



2018 Caswell County Comprehensive Transportation Plan



2018 Caswell County Comprehensive Transportation Plan

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Transportation Planning Division
N.C. Department of Transportation

In Cooperation with:

Town of Milton
Town of Yanceyville
Caswell County
Piedmont Triad Rural Planning Organization

Published: June 2018



A handwritten signature in black ink, appearing to read "Hemang M. Surti", written over a horizontal line.

Hemang M. Surti, PE
Project Engineer

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Executive Summary

In January of 2016, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and Caswell County initiated a study to cooperatively develop the Caswell County Comprehensive Transportation Plan (CTP), which includes the towns of Milton and Yanceyville. This is a long range multi-modal transportation plan that covers transportation needs through 2040. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening and public input, which are detailed in Chapter 1. Figure 1 shows the CTP maps, which were mutually adopted by NCDOT on October 5, 2017. Descriptive information and definitions for designations depicted on the CTP maps can be found in Appendix B. Implementation of the plan is the responsibility of Caswell 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 Caswell County CTP. The major recommendations for improvements are listed below. More detailed information about these and other recommendations can be found in Chapter 2. Additionally, for information on recommendations from existing transportation plans that were incorporated as a part of this CTP but not documented in this report refer to Appendix I.

HIGHWAY

- **US 158 (TIP R-2586 and R-2575):** Upgrade for operational improvements from Rockingham County to Person County.
- **NC 86:** Upgrade for operational improvements from Orange County to the Virginia State line.
- **NC 87:** Upgrade for operational improvements from Alamance County to Rockingham County.
- **NC 62 Bypass:** Construct a two-lane bypass on new location from existing NC 62/Main Street to Moorefield Road (SR 1745) around the southeast part of Yanceyville.

Adopted by:

Caswell County
Date: May 1, 2017

Town of Milton
Date: May 9, 2017

Town of Yanceyville
Date: May 9, 2017

NCDOT
Date: October 5, 2017

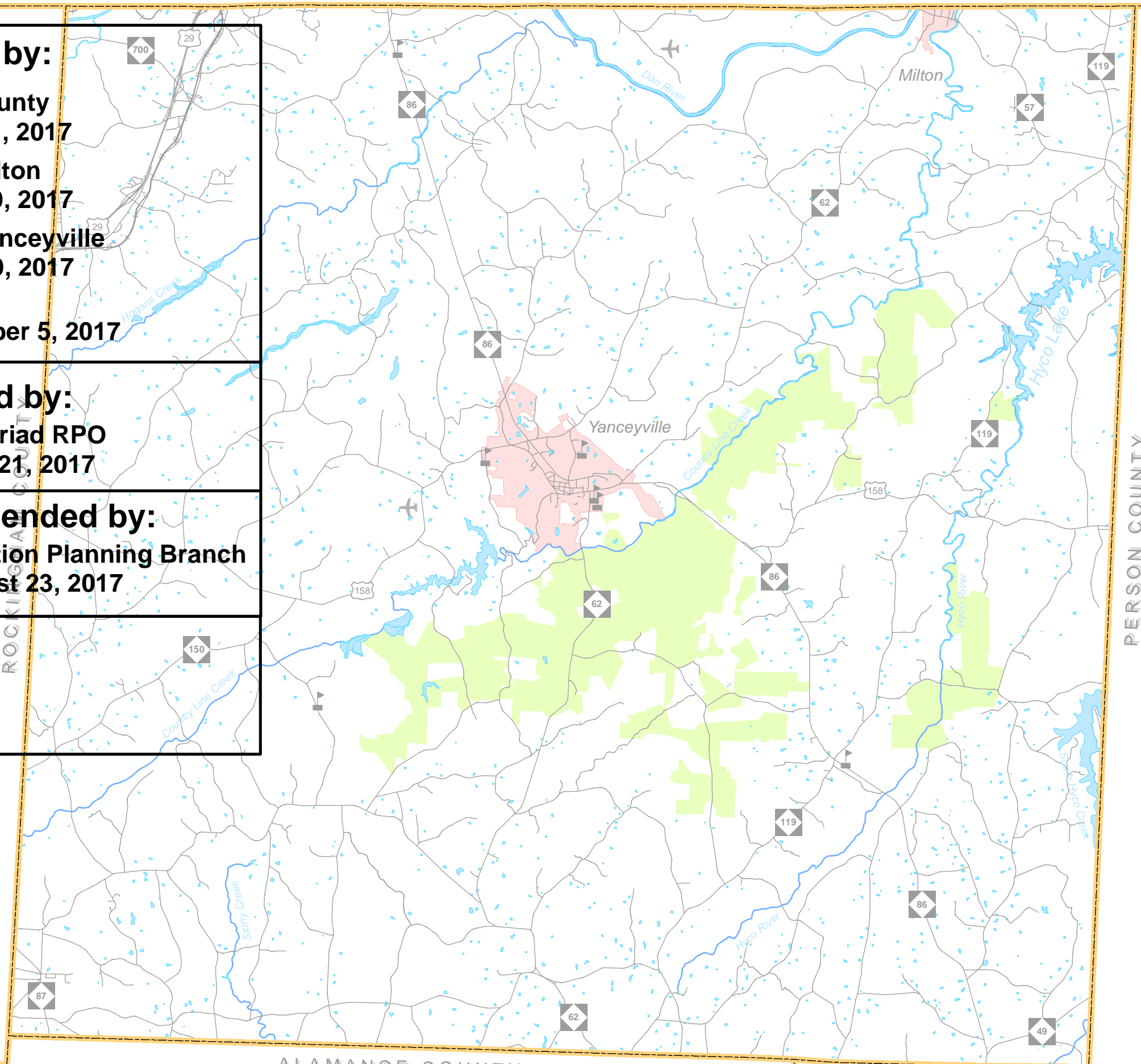
Endorsed by:

Piedmont Triad RPO
Date: June 21, 2017

Recommended by:

Transportation Planning Branch
Date: August 23, 2017

NOTES:



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

Plan date: July 13, 2017

Sheet 1 **Adoption Sheet**




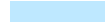



Sheet 2 **Highway Map**

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
-  County Boundary
-  Game Lands

0 2 4 Miles

FIGURE 1

Sheet 1 of 5

Base map date: January 14, 2016

Refer to CTP document for more details



VIRGINIA

ROCKINGHAM COUNTY

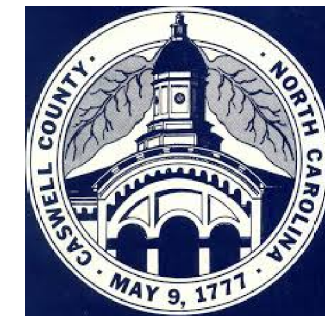
ALAMANCE COUNTY

GUILFORD COUNTY

ORANGE COUNTY

PERSON COUNTY

Highway Map



Caswell County

North Carolina

Comprehensive Transportation Plan

Plan date: July 13, 2017

Freeways

- Existing
- Needs Improvement
- Recommended

Expressways

- Existing
- Needs Improvement
- Recommended

Boulevards

- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares

- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares

- Existing
- Needs Improvement
- Recommended

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

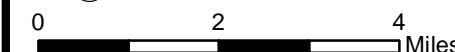


FIGURE 1

Sheet 2 of 5

Base map date: January 14, 2016

Refer to CTP document for more details



Highway Map Inset A



Caswell County North Carolina

Comprehensive Transportation Plan

Plan date: July 13, 2017

Freeways

- Existing
- Needs Improvement
- Recommended

Expressways

- Existing
- Needs Improvement
- Recommended

Boulevards

- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares

- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares

- Existing
- Needs Improvement
- Recommended

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

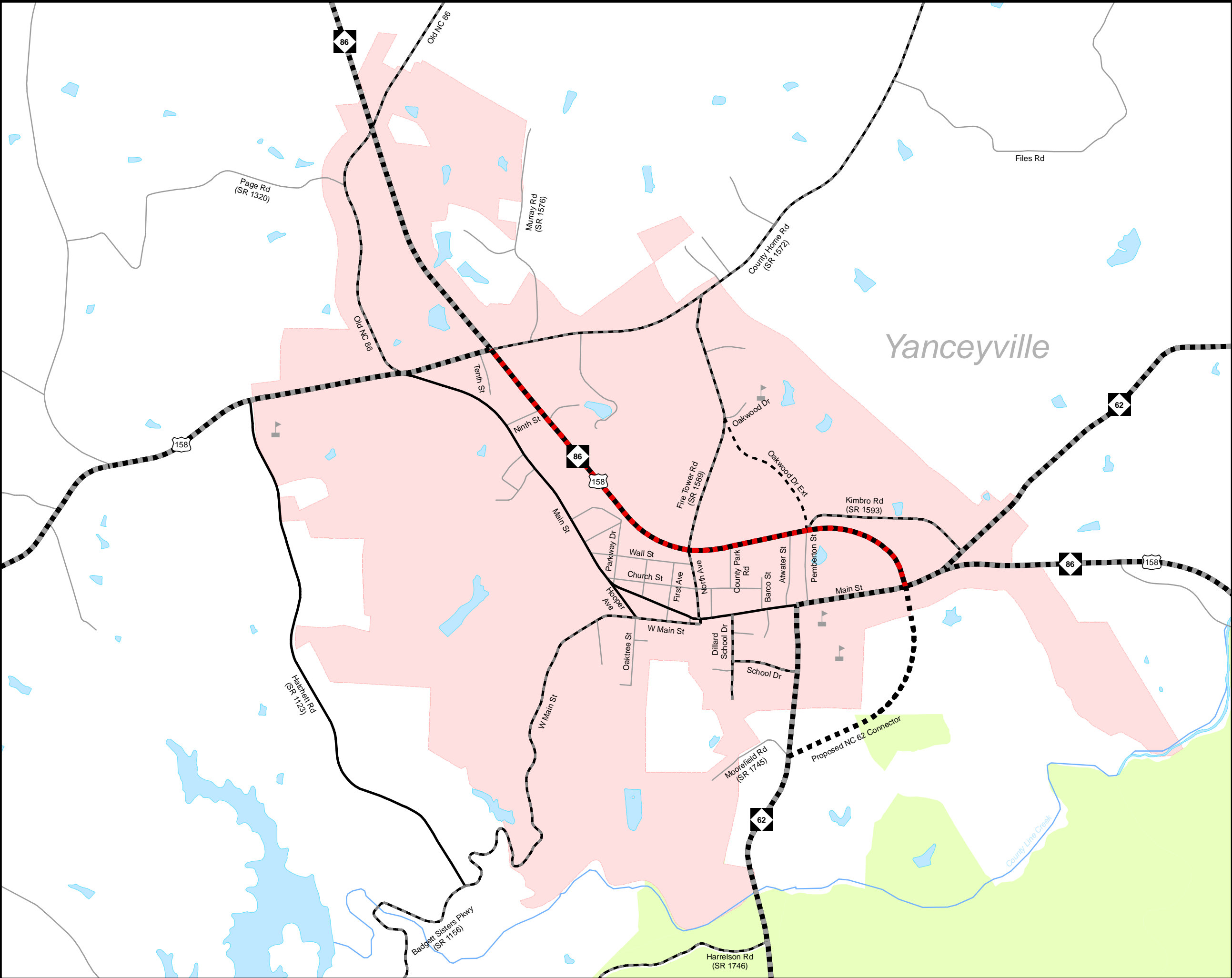
0 0.35 0.7 Miles

FIGURE 1

Sheet 2A of 5

Base map date: January 14, 2016

Refer to CTP document for more details



Highway Map
Inset B



Caswell County
North Carolina

Comprehensive
Transportation Plan

Plan date: July 13, 2017

Freeways

- Existing
- Needs Improvement
- Recommended

Expressways

- Existing
- Needs Improvement
- Recommended

Boulevards

- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares

- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares

- Existing
- Needs Improvement
- Recommended

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

0 0.15 0.3 Miles

FIGURE 1

Sheet 2B of 5

Base map date: January 14, 2016

Refer to CTP document for more details

VIRGINIA

Fairview Dr

Liberty St

Bridge St

East St

Race Track Rd

Broad St

Academy St

Palmers Alley

Lea's Alley

Bridge St

Holder St
(SR 1619)

Milton

Country Line Creek

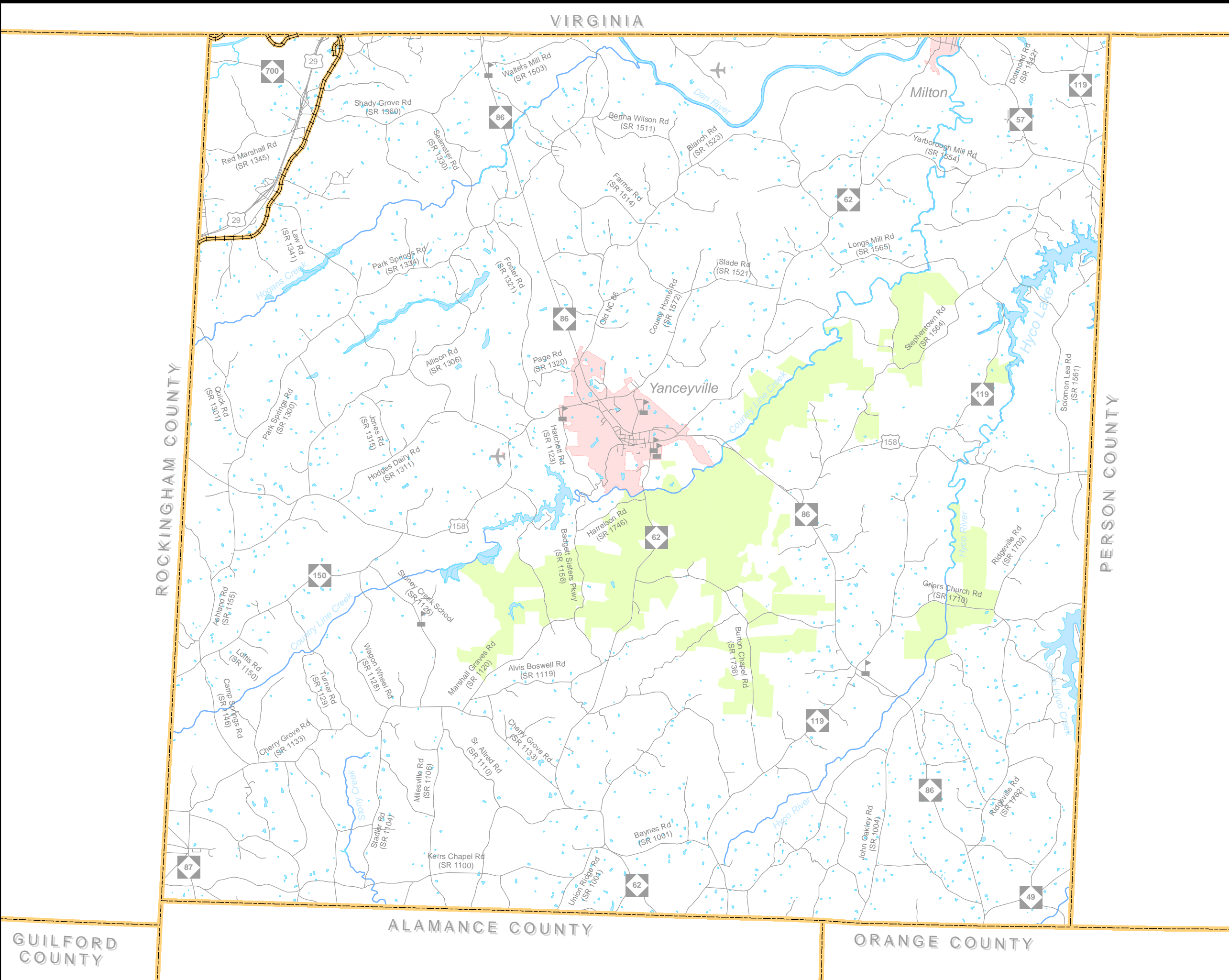
River Bend Dr
(SR 1527)

Doll Branch Rd
(SR 1538)

62

57

62



Public Transportation
and Rail Map



Caswell County
North Carolina

Comprehensive
Transportation Plan

Plan date: July 13, 2017

- Bus Routes**
- Existing
 - Needs Improvement
 - Recommended
- Fixed Guideway**
- Existing
 - Needs Improvement
 - Recommended
- Operational Strategies**
- Existing
 - Needs Improvement
 - Recommended
- Rail Corridor**
- Active
 - Inactive
 - Recommended
- High Speed Rail Corridor**
- Existing
 - Recommended
- Multimodal Connector**
- Existing
 - Recommended
- Park and Ride Lot**
- Existing
 - Recommended
- Grade Separation**
- Existing Grade Separation
 - Proposed Grade Separation

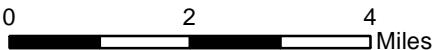


FIGURE 1

Sheet 3 of 5

Base map date: January 14, 2016
Refer to CTP document for more details



North Carolina

Plan date: July 13, 2017

Off-road

Existing

Needs Improvement

Recommended

Multi-Use Paths

Existing

Needs Improvement

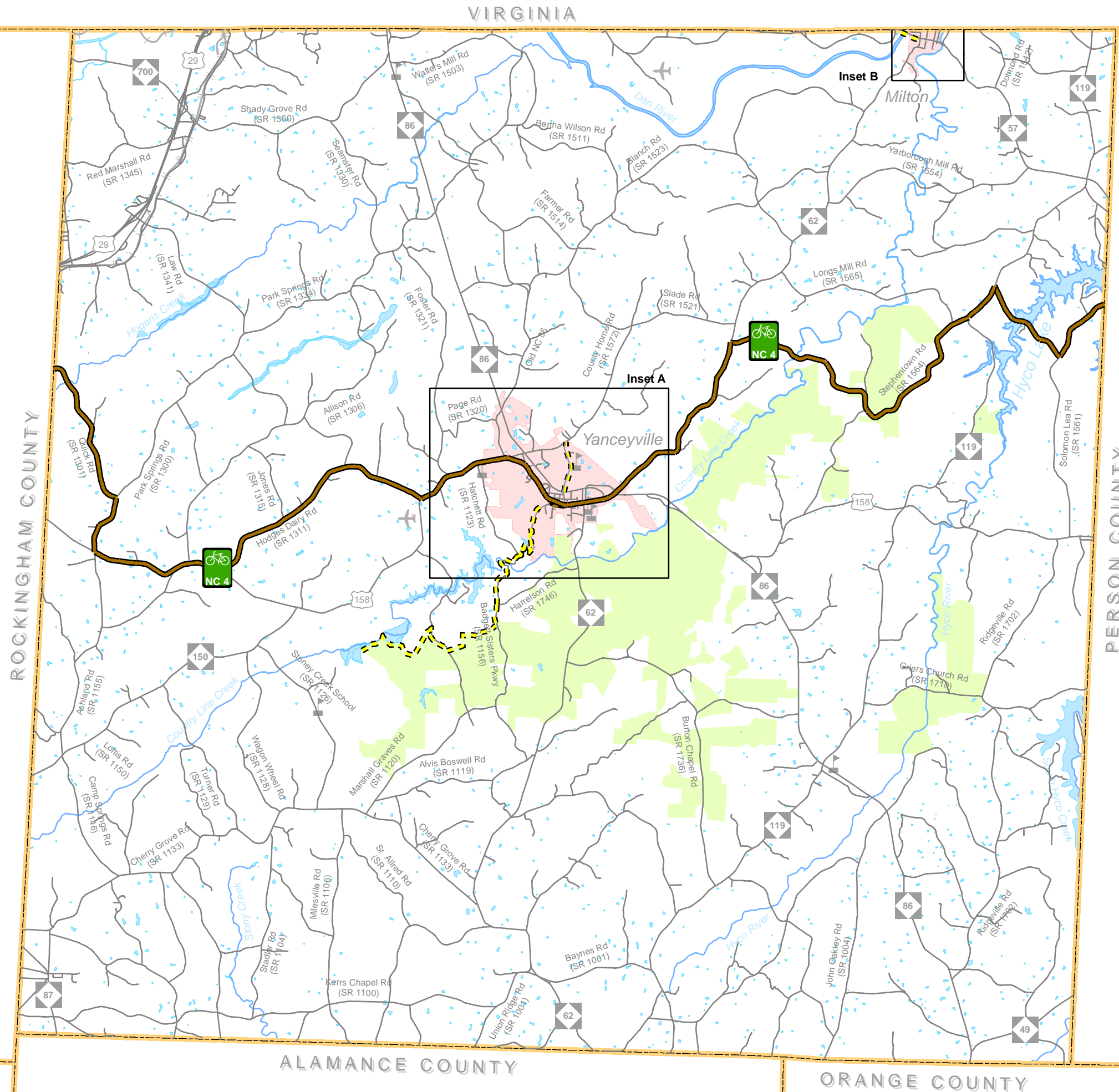
Recommended

○ Existing Grade Separation
● Proposed Grade Separation



FIGURE 1
Sheet 4 of 5

Base map date: January 14, 2016
Refer to CTP document for more details



Bicycle Map Inset A



Caswell County North Carolina

Comprehensive Transportation Plan

Plan date: July 13, 2017

On-road

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

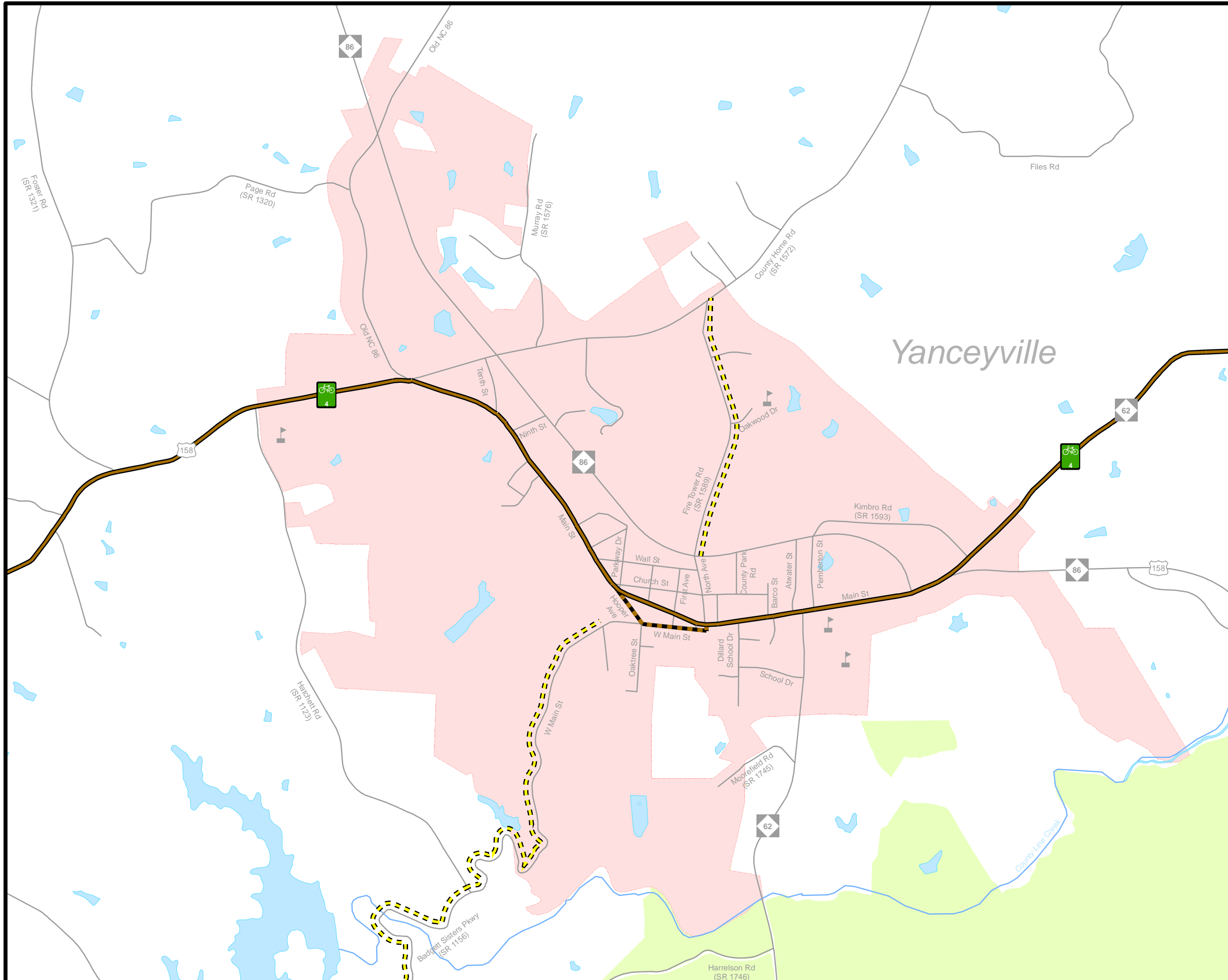
- Existing Grade Separation
- Proposed Grade Separation

0 0.35 0.7 Miles

FIGURE 1
Sheet 4A of 5



Base map date: January 14, 2016
Refer to CTP document for more details



**Bicycle Map
Inset B**



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

Plan date: July 13, 2017

On-road

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.125 0.25 Miles

FIGURE 1
Sheet 4B of 5



Base map date: January 14, 2016

Refer to CTP document for more details

VIRGINIA

Fairview Dr

Liberty St

Bridge St

East St

Race Track Rd

Broad St

Academy St

Palmer's Alley

Lea's Alley

Bridge St

Holder St
(SR 1619)

Milton

Country Line Creek

River Bend Dr
(SR 1527)

Dan River

Doll Branch Rd
(SR 1538)

Comprehensive Transportation Plan

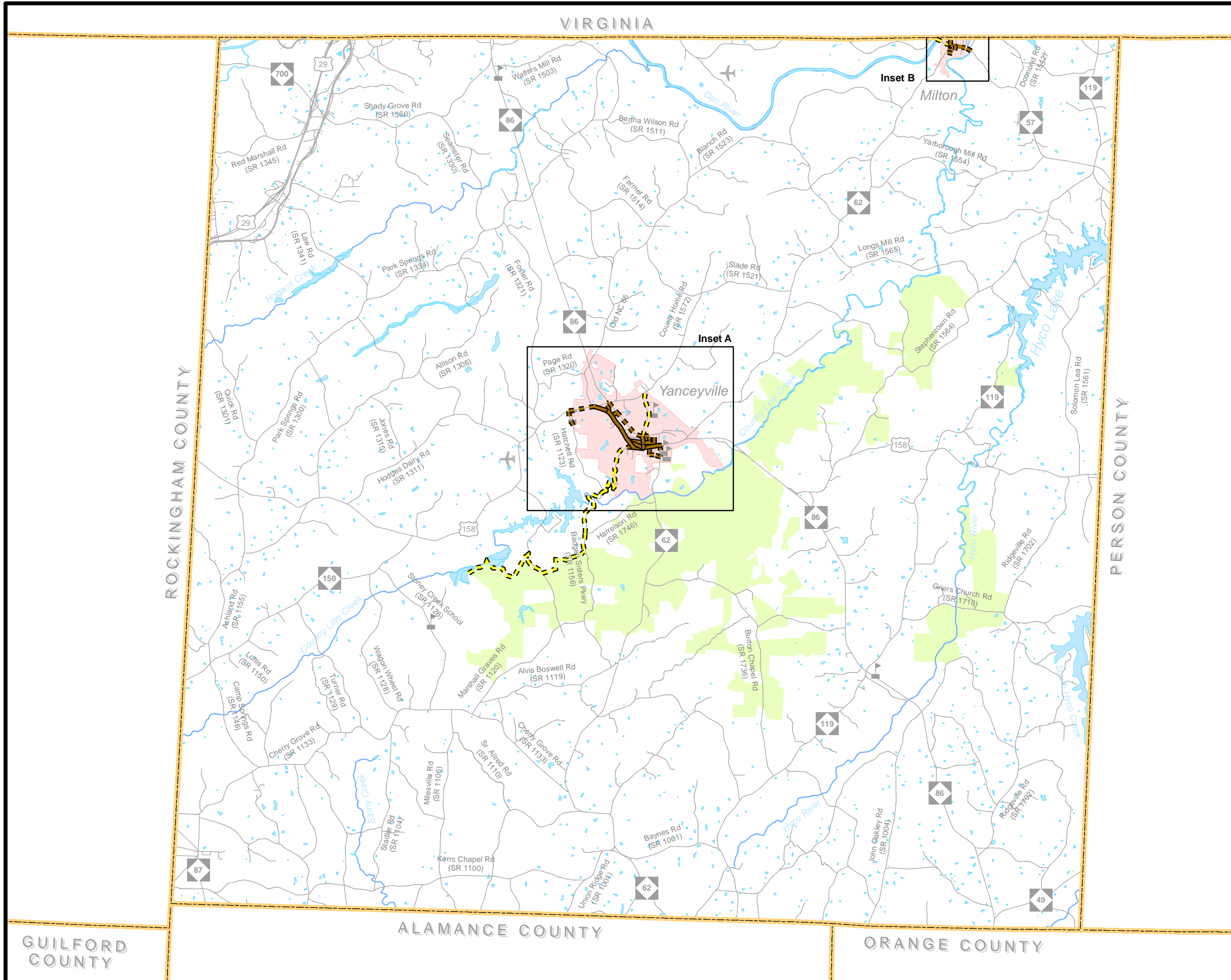
Plan date: July 13, 2017

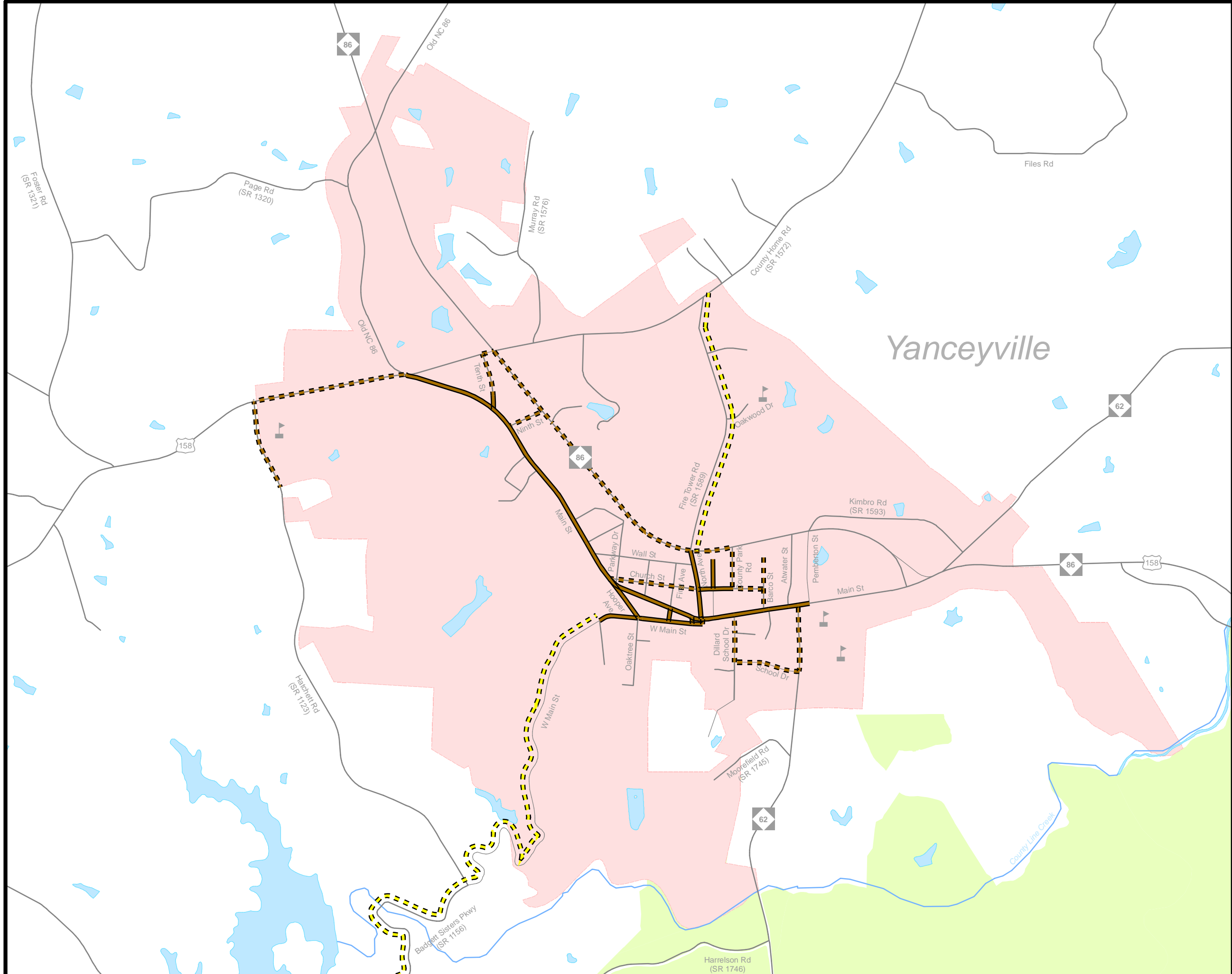
- On-road**
- Existing
- Needs Improvement
- Recommended
- Off-road**
- Existing
- Needs Improvement
- Recommended
- Multi-Use Paths**
- Existing
- Needs Improvement
- Recommended
- Existing Grade Separation
- Proposed Grade Separation



FIGURE 1
Sheet 5 of 5

Base map date: January 14, 2016
Refer to CTP document for more details





**Pedestrian Map
Inset A**



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

Plan date: July 13, 2017

- On-road
- Existing
 - Needs Improvement
 - Recommended

- Off-road
- Existing
 - Needs Improvement
 - Recommended

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

- Existing Grade Separation
- Proposed Grade Separation

0 0.35 0.7 Miles

FIGURE 1
Sheet 5A of 5



Base map date: January 14, 2016
Refer to CTP document for more details

**Pedestrian Map
Inset B**



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

Plan date: July 13, 2017

Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.125 0.25 Miles



FIGURE 1
Sheet 5B of 5

Base map date: January 14, 2016

Refer to CTP document for more details

VIRGINIA

Fairview Dr

Liberty St

Bridge St

East St

Race Track Rd

Broad St

Academy St

Palmer's Alley

Lea's Alley

Bridge St

Holder St
(SR 1619)

Milton

Country Line Creek

River Bend Dr
(SR 1527)

Dan River

Doll Branch Rd
(SR 1538)

1. Analysis of the Existing and Future Transportation System

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

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

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

1.1 Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

One of those statewide initiatives is the Strategic Transportation Corridors (STC)¹ adopted by the Board of Transportation on March 4, 2015.

