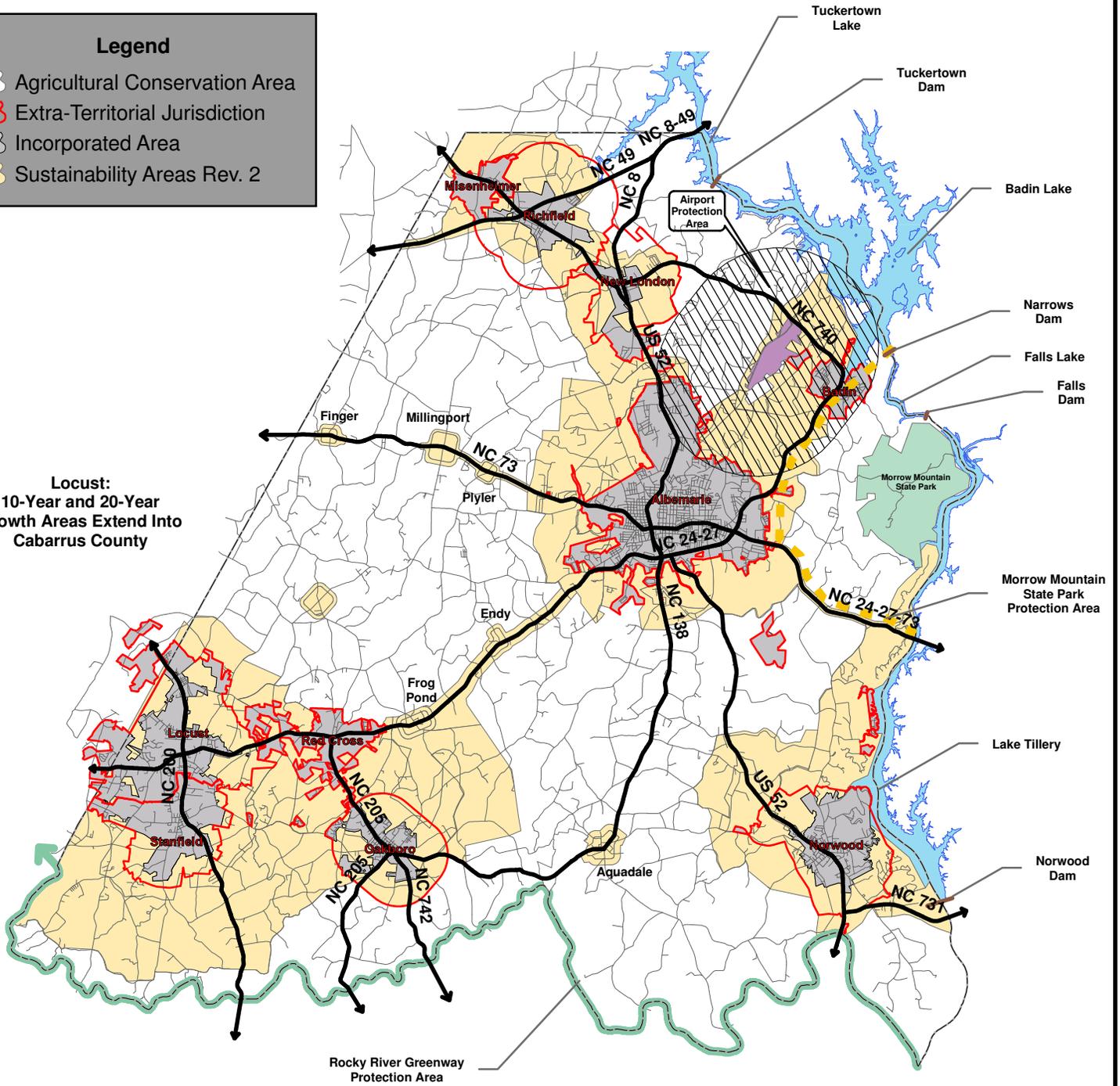


Figure 6
Existing Land Use
 Land Use Plan
 Stanly County, North Carolina

Legend

-  Agricultural Conservation Area
-  Extra-Territorial Jurisdiction
-  Incorporated Area
-  Sustainability Areas Rev. 2

Locust:
10-Year and 20-Year
Growth Areas Extend Into
Cabarrus County



0 4 8 Miles



Figure 7

Long-Range Plan Recommendations

Land Use Plan
Stanly County, North Carolina

Consideration of Natural and Human Environment

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

A full listing of environmental features that were examined as a part of this study is shown in the following tables utilizing the best available data. Environmental features occurring within Stanly County are shown in Figure 8 and highlighted in Tables 1 and 2.

Table 1 – Environmental Features

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

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

Table 2 – Restricted Environmental Features

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

**Figure 8
Environmental
Features**

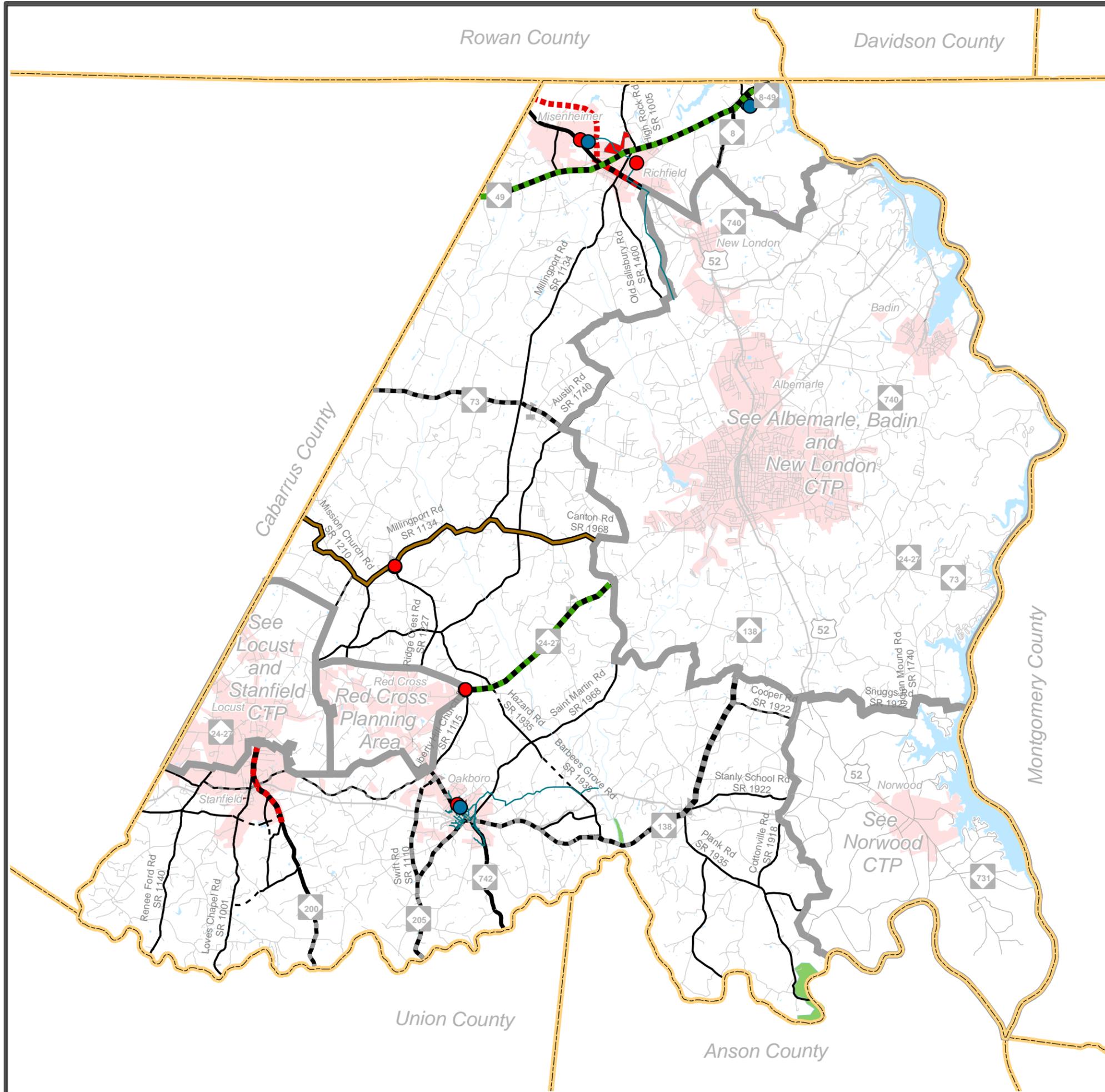


**Stanly County
North Carolina**

**Comprehensive
Transportation Plan**

Legend

-  Water Distribution Systems - Tanks
-  Water Distribution Systems - Pump Stations
-  Sewer Distribution Systems - Pipes
-  Roads
-  Railroads
-  Rivers and Streams
-  Rec. Projects Land Water Conservation Fund
-  Natural Heritage Element Occurrences (polygons)
-  Planning Area Boundaries
-  County Boundary
-  Municipal Limits
-  Water Bodies
-  State Bicycle Route



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 Stanly County Board of Commissioners in December 2008 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

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

The public involvement process included holding two public drop-in sessions in Stanly County to present the proposed CTP to the public and solicit comments. The first meeting was held on May 5, 2011 in Richfield from 11:00 am – 1:00 pm; the second meeting was held on May 5, 2011 in Locust from 3:00 pm – 5:00 pm. Each session was publicized in the local newspaper. Two comment forms were submitted during the sessions.

Public hearings were held for all jurisdictions within Stanly County as listed below:

- Stanfield Council Meeting – June 30, 2011
- Oakboro Council Meeting – July 5, 2011
- Misenheimer Council Meeting – July 11, 2011
- Richfield Council Meeting – July 25, 2011
- Norwood Council Meeting – August 1, 2011

The CTP was adopted during each of these meetings. A public hearing was held on July 11, 2011 during the Stanly County Board of 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 at the Stanly County Board of Commissioners meeting on August 15, 2011.

The Rocky River RPO endorsed the CTP on November 17, 2011. The North Carolina Department of Transportation mutually adopted the Stanly County CTP on January 5, 2012.

II. Recommendations

This chapter presents recommendations for each mode of transportation in Stanly County, as shown in Figure 1.

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 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 Rocky River RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local government coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and the North Carolina Department of Transportation share the responsibility for access management and the planning, design and construction of the recommended projects.

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

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

Problem Statements

HIGHWAY

US 52, TIP No. R-2903

US 52 is designated as a boulevard on NCDOT's Strategic Highway Corridor (SHC) Vision Plan¹. Within Stanly County, it is recommended that US 52 be upgraded to a four lane boulevard from the Albemarle, Badin, and New London planning area to Culp Road (SR 1501) and continues on new location from Culp Road (SR 1501) northeast around Misenheimer and Pfeiffer University and continuing into Cabarrus County. This bypass is recommended to be a four lane boulevard. For additional information about this project, including the Purpose and Need, contact NCDOT's Project Development and Environmental Analysis Branch.