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

The STC identify a network of critical multimodal transportation corridors considered the backbone of the state's transportation system. These 25 corridors move most of our freight and people, link critical centers of economic activity to international air and sea ports, and support interstate commerce. They must operate well to help North Carolina attract new businesses, grow jobs and catalyze economic development.

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

In the development of this plan, travel demand was projected from 2016 to 2040 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1993 to 2013. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Steering Committee on June 29, 2016, the Town of Milton, the Town of Yanceyville, and the Caswell County Commissioners on July 14, 2016. Refer to Appendix G for more detailed information on growth expectations and the socio-economic data forecasting methodology.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to Figures 2 and 3 for existing and future capacity deficiencies. The 2040 traffic volume in Figure 3 is an estimate of the traffic volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2016 – 2025 Transportation Improvement Program² (TIP).

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

- ❖ Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;

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

- ❖ Typical users of the road, such as commuters, recreational travelers, and truck traffic;
- ❖ Access control, including streets and driveways, or lack thereof, along the roadway;
- ❖ Development along the road, including residential, commercial, agricultural, and industrial developments;
- ❖ Number of traffic signals along the route;
- ❖ Peaking characteristics of the traffic on the road;
- ❖ Characteristics of side-roads feeding into the road; and
- ❖ Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

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

LOS D indicates “practical capacity” of a roadway, or the capacity at which the public begins to experience delay. The practical capacity for each roadway was developed based on the 2000 Highway Capacity Manual using the Transportation Planning Branch’s *LOS D Standards for Systems Level Planning*. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C for new facilities. Refer to Appendix E for detailed information on LOS.

Traffic Crash Assessment

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. The Traffic Safety Unit of NCDOT’s Transportation Mobility and Safety Division identifies high frequency crashes at intersections and along roadway sections during a five year period. The high frequency crash locations examined during the development of the Caswell County CTP occurred between January 1, 2012 and December 31, 2016. During this period, a total of eighteen intersections and numerous roadway sections were identified as having a high frequency of crashes as illustrated in Figure 4. Contact information for the Transportation Mobility and Safety Division can be found in Appendix A.

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

Bridge Deficiency Assessment

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

The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. Bridges having the highest priority are replaced as federal and state funds become available. Eight deficient bridges were identified on roads evaluated as part of the CTP and are illustrated in Figure 5. Of these, none are scheduled for replacement in the 2016-2025 TIP. As deficient bridges are replaced, every consideration should be given to proposed CTP recommendation and cross section associated with the recommendation. Table 3 in Appendix F gives a listing of the deficient bridges identified in the CTP and the ID number associated with CTP project proposal. Refer to Appendix F for more detailed bridge deficiency information.

**Figure 2
Inset A
2016
Volumes and Capacity
Deficiencies**



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

- 8100 2016 Volumes (AADT)
- 12400 2016 Capacity
- Near Capacity
- Over Capacity
- Study Roads
- Roads
- Railroads
- Schools
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Game Lands

0 0.35 0.7 Miles



Sheet 2 of 3

Base map date: January 14, 2016

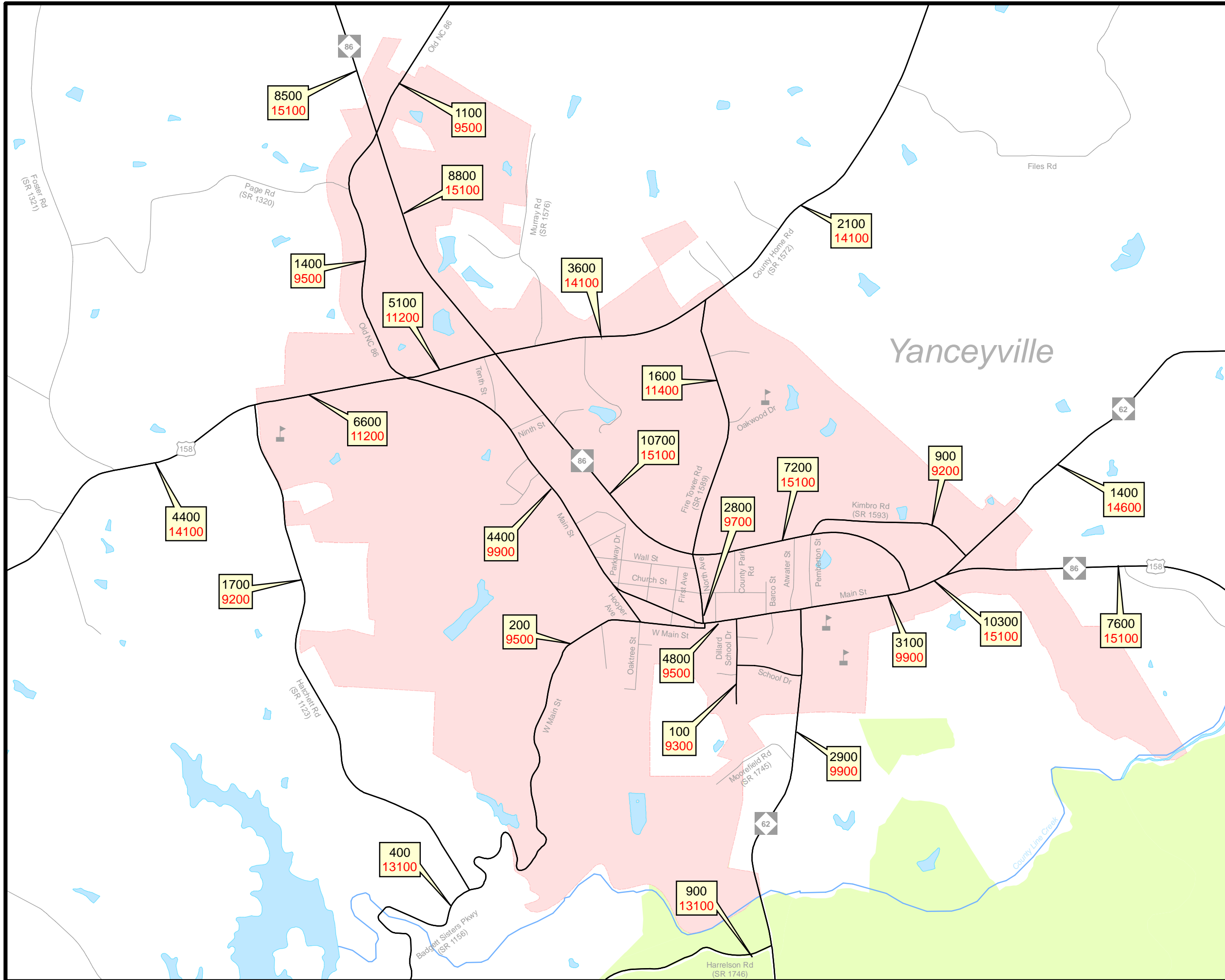


Figure 2
Inset B
2016
Volumes and Capacity
Deficiencies



Caswell County
 North Carolina

Comprehensive
Transportation Plan

- 8100
 12400

2016 Volumes (AADT)
 2016 Capacity
- Near Capacity
- Over Capacity
- Study Roads
- Roads
- +

+

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

0 0.125 0.25 Miles

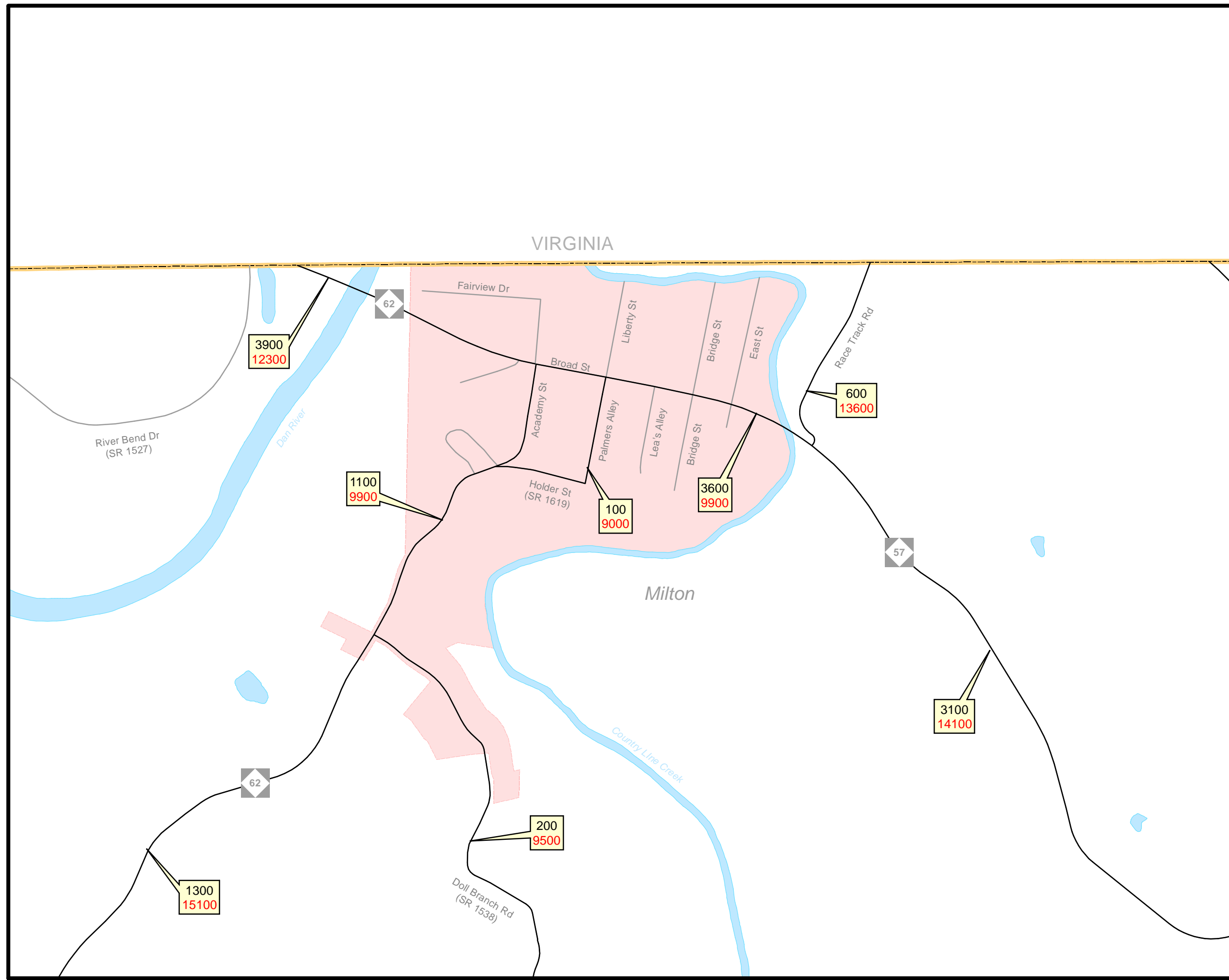
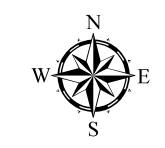


Figure 2
2040
Volumes and Capacity
Deficiencies



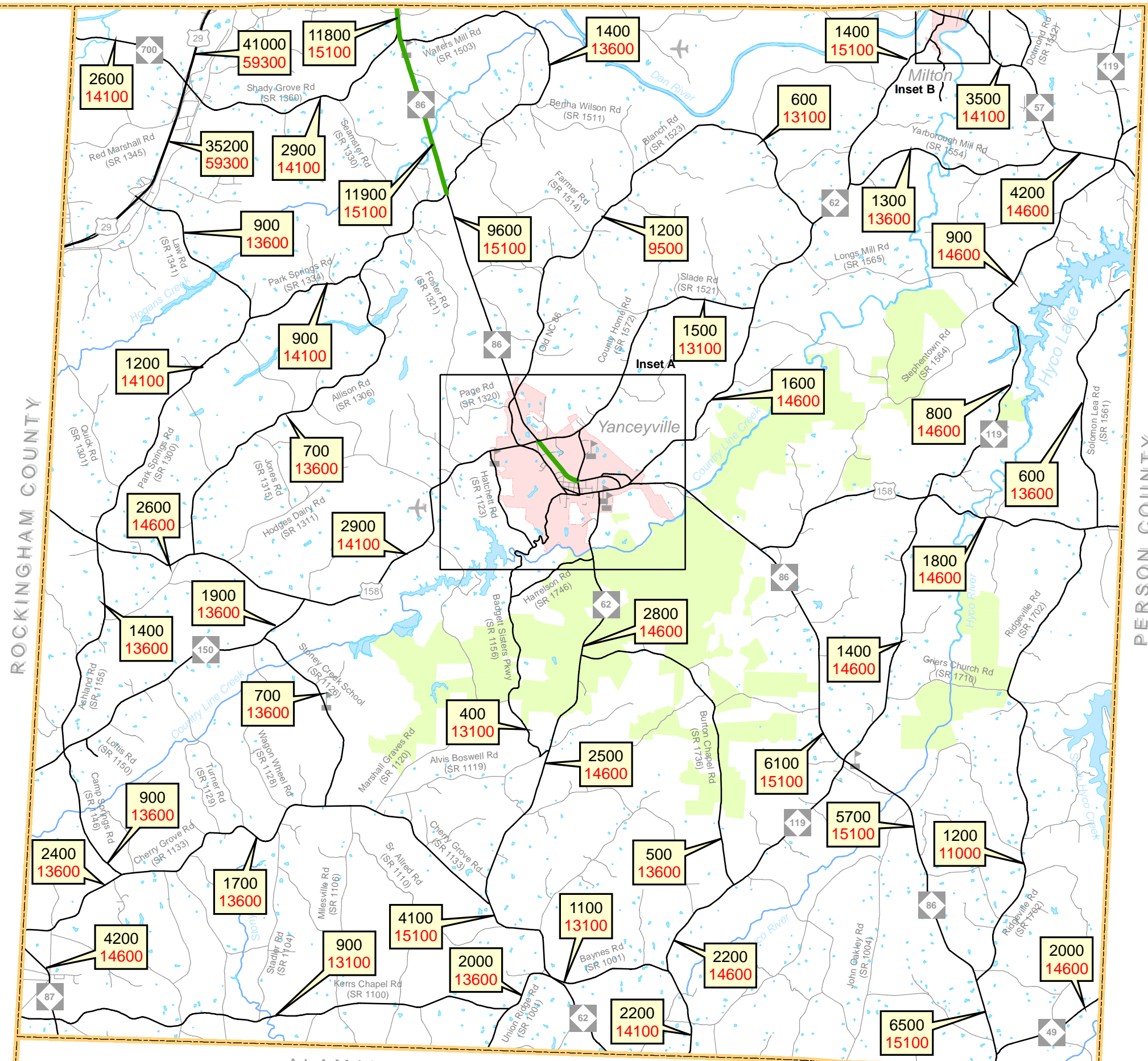
Caswell County
 North Carolina

Comprehensive
Transportation Plan

8100 2040 Volumes (AADT)
 12400 2016 Capacity

- Near Capacity
- Over Capacity
- Study Roads
- Roads
- Railroads
- Schools
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Game Lands

0 2 4 Miles



**Figure 2
Inset A
2040
Volumes and Capacity
Deficiencies**



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

- 8100 2040 Volumes (AADT)
- 12400 2016 Capacity
- Near Capacity
- Over Capacity
- Study Roads
- Roads
- +

+

+

 Railroads
- ▲

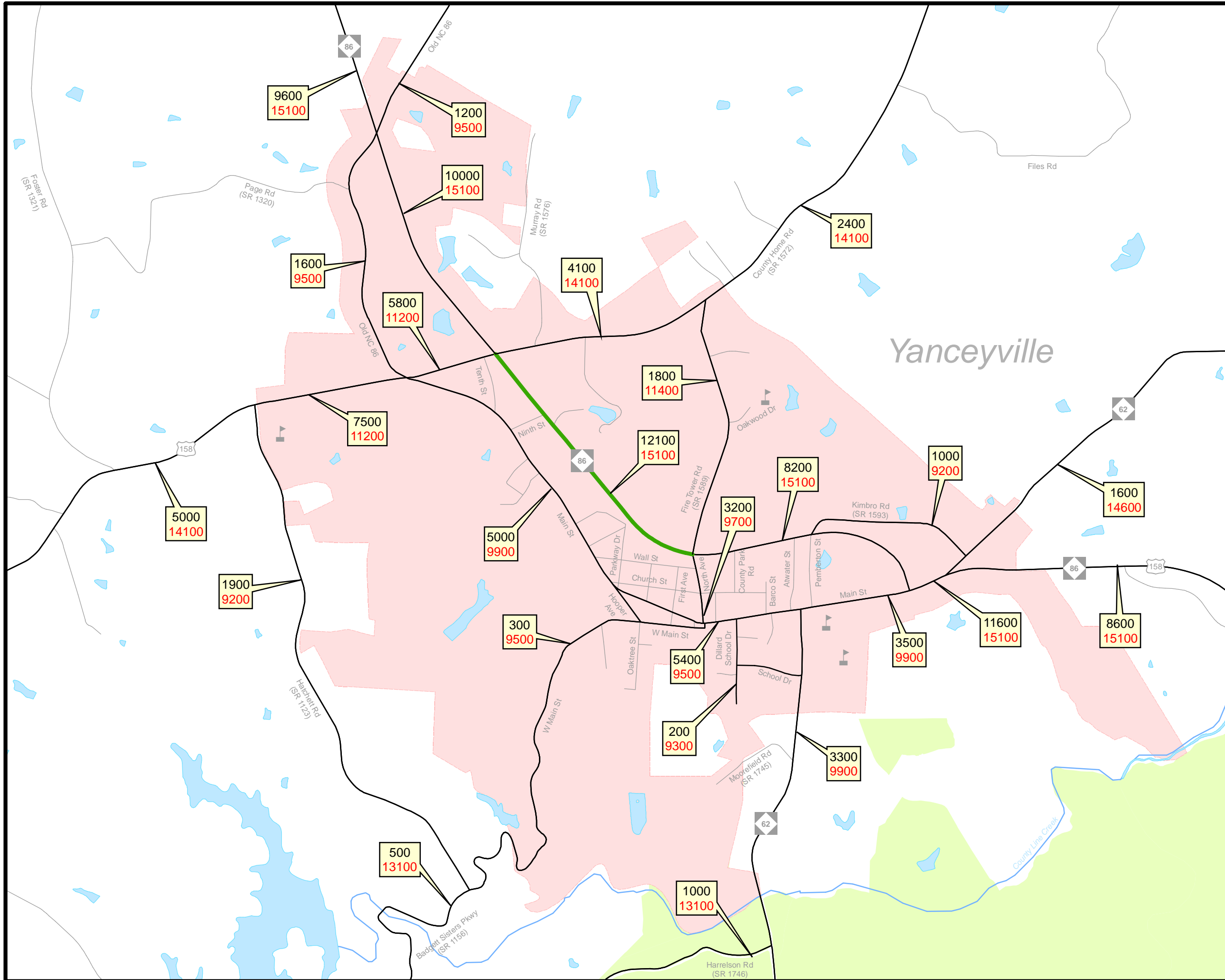
 Schools
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Game Lands

0 0.35 0.7 Miles



Sheet 2 of 3

Base map date: January 14, 2016



**Figure 2
Inset B
2040
Volumes and Capacity
Deficiencies**



Caswell County
North Carolina

**Comprehensive
Transportation Plan**

- 8100 2040 Volumes (AADT)
- 12400 2016 Capacity
- Near Capacity
- Over Capacity
- Study Roads
- Roads
- Railroads
- Schools
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary

0 0.125 0.25 Miles

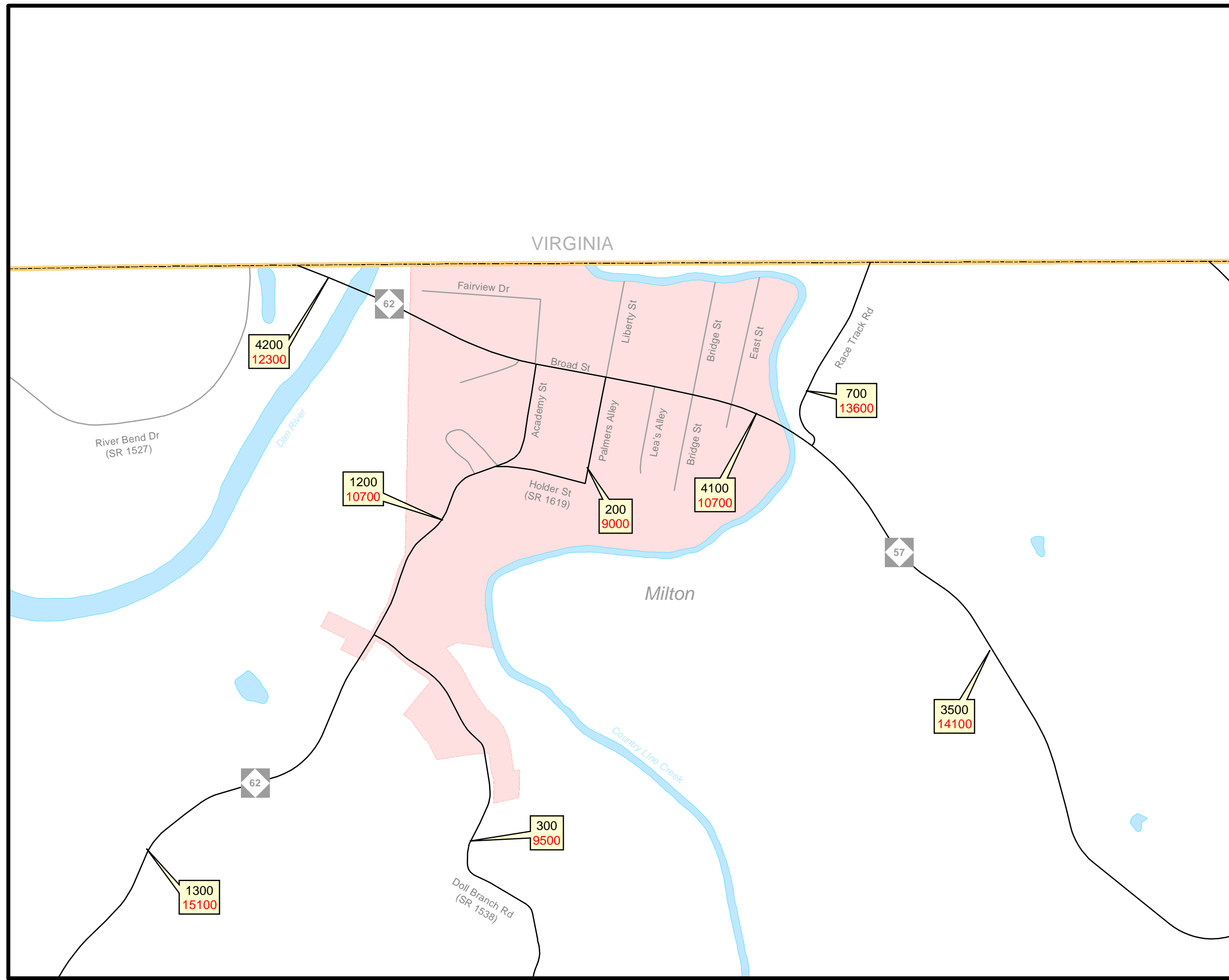
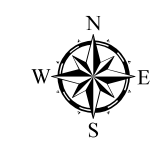


FIGURE 4 Caswell County Comprehensive Transportation Plan

HIGH FREQUENCY CRASH LOCATIONS

January 1, 2012 to
December 31, 2016

Crash Intersections

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

Crash Sections

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

- Study Roads
- Roads
- Railroads
- Schools
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Game Lands

0 2 4 Miles



Base map date: January 16, 2014

VIRGINIA

ROCKINGHAM COUNTY

PERSON COUNTY

ALAMANCE COUNTY

ORANGE COUNTY

GUILFORD
COUNTY

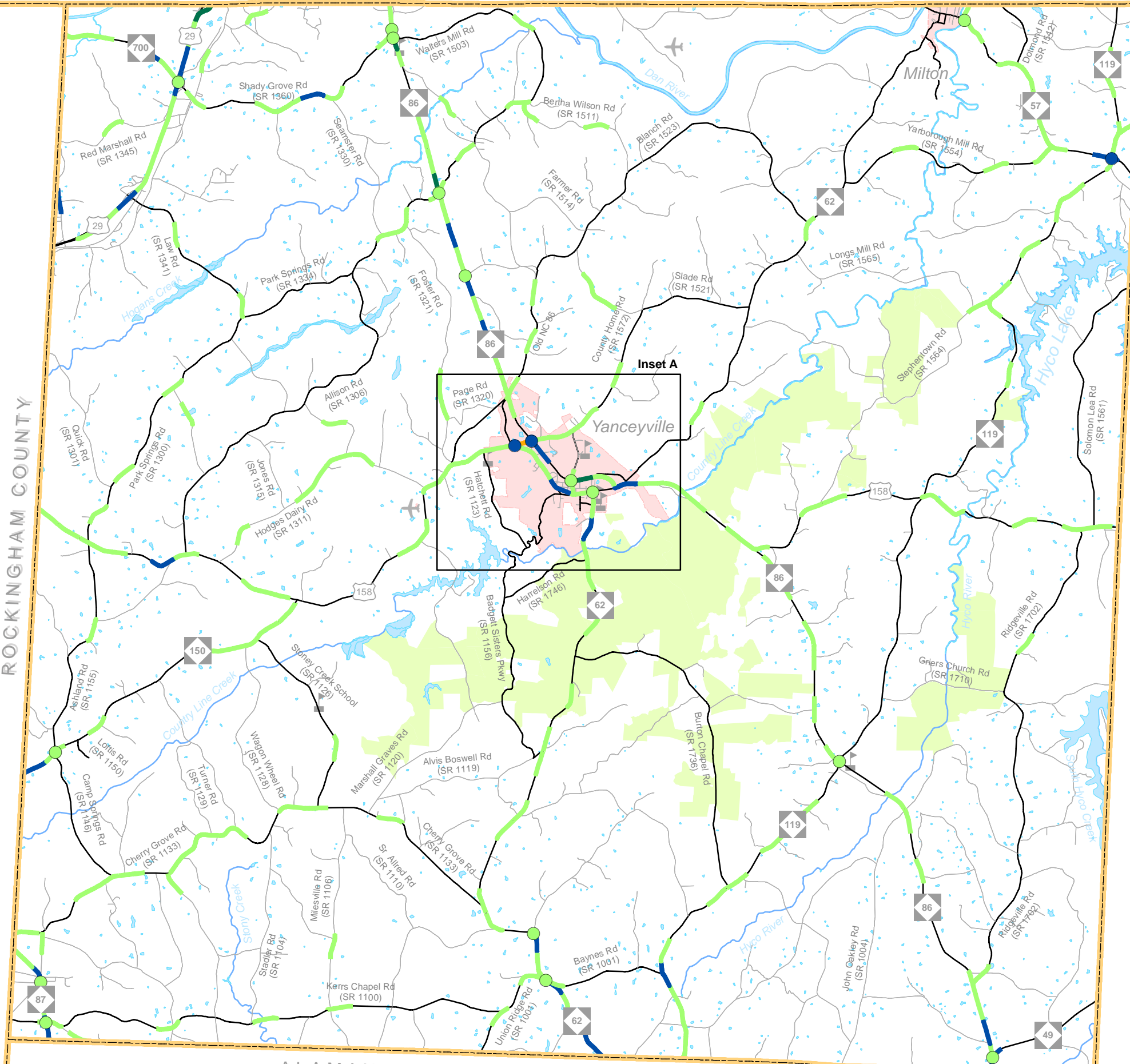


FIGURE 4 Inset A Caswell County Comprehensive Transportation Plan HIGH FREQUENCY CRASH LOCATIONS

January 1, 2012 to
December 31, 2016

Crash Intersections

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

Crash Sections

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

Study Roads

Roads

Railroads

Schools

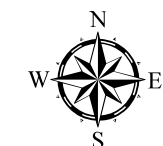
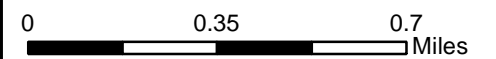
Rivers and Streams

Water Bodies

Municipal Boundary

County Boundary

Game Lands



Base map date: January 16, 2014

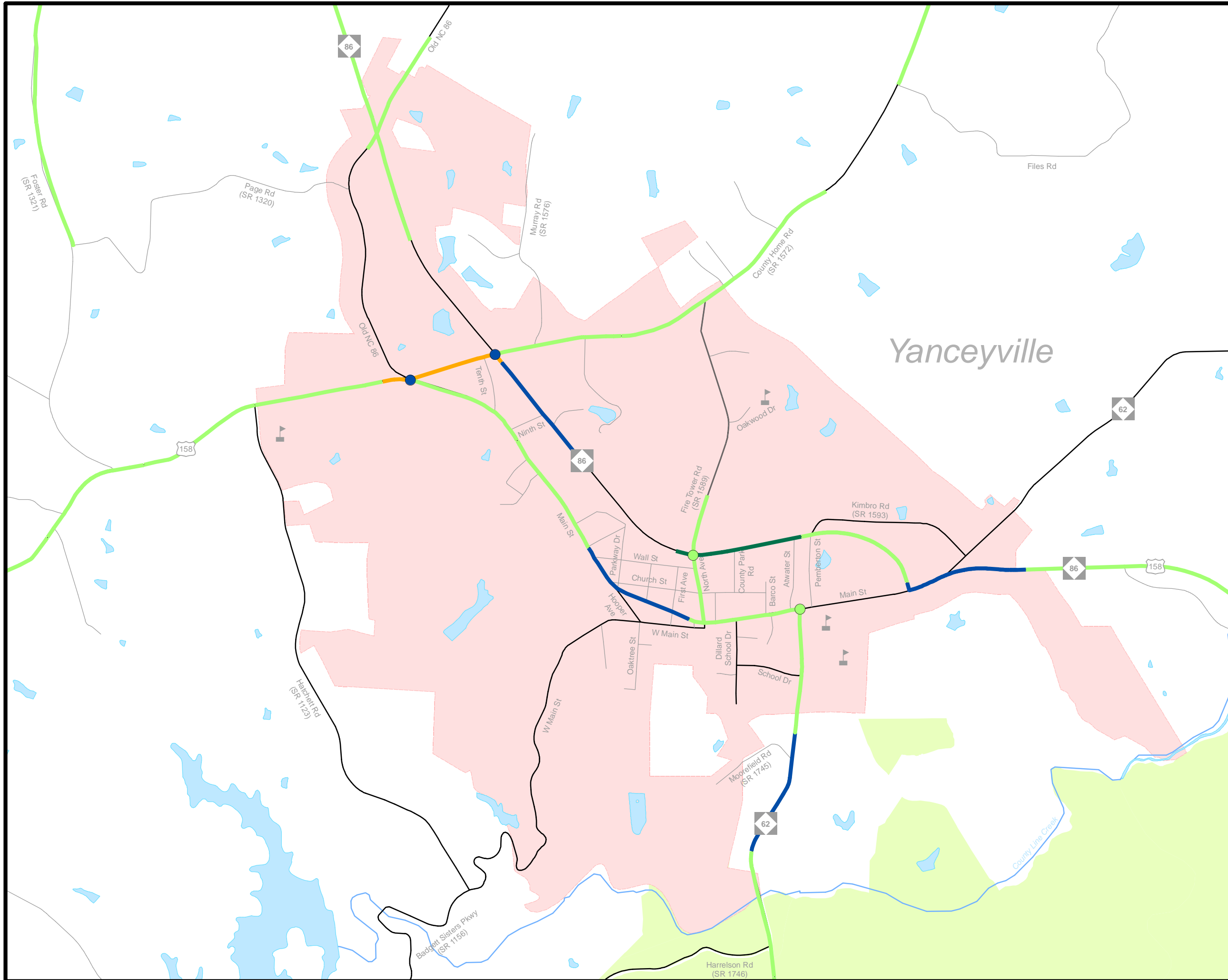


Figure 5

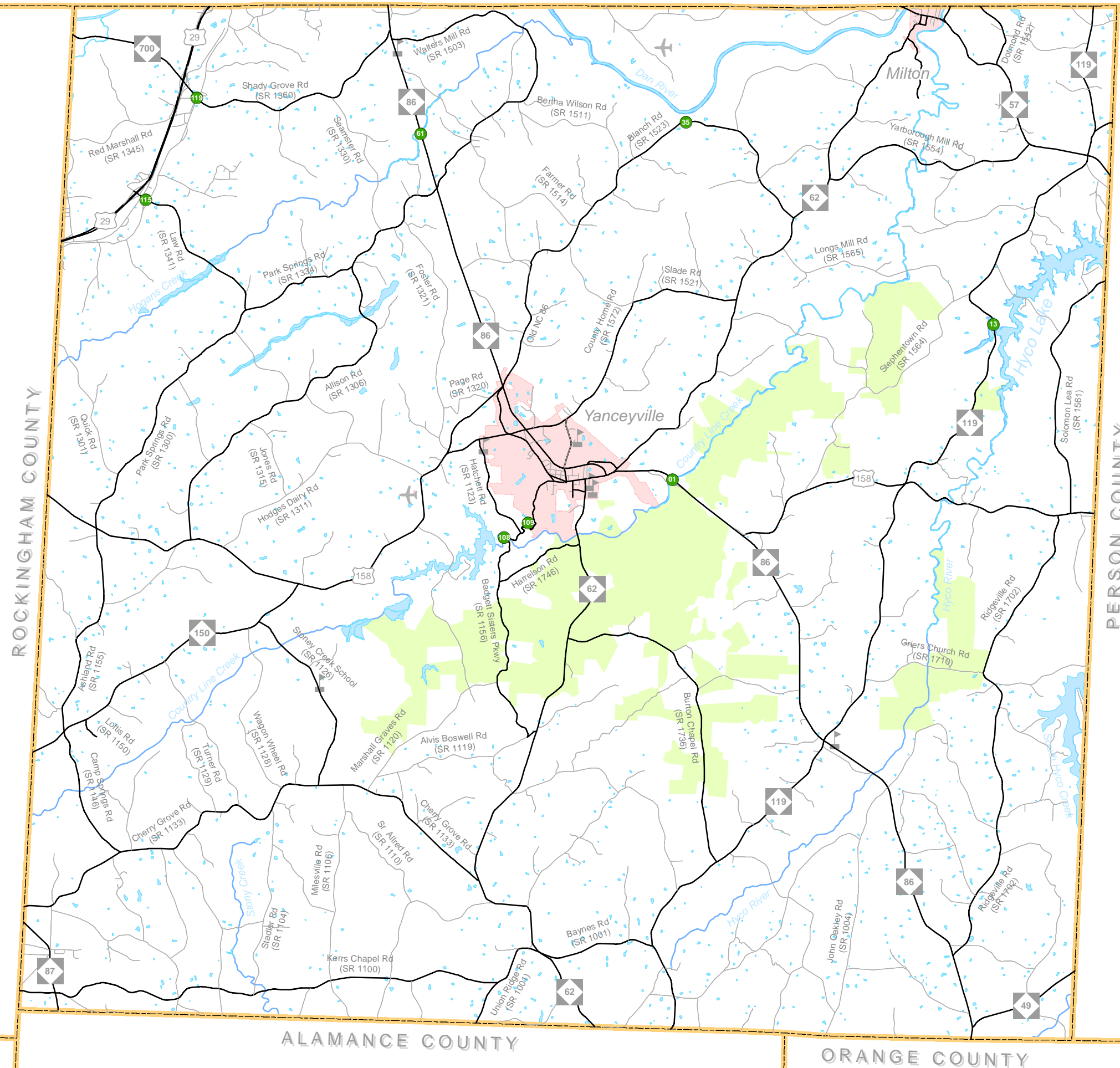
Deficient Bridges



Caswell County

North Carolina

Comprehensive Transportation Plan



A horizontal scale bar with alternating black and white segments. Above the bar are the numbers 0, 2, and 4. To the right of the bar is the word "Miles".



Base map date: January 14, 2016

Public Transportation and Rail

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

Public Transportation

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

- ❖ Community Transportation - Local transportation efforts formerly centered on assisting clients of human service agencies. Today, the vast majority of rural systems serve the general public as well as those clients.
- ❖ Regional Community Transportation - Regional community transportation systems are composed of two or more contiguous counties providing coordinated / consolidated service. Although such systems are not new, it is encouraging single-county systems to consider mergers to form more regional systems.

An inventory of existing and planned fixed public transportation routes for the planning area is presented on Sheet 3 of Figure 1. Currently, the Caswell County Area Transportation System (CATS) is a rural coordinated transportation system that provides on demand community and public services in and out of the county for travel for residents of Caswell County. There are no existing or proposed fixed routes for public transportation. Refer to Appendix A for contact information for the Public Transportation Division.

Rail

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

There are two major freight railroad companies that operate in North Carolina, CSX Transportation and Norfolk Southern Corporation. Also, there are more than 17 smaller freight railroads, known as shortlines.

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. There is only one active Class I freight line operating in Caswell County. Owned by the North Carolina Railroad Company, Norfolk Southern operates a 7 mile stretch of railroad from Rockingham County to the Virginia Line. This train travels at speeds 1-30 mph and is intended mainly for freight service. One to four trains per day with three crossings may operate over the rail line depending on rail traffic, customer needs, whether in a town or a rural area. No passenger trains or commuter service are currently operating over any of the tracks nor are any formal rail passenger or rail

commuter service planned in the foreseeable future. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information for the Rail Division.

Bicycles & Pedestrians

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

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The 2012 Heritage Trails Master Plan for Caswell County, the Caswell County Bicycling, and the 2011 Comprehensive Pedestrian Plan for the Town of Yanceyville, were utilized in the development of these elements of the CTP. NC Bicycle Route 4 (North Line Trace) is a 400 mile statewide route that runs through Caswell County. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information for the Division of Bicycle and Pedestrian Transportation.

Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2013 Caswell County Land Use Plan (refer to Appendix G) adopted on July 1, 2013 was used to meet this requirement. This plan identifies land use for existing and future conditions by taking into account countywide population growth, employment data, and development patterns. In addition, information obtained from local officials and the various communities in the county helped develop a future vision for the area. For detailed

information on how land use and growth projections were developed and applied in the CTP, refer to Appendix J.

Land use refers to the physical patterns of activities and functions within an area. Traffic demand in a given area is, in part, attributed to adjacent land use. For example, a large shopping center typically generates higher traffic volumes than a residential area.

The spatial distribution of different types of land uses is a predominant determinant of when, where, and to what extent traffic congestion occurs. The travel demand between different land uses and the resulting impact on traffic conditions varies depending on the size, type, intensity, and spatial separation of development. Additionally, traffic volumes have different peaks based on the time of day and the day of the week. For transportation planning purposes, land use is divided into the following categories:

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

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

Existing land use within the county is comprised mainly of agriculture and/or undeveloped land. Forest and games land cover a major area of Caswell County. Land for rural development is located in the unincorporated areas and generally concentrated along roads and highways on single lots, farmsteads, and small subdivisions. In addition, the county has traditional rural communities or clusters that include residential and supporting rural retail uses.

The future land use map (see appendix G) of the 2013 Caswell County Land Use Plan allocates the county into three top development categories: Economic Development, Health & Wellness, and Agriculture & Rural Preservation. The Economic Development will provide quality job opportunities for residents and improve the quality of life. Health & Awareness is needed to maintain a healthy environment within the community. Agriculture and Rural Preservation in Caswell County is to increase farming operations while maintaining a scenic rural landscape.

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

1.2 Consideration of Natural and Human Environment

Environmental features are a key consideration in the transportation planning process. Section 102 of the National Environmental Policy Act³ (NEPA) requires consideration of impacts on wetlands, wildlife, water quality, historic properties, and public lands. While a full NEPA evaluation was not conducted as part of the CTP, every effort was made to minimize potential impacts to these features utilizing the best available data. Any potential impacts to these resources were identified as a part of the project recommendations in Chapter 2 of this report. Prior to implementing transportation recommendations of the CTP, a more detailed environmental study would need to be completed in cooperation with the appropriate environmental resource agencies.

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

³ For more information on NEPA, go to: <https://ceq.doe.gov/>.

Table 1 – Environmental Features

- | | |
|--|---|
| <ul style="list-style-type: none"> • 24k Hydro Lines • 303D Streams • Airport Boundaries • Anadromous Fish Spawning Areas • APNEP - Submerged Aquatic Vegetation • Beach and Waterfront Access • Benthic Habitat • Bicycle Routes • Boating Access • Churches and Cemeteries • Colleges and Universities (Points) • Conservation Tax Credit Properties • Critical Habitat for Threatened and Endangered Species • Emergency Operation Centers • Fish Nursery Areas • Hazard Substance Disposal Sites (points & polygons) • Hazardous Waste Facilities • High Quality Waters and Outstanding Resource Water Management • Historic Resources – National Register and Determined Eligible (points and polygons) • Hospitals | <ul style="list-style-type: none"> • Hydrography - 1:24,000-scale (polygons) • Landscape Habitat Indicator Guilds (LHIGs) • Managed Areas • National Wetlands Inventory (polygons) • Natural Heritage Element Occurrences • NC-CREWS: N.C. Coastal Region Evaluation of Wetland Significance • NCDOT Maintained Mitigation Sites • Railroads (1:24,000) • Recreation Projects - Land and Water Conservation Fund • Regional Trails • Sanitary Sewer Systems - Treatment Plants • Schools (Public & Non-Public) • Significant Natural Heritage Areas • State Natural and Scenic Rivers • State Parks • Target Local Watersheds - EEP • Trout Streams (DWQ) • Trout Waters WRC (arcs & polygons) • Unique Wetlands • Water Distribution Systems – Tanks & Treatment Plants • Water Supply Watersheds |
|--|---|

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

Figure 6
Environmental
Features



Caswell County

North Carolina

Comprehensive Transportation Plan

Legend

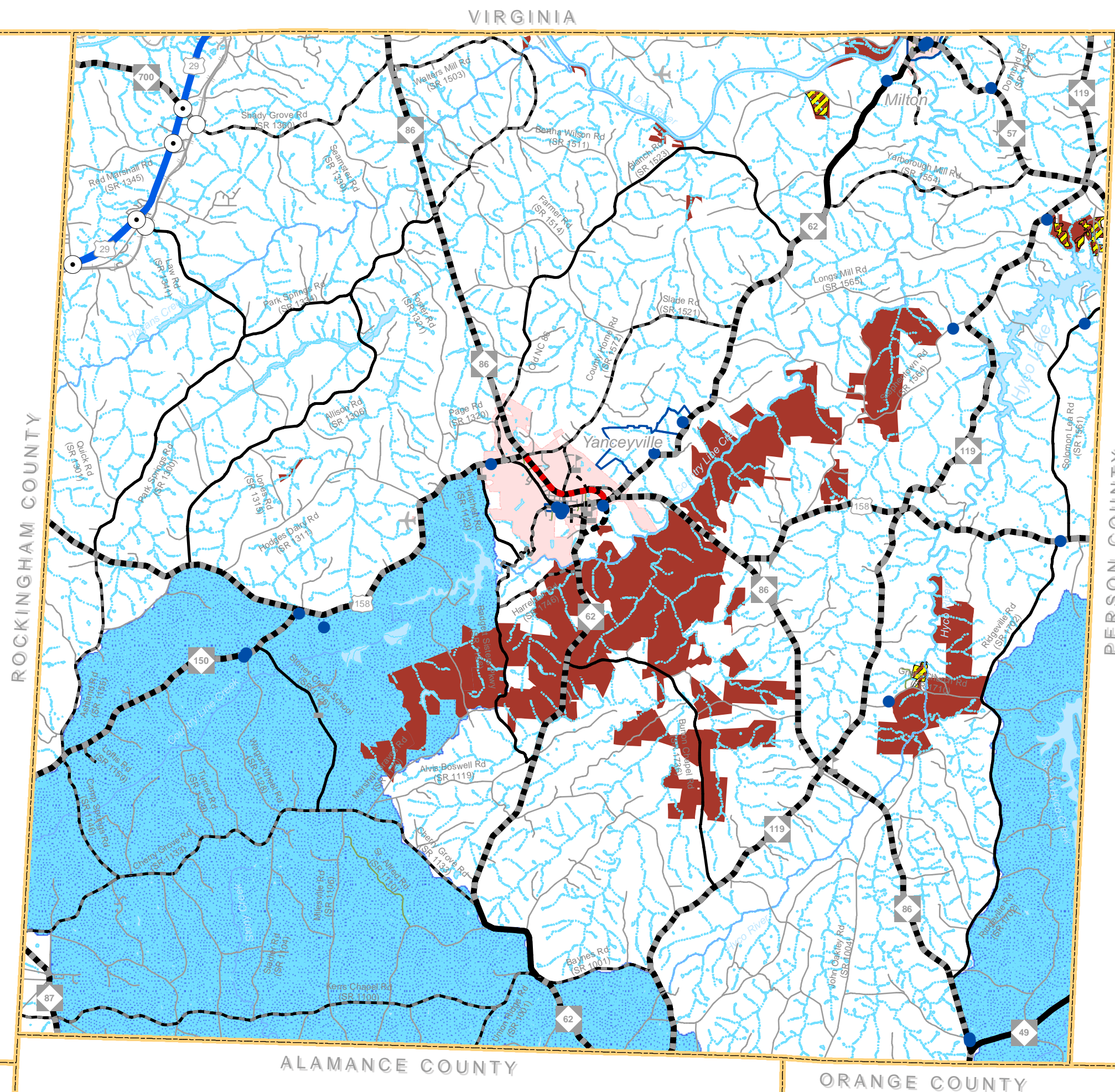
- Roads
- 24k Hydro Lines
- Historic Resources Sites
- Historic Resources Areas
- Managed Areas
- High Quality Waters
- Conservation Tax Credit Property
- Municipal Boundary
- County Boundary

0 2 4 Miles



Sheet 1 of 4

Base map date: January 14, 2016



GUILFORD
COUNTY

ALAMANCE COUNTY

ORANGE COUNTY

Figure 6
Environmental
Features



Caswell County

North Carolina

Comprehensive Transportation Plan

Legend

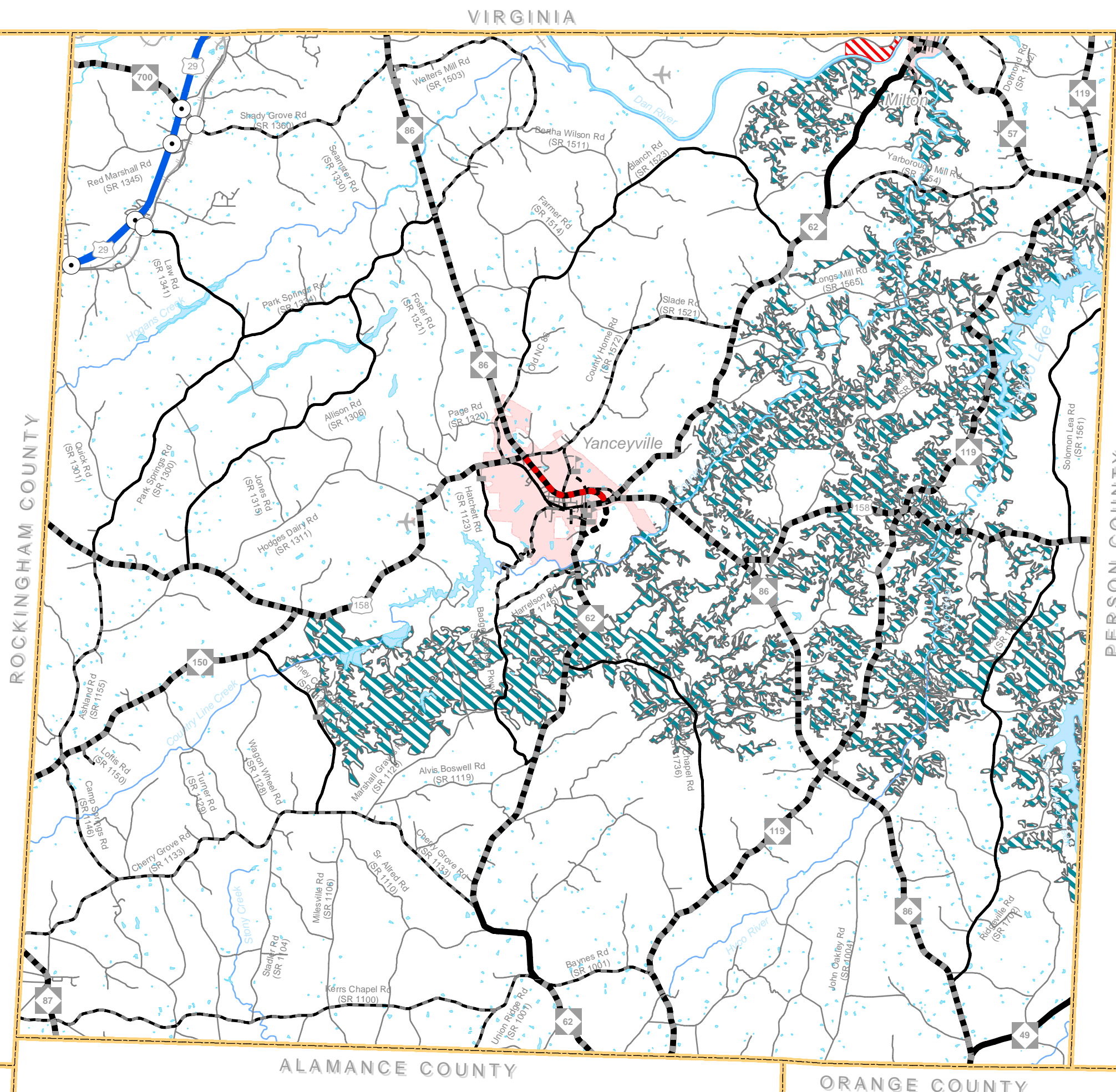
- Roads
- NCDOT Maintained Mitigation Sites
- Landscape Habitat Indicator Guilds
- NC-CREWS
- Municipal Boundary
- County Boundary

0 2 4 Miles



Sheet 2 of 4

Base map date: January 14, 2016



GUILFORD
COUNTY

ALAMANCE COUNTY

ORANGE COUNTY

ROCKINGHAM COUNTY

PERSON COUNTY

Figure 6
Environmental
Features



Caswell County

North Carolina

Comprehensive Transportation Plan

Legend

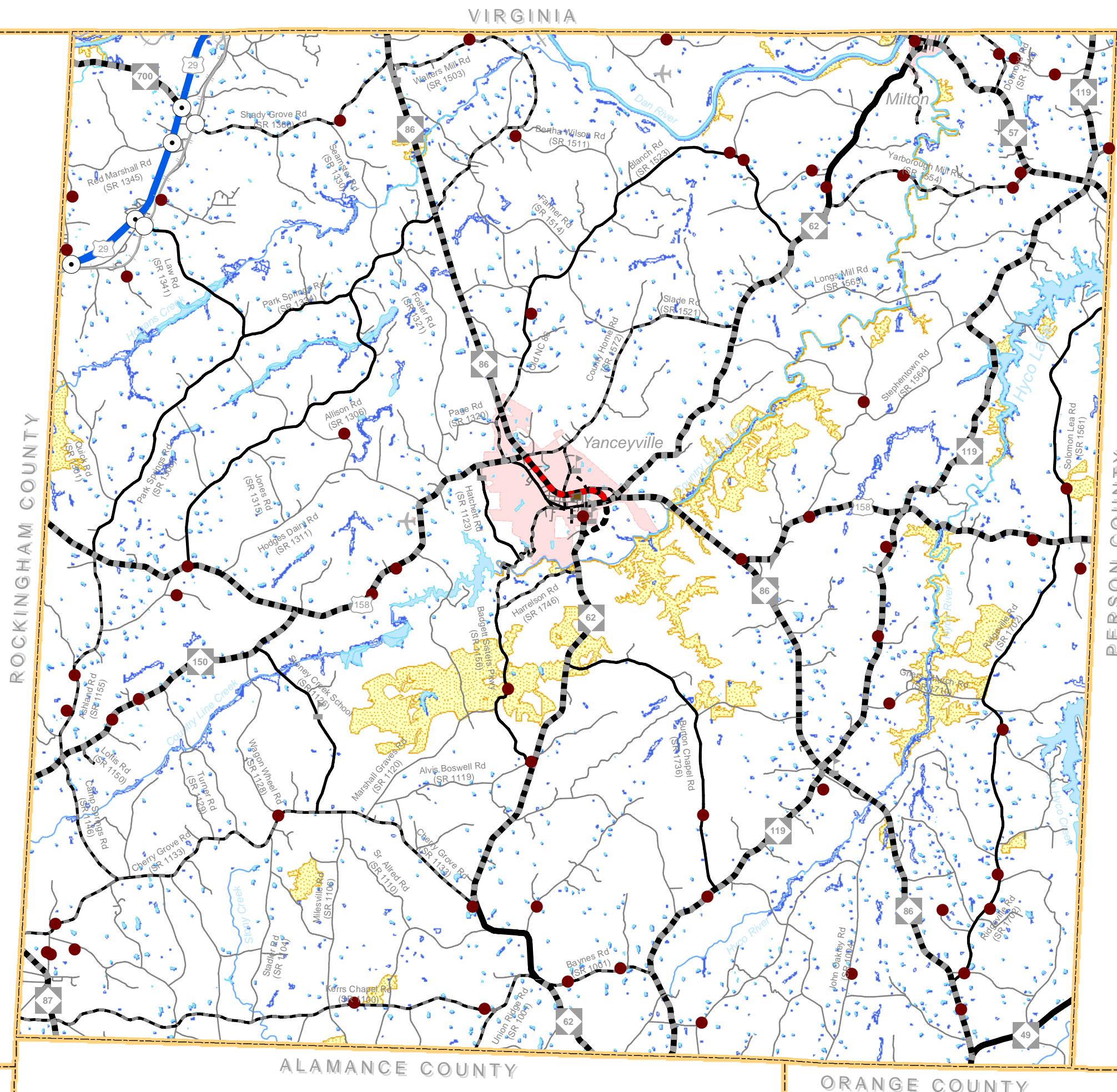
- Roads
- Churches and Cemeteries
- National Wetland Inventory
- Significant Natural Heritage Areas
- Recreation Projects - Land and Water Conservation Fund
- Municipal Boundary
- County Boundary

0 2 4 Miles



Sheet 3 of 4

Base map date: January 14, 2016



1.3 Public Involvement

Public involvement is a key element in the transportation planning process. Adequate documentation of this process is essential for a seamless transfer of information from systems planning to project planning and design.

A meeting was held with the Caswell County Board of Commissioners in January 2016 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

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

The public involvement process included holding two public drop-in sessions in Caswell County to present the proposed CTP to the public and solicit comments. The first meeting was held on March 14, 2017 at the Thomas Day House & Union Tavern in Milton; and the second meeting was held on March 20, 2017 at the Caswell County Historic Courthouse. Each session was publicized in the local newspaper and was held from 5:00 – 7:00pm in Milton and 4:00 – 6:00pm in Yanceyville. A few comments were submitted during the first session. Refer to Appendix H for more detailed information.

Public hearings were held throughout Caswell County on the following dates:

Locale	Date
Caswell County	May 1, 2017
Town of Milton	May 9, 2017
Town of Yanceyville	May 9, 2017

The purpose of these meetings was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during these meetings.

The Piedmont Triad RPO endorsed the CTP on June 21, 2017. The North Carolina Department of Transportation mutually adopted the Caswell County CTP on October 5, 2017.

2. Recommendations

This chapter presents recommendations for each mode of transportation in the 2017 Caswell County CTP as shown in Figure 1. More detailed information on each recommendation is tabulated in Appendix C.

NCDOT adopted a "Complete Streets¹" policy in July 2009. The policy directs the Department to consider and incorporate several modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, the Department will collaborate with cities, towns and communities during the planning and design phases of projects. Together, they will decide how to provide the transportation options needed to serve the community and complement the context of the area. The benefits of this approach include:

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

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

2.1 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 Caswell 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 Piedmont Triad RPO for regional prioritization and submittal to NCDOT. Refer to Appendix A for contact information on regional prioritization and

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

funding. Local governments may use the CTP to guide development and protect corridors for the recommended projects. It is critical that NCDOT and local governments coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and NCDOT share the responsibility for access management and the planning, design and construction of the recommended projects.

Recommended improvements shown on the CTP map represents an agreement of identified transportation deficiencies and potential solutions to address the deficiencies. While the CTP does propose recommended solutions, it may not represent the final location or cross section associated with the improvement. All CTP recommendations are based on high level systems analyses that seek to minimize impacts to the natural and human environment. Prior to implementing projects from the CTP, additional analysis will be necessary to meet the National Environmental Policy Act (NEPA) or the North Carolina (or State) Environmental Policy Act² (SEPA). During the NEPA/SEPA process, the specific project location and cross section will be determined based on environmental analysis and public input. This CTP may be used to support transportation decision making and provide transportation planning data in the NEPA/SEPA process.

2.2 Problem Statements

Problem statements describe the transportation system deficiencies identified during the CTP process and recommend improvements to alleviate the deficiencies. The following are problem statements for each recommendation, organized by CTP modal element. The information provided in the problem statement is intended to help support decisions made in the NEPA/SEPA process. A full, minimum or reference problem statement is presented for each recommendation, with full problem statements occurring first in each section. Full problem statements are denoted by a gray shaded box containing project information. Minimum problem statements are more concise and less detailed than full problem statements, but include all known or readily available information. Reference problem statements are developed for TIP projects where the purpose and need for the project has already been established.

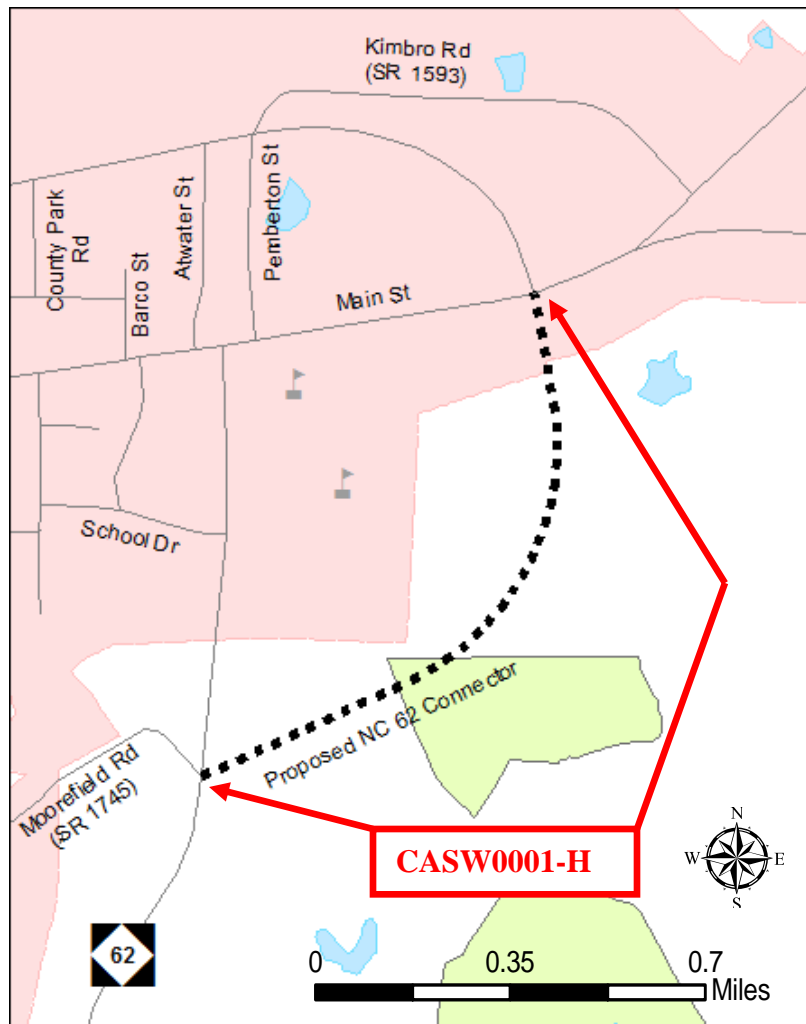
² For more information on SEPA, go to: <http://www.doa.nc.gov/clearing/faq.aspx>.