NC 24-27, Local ID: STAN0015-H

Based on North Carolina's vision for mobility and connectivity, NC 24-27 from the Red Cross planning area to the Albemarle, Badin, New London CTP planning area does not meet the future mobility and connectivity needs in western North Carolina. This facility is intended to provide mobility in Stanly County, and ultimately, connectivity between Harnett County and Charlotte, NC. NC 24-27 is designated as an expressway on NCDOT's SHC Vision Plan. TIP Project R-0967 was recently completed and included widening NC 24-27 to a four lane divided facility from. Additional improvements are needed to upgrade the facility to expressway standards from the Red Cross planning area to the Albemarle, Badin, and New London planning area. Access control measures and the removal of traffic signals are needed to meet expressway standards.

NC 49 TIP, No. R-2533

Based on North Carolina's vision for mobility and connectivity, NC 24-27 from Rowan County to Cabarrus County does not meet the future mobility and connectivity needs in western North Carolina. This facility is intended to provide mobility in Stanly County, and ultimately, connectivity between Raleigh, NC and Charlotte, NC. NC 49 is designated as an expressway on NCDOT's SHC Vision Plan. It is recommended that the facility be widened from two to four lanes from Rowan County to Cabarrus County. The existing facility is currently a two lane major thoroughfare with 11-foot lanes and is proposed to be upgraded to a four lane expressway with 12 foot lanes.

NC 200, Local ID: STAN0013-H

NC 200 is recommended to be upgraded to a boulevard within the Stanfield town limits, by widening from a two lane to a two lane divided facility from Harvell Road (SR 1125) to Locust planning area. This upgrade will increase mobility and better accommodate the increased traffic volume expected in 2035 from the

¹ The Strategic Highway Corridor was adopted by NCDOT on September 2, 2004 and last updated on July 10, 2008.

Monroe Bypass, and other development in the vicinity. It is also consistent with the boulevard recommendation from the Locust and Stanfield CTP.

Swift Road, Local ID: STAN0033-H

Swift Road (SR 1110) /Wade Road is recommended to be designated as the new NC 205 alignment from NC 205/Swift Road (SR 1110) intersection to unpaved Wade Road. The existing NC 205 at the NC 205/2nd Street intersection is not wide enough for trucks to make the 90 degree turn, causing traffic issues and disruption in the traffic flow in the downtown area. It is also recommended to be widened from two 9-foot lanes to 12-foot lanes and 2-foot paved shoulders. This facility will improve connectivity and mobility through this area.

Minor Connector/Re-alignment Improvements

The following routes are recommended to be constructed as minor thoroughfares with two 12-foot lanes and 2-foot paved shoulders. These new facilities will improve connectivity and mobility throughout the county.

- **STAN0021-H:** Frog Pond Road (SR 1221)/Hazard Road (SR 1970)/Barbees Grove Road (SR 1953) – From Frog Pond Road (SR 1221) to Hazard Road (SR 1970) and from Hazard Road (SR 1970) to Barbees Grove Road (SR 1953)
- **STAN0026-H:** Oak Grove Road (SR 1115) – From Oak Grove Road (SR 1115) to Love Mill Road (SR 1001).
- **STAN0030-H:** River Road (SR 1145) - From existing River Road (SR 1145) to NC 200.
- **STAN0032-H:** Sunset Lake Road – From Sunset Lake Road to Harvell Road (SR 1125).

Minor Widening Improvements

The following routes do not have capacity issues but are recommended to be upgraded to 12-foot lanes to improve narrow widths or to accommodate bicycles.

- **STAN0012-H:** NC 205 – from Union County to Red Cross planning area
- **STAN0013-H:** NC 200 – from Union County to Brooks Road (SR 1119)
- **STAN0014-H:** NC 138 – from NC 742 to Albemarle, Badin, and New London planning area
- **R-2410:** NC 73 – from Cabarrus County to Albemarle, Badin, and New London planning area
- **STAN0016-H:** NC 8 – from NC 49 to Albemarle, Badin, and New London planning area
- **STAN0017-H:** Austin Road (SR 1214) – from Locust planning area to Running Creek Church Road (SR 1134)

- **STAN0018-H:** Big Lick Road (SR 1130/SR 1115) - from NC 200 to NC 205
- **STAN0019-H:** Coley Store Road (SR 1211) - from Mission Church Road (SR 1210) to Locust planning area
- **STAN0020-H:** Cooper Road (SR 1914) – from NC 138 to Swaringen Road (SR 1913)
- **STAN0002-H:** Cottonville Road (SR 1918) – from Plank Road (SR 1935) to Stanly School Road (SR 1922)
- **STAN0004-H:** Hardy Road (SR 1937) – Plank Road (SR 1935) to Whitley Road (SR 1933)
- **STAN0022-H:** Love Chapel Road (SR 1001) – from River Road (SR 1145) to NC 200
- **STAN0022-H:** Love Mill Road (SR 1001) - from Union County to River Road (SR 1145)
- **STAN0023-H:** Main Street (Richfield) – from NC 49 to Millingport Road (SR 1134)
- **STAN0024-H:** Millingport Road (SR 1134) – from Mission Church Road (SR 1210) to Old Salisbury Road (SR 1400)
- **STAN0025-H:** Nance Road (SR 1143) – from Brown Hill Road (SR 1142) to Renee Ford Road (SR 1140)
- **STAN0027-H:** Plank Road (SR 1935) – from NC 138 to Hardy Road (SR 1937)
- **STAN0028-H:** Renee Ford Road (SR 1140) – from Union County to Locust planning area
- **STAN0029-H:** River Road (SR 1145) - from Renee Ford Rd (SR 1140) to Love Chapel Road (SR 1001)
- **STAN0031-H:** Running Creek Church Road (SR 1134) – from Austin Road (SR 1214) to Millingport Road (SR 1134)
- **STAN0009-H:** Stanly School Road (SR 1922) – from NC 138 to proposed US 52 Bypass
- **STAN0034-H:** Wesley Chapel Road (SR 1455) – from US 52 to NC 49
- **STAN0035-H:** West Stanly Street (SR 1144) - from Renee Ford Road (SR 1140) to NC 200

PUBLIC TRANSPORTATION & RAIL

A public transportation and rail assessment was completed during the development of the CTP. There are no recommended improvements associated with the public transportation mode. Several at-grade highway/railroad crossing improvements are planned for rail within the study area. These improvements are as follows:

- Crossing 724310V – Glenmore Rd (SR 1456) near Misenheimer at NS Milepost N18.3, install gates.
- Crossing 728836J – Silver Rd (SR1107) near Oakboro at ACWR Milepost NS357.9, install gates.
- Crossing 728851L– Old Aquadale Road (SR2001) near Aquadale at ACWR Milepost NS350.5, install gates.

- Crossing 728871X– Anson Ave (SR1932) near Norwood at ACWR Milepost NS344.8, install gates.
- Crossing 724294N– Steakhouse Rd (SR1440) near New London at NS Milepost N23.8, traffic signal project coordination with NCDOT Division 10.

BICYCLE

The existing bicycle facilities incorporated into the CTP were developed from the 2011 Uwharrie/Central Park Regional Bicycle Plan Map. The existing regional Piedmont Spur (Route 6), as well as existing NC Bicycle Routes 1, 2, and 3 are recommended as needs improvement with the addition of bicycle accommodations.

PEDESTRIAN

The pedestrian recommendations incorporated into the CTP were developed from the 2005 Norwood Pedestrian Plan, the 2010 Oakboro Pedestrian Plan, 2010 Stanfield Sidewalk Improvements, the 2012 Richfield Pedestrian Plan and the 2010 Misenheimer Pedestrian Plan.

APPENDICES

Appendix A Resources and Contacts

North Carolina Department of Transportation

Customer Service Office

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

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

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

Secretary of Transportation

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

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

Board of Transportation

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

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

Highway Division Engineer

716 W. Main St. Albemarle, NC 28001 (704) 983-4400

<http://www.ncdot.gov/doh/operations/division10/>

Contact the:

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

615 Concord Rd. Albemarle, NC 28001 (704)982-0104

Transportation Planning Branch (TPB)

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

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

Rocky River Rural Planning Organization (RPO)

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

1000 N. 1st St. Albemarle, NC 28001 (980) 581-6589
www.rockyriverrpo.org

Strategic Planning Office

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

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

Project Development & Environmental Analysis (PDEA)

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

1548 Mail Service Center Raleigh, NC 27699-1548 (919) 707-6000
<http://www.ncdot.gov/doh/preconstruct/pe/>

Secondary Roads Unit

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

1535 Mail Service Center Raleigh, NC 27699-1535 (919) 707-2500
<http://www.ncdot.gov/doh/operations/secondaryroads/>

Program Development Branch

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

1534 Mail Service Center Raleigh, NC 27699-1534 (919) 707-4610
<http://www.ncdot.org/planning/development/>

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

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

Rail Division

Contact the Rail Division for rail information throughout the state.

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

Division of Bicycle and Pedestrian Transportation

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

1552 Mail Service Center Raleigh, NC 27699-1552 (919) 707-2600
<http://www.ncdot.gov/transit/bicycle/>

Structures Management Unit

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

1581 Mail Service Center Raleigh, NC 27699-1581 (919) 707-6400
http://www.ncdot.gov/doh/operations/dp_chief_eng/maintenance/bridge/

Roadway Design Unit

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

1582 Mail Service Center Raleigh, NC 27699-1582 (919) 707-6200
<http://www.ncdot.org/doh/preconstruct/highway/roadway/>

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

<http://www.nccommerce.com/en/CommunityServices/>

Appendix B

Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

- **Freeways**

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

- **Expressways**

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

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

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

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

- **Bus Routes** – The primary fixed route bus system for the area. Does not include demand response systems.
- **Fixed Guideway** – Any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail, monorail, trolleybus, aerial tramway, included plane, cable car, automated guideway transit, and ferryboats.

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

Bicycle Map

- **On Road-Existing** – Conditions for bicycling on the highway facility are adequate to safely accommodate cyclists.
- **On Road-Needs Improvement** – At the systems level, it is desirable for an **existing** highway facility to accommodate bicycle transportation; however, highway improvements are necessary to create safe travel conditions for the cyclists.
- **On Road-Recommended** – At the systems level, it is desirable for a **recommended** highway facility to accommodate bicycle transportation. The highway should be designed and built to safely accommodate cyclists.
- **Off Road-Existing** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way.
- **Off Road-Needs Improvement** – A facility that accommodates only bicycle transportation and is physically separated from a highway facility either within the right-of-way or within an independent right-of-way that will not adequately serve future bicycle needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment.

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

Pedestrian Map

- **Sidewalk-Existing** – Paved paths (including but not limited to concrete, asphalt, brick, stone, or wood) on both sides of a highway facility and within the highway right-of-way that are adequate to safely accommodate pedestrian traffic.
- **Sidewalk-Needs Improvement** – Improvements are needed to provide paved paths on both sides of a highway facility. The highway facility may or may not need improvements. Improvements do not include re-paving or other maintenance activities but may include: filling in gaps, widening sidewalks, or meeting ADA (Americans with Disabilities Act) requirements.
- **Sidewalk-Recommended** – At the systems level, it is desirable for a recommended highway facility to accommodate pedestrian transportation **or** to add sidewalks on an existing facility where no sidewalks currently exist. The highway should be designed and built to safely accommodate pedestrian traffic.