HIGHWAY

**Proposed NC 62 Connector from US 158/NC 86/Main
Street to existing NC 62/ Moorefield Road (SR 1745)**

Local ID: CASW0001-H

Last Updated: 9/8/2017



Identified Problem

NC 62 is a north-south facility within the Yanceyville planning area. Improvements are needed to accommodate an increased mix of truck and school traffic on NC 62 as well as to improve mobility through the town of Yanceyville such that a minimum Level of Service (LOS) D can be achieved.

Justification of Need

NC 62 is a major north-south corridor through Caswell County, connecting Burlington-Graham to the south, rural areas in the county including Yanceyville and Milton, and to communities in Virginia. The facility is an important artery for moving people and goods into and out of the county. NC 62 serves local traffic and long-distance trips. Downtown Yanceyville along Main Street is used by trucks for access to the major routes in Caswell County. This connector is recommended to alleviate the restricted roadway geometrics for truck maneuvers at the NC 62 and Main Street intersection, traffic congestion through the town limits, and enhance connectivity to other major routes.

Community Vision and Relationship to Land Use Plans

The community envisions Yanceyville and the surrounding areas to having the potential for growth and future development. This proposed project supports the vision of the community and any land use enhancements and strategies for the future economic planning for Caswell County.

The current land use along the proposed NC 62 connector varies between institutional use, extensive farmland, single family residential, and recreation, as identified in the 2014 Caswell County Comprehensive Plan³. This area has a low to moderate density of population with land use consisting of many local businesses, commercial/industrial properties, gas stations, shops, and nearby schools. NC 62 provides access to routes such as US 158 and NC 57. This plan indicates primarily commercial and urban development along certain sections of this corridor.

CTP Project Proposal

Project Description and Overview

The CTP project proposal (CASW0001-H) is to construct a two lane connector with 12 foot lanes on new location from US 158/ NC 86/ Main Street to existing NC 62/ Moorefield Road (SR 1745) near Yanceyville.

The proposed project will provide an alternate route in Yanceyville without having to utilize NC 62 through the downtown area, and allow for improved efficiency, safety, and mobility in moving people and goods. This new route will also assist in better mobility for trucks traveling through residential and school areas near Main Street. The entrances of Bartlett Yancey High School and the Piedmont Community College would

³To view the 2014 Caswell County Comprehensive Plan, go to:
<http://www.ptrc.org/modules/showdocument.aspx?documentid=3859>

benefit with less truck traffic volumes. The proposed facility will help improve mobility and safety along the corridor.

Additionally, during the most recent five year period from January 1, 2012 to December 31, 2016, one intersection along NC 62 was identified as having 4 or more crashes and/or had a severity index above the State's 4.56 average for the same period. That intersection is located at Main Street/NC 62 in Yanceyville. Refer to Chapter 1 of the CTP report for more detailed information on these locations.

Linkages to Other Plans and Proposed Project History

The CTP project proposal (CASW0001-H) is to construct a two lane connector near the town of Yanceyville. This improvement was previously identified in the 2009 Caswell County Comprehensive Transportation Plan⁴.

Natural & Human Environmental Context

Based on a planning level environmental review using available GIS data, portions of the proposed project are within the Roanoke Basin water shed area. The proposed project may impact wetlands as well as the northern edge of the Caswell County Game Lands. This project is intended to minimize the impacts on the game lands and its surrounding territory.

Multi-modal Considerations

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

Public/ Stakeholder Involvement

The CTP vision, goals and objectives were developed as part of the public involvement process to help identify how the people within the area would like to develop the transportation system. Based on the CTP vision, goals and objectives developed for the CTP, there is a strong desire to preserve the community and rural character, keep businesses in downtown areas, and preserve existing buildings and neighborhoods. Out of the many comments made by the public about NC 62, the most frequent concerns were:

- Traffic
 - Logging and commercial truck movements through central Yanceyville
- Preservation of homes and businesses along NC 62
 - Access
 - School bus safety

⁴To view this plan, go to: https://connect.ncdot.gov/projects/planning/TPBCTP/Caswell%20County/CaswellCTP_Report.pdf

Respondents to the goals and objectives survey identified NC 62 through Yanceyville as a cut through route. From other public comment opportunities, the primary public concern on the existing NC 62 corridor was the high volume of trucks and safety.

US 158, Local ID: CASW0002-H:

The US 158 is the only major east-west corridor through Caswell County, connecting Yanceyville with the rural areas in the county. The facility is an important artery for moving people and goods while serving local traffic and long distance trips.

The CTP project proposal (CASW0002-H) recommends operational improvements, including sight distance and safety improvements (due to high number of crashes on certain sections), addition of passing lanes, and intersection improvements with new turning lanes, throughout this corridor from Rockingham County, through Caswell County including around the Town of Yanceyville, and to Person County.

The section of US 158/ NC 86 from NC 62 (Main Street) to US 158/ County Home Road (SR 1572) in Yanceyville is projected to be near capacity in 2040. The land use consists of urban development including municipal town buildings, commercial retail, shopping centers, and restaurants. Due to the high truck and vehicular traffic along this vital corridor, it is recommended to upgrade this section to boulevard standards to increase capacity and provide more access control to these businesses.

This majority of this project area is comprised of mostly rural undeveloped land. Based on a planning level environmental review using available GIS data, the proposed project may potentially impact the Roanoke Basin water shed area. Wetlands, major streams, and other land areas within the Caswell County Game Lands may potentially be affected along this facility.

NC 86, Local ID: CASW0003-H

NC 86 is a major north-south corridor through Caswell County, connecting Hillsborough to the south, with rural areas in the county including Yanceyville, and communities in Virginia. The facility is an important artery for moving people and goods into and out of the county and thus there is a desire to relieve increasing congestion. NC 86 serves local traffic and long-distance trips. NC 86 is projected to be near capacity by 2040 along certain sections from Orange County to Virginia. Improvements are needed to accommodate projected traffic volumes and to improve mobility through Caswell County such that a minimum Level of Service (LOS) D can be achieved.

The CTP project proposal (CASW0003-H) recommends operational improvements, including sight distance improvements, addition of passing lanes, and intersection

improvements with new turning lanes, throughout this corridor from Orange County, through Caswell County including through the Town of Yanceyville, and to Virginia.

Additionally, during the most recent five year period, two intersections along the NC 86 corridor were identified as having 10 or more crashes and/or had a severity index above the State's 4.56 average for the same period. Those intersections included: at US 158 and at US 158/ County Home Road (SR 1572). Refer to Chapter 1 of the CTP report for more detailed information on these locations. The proposed facility will help reduce congestion and improve mobility along the corridor.

Yanceyville is the county seat of Caswell County and is the center of activity for the county. Several major regional roads converge in the town bringing traffic from all directions. This facility is a highly traveled business route that provides direct access to local businesses in Hillsborough, Yanceyville, and areas in Virginia. Residents who live in and around the vicinity of Yanceyville use this facility to access jobs, local shops, restaurants, and other amenities in this small urban area. This improvement was previously identified in the 2009 Caswell County Comprehensive Transportation Plan⁵.

Based on a planning level environmental review using available GIS data, portions of the proposed project are within the Roanoke Basin water shed area. The proposed project may also potentially impact wetlands and water and sewer pipes.

Current land use along the proposed project of NC 86 varies between extensive farmland, single family residential, commercial use in Yanceyville, and recreation, as identified in the 2014 Caswell County Comprehensive Plan⁶. This area has a low to moderate density of population with land use consisting of many local businesses, commercial/industrial properties, gas stations, shops, and nearby schools. NC 86 provides access to major routes such as US 158, NC 119, and NC 62. The county Comprehensive Plan indicates primarily commercial and urban development is expected along certain sections of this corridor.

The CTP vision, goals and objectives were developed as part of the public involvement process to help identify how the people within the area would like to develop the transportation system. Based on the CTP vision, goals and objectives developed for the CTP, there is a strong desire to preserve the community and rural character, provide opportunity for greater development in town, keep businesses in downtown areas, and the preserve existing buildings and neighborhoods. Out of the many comments made by the Steering Committee members about NC 86, the most frequent concerns were:

- Speeding
 - Excessive and/or dangerous

⁵To view this plan, go to: https://connect.ncdot.gov/projects/planning/TPBCTP/Caswell%20County/CaswellCTP_Report.pdf

⁶To view the 2014 Caswell County Comprehensive Plan, go to:
<http://www.ptrc.org/modules/showdocument.aspx?documentid=3859>

- Safety concerns pertaining to lack of passing zones
- Traffic
 - Congestion during peak hours on section north of Yanceyville
 - Truck movement through central Yanceyville
- Preservation of homes and businesses along NC 86
 - Access
 - School bus safety

Respondents to the goals and objectives survey identified NC 86 through Yanceyville as a heavily traveled business route. From other public comment opportunities, the primary public concern on the existing NC 86 corridor was the high volume of trucks, including safety issues due to the high number of crashes.

NC 87, Local ID: CASW0004-H

NC 87 is currently a two-lane major thoroughfare with 12 foot lanes from Alamance County to Rockingham County within the southwest portion of Caswell County. Land use along this section of NC 87 is mostly interspersed with some industrial, single family residential, and rural farmland. It is lined with numerous driveway and roadway access points. The purpose of the proposed project is to improve mobility on the existing facility and to provide a direct and efficient link from US 29 in Reidsville to I-40 in Burlington.

The CTP project proposal (CASW0004-H) is to upgrade the existing facility with needed operational improvements. As development occurs along this corridor every effort should be made to limit access in order to maintain mobility.

A crash assessment performed during the development of the CTP identified the intersections at Kerrs Chapel Road (SR 1100) and Parkdale Road (SR 1159) along this corridor as experiencing 4 to 9 crashes. Also, there were 10 to 19 crashes along this section of NC 87 with these crashes occurring between January 1, 2012 and December 31, 2016. The proposed improvements may reduce the amount and severity of crashes at this location.

Based on the planning level environmental assessment using available GIS data, the proposed project may potentially impact water shed and farmland areas.

Oakwood Drive Extension, Local ID: CASW0005-H

Oakwood Drive is currently a two lane minor thoroughfare that leads into the Oakwood Elementary School in Yanceyville. The purpose of the proposed project is to improve mobility and connectivity to the school and provide an alternate route to US 158/ NC 86.

The CTP project proposal (CASW0005-H) is to construct a two-lane facility on new

location from existing Oakwood Drive/ Fire Tower Road (SR 1589) to US 158/ NC 86. As development occurs along this corridor every effort should be made to limit access in order to maintain mobility.

Minor Widening Improvements

The following routes are not expected to exceed capacity, but were identified as candidates for upgrading to NCDOT design standards in order to improve mobility, safety and/or to accommodate bicycles. Additionally, some facilities may require improvements to the vertical and/or horizontal alignment. Implementation of the proposed projects should be coordinated through NCDOT's Highway Division 7 office (refer to Appendix A for contact information).

- **NC 57, CASW0006-H:** Widen from 11 to 12 foot lanes from NC 62 in Milton to Person County.
- **NC 62, CASW0007-H:** Widen from 11 to 12 foot lanes from Alamance County to Virginia. *Note: Portions of this facility are currently 12 foot lanes.*
- **NC 119, CASW0008-H:** Widen from 11 to 12 foot lanes from Alamance County to Virginia.
- **NC 150, CASW0009-H:** Widen from 9 to 12 foot lanes from Rockingham County to US 158.
- **NC 700, CASW0010-H:** Widen from 10 to 12 foot lanes from Rockingham County to Shady Grove Road (SR 1360).
- **Ashland Road (SR 1155), CASW0011-H:** Widen from 9 to 11 foot lanes from NC 150 to US 158.
- **Badgett Sisters Parkway (SR 1156), CASW0012-H:** Widen from 9 to 10 foot lanes from Harrelson Road (SR 1746) to Hatchet Road (SR 1123).
- **Baynes Road (SR 1001), CASW0013-H:** Widen from 9 to 10 foot lanes from NC 62 to NC 119.
- **Broad Street, CASW0014-H:** No widening but modify cross section and lane striping from NC 62 to Race Track Road.
- **Camp Springs Road (SR 1146), CASW0015-H:** Widen from 9 to 11 foot lanes from Cherry Grove Road (SR 1133) to NC 150.
- **Cherry Grove Road (SR 1133), CASW0016-H:** Widen from 10 to 12 foot lanes from Rockingham County to NC 62.
- **County Home Road (SR 1572), CASW0017-H:** Widen from 10 to 12 foot lanes from US 158/ NC 86 to Slade Road (SR 1521).
- **Cunningham Road (SR 1553), CASW0018-H:** Widen from 9 to 10 foot lanes from NC 119 to Person County.
- **Dillard School Drive, CASW0019-H:** Widen from 10 to 12 foot lanes from Main Street to end of Road.

- **Doll Branch Road (SR 1538), CASW0020-H:** Widen from 10 to 11 foot lanes from NC 62 to dead end. *Note: A portion of this facility is currently unpaved.*
- **Dotmond Road (SR 1542), CASW0021-H:** Widen from 10 to 12 foot lanes from NC 57 to Virginia.
- **Fire Tower Road (SR 1589), CASW0022-H:** Widen from 10 to 12 foot lanes from US 158 to County Home Road (SR 1572).
- **Harrelson Road (SR 1746), CASW0023-H:** Widen from 9 to 11 foot lanes from Badgett Sisters Parkway (SR 1156) to NC 62.
- **Holder Street (SR 1619), CASW0024-H:** Widen from 8 to 11 foot lanes from NC 62 (Academy Street) to Palmers Alley.
- **Kerrs Chapel Road (SR 1100), CASW0025-H:** Widen from 9 to 11 foot lanes from Rockingham County to Union Ridge Road (SR 1001).
- **Kimbrow Road (SR 1593), CASW0026-H:** Widen from 9 to 11 foot lanes from US 158/ NC 86 to NC 62.
- **Loftis Road (SR 1150), CASW0027-H:** Widen from 10 to 11 foot lanes from NC 150 to Dead end.
- **New Walters Mill Road (SR 1505), CASW0028-H:** Widen from 10 to 11 foot lanes from Park Springs Road (SR 1300) to Walters Mill Road (SR 1500).
- **North Avenue, CASW0029-H:** Widen from 11 to 12 foot lanes from Main Street to US 158.
- **Old NC 86, CASW0030-H:** Widen from 10 to 12 foot lanes from US 158 to Blanch Road (SR 1523).
- **Palmers Alley, CASW0031-H:** Widen from 9 to 11 foot lanes from Holder Street (SR 1619) to NC 57 (Broad Street).
- **Park Springs Road (SR 1300), CASW0032-H:** Widen from 11 to 12 foot lanes from Ashland Road (SR 1155) to US 158 and from NC 86 to New Walters Mill Road (SR 1503).
- **Race Track Road, CASW0033-H:** Widen from 10 to 12 foot lanes from NC 57 to Virginia.
- **School Drive, CASW0034-H:** Widen from 9 to 12 foot lanes from Dillard School Drive to NC 62.
- **Shady Grove Road (SR 1360), CASW0035-H:** Widen from 11 to 12 foot lanes from US 29 to NC 86.
- **Slade Road (SR 1521), CASW0036-H:** Widen from 9 to 12 foot lanes from County Home Road (SR 1572) to NC 62.
- **Union Ridge Road (SR 1001), CASW0037-H:** Widen from 10 to 11 foot lanes from Alamance County to NC 62.
- **West Main Street, CASW0038-H:** Widen from 10 to 12 foot lanes from Hatchett Road (SR 1156) to Hooper Avenue and no widening but modify cross section and lane striping from Hooper Avenue to Main Street.

- **Walters Mill Road, CASW0039-H:** Widen from 10 to 11 foot lanes from NC 86 to New Walters Mill Road (SR 1503).
- **Yarborough Mill Road, CASW0040-H:** Widen from 9 to 11 foot lanes from NC 62 to NC 57.

Other Local Initiatives

During the development of the CTP, the following local initiatives were also identified.

- **Broad Street Improvements:** The town of Milton expressed an interest in pursuing safety and operational improvements at and around the intersection of NC 62 and Broad Street. Both approaches on the east-west corridor of this signalized intersection consist of site distance issues and steep grades. Speeding through this intersection and downtown Milton is a major concern to the local residents. Strategies and options such as speed bumps, flashing warning signs, signal modifications, intersection improvements, or reduction of the speed limit should be studied and implemented as needed along this corridor to reduce conflicts and improve safety. Further analysis or speed studies will be needed to determine the best possible solution.
- **Main Street/ US 158-NC 86 Intersection Improvements:** The town of Yanceyville expressed an interest in pursuing safety and operational improvements at and around the intersection of Main Street and US 158-NC 86. Speeding and congestion through this intersection and downtown Yanceyville is a major concern to the local residents. Strategies and options such as a proposed new signal and/or intersection improvements should be studied and implemented along this corridor to reduce conflicts and improve safety. Further analysis or speed studies will be needed to determine the best possible solution.

PUBLIC TRANSPORTATION & RAIL

A public transportation and rail assessment was completed during the development of the CTP. There is one active rail line within Caswell County but there are no rail improvements proposed in this CTP. Existing rail facilities are shown on the Public Transportation and Rail Map, Sheet 3 of Figure 1.

Currently, there are no existing or proposed fixed route bus services in Caswell County. However, the Caswell Area Transportation System (CATS)⁷ does provide demand response services within Caswell County. Future transit studies are recommended for the CATS service area to determine the feasibility of fixed bus route(s) within Caswell County.

⁷ For more information on CATS, go to: <http://www.caswellcountync.gov>.

BICYCLE

The 2012 Heritage Trails Master Plan for Caswell County, NC⁸ and the 2013 North Carolina Statewide Pedestrian and Bicycle Plan⁹ (WalkBikeNC) identify existing and recommended greenways, bicycle facilities, and off-road trails throughout Caswell County. These facilities were incorporated into the CTP. Additionally, during the development of the CTP, the following facilities were identified as recommended bicycle routes and will need improvement.

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

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

On-road bicycle improvements are proposed on the following roads:

- **Hooper Avenue, CASW0001-B:** from Main Street to West Main Street in Yanceyville.
- **West Main Street, CASW0002-B:** from Hooper Avenue to Main Street in Yanceyville.

PEDESTRIAN

The 2011 Comprehensive Pedestrian Plan¹⁰ identifies existing and recommended greenways and pedestrian facilities throughout the town of Yanceyville. These facilities were incorporated into the CTP. Additionally, during the development of the CTP, the following facilities were identified for pedestrian improvements.

Sidewalks - Recommended (Sidewalks needed on one or both sides of a facility)

Yanceyville:

- **US 158, CASW0001-P:** from Hatchett Road (SR 1123) to Old NC 86/ Main Street and Tenth Street to NC 86.
- **NC 86, CASW0002-P:** from County Park Road to County Home Road (SR 1572).

⁸ For more information, go to: <http://www.danriver.org>.

⁹ For more information on WalkBikeNC, go to: <https://www.ncdot.gov/bikeped/walkbikenc>.

¹⁰ For more information, go to: <http://www.altaplanning.com>.

- **NC 62, CASW0003-P:** from Main Street to Piedmont Drive.
- **Barco Street, CASW0004-P:** from Main Street to the Recreation Department.
- **Church Street, CASW0005-P:** from Main Street to North Avenue and County Park Road to Barco Street.
- **County Park Road, CASW0006-P:** from Church Street to NC 86.
- **Dillard School Drive, CASW0007-P:** from Main Street to School Drive.
- **Hatchett Road (SR 1123), CASW0008-P:** from US 158 to the N L Dillard Jr High School driveway.
- **Ninth Street, CASW0009-P:** from Main Street to NC 86.
- **School Drive, CASW0010-P:** from Dillard School Drive to NC 62.
- **Tenth Street, CASW0011-P:** from Food Lion Driveway to US 158.

Milton:

- **NC 57 (Broad Street), CASW0012-P:** from Bridge Street to Race Track Road.
- **Holder Street (SR 1619), CASW0013-P:** from Academy Street to Palmer's Alley.
- **Palmer's Alley, CASW0014-P:** from Holder Street (SR 1619) to Broad Street.

Sidewalks – Needs Improvement (Sidewalks needed on one side of a facility)

- **NC 57 (Broad Street), CASW0015-P:** from Academy Street to Bridge Street (Milton).
- **Academy Street, CASW0016-P:** from Holder Street (SR 1619) to Broad Street (Milton).

Additionally, the following multi-use paths were recommended during the development of the CTP:

- **Fire Tower Trail Proposed Greenway, CASW0001-M:** from North Avenue to County Home Road (SR 1572) in Yanceyville.
- **Milton Proposed Greenway, CASW0002-M:** from Academy Street to Boat Access near bridge crossing the Dan River.
- **Country Line Creek Trail, CASW0003-M:** from West Main Street in Yanceyville to entrance of Boys Scout Camp on Boy Scout Camp Road.

APPENDICES

Appendix A Resources and Contacts

Local Planning Organization

Piedmont Triad Rural Planning Organization (www.ptrc.org)

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

1398 Carrollton Crossing Drive Kernersville, NC 27284 (336) 904-0300

North Carolina Department of Transportation

Customer Service Office

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

1-877-DOT-4YOU (1-877-368-4968) <http://www.ncdot.gov/contact/>

Secretary of Transportation (<http://www.ncdot.org/about/leadership/secretary.html>)

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

Board of Transportation (<http://www.ncdot.gov/about/board/>)

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

Highway Division 7 (<https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx>)

1584 Yanceyville Street Greensboro, NC 27415 (336) 487-0000
PO Box 14996

Contact the Highway Division with questions concerning NCDOT activities within each Division and for information on Small Urban Funds.

Contact the following NCDOT divisions and units¹ for:

<u>Transportation Planning Division (TPD)</u>	Information on long-range multi-modal planning services. 1554 Mail Service Center Raleigh, NC 27699 (919) 707-0900
<u>Strategic Prioritization Office</u>	Information concerning prioritization of transportation projects. 1534 Mail Service Center Raleigh, NC 27699 (919) 707-4622
<u>Project Development & Environmental Analysis (PDEA)</u>	Information on environmental studies for projects that are included in the TIP. 1548 Mail Service Center Raleigh, NC 27699 (919) 707-6000
<u>State Asset Management Unit</u>	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.

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

	1535 Mail Service Center Raleigh, NC 27699 (919) 707-2500
<u>Division of Planning & Programming</u>	<i>Information concerning Roadway Official Corridor Maps, Feasibility Studies and the Transportation Improvement Program (TIP).</i> 1534 Mail Service Center Raleigh, NC 27699 (919) 707-4610
<u>Public Transportation Division</u>	<i>Information on public transit systems.</i> 1550 Mail Service Center Raleigh, NC 27699 (919) 707-4670
<u>Rail Division</u>	<i>Rail information throughout the state.</i> 1553 Mail Service Center Raleigh, NC 27699 (919) 707-4700
<u>Division of Bicycle and Pedestrian Transportation</u>	<i>Bicycle and pedestrian transportation information throughout the state.</i> 1552 Mail Service Center Raleigh, NC 27699 (919) 707-2600
<u>Structures Management Unit</u>	<i>Information on bridge management throughout the state.</i> 1581 Mail Service Center Raleigh, NC 27699 (919) 707-6400
<u>Roadway Design Unit</u>	<i>Information regarding design plans and proposals for road and bridge projects throughout the state.</i> 1582 Mail Service Center Raleigh, NC 27699 (919) 707-6200
<u>Transportation Mobility and Safety Division</u>	<i>Information regarding crash data throughout the state.</i> 1561 Mail Service Center Raleigh, NC 27699 (919) 773-2800

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

<http://www.nccommerce.com/cd>

Appendix B

Comprehensive Transportation Plan Definitions

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

Highway Map

The “[*NCDOT Facility Type –Control of Access Definitions*](#)” document provides a visual depiction of facility types for the following CTP classification.

Facility Type Definitions

❖ Freeways

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

❖ Expressways

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

❖ **Boulevards**

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

❖ **Other Major Thoroughfares**

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

❖ **Minor Thoroughfares**

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

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

- ❖ **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- ❖ **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
 - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
 - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
 - Recommended – It is desirable for future rail to be considered to serve an area.
- ❖ **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
 - Existing – Corridor where higher-speed rail service (over 79 mph) is provided or a corridor that is officially designated by FRA to run higher speed trains in the future. There is currently one federally designated high-speed rail corridor in North Carolina - The Southeast High Speed Rail Corridor.
 - Recommended – Proposed corridor for higher speed rail service.
- ❖ **Rail Stop** – A railroad station or stop along the railroad tracks.
- ❖ **Multimodal Connector** - A location where more than one mode of transportation meet such as where light rail and a bus route come together in one location. (NOTE- intermodal refers to two or more modes that transfer the same cargo unit-like 40' shipping container from ship to train or truck); multimodal is the transfer of people/cargo between two or more modes and in NC is used in public transit settings i.e. Charlotte Multimodal Station)
- ❖ **Park and Ride Lot** – A strategically located parking lot that provides commuters connections to transit or carpools.
- ❖ **Existing Grade Separation** – Locations where existing rail facilities are physically separated from existing highways or other transportation facilities. These may be bridges, culverts, or other structures.
- ❖ **Proposed Grade Separation** – Locations where rail facilities are recommended to be physically separated from existing or recommended highways or other transportation facilities. These may be bridges, culverts, or other structures.

Bicycle Map

- ❖ **On Road-Existing** – Conditions for bicycling on the highway facility are adequate to safely accommodate cyclists.
- ❖ **On Road-Needs Improvement** – At the systems level, it is desirable for an existing highway facility to accommodate bicycle transportation; however, highway improvements are necessary to create safe travel conditions for the cyclists.

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

Pedestrian Map

- ❖ **Sidewalk-Existing** – Paved paths (including but not limited to concrete, asphalt, brick, stone, or wood) on both sides of a highway facility and within the highway right-of-way that are adequate to safely accommodate pedestrian traffic.
- ❖ **Sidewalk-Needs Improvement** – Improvements are needed to provide paved paths on both sides of a highway facility. The highway facility may or may not need improvements. Improvements do not include re-paving or other maintenance activities but may include: filling in gaps, widening sidewalks, or meeting ADA (Americans with Disabilities Act) requirements.
- ❖ **Sidewalk-Recommended** – At the systems level, it is desirable for a recommended highway facility to accommodate pedestrian transportation **or** to add sidewalks on an existing facility where no sidewalks currently exist. The highway should be designed and built to safely accommodate pedestrian traffic.
- ❖ **Off Road-Existing** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.
- ❖ **Off Road-Needs Improvement** – A facility that accommodates only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way that will not adequately serve future pedestrian needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), improved horizontal or vertical alignment, and meeting ADA requirements.
- ❖ **Off Road-Recommended** – A facility needed to accommodate only pedestrian traffic and is physically separated from a highway facility usually within an independent right-of-way.
- ❖ **Multi-use Path-Existing** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.
- ❖ **Multi-use Path-Needs Improvement** – An existing facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that serves bicycle and pedestrian traffic that will not adequately serve future needs. Improvements may include but are not limited to, widening, paving (not re-paving or other maintenance activities), and improved horizontal or vertical alignment. Sidewalks should not be designated as a multi-use path.
- ❖ **Multi-use Path-Recommended** – A facility physically separated from motor vehicle traffic that is either within the highway right-of-way or on an independent right-of-way that is needed to serve bicycle and pedestrian traffic. Sidewalks should not be designated as a multi-use path.

- ❖ **Existing Grade Separation** – Locations where existing “Off Road” facilities and “Multi-use Paths” are physically separated from existing highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.
- ❖ **Proposed Grade Separation** – Locations where “Off Road” facilities and “Multi-use Paths” are recommended to be physically separated from existing or recommended highways, railroads, or other transportation facilities. These may be bridges, culverts, or other structures.

Appendix C

CTP Inventory and Recommendations

Assumptions/ Notes:

- ❖ **Local ID:** This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- ❖ **Jurisdiction:** Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- ❖ **Existing Cross-Section:** Listed under 'Total Width (ft)' is the approximate width of the roadway from edge of pavement to edge of pavement and under 'Lane Width (ft)' is the approximate width of a single lane based on centerline/ edge line markings. Listed under 'Lanes' is the total number of lanes, with 'D' if the facility is divided, and 'OW' if it is a one-way facility.
- ❖ **Existing ROW:** The estimated existing right-of-way is based on NCDOT's Road Characteristics shapefile. These right-of-way amounts are approximate and may vary.
- ❖ **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed based on the 2000 Highway Capacity Manual using the Transportation Planning Branch's LOS D Standards for Systems Level Planning, as documented in Chapter 1.
- ❖ **Existing and Proposed Volumes,** given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2040 Volume E+C' is an estimate of the volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012 - 2018 Transportation Improvement Program (TIP). The '2040 Volume with CTP' is an estimate of the volume in 2040 with all proposed CTP improvements assumed to be in place. The '2040 Volume with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter 1.
- ❖ **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended for the given mode as part of the CTP.

- ❖ **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.
- ❖ **Tier:** Tiers are defined as part of the North Carolina Multimodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- ❖ **Proposals for Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H= highway, T= public transportation, R= rail, B= bicycle, P= pedestrian, and M= multi-use path).

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
	US 29	Rockingham Co.	Law Rd (SR 1341)	Caswell Co.	1.9	48	4	12	300	65	59300	15500	17600	17600	59300	ADQ	ADQ	F	Sta	
	US 29	Law Rd (SR 1341)	NC 700	Caswell Co.	2.5	48	4	12	300	65	59300	15500	17600	17600	59300	ADQ	ADQ	F	Sta	
	US 29	NC 700	Virginia Line	Caswell Co.	1.6	48	4	12	300	65	59300	18100	20500	20500	59300	ADQ	ADQ	F	Sta	
CASW0002-H	US 158	Rockingham Co.	Ashland Rd (SR 1155)/ Park Springs Rd (SR 1300)	Caswell Co.	1.3	22	2	11	60	55	14600	2700	3100	3100	15100	2A	60	Maj	Sta	
CASW0002-H	US 158	Ashland Rd (SR 1155)/ Park Springs Rd (SR 1300)	Allison Rd (SR 1306)	Caswell Co.	2.0	22	2	11	60	55	14600	2300	2600	2600	15100	2A	60	Maj	Sta	
CASW0002-H	US 158	Allison Rd (SR 1306)	NC 150	Caswell Co.	2.4	22	2	11	60	55	14600	1700	1900	1900	15100	2A	60	Maj	Sta	B
CASW0002-H	US 158	NC 150	Hodges Dairy Rd (SR 1311)	Caswell Co.	4.0	22	2	11	60	45	14100	2600	2900	2900	15100	2A	60	Maj	Sta	
CASW0002-H	US 158	Hodges Dairy Rd (SR 1311)	Hatchet Rd (SR 1123)	Caswell Co.	1.4	22	2	11	60	45	14100	4400	5000	5000	15100	2A	60	Maj	Sta	
CASW0002-H	US 158	Hatchet Rd (SR 1123)	Main St (SR 1163)	Yanceyville	0.6	22	2	11	60	35	11200	6600	7500	7500	15100	2E	60	Maj	Sta	
CASW0002-H	US 158	Main St (SR 1163)	NC 86/ County Home Rd (SR 1572)	Yanceyville	0.4	22	2	11	150	35	11200	5100	5800	5800	15100	2E	60	Maj	Sta	
CASW0002-H	US 158/NC 86	NC 86/ County Home Rd (SR 1572)	Fire Tower Rd (SR 1589)	Yanceyville	1.1	40	3	12	110	55	15100	10700	12100	12100	40500	4B	130	Blvd	Sta	
CASW0002-H	US 158/NC 86	Fire Tower Rd (SR 1589)	E Main St	Yanceyville	0.9	24	2	12	80	55	15100	7200	8200	8200	40500	4B	130	Blvd	Sta	
CASW0002-H	US 158/NC 86	E Main St	NC 62	Yanceyville	0.1	22	2	11	60	35	11200	9000	10200	10200	12900	3A	130	Maj	Sta	
CASW0002-H	US 158	NC 62	NC 86 Split	Caswell Co.	3.0	24	2	12	60	55	15100	10300	11600	11600	15100	2A	130	Maj	Sta	
CASW0002-H	US 158	NC 86 Split	NC 119	Caswell Co.	3.8	24	2	12	60	55	15100	7600	8600	8600	15100	2A	130	Maj	Sta	
CASW0002-H	US 158	NC 119	Ridgeville Rd (SR 1702)	Caswell Co.	3.2	22	2	11	60	55	14600	1600	1800	1800	15100	2A	130	Maj	Sta	

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0002-H	US 158	Ridgeville Rd (SR 1702)	Solomon Lea Rd (SR 1561)	Caswell Co.	0.1	22	2	11	60	45	12300	2300	2600	2600	14600	2A	130	Maj	Sta	
CASW0002-H	US 158	Solomon Lea Rd (SR 1561)	Person Co.	Caswell Co.	0.1	22	2	11	60	45	12300	2200	2500	2500	14600	2A	130	Maj	Sta	
	NC 49	NC 86	Person Co.	Caswell Co.	2.4	22	2	11	60	55	14600	1800	2000	2000	14600	ADQ	ADQ	Maj	Reg	
CASW0006-H	NC 57	Race Track Rd	Dotmond Rd (SR 1542)	Caswell Co.	1.5	22	2	11	60	45	14100	3100	3500	3500	14600	2A	60	Maj	Reg	
CASW0006-H	NC 57	Dotmond Rd (SR 1542)	Yarborough Mill Rd (SR 1554)	Caswell Co.	1.8	22	2	11	60	45	14100	3600	4100	4100	14600	2A	60	Maj	Reg	
CASW0006-H	NC 57	Yarborough Mill Rd (SR 1554)	NC 119	Caswell Co.	1.2	22	2	11	60	55	14600	3700	4200	4200	15100	2A	60	Maj	Reg	
CASW0006-H	NC 57	NC 119	Person Co.	Caswell Co.	0.6	22	2	11	60	55	14600	3600	4100	4100	15100	2A	60	Maj	Reg	
CASW0001-H	NC 62 Bypass	NC 62	Main St (SR 1163)	Yanceyville	1.0	-	-	-	-	-	-	-	-	-	15100	2A	60	Maj	Sta	
CASW0007-H	NC 62	Alamance Co.	Baynes Rd (SR 1001)	Caswell Co.	1.8	22	2	11	60	55	14600	1700	1900	1900	15100	2A	60	Maj	Reg	
CASW0007-H	NC 62	Baynes Rd (SR 1001)	Cherry Grove Rd (SR 1133)	Caswell Co.	2.2	24	2	12	60	55	15100	3600	4100	4100	15100	ADQ	ADQ	Maj	Reg	
CASW0007-H	NC 62	Cherry Grove Rd (SR 1133)	Oakview Loop Rd	Caswell Co.	3.2	22	2	11	60	55	14600	2200	2500	2500	15100	2A	60	Maj	Reg	
CASW0007-H	NC 62	Oakview Loop Rd	Burton Chapel Rd (SR 1736)	Caswell Co.	2.1	22	2	11	60	55	14600	2800	3200	3200	15100	2A	60	Maj	Reg	
CASW0007-H	NC 62	Burton Chapel Rd (SR 1736)	Harrelson Rd (SR 1746)	Caswell Co.	2.1	22	2	11	60	55	14600	2500	2800	2800	15100	2A	60	Maj	Reg	
CASW0007-H	NC 62	Harrelson Rd (SR 1746)	Main St (SR 1163)	Yanceyville	1.4	22	2	11	60	35	9900	2900	3300	3300	10200	2B	60	Maj	Reg	
CASW0007-H	NC 62/ Main St	Main St (SR 1163)	US 158/ NC 86	Yanceyville	0.6	22	2	11	60	35	9900	3100	3500	3500	10200	2B	60	Maj	Reg	
CASW0007-H	NC 62	US 158/ NC 86	Slade Rd (SR 1521)	Caswell Co.	4.7	22	2	11	60	55	14600	1400	1600	1600	15100	2A	60	Maj	Reg	
CASW0007-H	NC 62	Slade Rd (SR 1521)	Blanch Rd (SR 1523)	Caswell Co.	3.2	22	2	11	60	55	14600	1500	1700	1700	15100	2A	60	Maj	Reg	
CASW0007-H	NC 62	Blanch Rd (SR 1523)	Yarborough Mill Rd (SR 1554)	Caswell Co.	1.1	22	2	11	60	45	14100	1200	1400	1400	14600	2A	60	Maj	Reg	
CASW0007-H	NC 62	Yarborough Mill Rd (SR 1554)	Doll Branch Rd (SR 1538)	Caswell Co.	3.4	24	2	12	60	45	15100	1300	1400	1400	15100	ADQ	ADQ	Maj	Reg	

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0007-H	NC 62	Doll Branch Rd (SR 1538)	NC 57	Milton	0.5	22	2	11	60	35	10700	1100	1200	1200	11100	2B	60	Maj	Reg	
CASW0007-H	NC 62	NC 57	Virginia	Milton	0.4	22	2	11	60	45	12300	3900	4200	4200	12700	2B	60	Maj	Reg	
CASW0003-H	NC 86	Orange Co.	NC 49	Caswell Co.	0.1	24	2	12	60	55	15100	3900	4600	4600	15100	2A	60	Maj	Sta	
CASW0003-H	NC 86	NC 49	Ridgeville Rd (SR 1702)	Caswell Co.	1.5	24	2	12	60	55	15100	5700	6500	6500	15100	2A	60	Maj	Sta	
CASW0003-H	NC 86	Ridgeville Rd (SR 1702)	NC 119	Caswell Co.	5.3	24	2	12	60	55	15100	5000	5700	5700	15100	2A	60	Maj	Sta	
CASW0003-H	NC 86	NC 119	US 158	Caswell Co.	4.6	24	2	12	60	55	15100	5400	6100	6100	15100	2A	60	Maj	Sta	
CASW0003-H	NC 86	US 158	NC 62/ Main St	Caswell Co.	3.1	24	2	12	60	55	15100	7600	8600	8600	56100	4F	100	Maj	Sta	
CASW0003-H	NC 86	NC 62/ Main St	Fire Tower Rd (SR 1589)	Yanceyville	0.9	24	2	12	60	55	15100	7200	8200	8200	56100	4A	300	Maj	Sta	
CASW0003-H	NC 86	Fire Tower Rd (SR 1589)	NC 86/ County Home Rd (SR 1572)	Yanceyville	1.1	24	2	12	60	55	15100	10700	12100	12100	56100	4A	300	Maj	Sta	
CASW0003-H	NC 86	NC 86/ County Home Rd (SR 1572)	Old NC 86	Yanceyville	1.0	24	2	12	60	55	15100	8800	10000	10000	56100	4A	300	Maj	Sta	
CASW0003-H	NC 86	Old NC 86	Park Springs Rd (SR 1334)	Caswell Co.	4.2	24	2	12	60	55	15100	8500	9600	9600	15100	2A	60	Maj	Sta	
CASW0003-H	NC 86	Park Springs Rd (SR 1334)	Shady Grove Rd (SR 1360)	Caswell Co.	3.3	24	2	12	60	55	15100	10500	11900	11900	15100	2A	60	Maj	Sta	
CASW0003-H	NC 86	Shady Grove Rd (SR 1360)	Virginia Line	Caswell Co.	0.5	24	2	12	60	55	15100	10400	11800	11800	15100	2A	60	Maj	Sta	
CASW0004-H	NC 87	Alamance Co.	Kerrs Chapel Rd (SR 1100)	Caswell Co.	0.1	22	2	11	60	55	14600	2900	3300	3300	45200	4A	300	Maj	Sta	
CASW0004-H	NC 87	Kerrs Chapel Rd (SR 1100)	Rockingham Co.	Caswell Co.	1.9	22	2	11	60	55	14600	3700	4200	4200	45200	4A	300	Maj	Sta	
CASW0008-H	NC 119	Alamance Co.	Baynes Rd (SR 1001)	Caswell Co.	1.8	22	2	11	60	55	14100	1900	2200	2200	15100	2A	60	Maj	Reg	
CASW0008-H	NC 119	Baynes Rd (SR 1001)	Burton Chapel Rd (SR 1736)	Caswell Co.	2.3	22	2	11	60	55	14600	1900	2200	2200	15100	2A	60	Maj	Reg	
CASW0008-H	NC 119	Burton Chapel Rd (SR 1736)	NC 86	Caswell Co.	3.3	22	2	11	60	55	14600	1700	1900	1900	15100	2A	60	Maj	Reg	

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0008-H	NC 119	NC 86	US 158	Caswell Co.	5.6	22	2	11	60	55	14600	1200	1400	1400	15100	2A	60	Maj	Reg	
CASW0008-H	NC 119	US 158	Stephentown Rd (SR 1564)	Caswell Co.	4.7	22	2	11	60	55	14600	700	800	800	15100	2A	60	Maj	Reg	
CASW0008-H	NC 119	Stephentown Rd (SR 1564)	NC 57	Caswell Co.	3.8	22	2	11	60	55	14600	800	900	900	15100	2A	60	Maj	Reg	
CASW0008-H	NC 119	NC 57	Cunningham Rd (SR 1553)	Caswell Co.	0.6	22	2	11	60	55	14600	2000	2300	2300	15100	2A	60	Maj	Reg	
CASW0008-H	NC 119	Cunningham Rd (SR 1553)	Virginia Line	Caswell Co.	2.5	22	2	11	60	55	14600	700	800	800	15100	2A	60	Maj	Reg	
CASW0009-H	NC 150	Rockingham Co.	Camp Springs Rd (SR 1146)	Caswell Co.	0.8	18	2	9	60	55	13600	1600	1800	1800	15100	2A	60	Maj	Reg	
CASW0009-H	NC 150	Camp Springs Rd (SR 1146)	US 158	Caswell Co.	5.7	18	2	9	60	55	13600	1700	1900	1900	15100	2A	60	Maj	Reg	
CASW0010-H	NC 700	Rockingham Co.	US 29	Caswell Co.	2.4	20	2	10	60	55	14100	2300	2600	2600	15100	2A	60	Maj	Reg	
	Allison Rd (SR 1306)	US 158	Park Springs Rd (SR 1334)	Caswell Co.	7.6	18	2	9	60	55	13600	600	700	700	13600	ADQ	ADQ	Min	Sub	
CASW0011-H	Ashland Rd (SR 1155)	NC 150	US 158	Caswell Co.	2.5	18	2	9	60	55	13600	1200	1400	1400	14600	2A	60	Min	Sub	
CASW0012-H	Badgett Sisters Pkwy (SR 1156)	Oakview Loop Rd (SR 1156)	Harrelson Rd (SR 1746)	Caswell Co.	3.5	18	2	9	60	45	13100	300	400	400	13100	ADQ	ADQ	Min	Sub	
CASW0012-H	Badgett Sisters Pkwy (SR 1156)	Harrelson Rd (SR 1746)	Hatchet Rd (SR 1123)	Caswell Co.	1.5	18	2	9	60	45	13100	400	500	500	15100	2A	60	Min	Sub	
CASW0013-H	Baynes Rd (SR 1001)	NC 62	NC 119	Caswell Co.	2.4	18	2	9	60	45	13100	1000	1100	1100	14600	2A	60	Min	Sub	
	Blanch Rd (SR 1523)	Old NC 86 (SR 1500)	NC 62	Caswell Co.	8.0	18	2	9	60	45	13100	500	600	600	13100	ADQ	ADQ	Min	Sub	
CASW0014-H	Broad St	NC 62	Race Track Rd	Milton	0.5	22	2	11	60	35	10700	3600	4100	4100	11100	2B	60	Min	Sub	
	Burton Chapel Rd (SR 1736)	NC 62	NC 119	Caswell Co.	6.7	20	2	10	60	45	13600	400	500	500	13600	ADQ	ADQ	Min	Sub	

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0015-H	Camp Springs Rd (SR 1146)	Cherry Grove Rd (SR 1133)	NC 150	Caswell Co.	2.8	18	2	9	60	55	13600	800	900	900	15100	2A	60	Min	Sub	
CASW0016-H	Cherry Grove Rd (SR 1133)	Rockingham Co.	Camp Springs Rd (SR 1146)	Caswell Co.	2.4	20	2	10	60	45	13600	2100	2400	2400	14600	2A	60	Min	Sub	
CASW0016-H	Cherry Grove Rd (SR 1133)	Camp Springs Rd (SR 1146)	Stoney Creek School Rd (SR 1126)	Caswell Co.	4.9	20	2	10	60	45	13600	1500	1700	1700	14600	2A	60	Min	Sub	
CASW0016-H	Cherry Grove Rd (SR 1133)	Stoney Creek School Rd (SR 1126)	NC 62	Caswell Co.	3.8	20	2	10	60	45	13600	1100	1200	1200	14600	2A	60	Min	Sub	
CASW0017-H	County Home Rd (SR 1572)	US 158/ NC 86	Firetower Rd (SR 1589)	Caswell Co.	0.9	20	2	10	60	55	14100	3600	4100	4100	15100	2A	60	Min	Sub	
CASW0017-H	County Home Rd (SR 1572)	Firetower Rd (SR 1589)	Slade Rd (SR 1521)	Caswell Co.	2.8	20	2	10	60	55	14100	2100	2400	2400	15100	2A	60	Min	Sub	
CASW0018-H	Cunningham Rd (SR 1553)	NC 119	Person Co.	Caswell Co.	0.1	18	2	9	60	55	13600	900	1000	1000	15100	2A	60	Min	Sub	
CASW0019-H	Dillard School Dr	N Main St	End of Road	Yanceyville	0.4	20	2	11	60	25	9300	100	200	200	10000	2D	90	Min	Sub	
CASW0020-H	Doll Branch Rd (SR 1538)	NC 62	Dead end	Caswell Co.	1.6	20	2	10	60	35	9500	200	300	300	9900	2B	60	Min	Sub	
CASW0021-H	Dotmond Rd (SR 1542)	NC 57	Virginia Line	Caswell Co.	1.4	20	2	10	60	45	13600	500	600	600	14600	2A	60	Min	Sub	
	E Main St (SR 1163)	North Ave	NC 62	Yanceyville	0.4	20	2	10	60-100	35	9500	4800	5400	5400	9500	ADQ	ADQ	Min	Sub	
CASW0022-H	Fire Tower Rd (SR 1589)	US 158	Proposed Oakwood Dr Ext.	Yanceyville	0.6	20	2	10	60	45	11400	1600	1800	1800	14600	2A	60	Min	Sub	
CASW0022-H	Fire Tower Rd (SR 1589)	Proposed Oakwood Dr Ext.	County Home Rd (SR 1572)	Yanceyville	0.4	20	2	10	60	45	11400	1600	1800	1800	14600	2A	60	Min	Sub	
CASW0023-H	Harrelson Rd (SR 1746)	Badgett Sisters Pkwy (SR 1156)	NC 62	Caswell Co.	1.9	18	2	9	60	45	13100	900	1000	1000	14600	2A	60	Min	Sub	
	Hatchet Rd (SR 1123)	Badgett Sisters Pkwy (SR 1156)	US 158	Caswell Co.	2.2	18	2	9	60	35	9200	1700	1900	1900	9200	ADQ	ADQ	Min	Sub	P

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0024-H	Holder Street	NC 62	Palmers Alley	Milton	0.2	16	2	8	60	25	9000	100	200	200	10000	2A	60	Min	Sub	
	Hooper Ave	W Main St	Main St	Yanceyville	0.1	30	2	15	60	25	10000	300	400	400	10000	ADQ	ADQ	Min	Sub	
CASW0025-H	Kerrs Chapel Rd (SR 1100)	Rockingham Co.	NC 87	Caswell Co.	0.1	18	2	9	60	45	13100	500	600	600	14600	2A	60	Min	Sub	
CASW0025-H	Kerrs Chapel Rd (SR 1100)	NC 87	Union Ridge Rd (SR 1001)	Caswell Co.	9.0	18	2	9	60	45	13100	800	900	900	14600	2A	60	Min	Sub	
CASW0026-H	Kimbrow Rd (SR 1593)	US 158/ NC 86	NC 62	Yanceyville	0.7	18	2	9	60	35	9200	900	1000	1000	10200	2B	60	Min	Sub	
	Law Rd (SR 1341)	US 29	Park Springs Rd (SR 1300)	Caswell Co.	3.5	20	2	10	60	45	13600	800	900	900	13600	ADQ	ADQ	Min	Sub	
CASW0027-H	Loftis Rd (SR 1150)	NC 150	Dead end	Caswell Co.	1.1	20	2	10	60	35	9500	200	300	300	10200	2B	60	Min	Sub	
	Main St	NC 158	North Ave	Yanceyville	1.5	22	2	11	60	35	9900	4400	5000	5000	9900	ADQ	ADQ	Min	Sub	
CASW0028-H	New Walters Mill Rd (SR 1505)	Park Springs Rd (SR 1300)	Walters Mill Rd (SR 1500)	Caswell Co.	1.1	20	2	10	60	45	13600	800	900	900	14600	2A	60	Min	Sub	
CASW0029-H	North Ave	Main St	US 158	Yanceyville	0.3	22	2	11	60	25	9700	2800	3200	3200	10000	2D	80	Min	Sub	
	Oakview Loop Rd	Badgett Sisters Pkwy (SR 1156)	NC 62	Caswell Co.	0.1	18	2	9	60	45	13100	600	700	700	13100	ADQ	ADQ	Min	Sta	
CASW0005-H	Oakwood Drive Ext	US 158/ NC 86	Fire Tower Rd (SR 1589)	Yanceyville	0.7	-	-	-	-	-	-	-	-	-	12200	2B	60	Min	Sta	
CASW0030-H	Old NC 86 (SR 1500)	US 158	NC 86	Caswell Co.	1.1	20	2	10	60	35	9500	1400	1600	1600	10200	2B	60	Min	Sub	
CASW0030-H	Old NC 86 (SR 1500)	NC 86	Blanch Rd (SR 1523)	Caswell Co.	3.0	20	2	10	60	35	9500	1100	1200	1200	10200	2B	60	Min	Sub	
CASW0031-H	Palmers Alley	Holder Street	NC 57 (Broad Street)	Milton	0.2	18	2	9	60	25	9000	100	200	200	12200	2B	60	Min	Sta	

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0032-H	Park Springs Rd (SR 1300)	Ashland Rd (SR 1155)	US 158	Caswell Co.	2.5	22	2	11	60	45	14100	700	800	900	14100	2A	60	Min	Sub	
CASW0032-H	Park Springs Rd (SR 1300)	US 158	Law Rd (SR 1341)	Caswell Co.	5.4	22	2	11	60	45	14100	1100	1200	1200	14100	ADQ	ADQ	Min	Sub	
CASW0032-H	Park Springs Rd (SR 1300)	Law Rd (SR 1341)	Allison Rd (SR 1306)	Caswell Co.	2.4	22	2	11	60	45	14100	800	900	900	14100	ADQ	ADQ	Min	Sub	
CASW0032-H	Park Springs Rd (SR 1300)	Allison Rd (SR 1306)	NC 86	Caswell Co.	2.5	22	2	11	60	45	14100	1800	2000	2000	14100	ADQ	ADQ	Min	Sub	
CASW0032-H	Park Springs Rd (SR 1300)	NC 86	New Walters Mill Rd (SR 1503)	Caswell Co.	1.5	22	2	11	60	45	14100	800	900	900	14600	2A	60	Min	Sub	
CASW0033-H	Race Track Rd	NC 57	Virginia Line	Caswell Co.	0.1	20	2	10	60	45	13600	600	700	700	14600	2B	60	Min	Sub	
	Ridgeville Rd (SR 1702)	NC 86	US 158	Caswell Co.	9.6	18	2	9	60	45	11000	1100	1200	1200	11000	ADQ	ADQ	Min	Sub	
CASW0034-H	School Drive	Dillard School Dr	NC 62	Yanceyville	0.2	18	2	9	60	25	9000	100	200	200	10000	2D	90	Min	Sub	
CASW0035-H	Shady Grove Rd (SR 1360)	US 29	NC 86	Caswell Co.	5.2	22	2	11	60	45	14100	2600	2900	2900	14600	2A	80	Min	Sub	
CASW0036-H	Slade Rd (SR 1521)	County Home Rd (SR 1572)	NC 62	Caswell Co.	2.2	18	2	9	60	45	13100	1300	1500	1500	14600	2A	80	Min	Sub	
	Solomon Lea Rd (SR 1561)	US 158	Person Co.	Caswell Co.	5.3	20	2	10	60	45	13600	500	600	600	13600	ADQ	ADQ	Min	Sub	
	Stoney Creek School Rd (SR 1126)	Cherry Grove Rd (SR 1133)	NC 150	Caswell Co.	4.0	20	2	10	60	45	13600	600	700	700	13600	ADQ	ADQ	Min	Sub	
CASW0037-H	Union Ridge Rd (SR 1001)	Alamance Co.	Kerrs Chapel Rd (SR 1100)	Caswell Co.	1.0	20	2	10	60	45	13600	1300	1500	1500	14600	2A	80	Min	Sub	
CASW0037-H	Union Ridge Rd (SR 1001)	Kerrs Chapel Rd (SR 1100)	NC 62	Caswell Co.	1.4	20	2	10	60	45	13600	1800	2000	2000	14600	2A	80	Min	Sub	
CASW0038-H	W Main St (SR 1156)	Hatchett Rd (SR 1123)	Hooper Ave	Yanceyville	1.3	20	2	10	60	35	9500	200	300	300	10200	2B	60	Min	Sub	

HIGHWAY																				
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2016 Existing System							2040 Proposed System					CTP Classifi- cation	Tier	Proposals for Other Modes
		From	To			Total Width (ft)	Lanes	Lane Width (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2016 Volume	2040 Volume E+C	2040 Volume with CTP	Proposed Capacity (vpd)	Cross- Section	ROW (ft)			
CASW0038-H	W Main St (SR 1156)	Hooper Ave	Main St	Yanceyville	0.3	34	2	17	60	25	10000	1300	1500	1500	10000	ADQ	ADQ	Min	Sub	
CASW0039-H	Walters Mill Rd (SR 1503)	NC 86	New Walters Mill Rd (SR 1503)	Caswell Co.	4.8	20	2	10	60	45	13600	1200	1400	1400	14600	2A	80	Min	Sub	
CASW0040-H	Yarborough Mill Rd (SR 1554)	NC 62	NC 57	Caswell Co.	4.7	18	2	9	60	55	13600	1100	1300	1300	15100	2A	80	Min	Sub	

PUBLIC TRANSPORTATION AND RAIL

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

¹ Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to *[insert name of document(s)]*.

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	
	Norfolk Southern	Rockingham County - Virginia Line	1	25	6	Freight	35-100	20				

BICYCLE AND PEDESTRIAN ¹

BICYCLE								
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Cross-Section		Type	Cross-Section	
				(ft)	lanes			
	NC Bicycle Route 4	Rockingham County - Person County	32	18-24	2			
CASW0001-B	Hooper Avenue	Main Street to W Main Street	0.1	32	2	Bicycle	2E	P
CASW0002-B	W Main Street	Hooper Avenue to Main Street	0.2		2	Bicycle	2E	P

PEDESTRIAN								
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Type	Side of St	Type	Side of St	
	Town of Yanceyville							
CASW0001-P	US 158	Hatchett Road (SR 1123) to Old NC 86/ Main Street	0.7			Sidewalk	Both	
CASW0002-P	NC 86	County Home Road (SR 1572) to County Home Rd (SR 1572)	1.3			Sidewalk	Both	
CASW0003-P	NC 62	Main Street to Piedmont Drive	0.2			Sidewalk	Both	
CASW0004-P	Barco Street	Main Street to Recreation Department	0.2			Sidewalk	Both	
CASW0005-P	Church Street	Main Street to North Avenue	0.4			Sidewalk	South	
	Church Street	North Avenue to County Park Road	0.1	Sidewalk	South			
CASW0005-P	Church Street	County Park Road to Barco Street	0.1			Sidewalk	South	
CASW0006-P	County Park Road	Church Street to NC 86	0.2			Sidewalk	Both	
CASW0007-P	Dillard School Drive	Main Street to School Drive	0.2			Sidewalk	Both	
	First Avenue	W Main Street to Main Street	0.1	Sidewalk	West			
	Hooper Avenue	Main Street to W Main Street	0.2	Sidewalk	North			B
CASW0008-P	Hatchett Road (SR 1123)	US 158 to School Driveway	0.3			Sidewalk	Both	
	Main Street	Old NC 86 to Pemberton Street	2	Sidewalk	Both			
CASW0009-P	Ninth Street	Main Street to NC 86	0.2			Sidewalk	Both	
	North Avenue	Main Street to NC 86	0.3	Sidewalk	East			
CASW0010-P	School Drive	Dillard School Drive to NC 62	0.2			Sidewalk	Both	
	Tenth Street	Main Street to Food Lion Driveway	0.1	Sidewalk	East			
CASW0011-P	Tenth Street	Food Lion Driveway to US 158	0.2			Sidewalk	East	
	W Main Street	Cooper Rodgers Road to Main Street	0.4	Sidewalk	Both			B
	Town of Milton							
CASW0012-P	NC 57 (Broad Street)	Academy Street to Bridge Street	0.2			Sidewalk	South	
CASW0013-P	NC 57 (Broad Street)	Bridge Street to Race Track Road	0.2			Sidewalk	Both	
CASW0014-P	Holder Street	Academy Street to Palmer's Alley	0.1			Sidewalk	North	
CASW0015-P	Palmer's Alley	Holder Street to Broad Street	0.2			Sidewalk	West	
CASW0016-P	Academy Street	Holder Street to Broad Street	0.2			Sidewalk	West	
	Fairview Drive	Broad Street to 90 degree bend	0.1	Sidewalk	East			

MULTI-USE PATH								
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Side of St	Cross- Section	Side of St	Cross-Section	
CASW0001-M	Fire Tower Trail	North Avenue to County Home Road (SR 1572)	1			East	M A	
CASW0002-M	Milton Greenway	Academy Street to Boat Access near bridge crossing the Dan River	1			East	M A	

BICYCLE								
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Cross-Section		Type	Cross-Section	
				(ft)	lanes			
CASW0003-M	Country Line Creek Trail	West Main Street to entrance of Boys Scout Camp on Boy Scout Camp Road	10			Both Sides	M A	

' Only major routes and proposals are shown here. For further documentation of bicycle and pedestrian facilities and proposals, refer to the 2012 Heritage Trails Master Plan for Caswell County and the 2011 Comprehensive Pedestrian Plan for the Town of Yanceyville.

Appendix D

Typical Cross Sections

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

The comprehensive planning and design "typical" highway cross sections, as depicted on the following pages, were updated on May 5, 2014 in response to the Strategic Transportation Investments¹ (STI) law (House Bill 817) and are also consistent with SPOTOnline (used for project prioritization²), NCDOT's GIS-based web application for providing automated, near real-time prioritization scores and project costs. This guidance establishes design elements that emphasize safety, mobility, complete streets³, and accessibility for multiple modes of travel. These "typical" highway cross sections should be used as guidelines for comprehensive transportation planning, project planning and project design activities. The specific and final cross section details and right of way limits for projects will be established through the preparation of the National Environmental Policy Act⁴ (NEPA) documentation and through final design preparation.

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

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

¹ For more information on STI, go to: <http://www.ncdot.gov/strategictransportationinvestments/>.

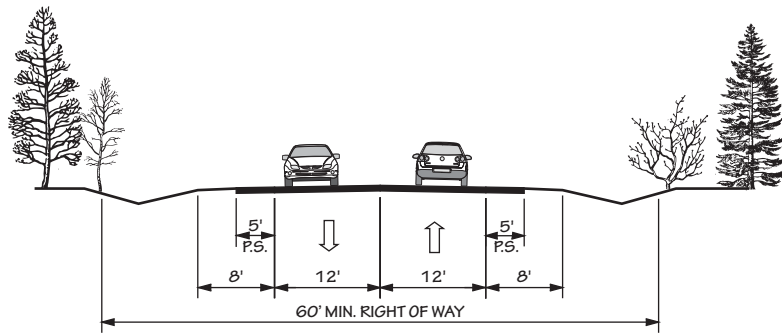
² For more information on prioritization, go to: <https://connect.ncdot.gov/projects/planning/Pages/StrategicPrioritization.aspx>.

³ For more information on Complete Streets, go to: <http://www.completestreetsnc.org/>.

⁴ For more information on NEPA, go to: <http://ceq.hss.doe.gov/>.