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

Appendix C

CTP Inventory and Recommendations

Assumptions/ Notes:

- **Local ID:** This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- **Jurisdiction:** Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- **Existing Cross-Section:** Listed under '(ft)' is the approximate width of the roadway from edge of pavement to edge of pavement. Listed under 'lanes' is the total number of lanes, with the letter 'D' if the facility is divided.
- **Existing ROW:** The estimated existing right-of-way is based on data from Division 10 - District 3, the Pavement Management Unit (PMU) and the NCDOT Road Characteristics file. These right-of-way amounts are approximate and may vary.
- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using NCLOS, as documented in Chapter I.
- **Existing and Proposed AADT** (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2009 AADT E+C' is an estimate of the volume in 2009 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012-2018 Transportation Improvement Program (TIP). The '2035 AADT with CTP' is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter I.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended as part of the CTP.
- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.
- **Tier:** Tiers are defined as part of the North Carolina Multitodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- **Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H=highway, T= public transportation, R= rail, B= bicycle, and P= pedestrian).

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	ROW (lanes)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)				
R-2903	US 52 Bypass	Cabarrus County - Culp Road (SR 1501)	Stanly Co.	2.9	-	-	-	-	-	-	13,500	13,500	45,200	4 B	250	B	Sta	
	US 52	Cabarrus County - 3 lanes Pfeiffer Campus	Misenheimer	0.8	24	2	60	55	15,100	5,800	5,600	5,600	15,100	ADQ	ADQ	Maj	Sta	B/P
	US 52	3 lanes Pfeiffer Campus - Richfield Town Limits	Misenheimer	0.8	33	3	60	35	12,900	5,800	9,200	9,200	12,900	ADQ	ADQ	Maj	Sta	B/P
	US 52	Richfield Town Limits - Culp Road (SR 1501)	Richfield	0.6	24	2	60	45	12,700	5,800	9,200	9,200	12,700	ADQ	ADQ	Maj	Sta	
R-2903	US 52	Culp Road (SR 1501) - NC 49	Richfield	0.3	24	2	60	35	22,200	5,800	9,200	9,200	35,100	4B	250	B	Sta	
R-2903	US 52	NC 49 - Main Street	Richfield	0.9	80	5	65	35	26,000	10,100	16,000	16,000	35,100	4B	250	B	Sta	B/P
R-2903	US 52	Main Street - Albemarle, Badin, New London planning area	Richfield	0.1	80	5	65	55	28,400	10,100	16,000	16,000	40,000	4B	250	B	Sta	B/P
	NC 742	Union County - Oakboro Town Limits	Stanly Co.	2.4	25	2	100	55	11,600	3,500	5,400	5,400	11,600	ADQ	ADQ	Maj	Reg	
	NC 742	Oakboro Town Limits - SR 1975	Oakboro	0.4	40	2	100	45	14,100	3,500	5,400	5,400	14,100	ADQ	ADQ	Maj	Reg	
	NC 742	SR 1975 - NC 205	Oakboro	0.1	48	2	100	45	14,100	3,500	5,400	5,400	14,100	ADQ	ADQ	Maj	Reg	
STAN0012-H	NC 205	Union County - Oakboro Town Limits	Stanly Co.	3.8	23	2	60	55	12,300	2,900	9,400	9,400	15,100	2 A	60	Maj	Reg	
STAN0012-H	NC 205	Oakboro Town Limits - St Martin Road (SR 1975)	Oakboro	0.8	23	2	60	45	12,300	4,600	4,600	4,600	14,600	2 A	100	Maj	Reg	B
STAN0012-H	NC 205	St Martin Road (SR 1975) - 2nd Street	Oakboro	0.5	23	2	85	35	12,300	4,600	4,600	14,200	14,200	2 A	85	Maj	Reg	B
STAN0012-H	NC 205	2nd Street - Tenth Street	Oakboro	0.6	48	2	60	20	11,600	7,100	9,700	9,700	11,100	2 G	85	Maj	Reg	B
	NC 205	Tenth Street - Red Cross planning area	Oakboro	1.1	24	2	60	35	11,600	7,100	9,700	9,700	11,600	ADQ	ADQ	Maj	Reg	
STAN0036-H	NC 200	Union County - Brooks Road (SR 1119)	Stanly Co.	1.5	22	2	60	55	14,200	1,800	4,300	4,300	14,600	2 A	60	Maj	Reg	
	NC 200	Brooks Road (SR 1119) - Harvell Road (SR 1125)	Stanly Co.	1.4	24	2	60	55	14,600	2,200	6,400	6,400	14,600	ADQ	ADQ	Maj	Reg	

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																			
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System						2035 Proposed System						CTP Classification	Tier	Other Modes
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section		ROW (ft)				
					(ft)	lanes							(ft)	(ft)					
STAN0013-H	NC 200	Harvell Road (SR 1125) - Locust planning area	Stanly Co.	2.3	24	2	100	45	12,300	3,600	8,000	8,000	14,600	2 I	100	B	Reg		
STAN0014-H	NC 138	NC 742 - Oakboro Town Limits	Oakboro	0.3	22	2	60	35	14,600	2,900	4,500	4,500	14,600	2 A	60	Maj	Reg	B/P	
STAN0014-H	NC 138	Oakboro Town Limits - Plank Road (SR 1935)	Stanly Co.	3.4	22	2	60	55	14,600	2,300	3,700	3,700	15,100	2 A	60	Maj	Reg	B/P	
STAN0014-H	NC 138	Plank Road (SR 1935) - Albemarle Badin New London planning area	Stanly Co.	2.1	24	2	60	55	15,100	3,500	4,300	4,300	15,100	2 A	60	Maj	Reg		
R-2410	NC 73	Cabarrus County - Albemarle Badin New London planning area	Stanly Co.	5.4	24	2	60	55	15,100	6,400	8,100	8,100	15,100	2 A	60	Maj	Reg		
R-2533	NC 49	Cabarrus County - Richfield Town Limits	Stanly Co.	2.8	22	2	60	55	14,600	4,200	7,700	7,700	53,600	4 A	250	Maj	Reg		
R-2533	NC 49	Richfield Town Limits - West of US 52	Richfield	0.2	22	2	60	45	14,100	4,200	7,700	7,700	43,300	4 A	250	Maj	Reg		
R-2533	NC 49	West of US 52 - US 52	Richfield	0.2	22	2	60	35	10,700	4,200	7,700	7,700	43,300	4 A	250	Maj	Reg		
R-2533	NC 49	US 52 - East of US 52	Richfield	0.3	22	2	60	35	10,700	5,500	7,900	7,900	43,300	4 A	250	Maj	Reg		
R-2533	NC 49	East of US 52 - Richfield Town Limits	Richfield	0.7	22	2	60	45	14,100	5,500	8,600	8,600	43,300	4 A	250	Maj	Reg		
R-2533	NC 49	Richfield Town Limits - Rowan County	Stanly Co.	3.0	22	2	60	55	14,600	5,000	9,500	9,500	53,600	4 A	250	Maj	Reg		
STAN0015-H	NC 24-27	Red Cross planning area - Albemarle Badin New London planning area	Stanly Co.	3.8	48	4D	250	55	54,800	12,000	21,000	21,000	54,800	4 A	250	Maj	Reg		
STAN0016-H	NC 8	Albemarle Badin New London planning area - NC 49	Stanly Co.	1.8	20	2	60	55	14,100	2,200	3,700	3,700	15,100	2 A	60	Maj	Reg		
	Austin Road (SR 1214)	NC 73 - Ridge Crest Road (SR 1227)	Stanly Co.	7.0	20	2	60	55	14,100	1,000	1,800	1,800	14,100	ADQ	ADQ	Min	Sub		
	Austin Road (SR 1214)	Ridge Crest Road (SR 1227) - Running Creek Road (SR 1134)	Stanly Co.	2.5	20	2	60	55	14,100	550	1,000	1,000	14,100	ADQ	ADQ	Min	Sub		

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																			
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System						2035 Proposed System						CTP Classification	Tier	Other Modes
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)				
					(ft)	lanes													
STAN0017-H	Austin Road (SR 1214)	Running Creek Road (SR 1134) - Locust planning area	Stanly Co.	1.1	18	2	60	55	13,600	1,200	2,500	2,500	15,100	2 A	60	Min	Sub	B	
STAN0021-H	Barbees Grove Road (SR 1953)	Hazard Road (SR 1970) - Connector	Stanly Co.	1.2	-	-	-	-	-	-	290	290	15,100	2 A	60	Min	Sub	B	
	Barbees Grove Road (SR 1953)	Connector - NC 138	Stanly Co.	1.6	16	2	60	55	12,700	180	290	290	12,700	ADQ	ADQ	Min	Sub	B	
STAN0018-H	Big Lick Road (SR 1130/1115)	NC 205 - NC 200	Stanly Co.	3.6	18	2	60	55	13,600	2,700	7,500	7,500	15,100	2 A	60	Min	Sub		
	Canton Road (SR 1249)	Albemarle Badin New London planning area - Millingport Road (SR 1134)	Stanly Co.	2.9	20	2	60	55	14,100	2000	2,900	2,900	14,100	ADQ	ADQ	Min	Sub	B	
STAN0019-H	Coley Store Road (SR 1211)	Mission Church Road (SR 1206) - Locust planning area	Stanly Co.	0.7	18	2	60	55	13,600	1500	3,300	3,300	15,100	2 A	60	Min	Sub		
STAN0020-H	Cooper Road (SR 1914)	NC 138 - Norwood planning area	Stanly Co.	1.7	18	2	60	55	13,600	780	1,300	1,300	15,100	2 A	60	Min	Sub		
STAN0002-H	Cottonville Road (SR 1918)	Plank Road (SR 1935) - Norwood planning area	Stanly Co.	1.1	18	2	60	45	13,100	650	1,100	1,100	14,600	2 A	60	Min	Sub		
	Frog Pond Road (SR 1221)	Austin Road (SR 1214)- Newsome (SR 1219)	Stanly Co.	1.7	20	2	60	55	14,100	240	390	390	14,100	ADQ	ADQ	Min	Sub	B	
	Frog Pond Road (SR 1221)	Newsome Road (SR 1219)- NC 24-27	Stanly Co.	0.4	16	2	60	55	12,700	460	730	730	12,700	ADQ	ADQ	Min	Sub	B	
	Frog Pond Road (SR 1221)	NC 24-27 - Connector	Stanly Co.	0.2	16	2	60	55	12,700	920	1,500	1,500	12,700	ADQ	ADQ	Min	Sub	B	
STAN0021-H	Frog Pond Road (SR 1221)	Connector - Hazard Road (SR 1970)	Stanly Co.	0.3	-	-	-	-	-	-	1,500	1,500	15,100	2 A	60	Min	Sub	B	