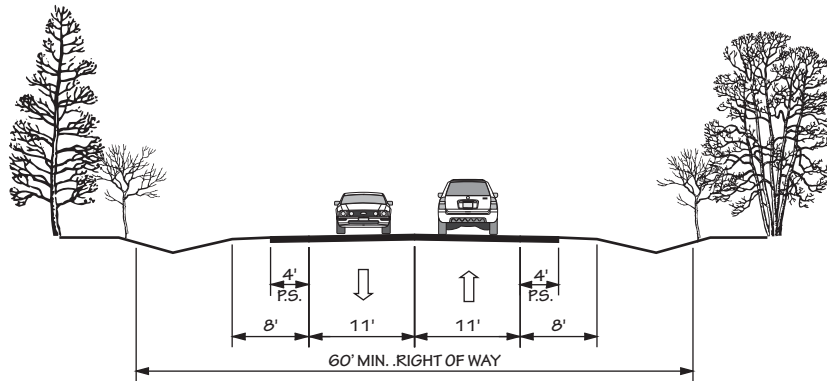
FIGURE 7 "TYPICAL" HIGHWAY CROSS SECTIONS

2A



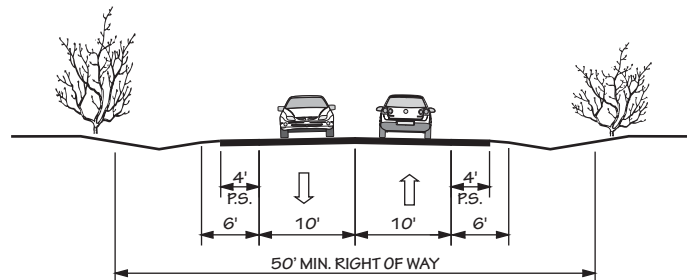
2 LANE UNDIVIDED WITH PAVED SHOULDERS
POSTED SPEED 55 MPH

2B



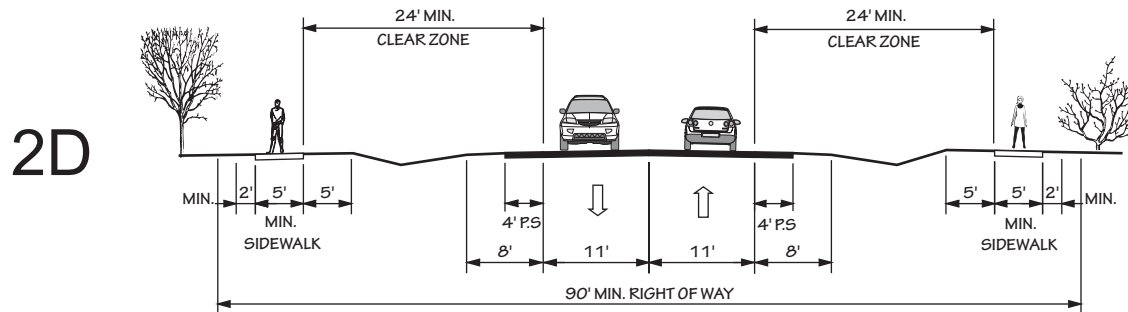
2 LANES UNDIVIDED
POSTED SPEED 45 MPH OR LESS

2C

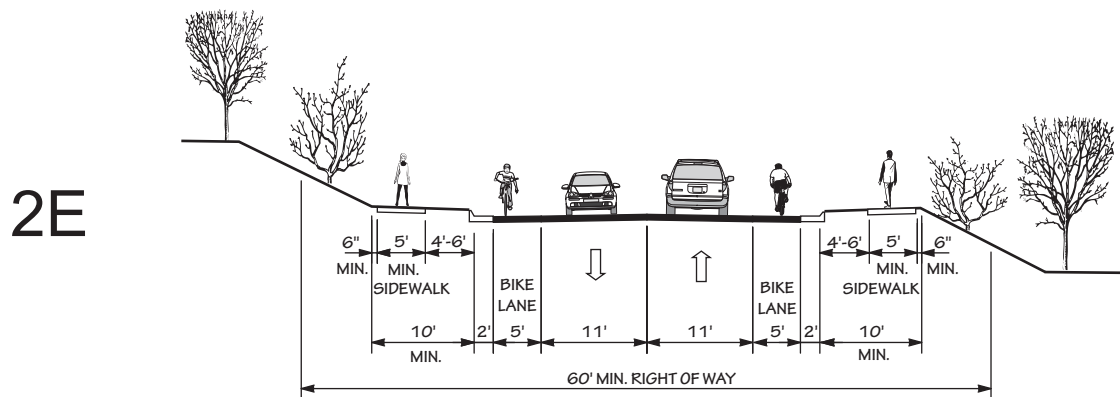


2 LANE UNDIVIDED WITH PAVED SHOULDERS
POSTED SPEED 25 - 35 MPH

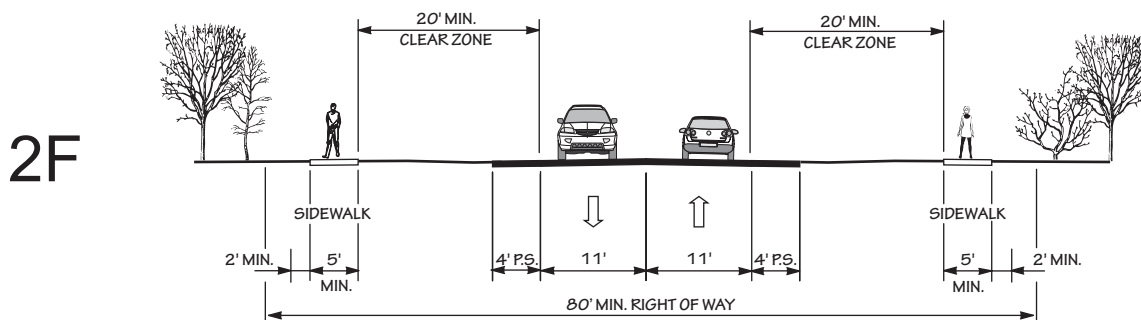
“TYPICAL” HIGHWAY CROSS SECTIONS



2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS
POSTED SPEED 25-45 MPH



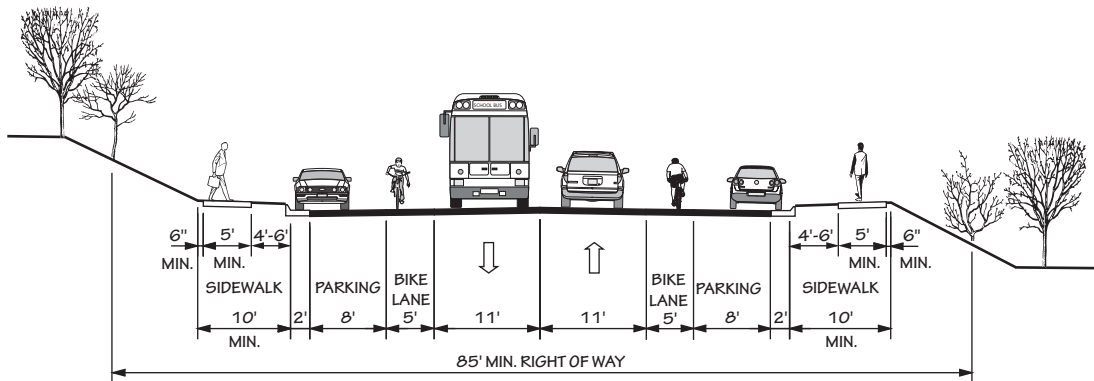
2 LANE UNDIVIDED WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH



2 LANE UNDIVIDED WITH PAVED SHOULDERS AND SIDEWALKS
IN CMA COUNTIES
POSTED SPEED 25-45 MPH

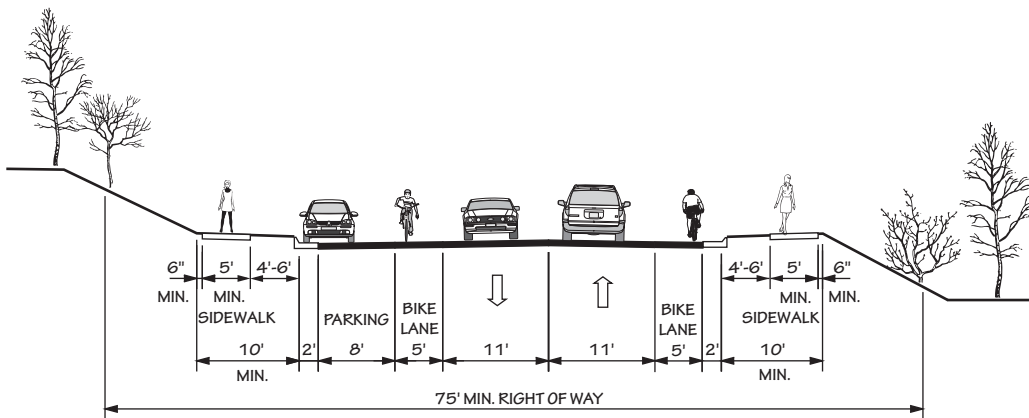
“TYPICAL” HIGHWAY CROSS SECTIONS

2G



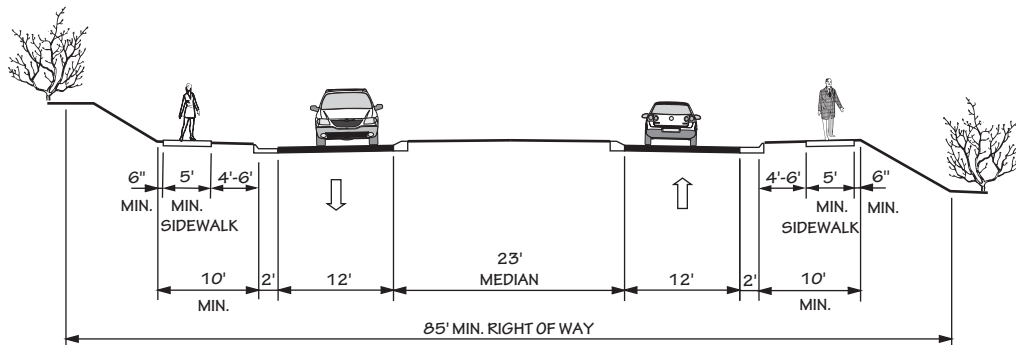
2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING BOTH SIDES,
BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

2H



2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING ONE SIDE,
BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

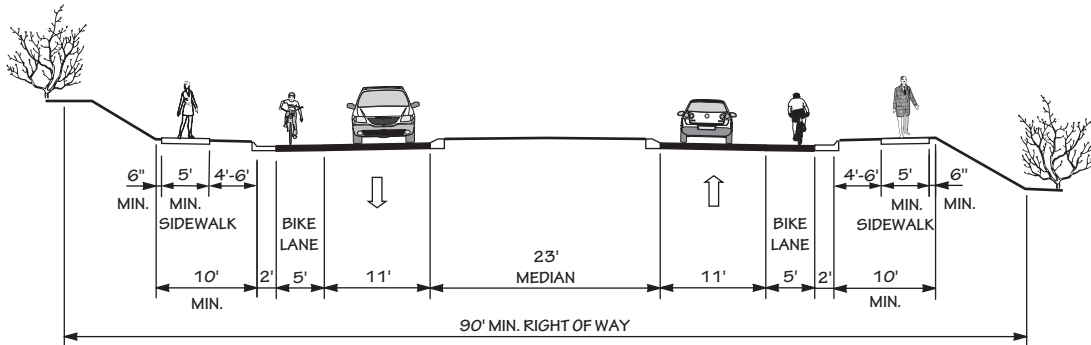
2I



2 LANE DIVIDED (23' RAISED MEDIAN)
WITH CURB & GUTTER AND SIDEWALKS
POSTED SPEED 25-45 MPH

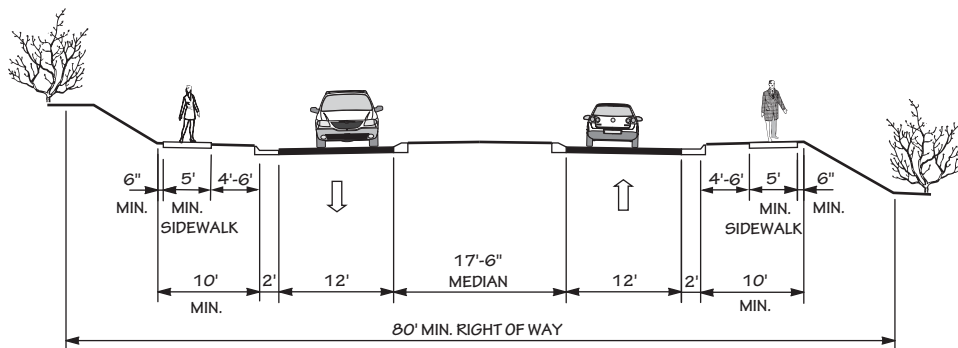
“TYPICAL” HIGHWAY CROSS SECTIONS

2J



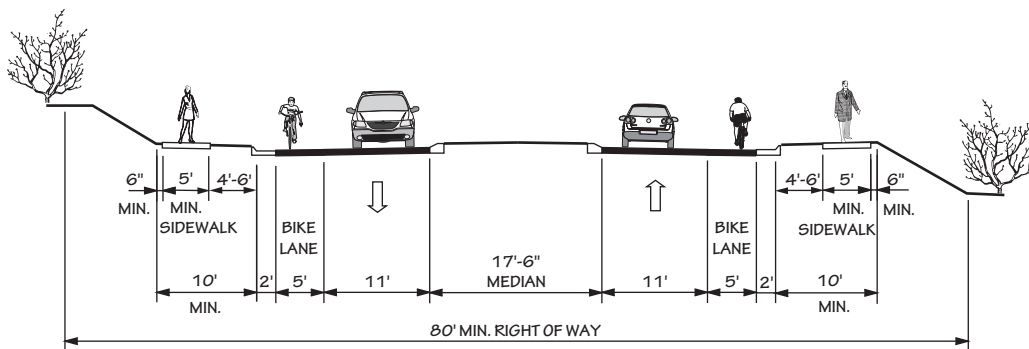
**2 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER,
BIKE LANES, AND SIDEWALKS**
POSTED SPEED 25-45 MPH

2K



**2 LANE DIVIDED (17'-6" RAISED MEDIAN)
WITH CURB & GUTTER AND SIDEWALKS**
POSTED SPEED 25-45 MPH

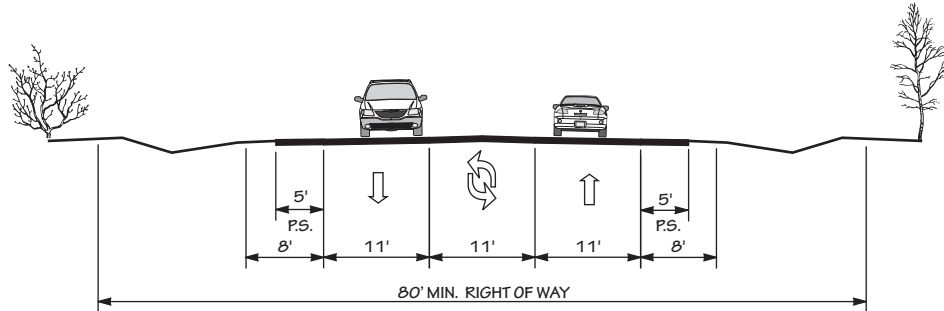
2L



**2 LANE DIVIDED (17'-6" RAISED MEDIAN)
WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS**
POSTED SPEED 25-45 MPH

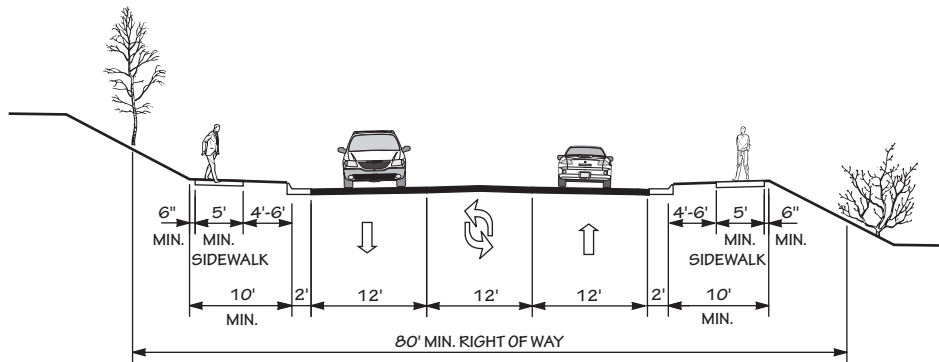
“TYPICAL” HIGHWAY CROSS SECTIONS

3A



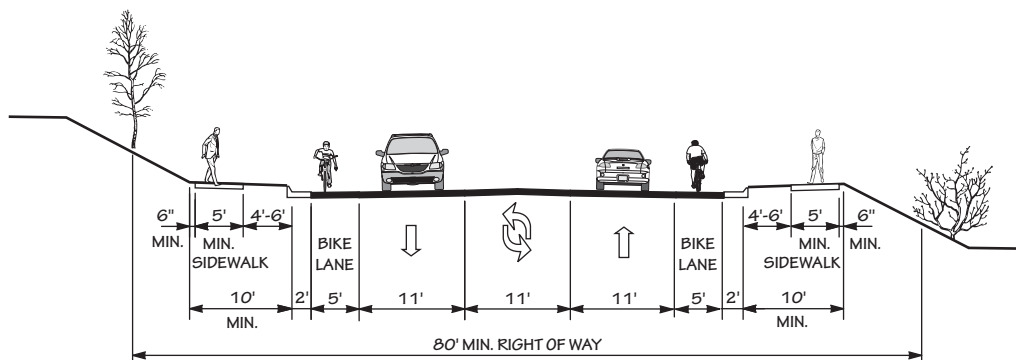
2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS
POSTED SPEED 25-55 MPH

3B



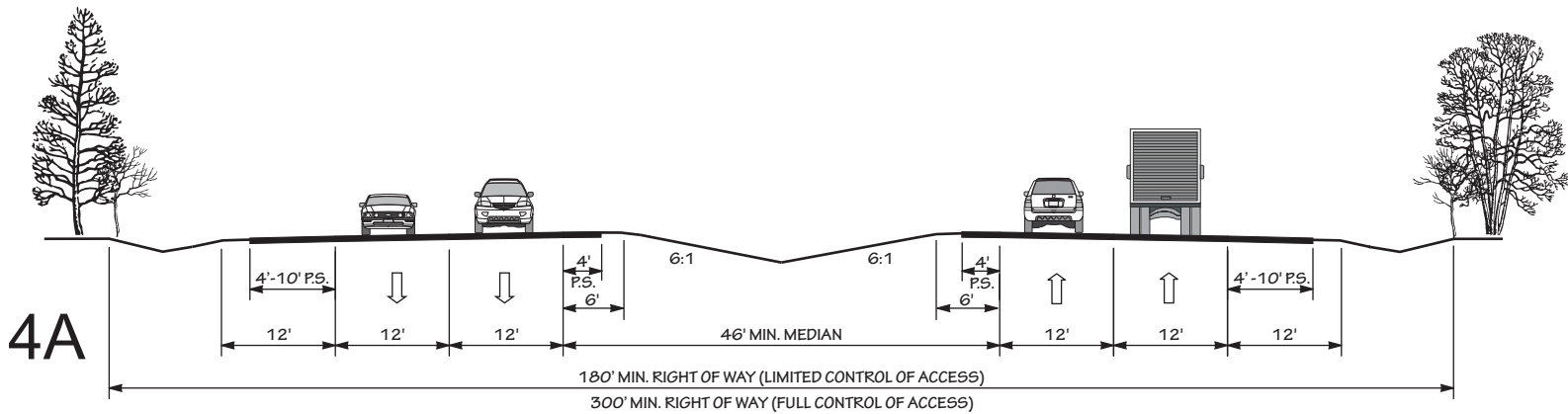
2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER,
AND SIDEWALKS
POSTED SPEED 25-45 MPH

3C

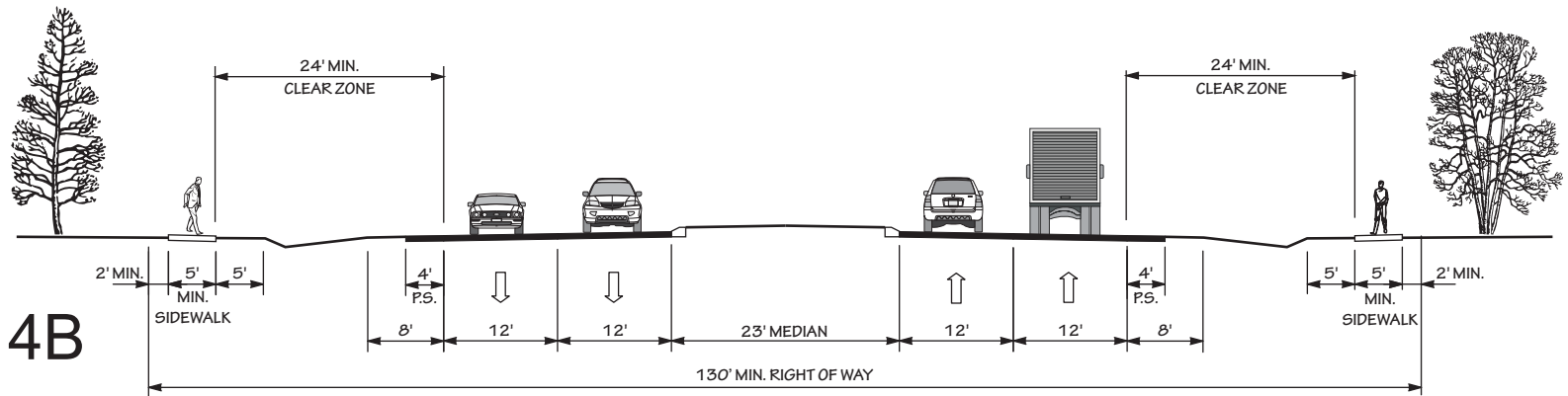


2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER,
BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

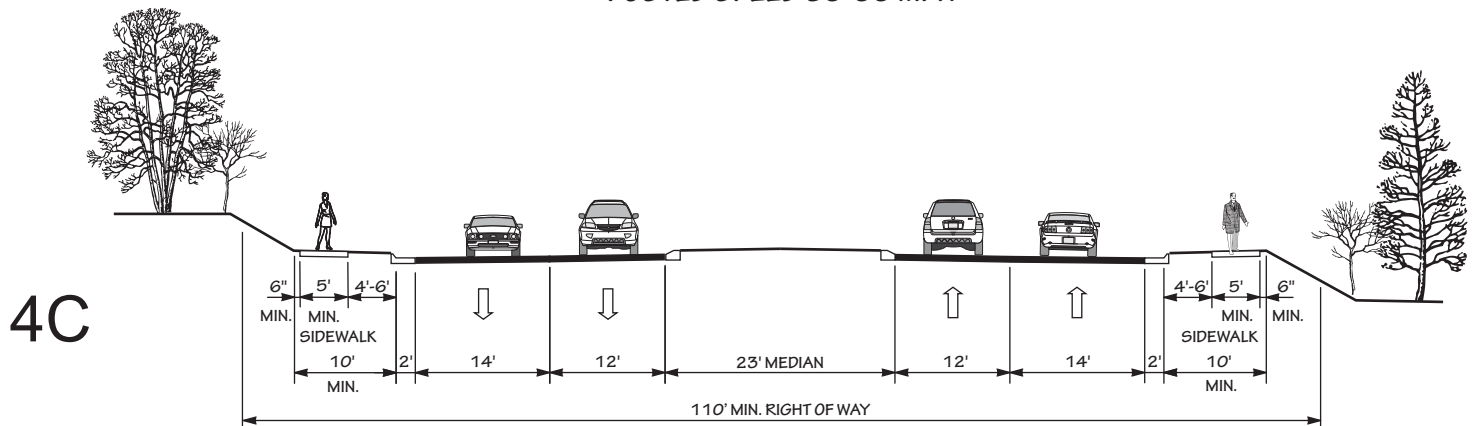
“TYPICAL” HIGHWAY CROSS SECTIONS



4 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS
POSTED SPEED 45-70 MPH

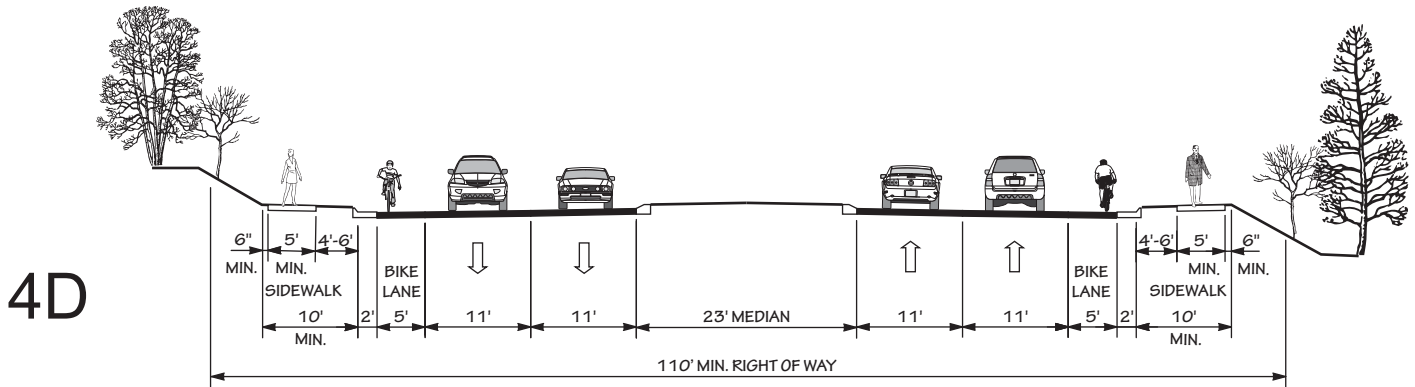


4 LANE DIVIDED (23' RAISED MEDIAN) WITH PAVED SHOULDERS AND SIDEWALKS
POSTED SPEED 35-55 MPH

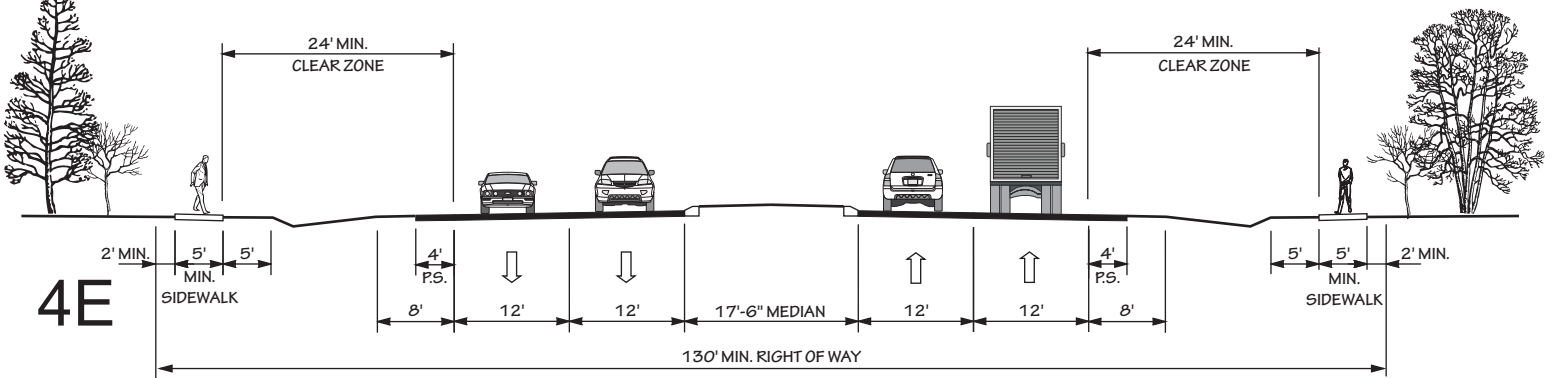


4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER, WIDE OUTSIDE LANES, AND SIDEWALKS
POSTED SPEED 35-45 MPH

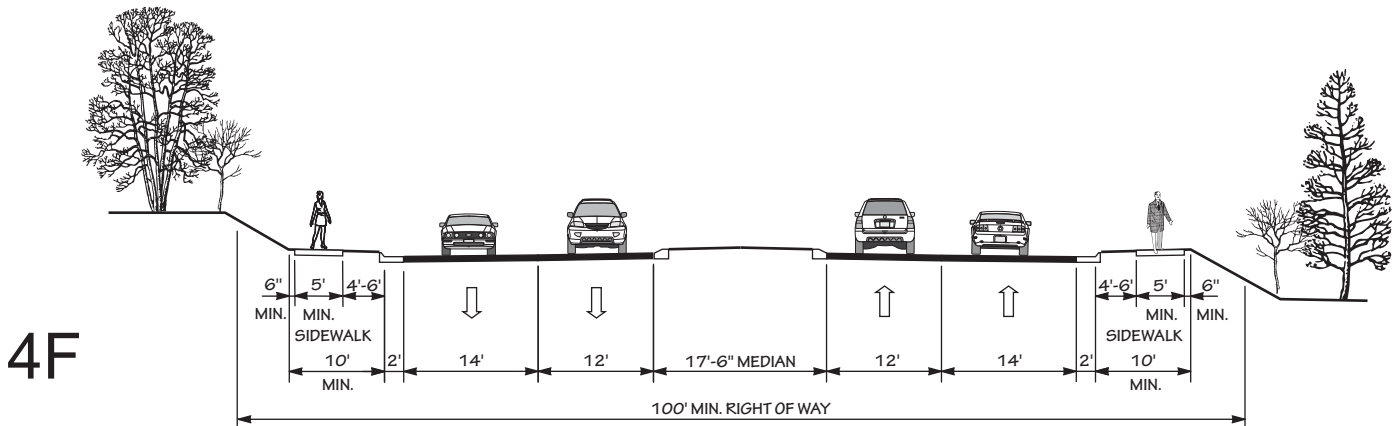
"TYPICAL" HIGHWAY CROSS SECTIONS



**4 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER,
BIKE LANES AND SIDEWALKS
POSTED SPEED 35-45 MPH**

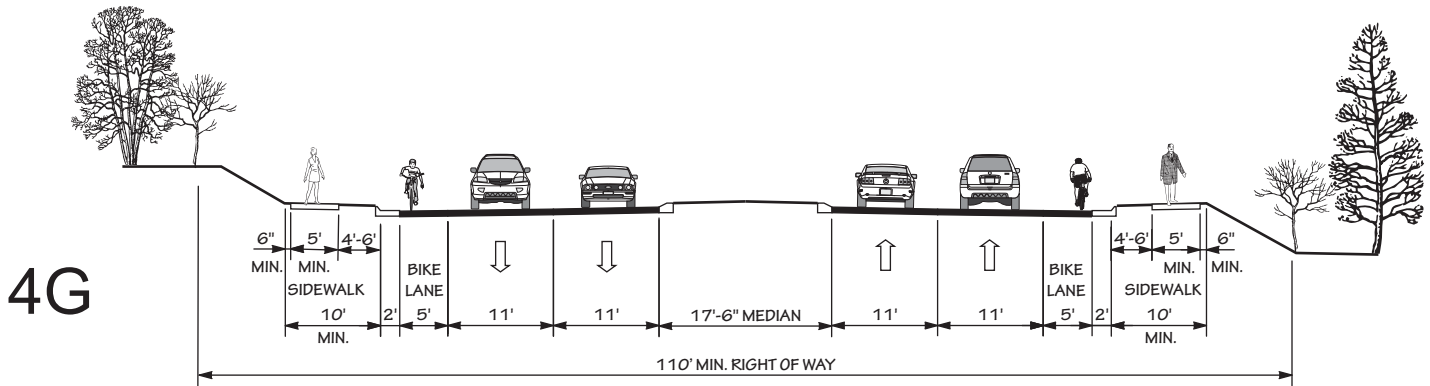


**4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH
PAVED SHOULDERS AND SIDEWALKS
POSTED SPEED 35-55 MPH**

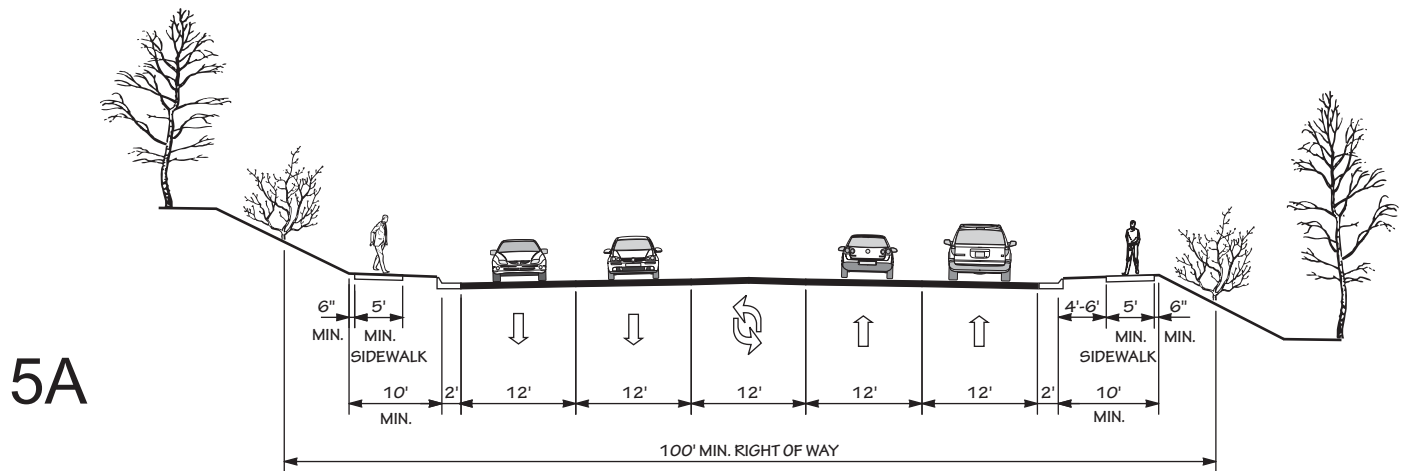


**4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER,
WIDE OUTSIDE LANES AND SIDEWALKS
POSTED SPEED 35-45 MPH**

“TYPICAL” HIGHWAY CROSS SECTIONS

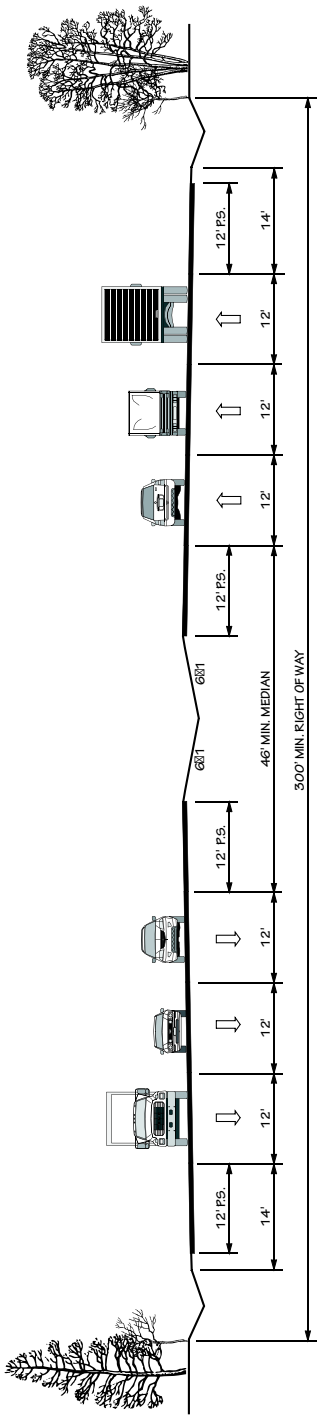


4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER,
BIKE LANES, AND SIDEWALKS
POSTED SPEED 35-45 MPH

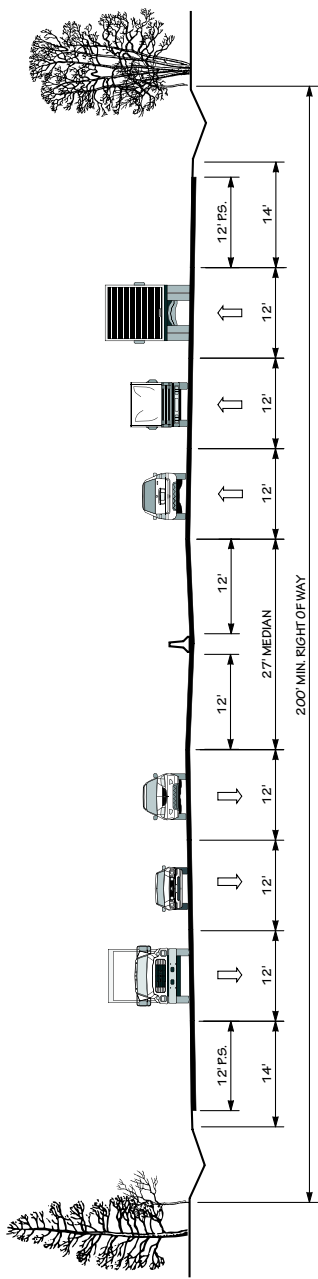


4 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER,
AND SIDEWALKS
POSTED SPEED 35-45 MPH

“TYPICAL” HIGHWAY CROSS SECTIONS



6A 6 LANE DIVIDED (46' DEPRESSED MEDIAN) WITH PAVED SHOULDERS
POSTED SPEED 45-70 MPH



6B 6 LANE DIVIDED (27' MEDIAN WITH JERSEY BARRIER)
WITH PAVED SHOULDERS
POSTED SPEED 55-70 MPH

Figure 10-10 illustrates a typical section of a four-lane highway with a 27' median and 12' lanes. The diagram shows a cross-section of the road with dimensions in feet. The total width of the right-of-way is 500' MIN. The road consists of two 12' travel lanes on each side of a 27' median. The dimensions are as follows:

- Outer shoulder: 8'
- Travel lane: 12'
- Total width of one side (shoulder + two lanes): 23'
- Median: 27'

Vehicle icons (car, truck, bus) are shown in the lanes to indicate typical traffic. The diagram also shows a 500' MIN. RIGHT OF WAY on both sides of the road.

6 LANE FREEWAY (27' MEDIAN WITH JERSEY BARRIER) WITH PAVED SHOULDERS
AND 2 LANE ONE-WAY SERVICE ROADS EACH SIDE
POSTED SPEED 55-70 MPH

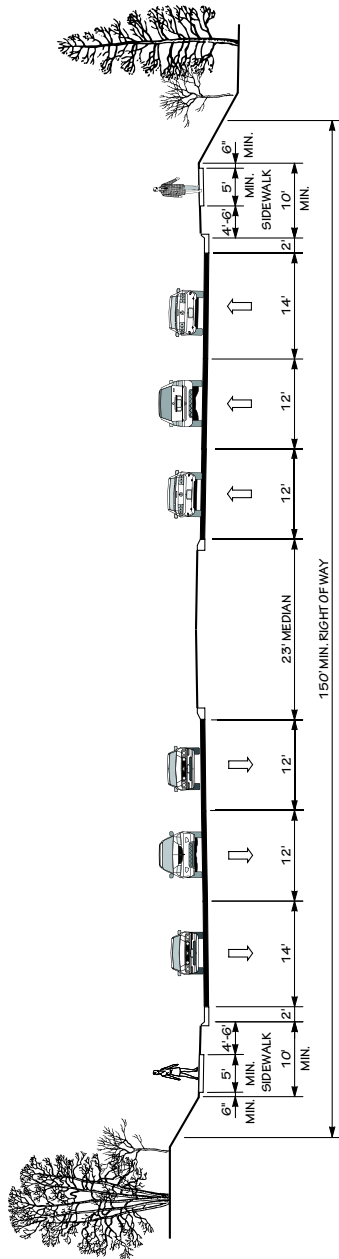
Diagram illustrating a four-lane highway cross-section with a 200' minimum right-of-way. The diagram shows a 27' median, 12' travel lanes, 4' shoulders, and 14' outer shoulders. It includes vehicle icons (car, truck, bus) and trees at the edges.

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

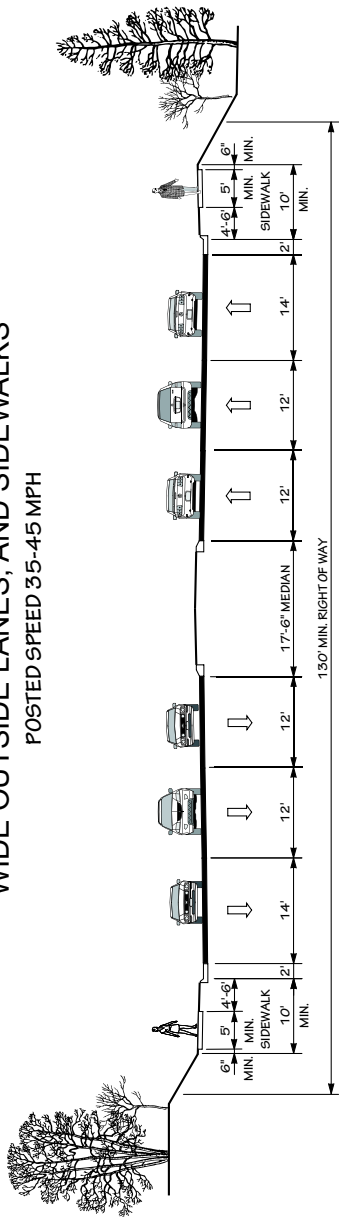
POSTED SPEED 55-70 MPH

Revised 05/05/2014

“TYPICAL” HIGHWAY CROSS SECTIONS

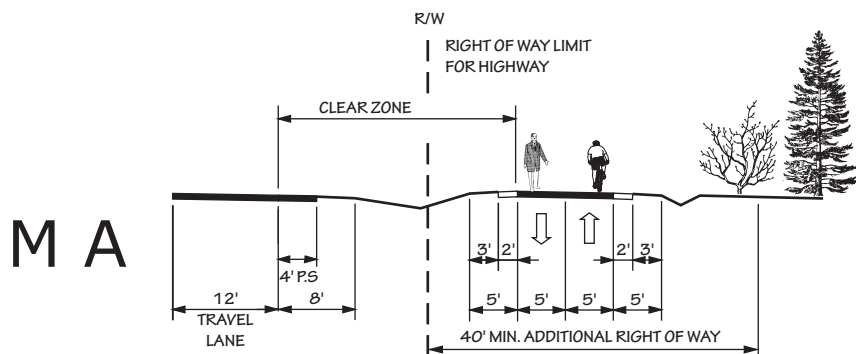


6E 6 LANE DIVIDED (23' RAISED MEDIAN) WITH CURB & GUTTER,
WIDE OUTSIDE LANES, AND SIDEWALKS
POSTED SPEED 35-45 MPH

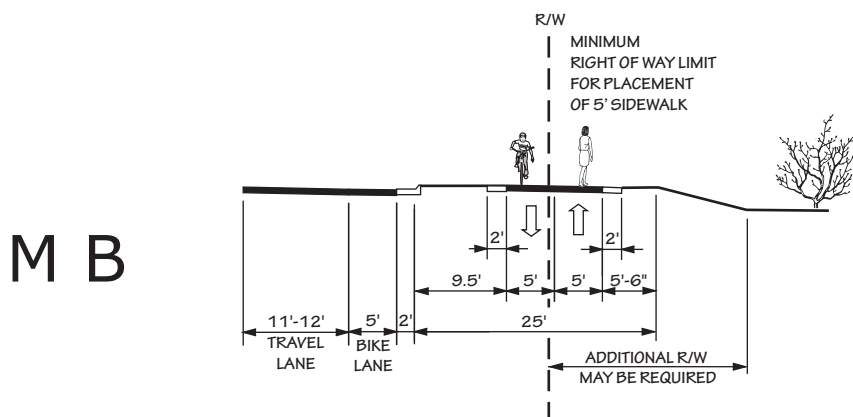


6F 6 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER,
WIDE OUTSIDE LANES, AND SIDEWALKS
POSTED SPEED 35-45 MPH

“TYPICAL” HIGHWAY CROSS SECTIONS



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



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

Appendix E

Level of Service Definitions

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

Design requirements for roadways vary according to the desired capacity and level of service. LOS D indicates “practical capacity” of a roadway, or the capacity at which the public begins to express dissatisfaction. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C on new facilities. The six levels of service are described below and illustrated in Figure 8.

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

Figure 8 - Level of Service Illustrations



LOS A



LOS B



LOS C



LOS D



LOS E



LOS F

Source: 2010 Highway Capacity Manual, Exhibit 11-4

Appendix F

Bridge Deficiency Assessment

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

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

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

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

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

Table 3 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
01	US 158/ NC 86	Country Line Creek	SD & FO	CASW0003-H ²
13	NC 119	Reedy Fork Creek	SD & FO	CASW0008-H ²
35	Blanch Road (SR 1523)	North Fork Rattlesnake Creek	SD & FO	B-5162 ¹
61	NC 86	Hogan's Creek	SD	CASW0003-H
108	Badgett Sisters Parkway (SR 1156)	Country Line Creek	SD & FO	CASW0012-H ²
109	Badgett Sisters Parkway (SR 1156)	Fuller's Creek	FO	CASW0012-H ²
115	Law Road (SR 1341)	Southern Railroad	FO	
119	Shady Grove Road (SR 1360)	Southern Railroad	FO	CASW0035-H ²

¹ This project is currently funded for right of way or construction in the 2016 – 2025 STIP.

² These projects are currently not funded for right of way or construction in the 2016 – 2025 STIP.

Appendix G

Socio-Economic Data Forecasting Methodology

In the development of the Caswell County CTP, existing and anticipated deficiencies were determined through an analysis of the transportation system looking at both current and future travel patterns. Two analysis methods were used: one for the non-modeled/rural areas and another for the more urban area around Washington.

For the non-modeled/rural portion of Caswell County, travel demand was projected from 2016 to 2040 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1992 to 2012. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. For this CTP, the Caswell County Land Use Plan (adopted in August 2014) was used and is illustrated in Figures 9 and 10, respectively.

It is more difficult to predict future travel patterns in urban areas where there are more alternative route options. Additionally, travel demand models require a broad range of socio-economic input data such as population and employment. These inputs are available from sources like the U.S. Census Bureau for the year 2010, but data for 2040 is also required.

The CTP Steering Committee worked with NCDOT to estimate population growth, economic development potential, and land use trends to determine the potential impacts on the future transportation system in 2040. This data was endorsed by the CTP steering committee on June 29, 2016 and revised by TPD on April 10, 2018.

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

Population

Population trends were estimated using available data from the Office of State Budget and Management (OSBM) and exponential growth. Table 6 shows current population through the year 2010 which were taken from the OSBM website on June 15, 2016. The population from 1990 to 2010 was calculated to have a 0.44% growth rate. The OSBM projections for population in Caswell County for the next few decades reflects a zero growth pattern. Therefore, it was agreed upon by the Steering Committee and local commissioners to round up the growth rate to an assumed rate of **0.50%**. Although, the 0.50% growth rate is not shown in the Population and Employment tables shown below, it was applied to the through traffic growth within the county to determine future volumes for 2040.

Table 4 – Population Data

Year	Caswell County
1990	20,859
2000	23,522
2010	23,693
2020*	23,694*
2030*	23,695*
2037*	23,695*

* Obtained from OSBM

Employment

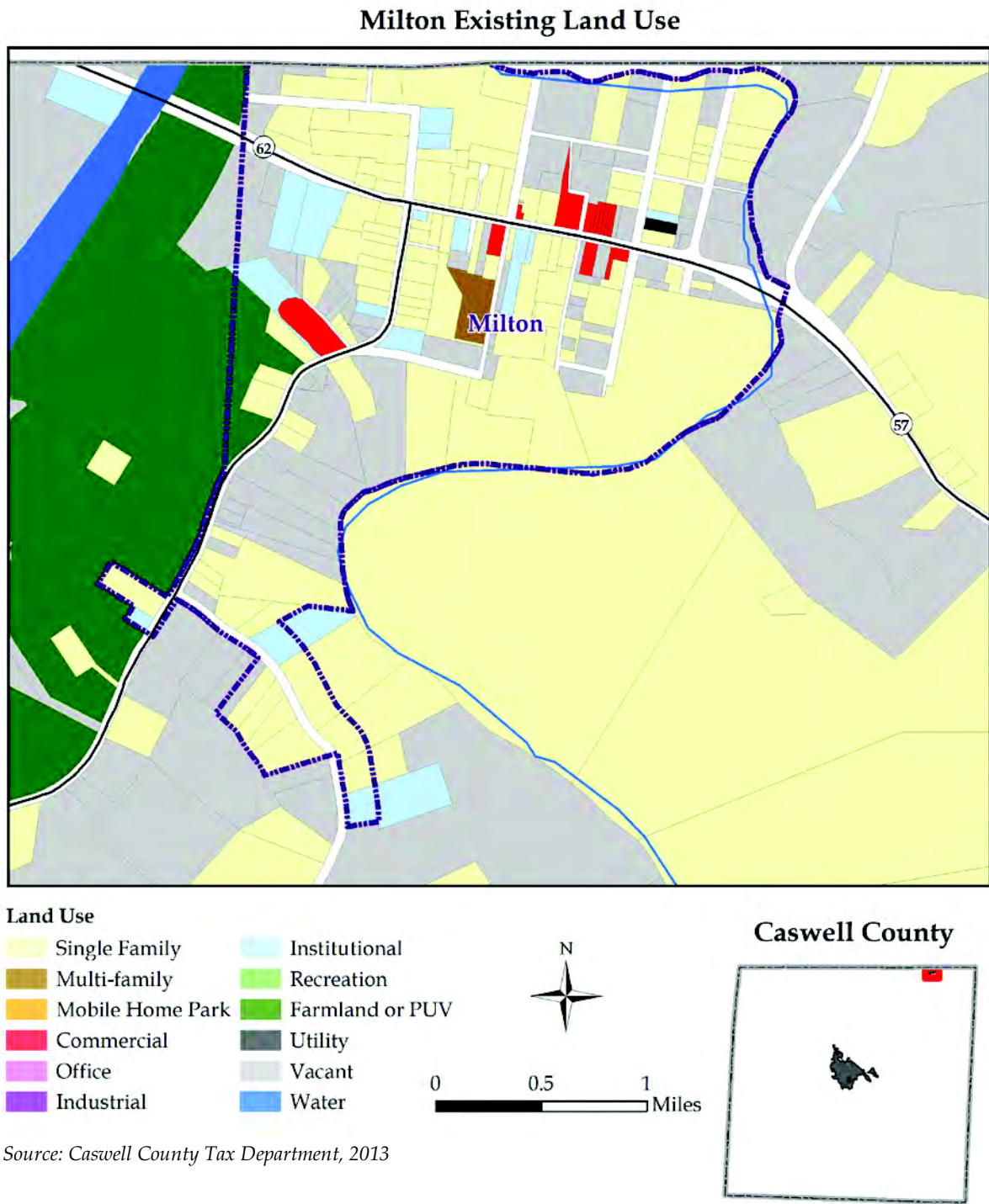
Employment conditions within Caswell County were approved on June 29, 2016 by the CTP Steering Committee and revised by TPD on April 10, 2018. This included approximate locations and intensity for proposed employment centers. Any anticipated heavy demand on the future transportation system as a result of these proposals is accounted for in projected traffic volumes. Employment totals were based on US Census Bureau “Quick Facts” for Caswell County. A calculated growth rate of 0.8% from 2015 to 2018 was applied to the future employment data.

Table 5 – Employment Data

Year	2010	2015	2018	2020*	2030*	2040*
Caswell County	8,745	9,577	9,804	9,961	10,788	11,682

* Estimate

Figure 9: Town of Milton Existing Land Use



Source: Caswell County Tax Department, 2013

Figure 10: Town of Yanceyville Existing Land Use

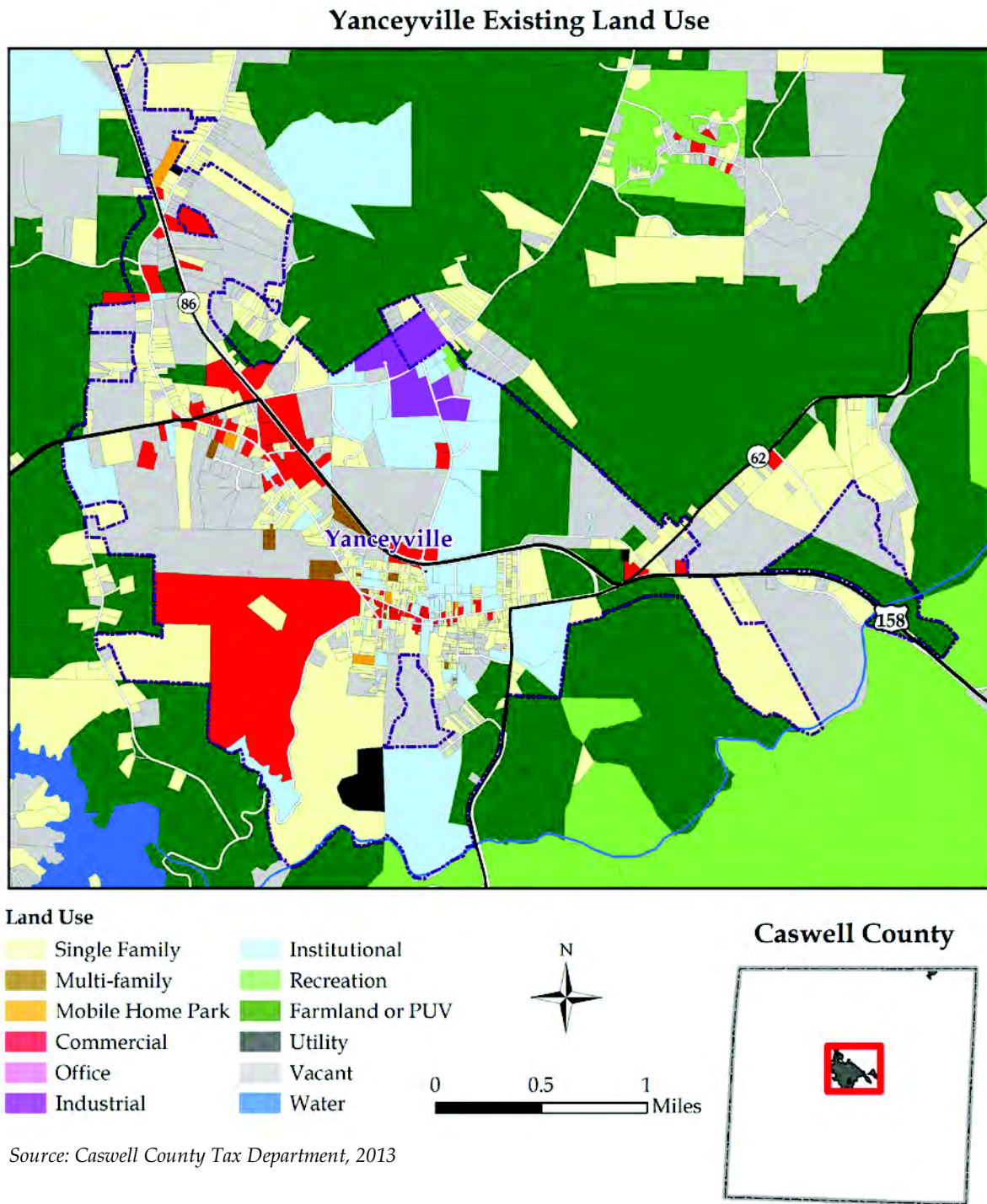
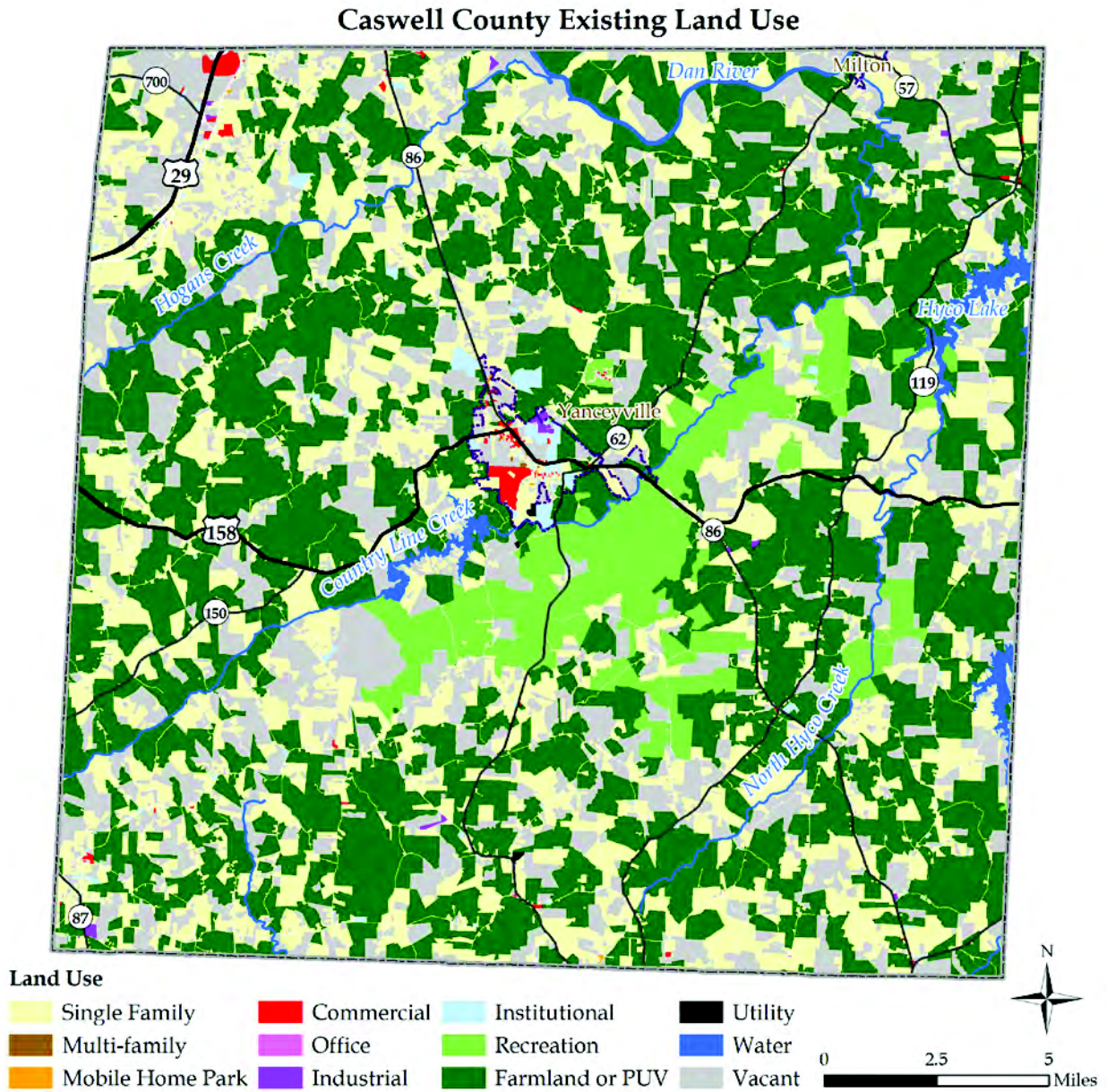


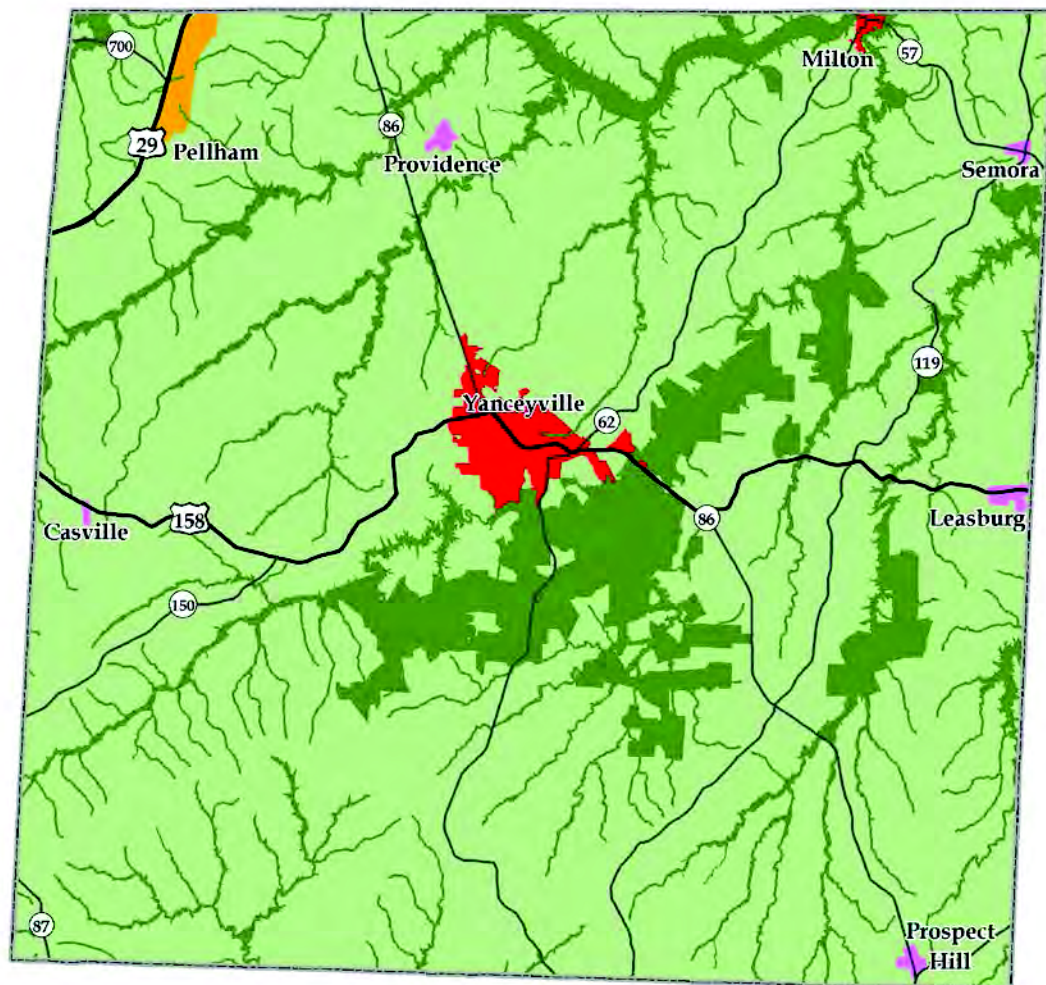
Figure 11: Caswell County Existing Land Use



Source: Caswell County Tax Department, 2013

Figure 10: Growth Strategy Map

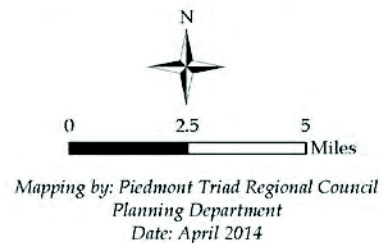
The general growth strategy map was established to provide a broad planning context in which to apply the above outlined land use classifications. The Growth Strategy Map shows the general location of strategic growth areas throughout the county. This map should be utilized to guide growth and development into the appropriate area of the county.



Land Use Classification

- Developed
- Transitional
- Community
- Rural
- Conservation

CASWELL COUNTY



Appendix H

Public Involvement

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

List of CTP Steering Committee Members

At the start of a CTP study, a committee is formed that is comprised of individuals who represent the various needs, issues and populations of the community. These representatives are responsible for capturing the transportation needs of the community relative to all modes of transportation and for guiding the development of the CTP. A listing of steering committee members for the Caswell County CTP is given below.

- Bryan Miller, Caswell County Manager
- Michael Bryant, Town of Milton
- Alvin Foster, Town of Yanceyville
- Michelle Waddell, Caswell DSS
- Donnie Powell, Caswell County Environmental Health
- Catesby Denison, Caswell County Planner
- Ed Lewis, NCDOT Division 7 Planning Engineer
- Kelly Larkins, Piedmont Triad RPO Coordinator
- Michael Orr, NCDOT – TPD, Triad Planning & Forecasting Group Supervisor
- Hemang M. Surti, PE, NCDOT – TPD, Project Engineer

CTP Vision, Goals, Objectives and MOEs

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

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

Vision:

Provide a safe, efficient, affordable and sustainable multi-modal regional transportation network that enhances quality of life and economic vitality that is compatible with the environment and land use patterns.