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																			
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System						2035 Proposed System						CTP Classification	Tier	Other Modes
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)				
					(ft)	lanes													
STAN0004-H	Hardy Road (SR 1937)	Plank Road (SR 1935) - Norwood planning area	Stanly Co.	0.4	16	2	60	55	12,700	440	720	720	15,100	2 A	60	Min	Sub	B	
	Harvell Road (SR 1125)	NC 200 - Oak Grove Road	Stanly Co.	1.8	20	2	60	55	14,100	250	400	400	14,100	ADQ	ADQ	Min	Sub		
	Hazard Road (SR 1970)	Connector - Barbee's Grove (SR 1953) Connector	Stanly Co.	2.1	20	2	60	55	14,100	720	1,700	1,700	14,100	ADQ	ADQ	Min	Sub	B	
	Liberty Hill Church (SR 1115)	NC 205 - NC 24-27	Stanly Co.	2.4	20	2	60	55	14,100	2,300	3,100	3,100	14,100	ADQ	ADQ	Min	Sub		
STAN0022-H	Love Chapel Road (SR 1001)	NC 200 - Stanfield Town Limits	Stanfield	0.7	20	2	60	35	9,500	2,100	4,300	4,300	10,200	2 A	60	Min	Sub		
STAN0022-H	Love Chapel Road (SR 1001)	NC 200 - Stanfield Town Limits	Stanfield	0.4	20	2	60	45	10,900	2,100	4,300	4,300	11,700	2 A	60	Min	Sub		
STAN0022-H	Love Mill Road (SR 1001)	Stanfield Town Limits - Union County	Stanly Co.	3.7	20	2	60	55	14,100	1,800	3,700	3,700	15,100	2 A	60	Min	Sub		
STAN0023-H	N. Main Street	US 52 - NC 49	Stanly Co.	1.5	18	2	60	35	9,200	940	1,300	1,300	10,200	2 A	60	Min	Sub	B	
STAN0023-H	S. Main Street	US 52 - Richfield Town Limits	Stanly Co.	0.3	22	2	60	35	10,700	1,400	2,000	2,000	14,600	2 A	60	Min	Sub	B	
STAN0024-H	Millington Road (SR 1134)	US 52 - Richfield Town Limits	Richfield	0.3	20	2	60	35	9,500	1,400	2,200	2,200	10,200	2 A	60	Min	Sub	B	
STAN0024-H	Millington Road (SR 1134)	Richfield Town Limits - Old Salisbury Road (SR 1400)	Stanly Co.	2.3	20	2	60	45	13,600	1,400	2,200	2,200	14,600	2 A	60	Min	Sub	B	
STAN0024-H	Millington Road (SR 1134)	Old Salisbury Road (SR 1400) - NC 73	Stanly Co.	4.1	20	2	60	55	14,100	740	1,900	1,900	15,100	2 A	60	Min	Sub	B	
STAN0024-H	Millington Road (SR 1134)	NC 73 - Canton Road (SR 1249)	Stanly Co.	3.2	20	2	60	55	14,100	1,600	2,800	2,800	15,100	2 A	60	Min	Sub		
STAN0024-H	Millington Road (SR 1134)	Canton Road (SR 1249) - Ridge Crest Road (SR 1227)	Stanly Co.	3.1	20	2	60	45	13,600	1,200	1,300	1,300	14,600	2 A	60	Min	Sub	B/P	
STAN0024-H	Millington Road (SR 1134)	Ridge Crest Road (SR 1227) - Mission Church Road (SR 1210)	Stanly Co.	0.9	20	2	60	55	14,100	1,200	2,000	2,000	15,100	2 A	60	Min	Sub	B	

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft)	lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
	Mission Church Road (SR 1210)	Cabarrus County - Millingport Road (SR 1134)	Stanly Co.	1.7	18	2	60	55	13,600	670	1,100	1,100	13,600	ADQ	ADQ	Min	Sub	B
	Mission Church Road (SR 1210)	Austin Road (SR 1214) - Red Cross planning area	Stanly Co.	0.4	18	2	60	55	13,600	670	1,100	1,100	13,600	ADQ	ADQ	Min	Sub	B
	Nance Road (SR 1143)	Cabarrus County - Browns Hill Road (SR 1142)	Stanfield	0.7	18	2	60	35	9,200	350	600	600	9,200	ADQ	ADQ	Min	Sub	
STAN0025-H	Nance Road (SR 1143)	Browns Hill Road (SR 1142) - Renee Ford Road (SR 1140)	Stanfield	0.4	18	2	60	35	9,200	350	600	600	10,200	2 A	60	Min	Sub	
	Oak Grove Road (SR 1115)	NC 200 - Rushing Road (SR 1941)	Stanly Co.	1.2	20	2	60	55	14,100	650	1,000	1,000	14,100	ADQ	ADQ	Min	Sub	
STAN0026-H	Oak Grove Road (SR 1115) Connector	Rushing Road (SR 1941) - Love Mill Road (SR 1001)	Stanly Co.	0.9	-	-	-	-	-	-	1,000	1,000	15,100	2 A	60	Min	Sub	
	Old Davis Road (SR 1943)	Plank Road (SR 1935) - Anson County	Stanly Co.	3.4	18	2	60	55	13,600	420	700	700	13,600	ADQ	ADQ	Min	Sub	B
	Old Salisbury Road (SR 1400)	Albemarle Badin New London planning area - Millingport Road (SR 1134)	Stanly Co.	0.3	24	2	60	55	15,100	940	1,600	1,600	15,100	ADQ	ADQ	Min	Sub	B
	Old School Road (SR 1917)	NC 138 - Barbees Grove Road (SR 1953)	Stanly Co.	1.6	20	2	60	55	14,100	530	900	900	14,100	ADQ	ADQ	Min	Sub	B
STAN0027-H	Plank Road (SR 1935)	NC 138 - Hardy Road (SR 1937)	Stanly Co.	0.3	20	2	60	35	9,500	1,200	1,900	1,900	9,500	2 A	60	Min	Sub	B
	Plank Road (SR 1935)	Hardy Road (SR 1937) - Anson County	Stanly Co.	2.0	20	2	60	55	14,100	720	1,200	1,200	14,100	ADQ	ADQ	Min	Sub	
STAN0028-H	Renee Ford Road (SR 1140)	Union County - River Road (SR 1145)	Stanly Co.	4.0	20	2	60	55	14,100	2,800	5,700	5,700	15,100	2 A	60	Min	Sub	B

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
					(ft)	lanes												
STAN0028-H	Renee Ford Road (SR 1140)	River Road (SR 1145) - Stanfield Town Limits	Stanly Co.	0.5	20	2	60	45	13,600	2,800	5,700	5,700	14,600	2 A	60	Min	Sub	B
STAN0028-H	Renee Ford Road (SR 1140)	Stanfield Town Limits - Locust planning area	Stanfield	0.8	20	2	60	45	13,600	2,800	5,700	5,700	14,600	2 A	60	Min	Sub	B
	Ridge Crest Road (SR 1227)	Millington Road (SR 1134) - Red Cross planning area	Stanly Co.	0.3	16	2	60	45	12,200	1,500	2,900	2,900	12,200	ADQ	ADQ	Min	Sub	B
	River Road (SR 1145)	Cabarrus County - Renee Ford Road (SR 1140)	Stanly Co.	1.1	20	2	60	55	14,100	1,600	2,500	2,500	14,100	ADQ	ADQ	Min	Sub	
	River Road (SR 1145)	Renee Ford Road (SR 1140) - Stanfield Town Limits	Stanly Co.	1.4	18	2	60	55	13,600	1,600	2,500	2,500	13,600	ADQ	ADQ	Min	Sub	
STAN0029-H	River Road (SR 1145)	Stanfield Town Limits - Realignment	Stanfield	0.2	18	2	60	55	13,600	1,600	2,500	2,500	15,100	2 A	60	Min	Sub	
STAN0029-H	River Road (SR 1145) Realignment	Realignment - Love Chapel Road	Stanfield	0.2	-	-	-	-	-	-	2,500	2,500	15,100	2 A	60	Min	Sub	
STAN0030-H	River Road (SR 1145) Extension	Love Chapel Road - Sunset Lake Road	Stanly Co.	0.9	-	-	-	-	-	-	2,200	2,200	15,100	2 A	60	Min	Sub	
STAN0030-H	River Road (SR 1145) Extension	Sunset Lake Road - NC 200	Stanfield	0.4	-	-	-	-	-	-	2,200	2,200	15,100	2 A	60	Min	Sub	
STAN0031-H	Running Creek Church Road (SR 1134)	Millington Road (SR 1134) - Austin Road (SR 1214)	Stanly Co.	1.8	18	2	60	55	13,600	1,200	1,900	1,900	15,100	2 A	60	Min	Sub	B
	Saint Martin Road (SR 1975)	NC 205 - Oakboro Town Limits	Oakboro	0.5	18	2	60	45	13,100	2,300	3,700	3,700	13,100	ADQ	ADQ	Min	Sub	B
	Saint Martin Road (SR 1975)	Oakboro Town Limits - St Martin Road (SR 1968)	Stanly Co.	1.3	18	2	60	55	13,600	2,300	3,700	3,700	13,600	ADQ	ADQ	Min	Sub	B
	Saint Martin Road (SR 1968)	McLester Road (SR 1975) - Frog Pond Road (SR 1221)	Stanly Co.	0.3	20	2	60	55	14,100	2,500	4,300	4,300	14,100	ADQ	ADQ	Min	Sub	B
	Saint Martin Road (SR 1968)	Frog Pond Road (SR 1221) - Hartsell Road (SR 1968)	Stanly Co.	3.1	20	2	60	55	14,100	2,700	4,900	4,900	14,100	ADQ	ADQ	Min	Sub	B

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																		
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2009 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section				ROW (ft)
					(ft)	lanes												
	Saint Martin Road (SR 1963)	Hartsell Road (SR 1968) - Albemarle Badin New London planning area	Stanly Co.	1.1	20	2	60	55	14,100	2,900	5,500	5,500	14,100	ADQ	ADQ	Min	Sub	B
STAN0009-H	Stanly School Road (SR 1922)	NC 138 - Norwood planning area	Stanly Co.	1.7	20	2	60	55	14,100	3,800	5,800	5,800	15,100	2 A	60	Min	Sub	
	Sunset Lake Road	NC 200 - Stanfield Town Limits	Stanfield	0.5	18	2	60	45	13,100	250	300	300	13,100	ADQ	ADQ	Min	Sub	
STAN0032-H	Sunset Lake Road Extension	Stanfield Town Limits - Harvell Road (SR 1125)	Stanly Co.	0.4	-	-	-	-	-	-	300	300	14,600	2 A	60	Min	Sub	
STAN0033-H	Swift Road (SR 1110)	NC 205 - Wade Road (unpaved)	Stanly Co.	2.1	18	2	60	55	13,600	2,000	3,700	3,700	15,100	2 A	60	Maj	Sub	
STAN0034-H	Wesley Chapel Road (SR 1455)	US 52 - NC 49	Stanly Co.	1.2	18	2	60	35	9,200	380	540	540	10,200	2 A	60	Min	Sub	B
STAN0035-H	West Stanly Street (SR 1144)	Renee Ford Road (SR 1140) - Love Chapel Road	Stanfield	1.1	20	2	*	35	9,500	1,700	3,800	3,800	10,200	2 A	60	Min	Sub	B
STAN0035-H	West Stanly Street (SR 1144)	Love Chapel Road - NC 200	Stanfield	0.2	20	2	*	25	9,300	2,400	2,700	2,700	10,000	2 A	60	Min	Sub	B

RAIL												
Local ID	Facility/ Route	Section (From - To)	Class	Speed Limit (mph)	Distance (mi)	Existing System			Proposed System			Other Modes
						Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	
	Aberdeen Carolina and Western (ACWR's NS-line)	Montgomery County to Cabarrus County	II	25	25	Freight	100	2 to 3	---	---	---	
	Norfolk Southern (NS) N-line	Cabarrus County to Albemarle, Badin, and New London planning area	I	25	3.7	Freight	100	2 to 3	---	---	---	

Appendix D Typical Cross Sections

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

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

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

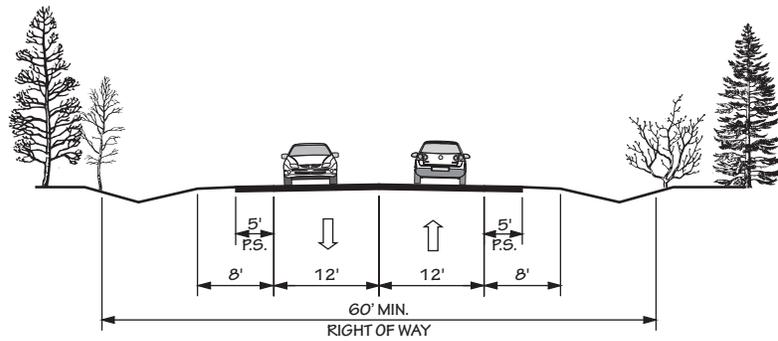
- roadways which may require widening after the current planning period,
- roadways which are borderline adequate and accelerated traffic growth could render them deficient, and
- roadways where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment.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

FIGURE 9

TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

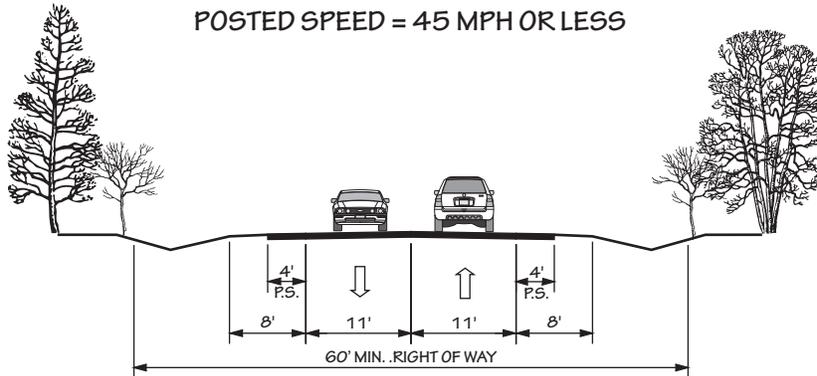
2 A

WIDE PAVED SHOULDERS
POSTED SPEED = 55 MPH



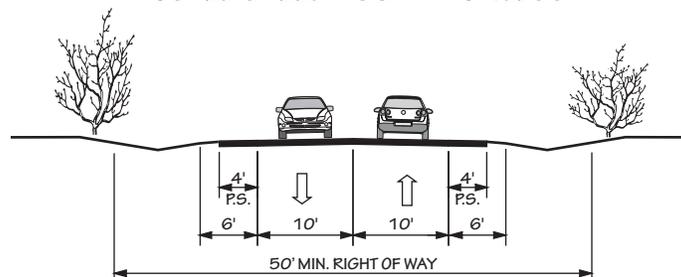
2 B

WIDE PAVED SHOULDERS
POSTED SPEED = 45 MPH OR LESS



2 C

WIDE PAVED SHOULDERS
POSTED SPEED = 35 MPH OR LESS

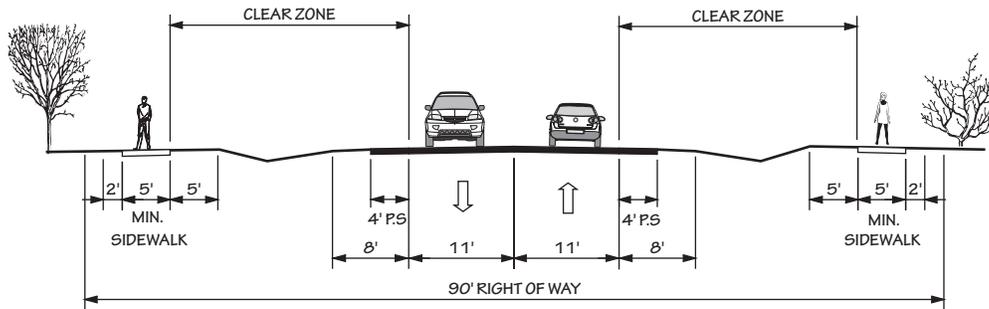


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

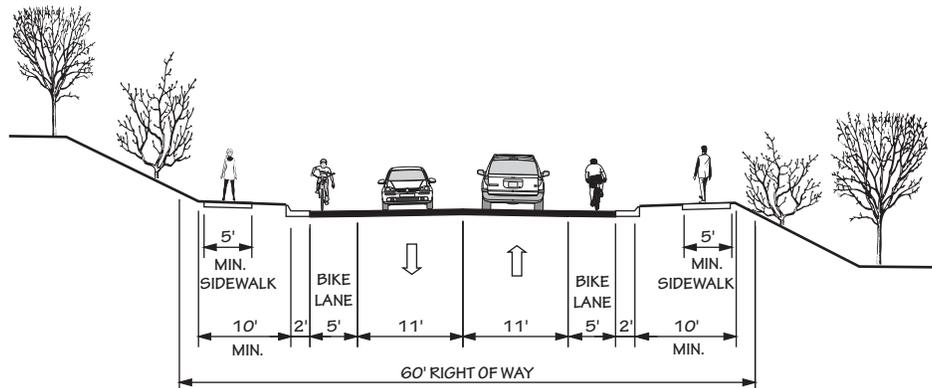
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



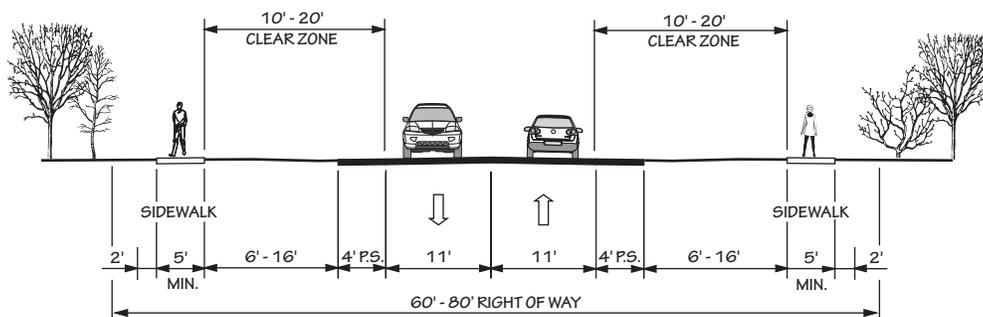
2 E

CURB AND GUTTER WITH BIKE LANES AND SIDEWALKS



2 F

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

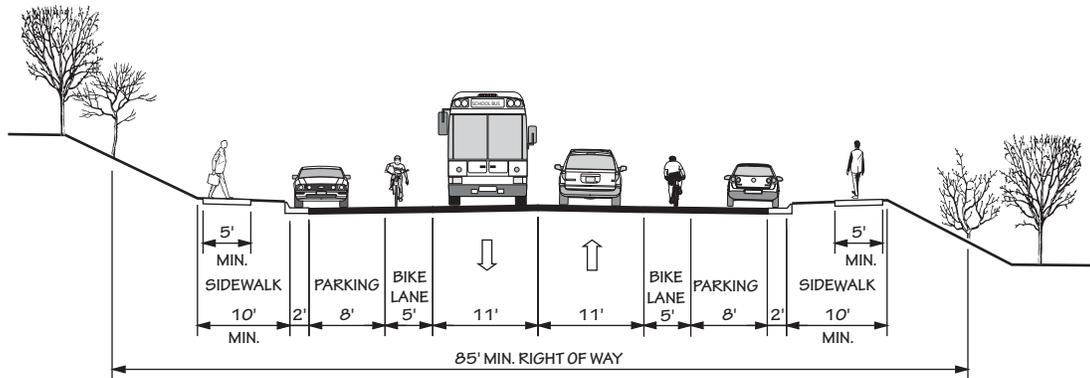


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

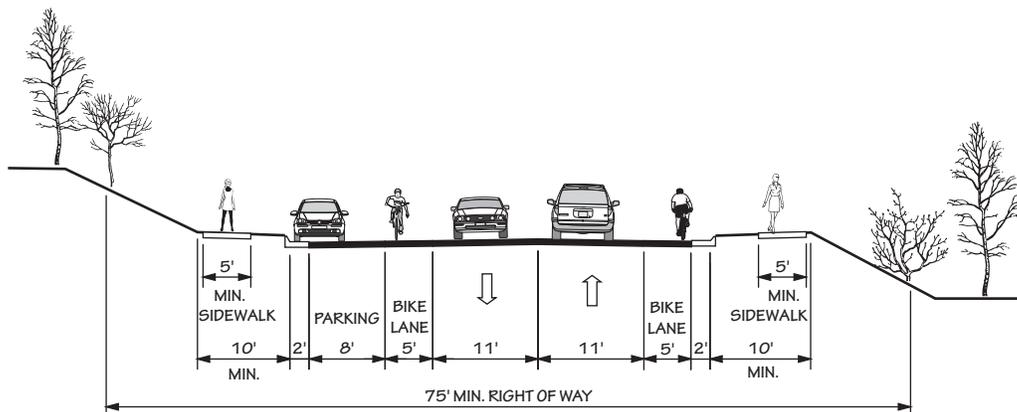
2 G

CURB & GUTTER - PARKING ON EACH SIDE



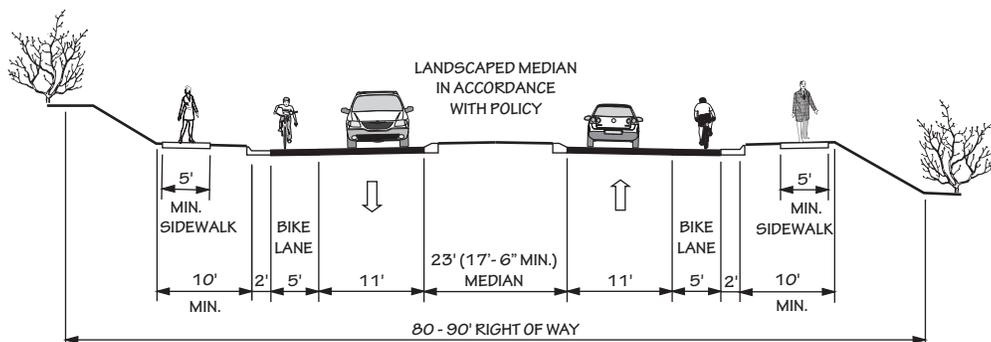
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER

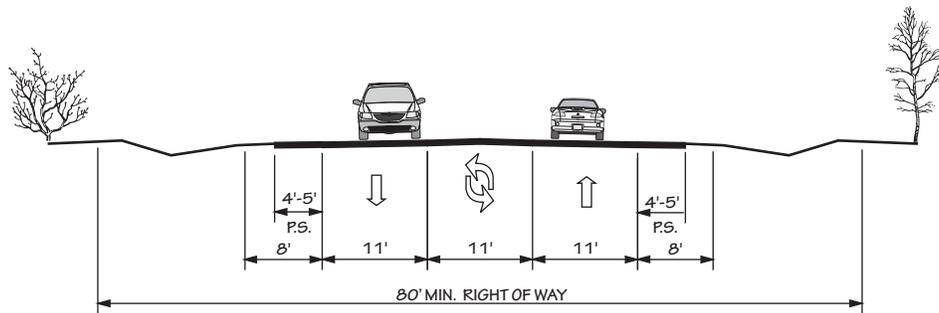


TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

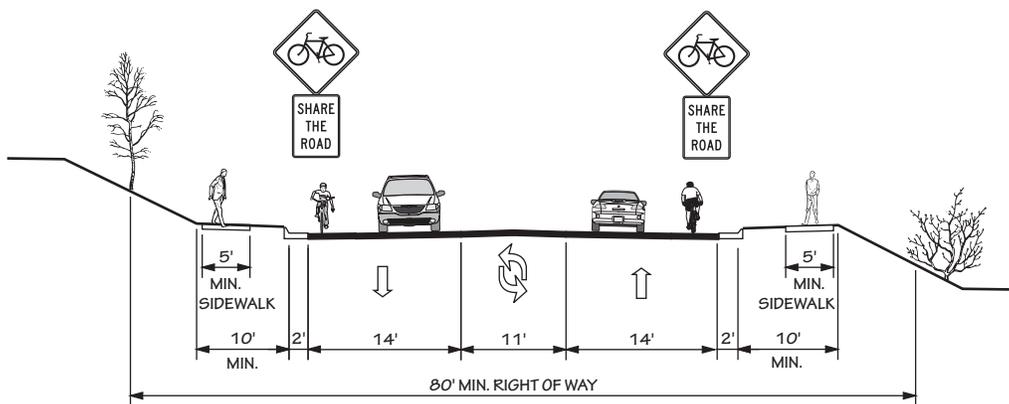
3 A

WIDE PAVED SHOULDERS



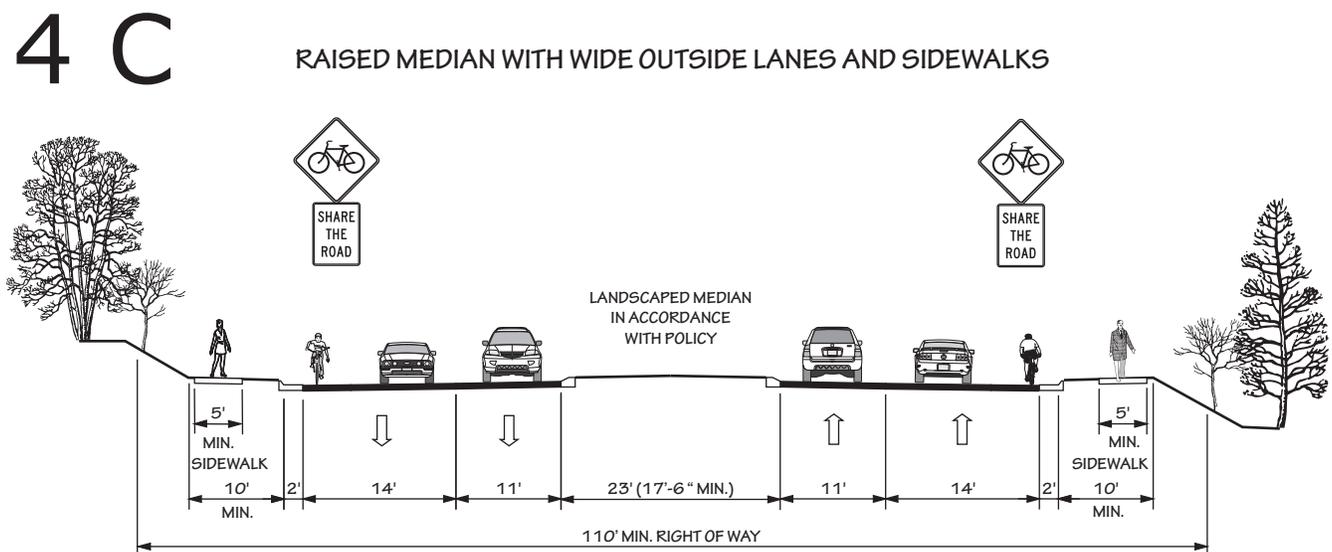
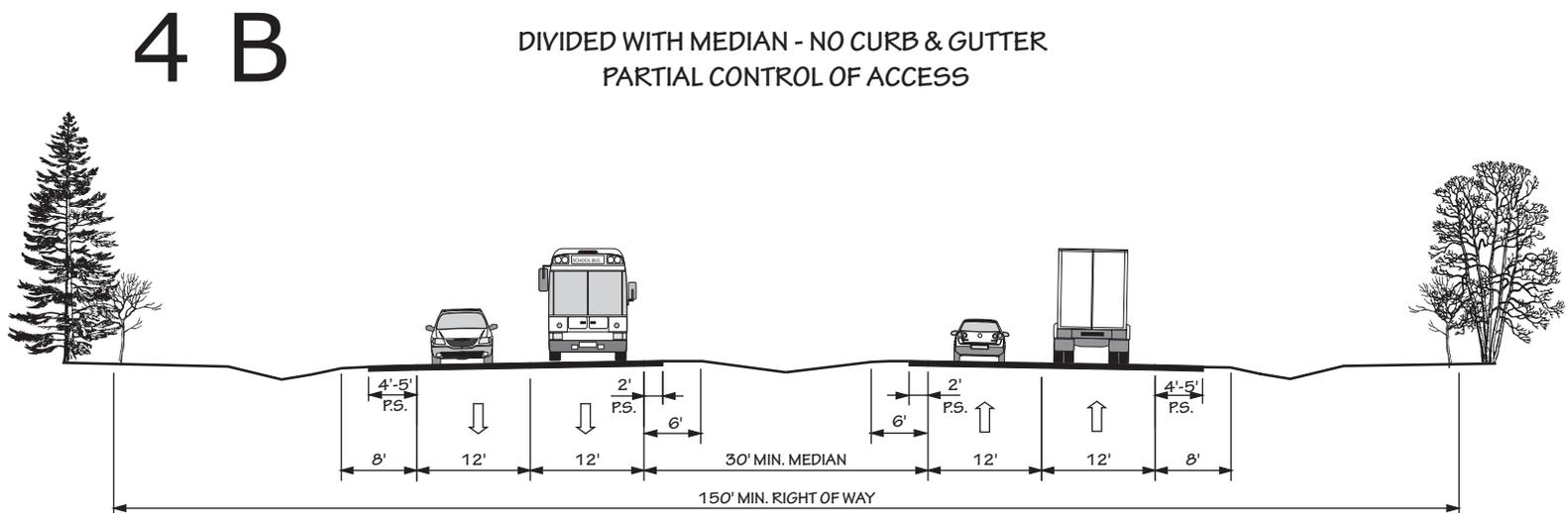
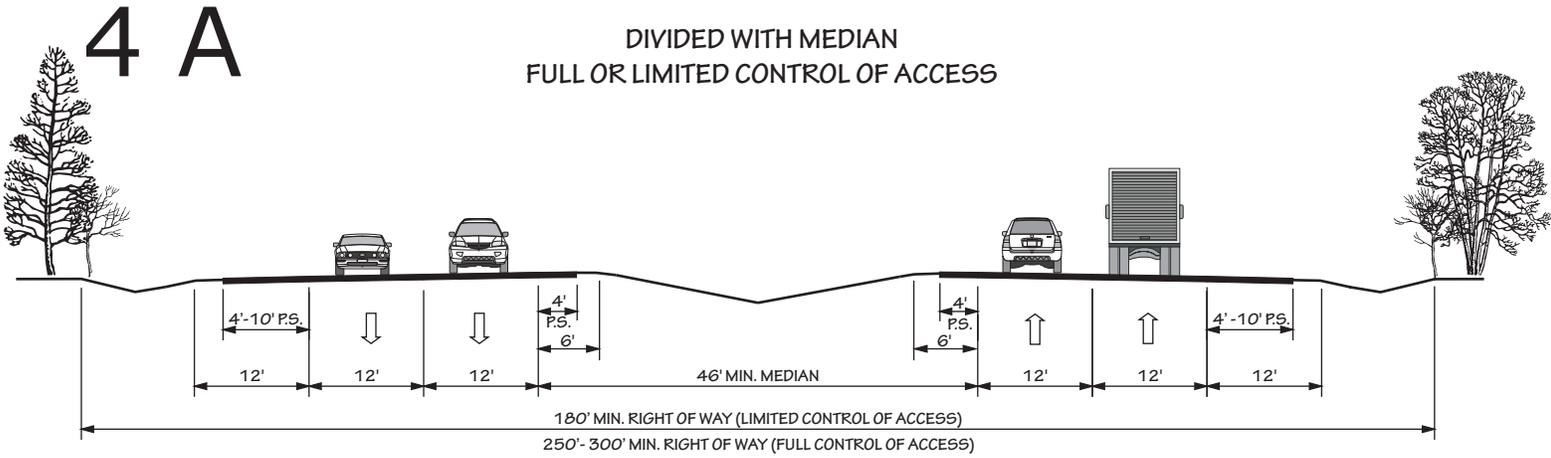
3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

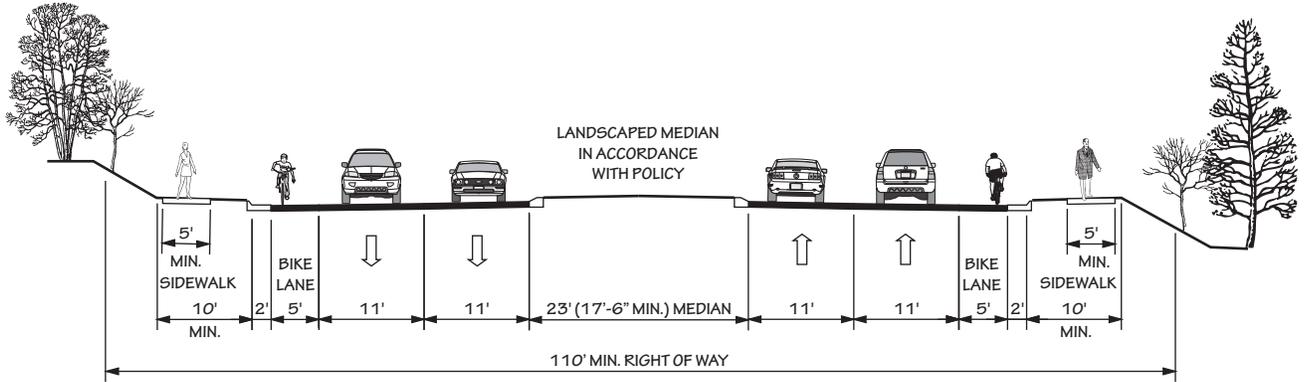


TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

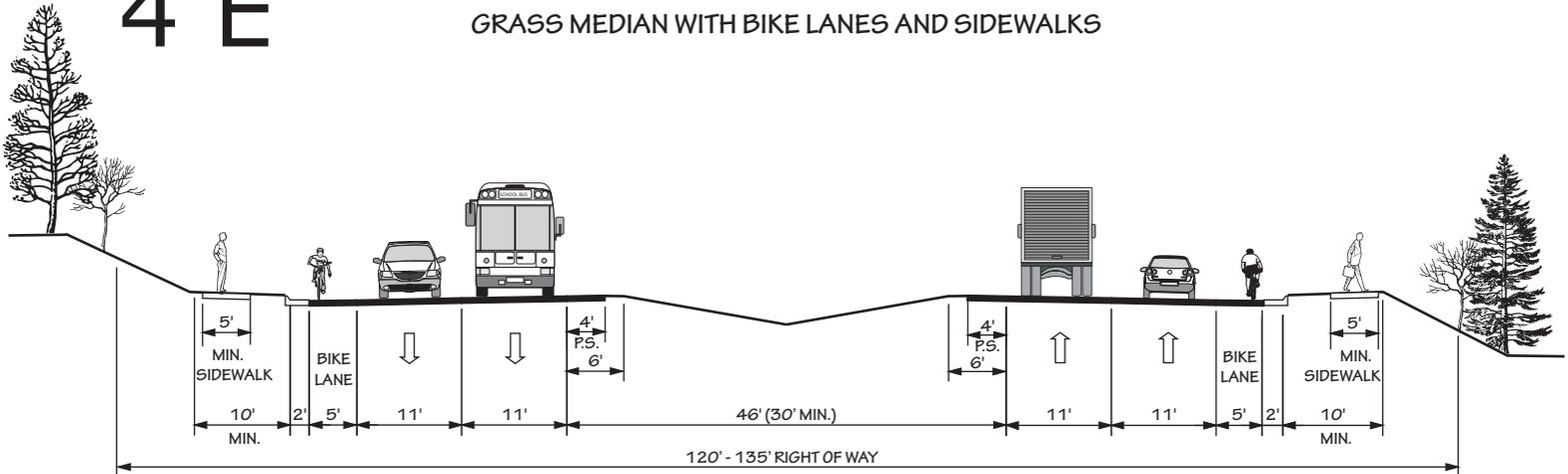
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

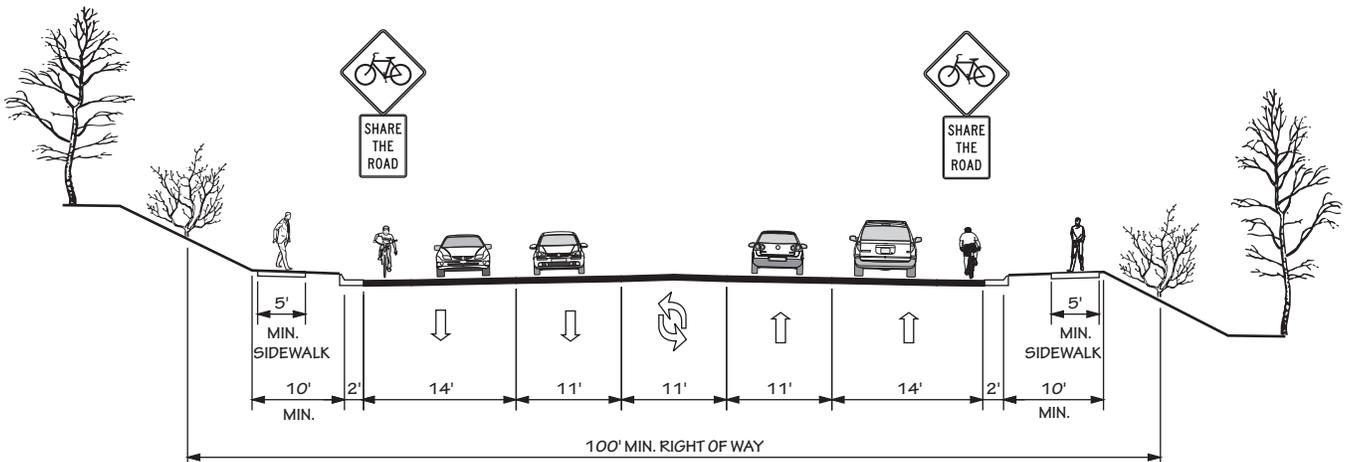
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES

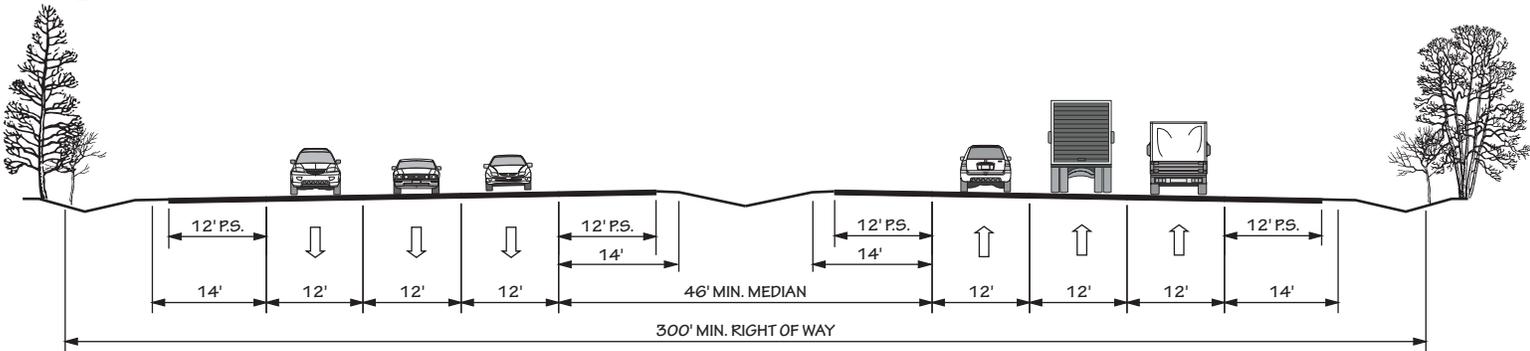


TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

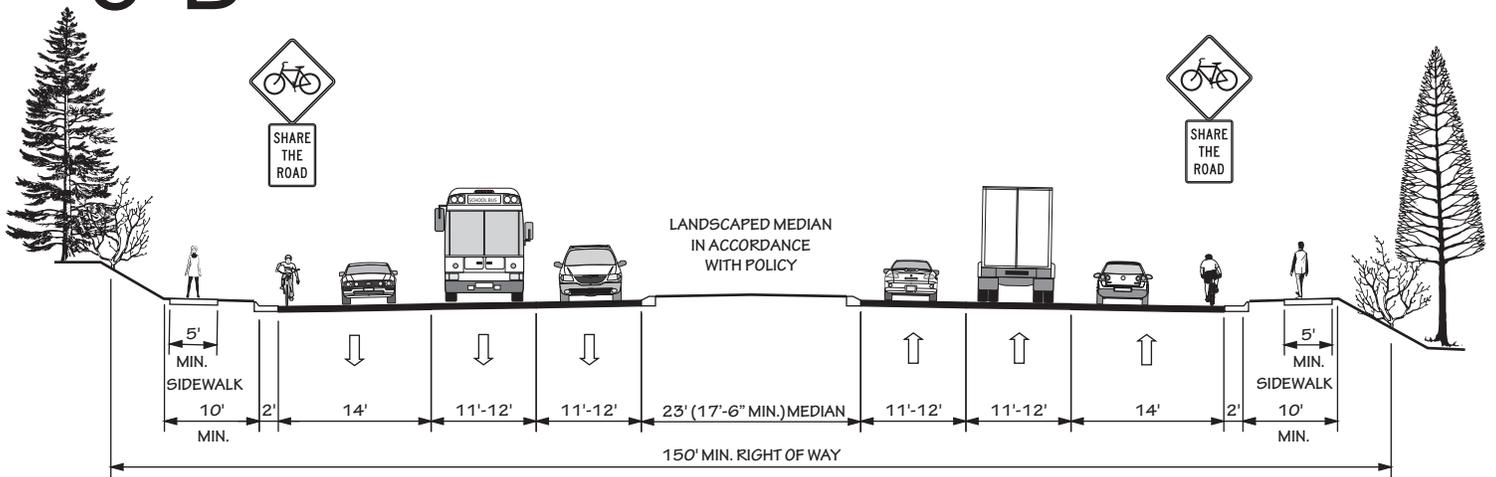
6 A

DIVIDED WITH GRASS MEDIAN



6 B

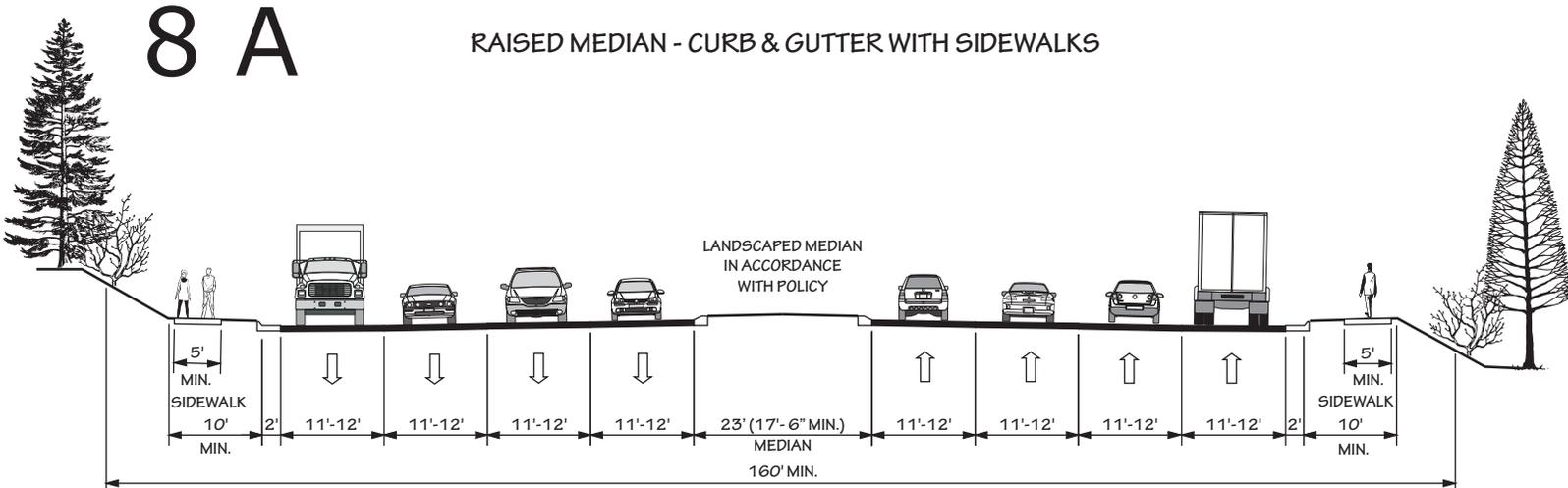
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

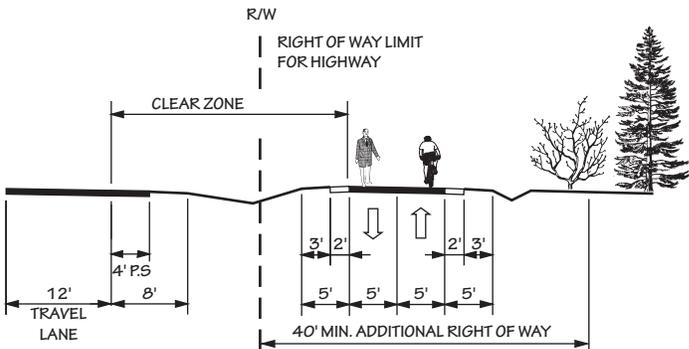
RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS



TYPICAL MULTI - USE PATH

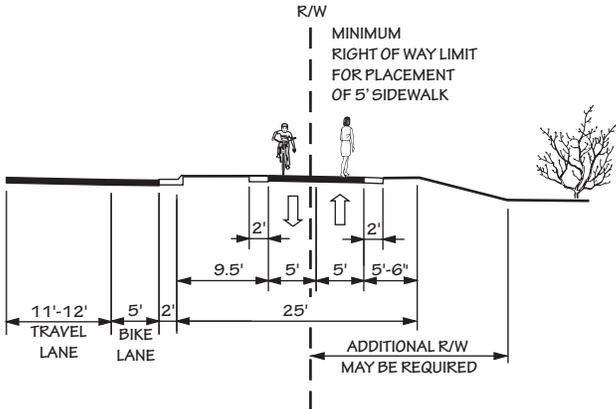
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Appendix E

Level of Service Definitions

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

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

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

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

Figure 10 - Level of Service Illustrations



Source: 2000 Highway Capacity Manual

Appendix F Traffic Crash Analysis

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

The severity of every crash is measured with a series of weighting factors developed by the NCDOT Division of Highways (DOH). These factors define a fatal or incapacitating crash as 47.7 times more severe than one involving only property damage and a crash resulting in minor injury is 11.8 times more severe than one with only property damage. In general, a higher severity index indicates more severe accidents. Listed below are levels of severity for various severity index ranges.

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

Table 4 depicts a summary of the crashes occurring in the planning area between April 20, 2006 and April 20, 2009. The data represents locations with 10 or more crashes or a severity average greater than that of the state's 4.45 index. The "Total" column indicates the total number of crashes reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 4 - Crash Locations

Map Index	Intersection	Average Severity	Total Crashes
1	US 52 and NC 49	2.71	13
2	NC 24-27 and SR 1115 (Oak Grove Rd.)	16.1	6
3	NC 73 and SR 1134 (Millingport Rd.)	5.44	5
4	NC 138 and SR 1914 (Cooper Rd.)	5.44	5

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

Appendix G

Bridge Deficiency Assessment

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

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

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

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

A bridge must be classified as deficient in order to qualify for Federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges located on roads evaluated in the CTP are listed in Table 5.

Table 5 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
16	NC 138	LONG CREEK	Structurally Deficient	STAN0014-H
21	NC 73	BIG BEAR CREEK	Functionally Obsolete	R-2410
24	NC 49	CURL TAIL CREEK	Structurally Deficient	R-2533, B-4643
62	SR 1943	TRIBUTARY OF ROCKY RIVER	Functionally Obsolete	
65	SR 1918	HARDY CREEK	Functionally Obsolete	STAN0002-H
125	SR 1130	ISLAND CREEK	Functionally Obsolete	STAN0018-H
134	SR 1140	NORFOLK,SOUTHERN RR	Functionally Obsolete	STAN0028-H
148	SR 1455	CURL TAIL CREEK	Functionally Obsolete	
208	SR 1001	ROCKY RIVER	Functionally Obsolete	STAN0022-H

Appendix H Public Involvement

A listing of focus group members, the vision statement/objectives, the goals and objectives survey results, and a summary of each public involvement opportunity are included in this appendix.

Stanly County CTP Focus Group members:

- Andy Lucas, Stanly County Manager
- Michael Sandy, Stanly County Planning Director
- Tim Fesperman, Locust Assistant City Manager/Planning and Zoning
- Marc Morgan, NCDOT – District Engineer, Highway Division 10
- Barry Moose, NCDOT – Division Engineer, Highway Division 10
- Bob Harvey, Stanfield Town Administrator
- Larry Branch, Oakboro Town Administrator
- Carolyn Capps, Richfield Town Administrator
- Michael Riemann, Village of Misenheimer Mayor
- Larry Smith/Heath Hahn, Red Cross Council Members
- Dana Stoogenke, Rocky River Rural Planning Organization (RRRPO)
- Reuben Q. Crummy, NCDOT – Transportation Planning Branch

Vision Statement

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

Objectives

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

5. Improve the security of the transportation system in Stanly County for all modes and users.
6. Encourage preservation of scenic views and rural character.
7. Provide an adequate transportation network and infrastructure for the agricultural industry.

Summary of Public Meetings

US 52 and NC 49 Misenheimer Bypass

On January 4, 2010, Richfield passed a resolution opposing the Stanly County CTP recommendation and Strategic Highway Corridor (SHC) alignment of US 52 bypassing their town. A workshop was held on May 4, 2011 at the Richfield Town Hall to discuss the issues and concerns relating to the recommendation. The main concerns addressed at the workshop were:

The priority of the Strategic Highway Corridors
US 52 future traffic bypassing Richfield hurting businesses
Widening NC 49 from a 2 lane to a 4 lane facility impacting the area

Additionally, the Draft Stanly County CTP Maps were presented at this workshop. A list of over 150 signatures were collected by Richfield to opposing the alignment of the bypass. After detailed discussions between NCDOT, the local government, and the public, the alignment was moved north of NC 49, merging into Culp Road. Richfield approved the realignment of the bypass and ultimately adopted the Stanly County CTP.

Public Workshop # 1 (Town Hall of Richfield)

A public workshop was held on May 5, 2011, from 11:00 am – 1:00 pm at the Richfield Town Hall in Richfield, NC. There were 14 citizens in attendance at this meeting. There were nine comments received. Main concerns were as follows:

Realign the bypass so that it does go through downtown Richfield
Bypass will impact businesses and commerce negatively
Widen NC 49 to four lanes and forget about US 52
Present traffic is an issue

Public Workshop # 2 (Stanly Community College, Crutchfield Campus)

A public workshop was held on May 5, 2011, from 3:00 pm – 5:00 pm at the Stanly Community College in Locust, NC. No citizens attended this meeting.

Public Hearings

Public hearings were held for all jurisdictions within Stanly County as listed below:

- Stanfield Council Meeting – June 30, 2011

- Oakboro Council Meeting – July 5, 2011
- Misenheimer Council Meeting – July 11, 2011
- Richfield Council Meeting – July 25, 2011
- Norwood Council Meeting – August 1, 2011

The CTP was adopted during each of these meetings. A public hearing was held on July 11, 2011 during the Stanly County Board of 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 at the Stanly County Board of Commissioners meeting on August 15, 2011.

Goals and Objectives Survey

There were a total of 97 surveys received on-line and manually.

- 1. How important are the following transportation goals to you? (Please rank in order of importance from 1, most important to 6, least important; please select only one rank for each goal.)** (total responses - 97)

Of those goals identified, the top six are listed below.

Rank	Location
1	Economic Growth (31.5%)
2	Faster Automobile Travel Times (30.7%)
3	Community and Rural Character Preservation (30.6%)
4	Increased Transportation Mode Choices (24.4%)
5	Service of Special Needs (23.5%)
6	Increased Public Transportation Options (22.7%)

- 2. To alleviate traffic congestion a road should be improved by: (Please rank in order of importance from 1, most important to 4, least important; please select only one rank for each goal.)** (total responses - 93)

Of these goals identified, the top four are listed below.

Rank	Location
1	Improving Intersection design, better traffic signal timing, adding turning lanes, and creating roundabouts (36.8%)
2	Controlling the frequency and locations of driveways and cross streets that access the road (33.7%)
3	Building additional travel lanes (30.4%)
4	Providing an alternative means of transportation (bus, train, bicycle, park-n-ride (26.1%)

3. Are you concerned with safety or crash problems at any specific locations?
(total responses - 49)

54.8% of respondents indicated that there was a concern with crash problems or safety in the area. Of those locations identified, the top three are listed below.

Rank	Location
1	US 52 at Pfeiffer University
2	Intersection of NC 205 and Big Lick Road/Liberty Hill Church Road
3	NC 24-27 at Frog Pond Road

4. When traveling in your area, do you find that you often have to go out of your way to get to your destination because the most direct route is too congested? (total responses - 12)

13.7% of respondents indicated that there was a concern with having to find another route while traveling because the direct route was too congested. Of those locations identified, the top three are listed below.

Rank	Location
1	US 52 and North Stanly – Random Drive
2	Intersection of Hwy 73 and Millingport Road
3	Instead of using NC 24-27, the back roads through Norwood are used to travel to the northern portion of Stanly County

5. Is truck traffic a problem in the area? (total responses - 25)

30.5% of respondents indicated that there was a concern with truck traffic problems in the area. Of those locations identified, the top three are listed below.

Rank	Location
1	US 52 – Pfeiffer University, between Granite Quarry and Richfield. Large gravel trucks, double-wide homes, and school buses.
2	NC 49 – North and south along US 52
3	Hwy 205 – Downtown Main Street, Oakboro

6. What towns or destinations would you like to have access improved? (Please check all that apply.) (total responses - 78) Of those towns identified, these are the destinations are listed below.

Rank	Location
1	Charlotte (38.5%)
2	Albemarle (38.5%)
3	Monroe (33.3%)
4	Oakboro (32.1%)
5	Misenheimer (30.8%)
6	Locust (23.1%)
7	Richfield (17.9%)

8	Norwood (16.7%)
9	Stanfield (11.5%)
10	Badin (7.7%)
11	Red Cross (7.7%)
12	New London (6.4%)

7. Please rank the following major roadways in Stanly County in the order by which they need to be improved: 1-Most Important to 9-Least Important; please select only one rank for each roadway. Of those roads identified, the roads most important (1) and the roads least important (10) are listed below.

Rank	Location
1	NC 24-27 (45.2%)
2	US 52 (31.6%)
3	NC 49 (24.0%)
4	NC 73 (28.4%)
5	NC 138 (18.6%)
6	NC 740 (20.6%)
7	NC 205 (17.5%)
8	NC 200 (20.0%)
9	NC 742 (18.2%)
10	NC 8 (38.6%)

8. Identify any secondary roadways that need improvement. (total responses - 16) Of those locations identified, the top three are listed below.

Rank	Location
1	Indian Mound Road/Palestine Road
2	Austin Road and Big Lick Road
3	St. Martin Road

9. Would you use the following transportation alternatives instead of your own personal vehicle if they were provided? (Please check the appropriate box and write in the locations) (total responses - 40) The top three locations are listed below.

Rank	Location
1	Charlotte
2	Western Stanly County
3	Northern Stanly County

10. What other transportation issues exist in Stanly County? (total responses - 28) The top three are listed below.

Rank	Location
1	Elderly and disabled usage of powered wheelchairs on the roadways – dangerous. They should have separate pathways so they can operate their scooters (too many scooters and mopeds) safely to shopping centers, etc.
2	Mostly poor timing of traffic signals almost everywhere
3	What about trolleys inside municipalities?

Appendix I

Existing Transportation Plans

The following CTP/Thoroughfare Plans for areas within the County that are not included as a part of this plan are listed below and can be viewed on the web.

2004 Locust and Stanfield Comprehensive Transportation Plan (Locust portion only) :
<http://www.ncdot.gov/doh/preconstruct/tpb/planning/locust.html>

2001 Albemarle and Badin Thoroughfare Plan:
http://www.ncdot.gov/doh/preconstruct/tpb/PDF/planning/Albemarle_TPlan_2001.pdf

The following CTP for areas within the County that was incorporated as a part of this plan is listed below and may be viewed on the web. Refer to this report for detailed descriptions of recommendations that were not documented as a part of this report.

2010 Norwood Comprehensive Transportation Plan:
<http://www.ncdot.org/doh/preconstruct/tpb/planning/NorwoodCTP.html>