Goals:

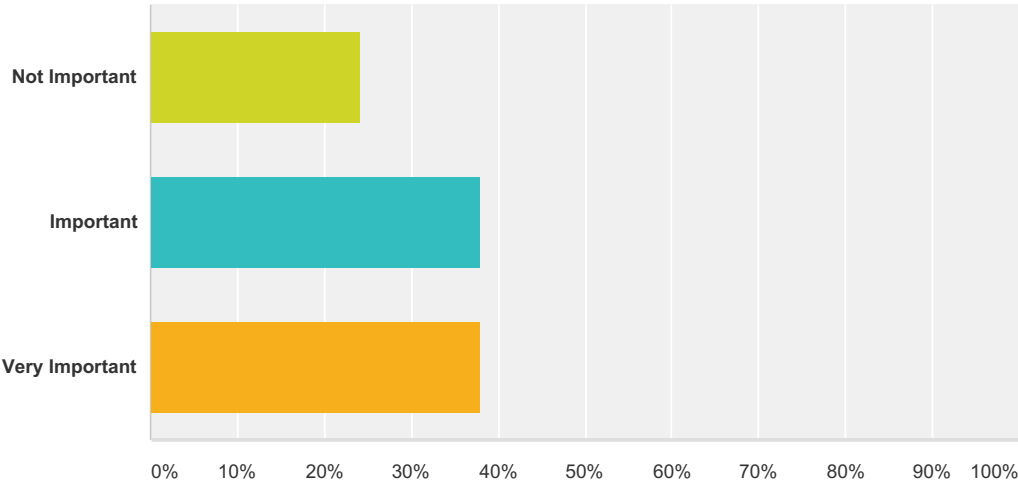
1. Establish a county-wide multi-modal transportation plan in conjunction with the county land use plan in cooperation with local and state organizations including but not limited to the Piedmont Triad Rural Planning Organization, Town of Milton, Town of Yanceyville, and neighboring communities.
2. Make informed transportation decisions that are sensitive to the environment and existing development patterns.
3. Offer policy guidance to local governments so that they can ensure the protection of corridors for future transportation use.
4. Develop recommendations that capitalize on the use of existing infrastructure across traditional jurisdictions and add capacity strategically.
5. Develop recommendations that improve and upgrade the connections between local urban areas within the county by identifying major corridors and using access management techniques.
6. Create land use and access management policy recommendations that optimize available transportation capacity for agriculture and economic development activities occurring within the County.
7. Develop recommendations that create opportunities for better mobility from local areas within the county to regional activity centers outside the county.

Goals and Objectives Survey

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

Q1 More Transportation Options (more ways to get places - buses, bicycle, sidewalks)

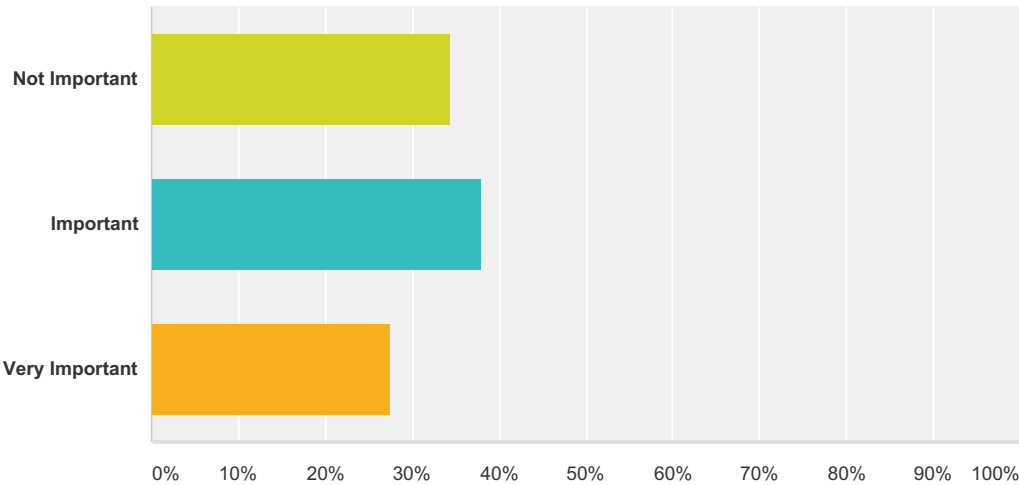
Answered: 29 Skipped: 0



Answer Choices	Responses	
Not Important	24.14%	7
Important	37.93%	11
Very Important	37.93%	11
Total		29

Q2 Faster Travel Times (High speed roads, more lanes, less intersections)

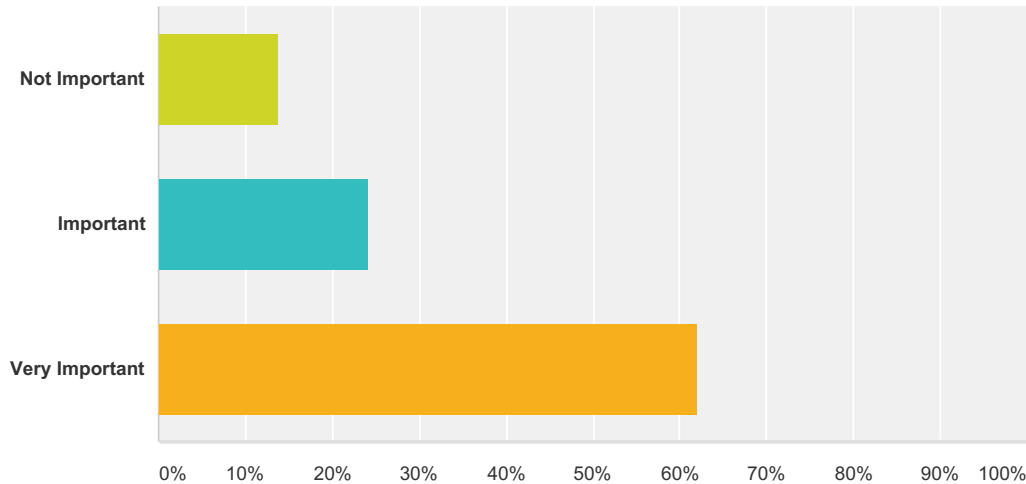
Answered: 29 Skipped: 0



Answer Choices	Responses	
Not Important	34.48%	10
Important	37.93%	11
Very Important	27.59%	8
Total		29

Q3 Preserve Community and Rural Character (Keep business downtown, protect existing neighborhoods, preserve landscape)

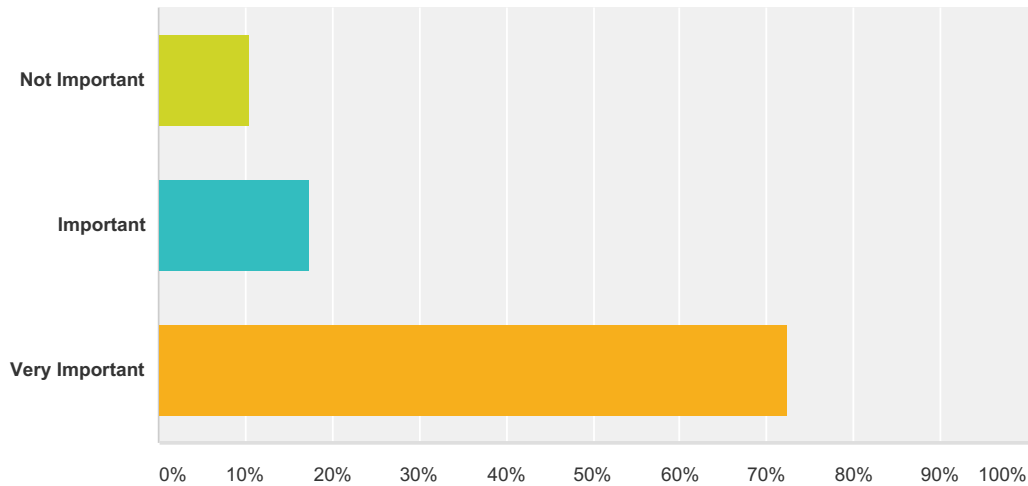
Answered: 29 Skipped: 0



Answer Choices	Responses	
Not Important	13.79%	4
Important	24.14%	7
Very Important	62.07%	18
Total		29

Q4 Environmental Protection (Protect wetlands, streams, wildlife, Reduce air and noise pollution)

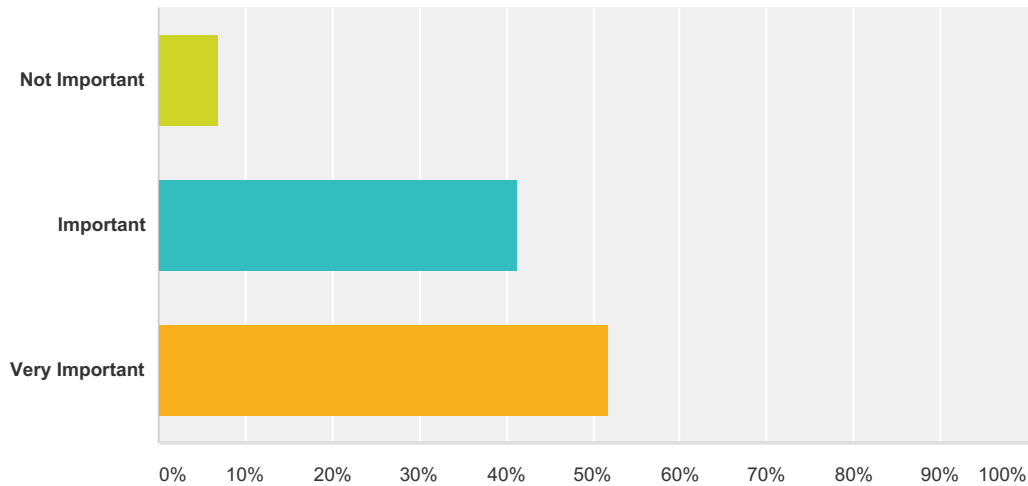
Answered: 29 Skipped: 0



Answer Choices	Responses	
Not Important	10.34%	3
Important	17.24%	5
Very Important	72.41%	21
Total		29

Q5 Improve Services for Special Needs
(Better transportation for elderly, low-income, and disabled residents)

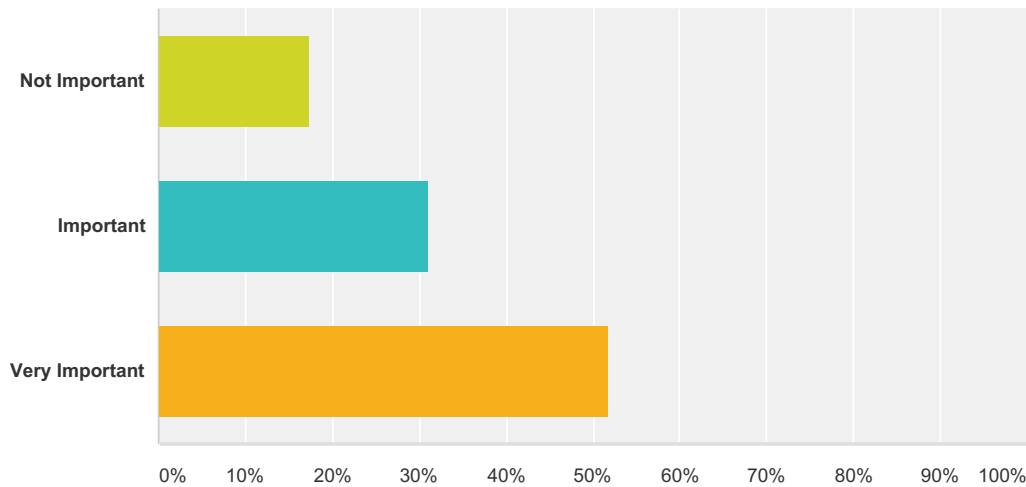
Answered: 29 Skipped: 0



Answer Choices	Responses	
Not Important	6.90%	2
Important	41.38%	12
Very Important	51.72%	15
Total		29

Q6 Improve Access (Better connections to employment, schools and services)

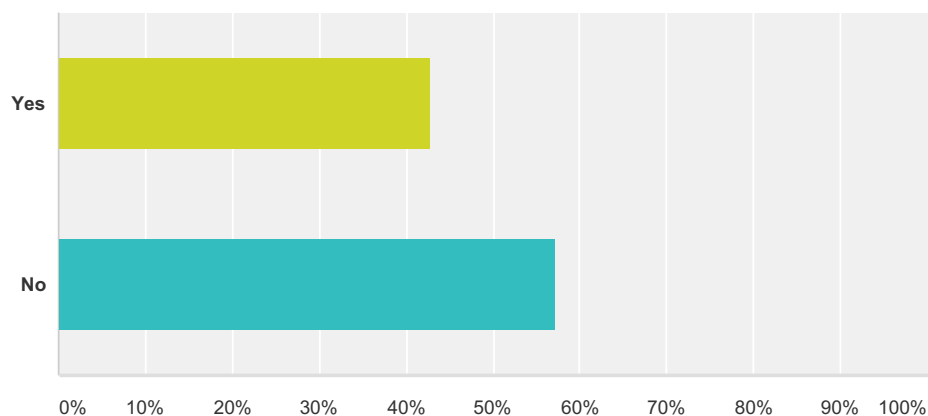
Answered: 29 Skipped: 0



Answer Choices	Responses	
Not Important	17.24%	5
Important	31.03%	9
Very Important	51.72%	15
Total		29

Q7 Are you concerned with bicycle safety at any specific locations?

Answered: 28 Skipped: 1

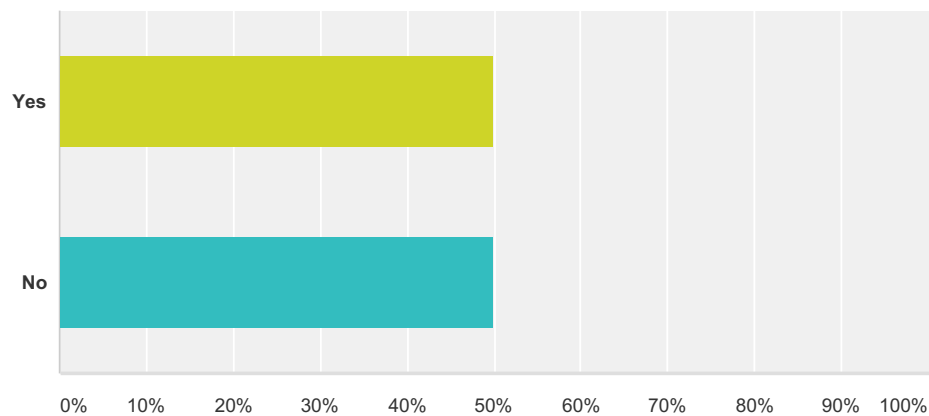


Answer Choices	Responses
Yes	42.86% 12
No	57.14% 16
Total	28

#	If yes, where?	Date
1	damn fools on county home road	9/16/2016 11:38 AM
2	hwy 86	9/14/2016 8:15 AM
3	Hwy 158W towards Reidsville	8/1/2016 5:58 PM
4	NC Hwy 62 North	7/22/2016 8:52 PM
5	Most secondary road are narrow with little shoulder area to accomodate	7/22/2016 9:52 AM
6	all locations	7/20/2016 9:25 PM
7	US Hwy 158 West within Yanceyville city limits	7/20/2016 12:47 PM
8	Hwy 158 -Yanceyville	7/20/2016 12:05 PM
9	open rural roads	7/20/2016 11:26 AM
10	On Hwy 57 and Hwy 62.	7/17/2016 3:10 PM
11	Milton, Semora, Yanceyville NC vicinity M	7/17/2016 12:58 PM

Q8 Are you concerned with pedestrian safety at any specific locations?

Answered: 28 Skipped: 1

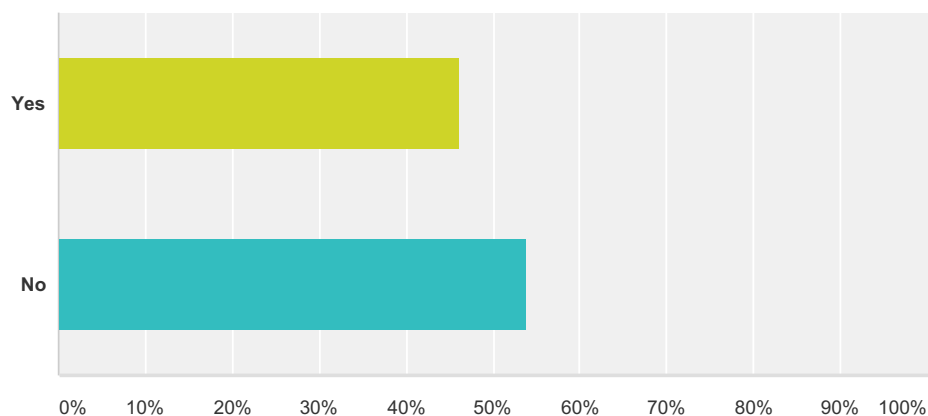


Answer Choices	Responses
Yes	50.00% 14
No	50.00% 14
Total	28

#	If yes, where?	Date
1	towns	8/1/2016 1:20 PM
2	town of milton	7/24/2016 5:28 PM
3	Milton and Semora	7/22/2016 8:52 PM
4	Milton	7/22/2016 8:41 PM
5	Milton	7/22/2016 9:52 AM
6	along hwy 86	7/21/2016 10:06 AM
7	all locations especially Broad Street, Milton	7/20/2016 9:25 PM
8	US Hwy 158 West within Yanceyville city limits	7/20/2016 12:47 PM
9	Hwy 158 - Yanceyville	7/20/2016 12:05 PM
10	open rural roads	7/20/2016 11:26 AM
11	All town locations without a sidewalk	7/19/2016 5:08 PM
12	Broad Street Milton,,heavy traffic	7/17/2016 4:22 PM
13	In the Town of Milton on Hwy 57.	7/17/2016 3:10 PM
14	Milton, Semora, Yanceyville vicinity	7/17/2016 12:58 PM

Q9 Are you concerned with vehicle accident problems at any specific locations?

Answered: 26 Skipped: 3

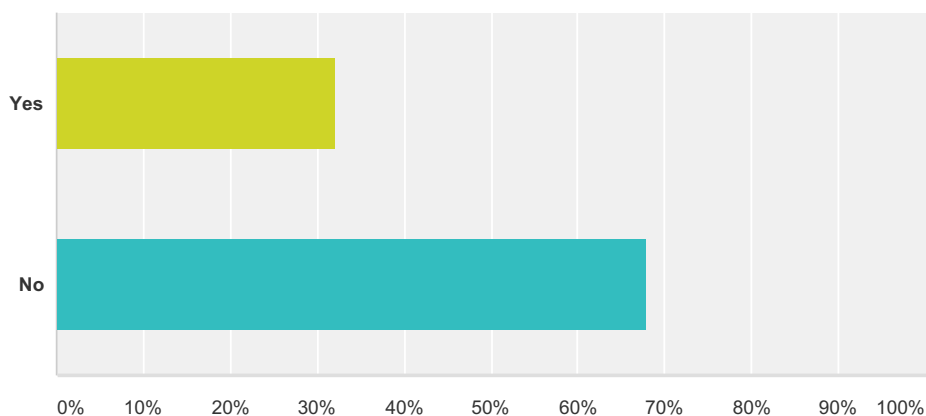


Answer Choices	Responses
Yes	46.15% 12
No	53.85% 14
Total	26

#	If yes, where?	Date
1	hwy 86 and walters mill road	9/15/2016 4:31 PM
2	Intersection of Old hwy 86 and hwy 86	9/14/2016 8:15 AM
3	Up and down NC Rt. 86	8/2/2016 1:54 PM
4	Highway 86 north has a lot of accidents	8/1/2016 3:05 PM
5	Highway 86, Hwy 86 & Park Springs Rd intersection	7/23/2016 6:07 AM
6	all highways, people sped too much!	7/22/2016 8:52 PM
7	hwy 86	7/22/2016 9:52 AM
8	NC 62 and NC 57 intersection, Milton	7/20/2016 9:25 PM
9	Intersection of Fire Tower Road, Hwy 158, and Street leading to downtown Yanceyville- vehicles run this light	7/20/2016 12:05 PM
10	intersection of Firetower Road and street to downtown Yanceyville -vehicles run this stop light on a regular basis	7/20/2016 11:26 AM
11	Milton traffic light	7/17/2016 4:22 PM
12	Corner of Hwy 62 and Hwy 57.	7/17/2016 3:10 PM
13	Milton, Semora, Yancyville vicinity	7/17/2016 12:58 PM

Q10 Is commercial truck traffic negatively affecting your area?

Answered: 28 Skipped: 1

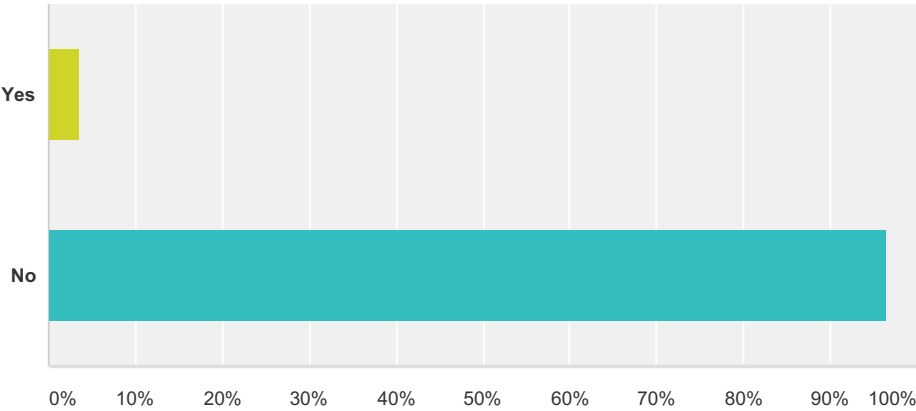


Answer Choices	Responses
Yes	32.14% 9
No	67.86% 19
Total	28

#	If yes, where?	Date
1	Walters Mill and Shady Grove Roads	8/2/2016 1:54 PM
2	Walters mill rd/ Hwy 86	7/27/2016 6:03 PM
3	town of milton	7/24/2016 5:28 PM
4	Traffic slows significantly on Hwy 86 due to commercial truck traffic. Additional lanes on uphill sections would be beneficial.	7/23/2016 6:07 AM
5	NC Hwy 57	7/22/2016 8:52 PM
6	Broad Street, Milton	7/20/2016 9:25 PM
7	Broad Street Milton	7/17/2016 4:22 PM
8	Going through the Town of Milton on Hwy 57	7/17/2016 3:10 PM
9	Milton NC 27305	7/17/2016 12:58 PM

Q11 Is farm equipment traffic negatively affecting your area?

Answered: 28 Skipped: 1

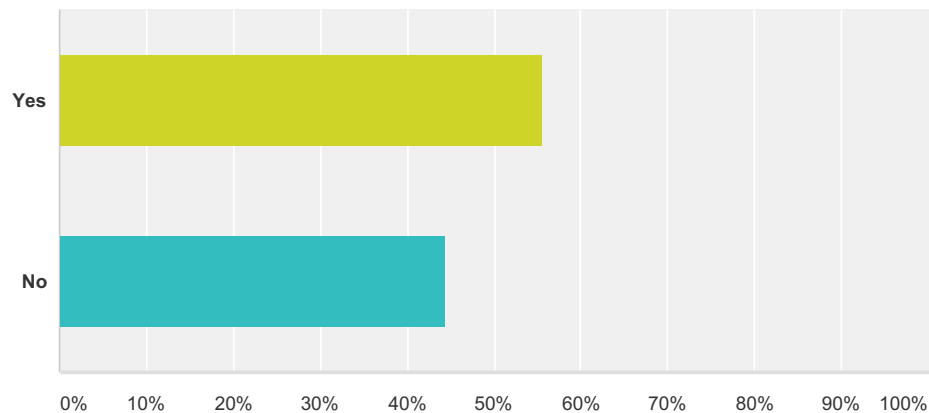


Answer Choices	Responses
Yes	3.57%1
No	96.43%27
Total	28

#	If yes, where?	Date
1	HWY 86 S	7/20/2016 11:46 AM

Q12 Would you use on-road bicycle facilities such as bicycle lanes and wider road shoulders?

Answered: 27 Skipped: 2

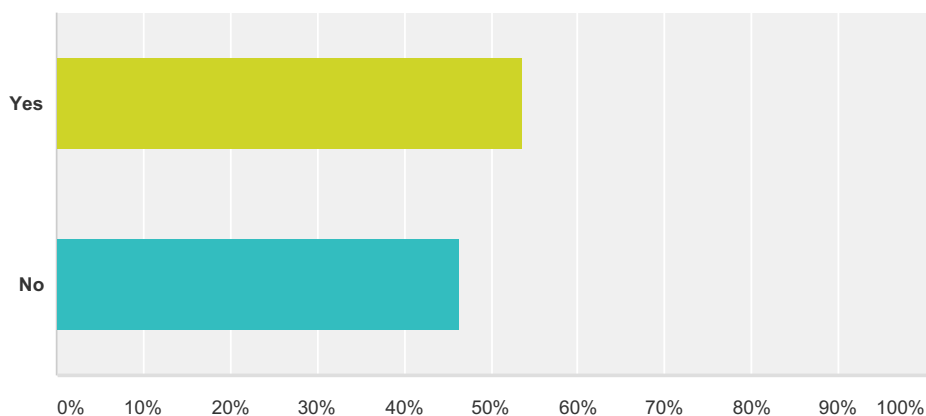


Answer Choices	Responses
Yes	55.56% 15
No	44.44% 12
Total	27

#	If yes, where?	Date
1	86n	9/16/2016 11:38 AM
2	anywhere in the county	9/15/2016 4:31 PM
3	the entire county	7/22/2016 8:52 PM
4	Milton	7/22/2016 8:41 PM
5	secondary roads	7/22/2016 9:52 AM
6	no, because I live outside of yanceyville, I don't need it	7/21/2016 10:06 AM
7	all locations	7/20/2016 9:25 PM
8	It would be great to have bicycle racks throughout the community like at social services so people have a place to lock their bicycles.	7/20/2016 2:17 PM
9	US Hwy 158 West inside Yanceyville city limits	7/20/2016 12:47 PM
10	COUNTY WIDE	7/20/2016 11:39 AM
11	Hwy 57 and Hwy 62	7/17/2016 3:10 PM

Q13 Are there areas where you would like to see sidewalks constructed or improved?

Answered: 28 Skipped: 1

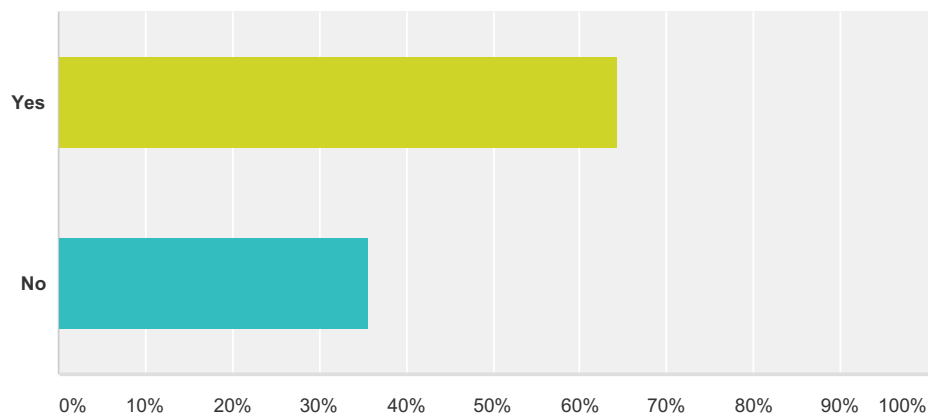


Answer Choices	Responses
Yes	53.57% 15
No	46.43% 13
Total	28

#	If yes, where?	Date
1	on HWY 62 from the BYHS to PCC	10/3/2016 9:48 AM
2	In the city limits of Yanceyville	8/1/2016 3:05 PM
3	towns	8/1/2016 1:20 PM
4	Yanceyville on Hwy 86	7/27/2016 6:03 PM
5	town of milton	7/24/2016 5:28 PM
6	Milton and Semora	7/22/2016 8:52 PM
7	Milton	7/22/2016 8:41 PM
8	Yanceyville and Milton	7/22/2016 9:52 AM
9	Milton, NC	7/20/2016 9:25 PM
10	Hwy 158 yanceyville	7/20/2016 12:05 PM
11	along hwy 158 -Yanceyville	7/20/2016 11:26 AM
12	Fireside	7/19/2016 5:08 PM
13	Broad Street Milton	7/17/2016 4:22 PM
14	On all the streets that make up the Town of Milton	7/17/2016 3:10 PM
15	Milton NC	7/17/2016 12:58 PM

Q14 Are there areas where you would like to see multi-use paths (for bicycling or walking) constructed or improved?

Answered: 28 Skipped: 1

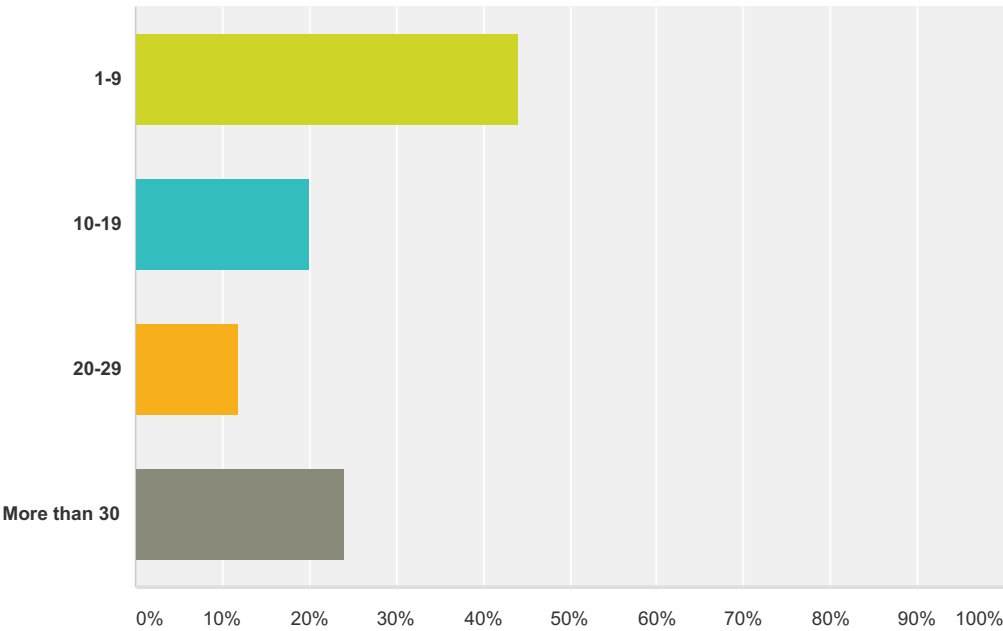


Answer Choices	Responses
Yes	64.29% 18
No	35.71% 10
Total	28

#	If yes, where?	Date
1	anywhere in the county	9/15/2016 4:31 PM
2	highway 86 N	9/14/2016 8:15 AM
3	towns	8/1/2016 1:20 PM
4	Hwy 158, Hwy 62	7/27/2016 6:03 PM
5	On Forrest Altman's land so he will stop threatening me with imminent domain to construct a trail on my property.	7/23/2016 6:07 AM
6	The entire county	7/22/2016 8:52 PM
7	Milton	7/22/2016 8:41 PM
8	Areas around Yanceyville	7/22/2016 9:52 AM
9	all Caswell County towns and communities	7/20/2016 9:25 PM
10	My family have started cycling more and it would be great to have places that are safe to ride bicycles similar to how Dan Daniels Park in Danville, VA has setup.	7/20/2016 2:17 PM
11	US Hwy 158 West within Yanceyville city limits	7/20/2016 12:47 PM
12	hwy 158 Yanceyville	7/20/2016 12:05 PM
13	COUNTY WIDE	7/20/2016 11:39 AM
14	along hwy 158 - Yanceyville	7/20/2016 11:26 AM
15	Fireside	7/19/2016 5:08 PM
16	Hwy 57 and Hwy 62	7/17/2016 3:10 PM
17	Milton NC	7/17/2016 12:58 PM

Q15 How many miles do you travel to work?

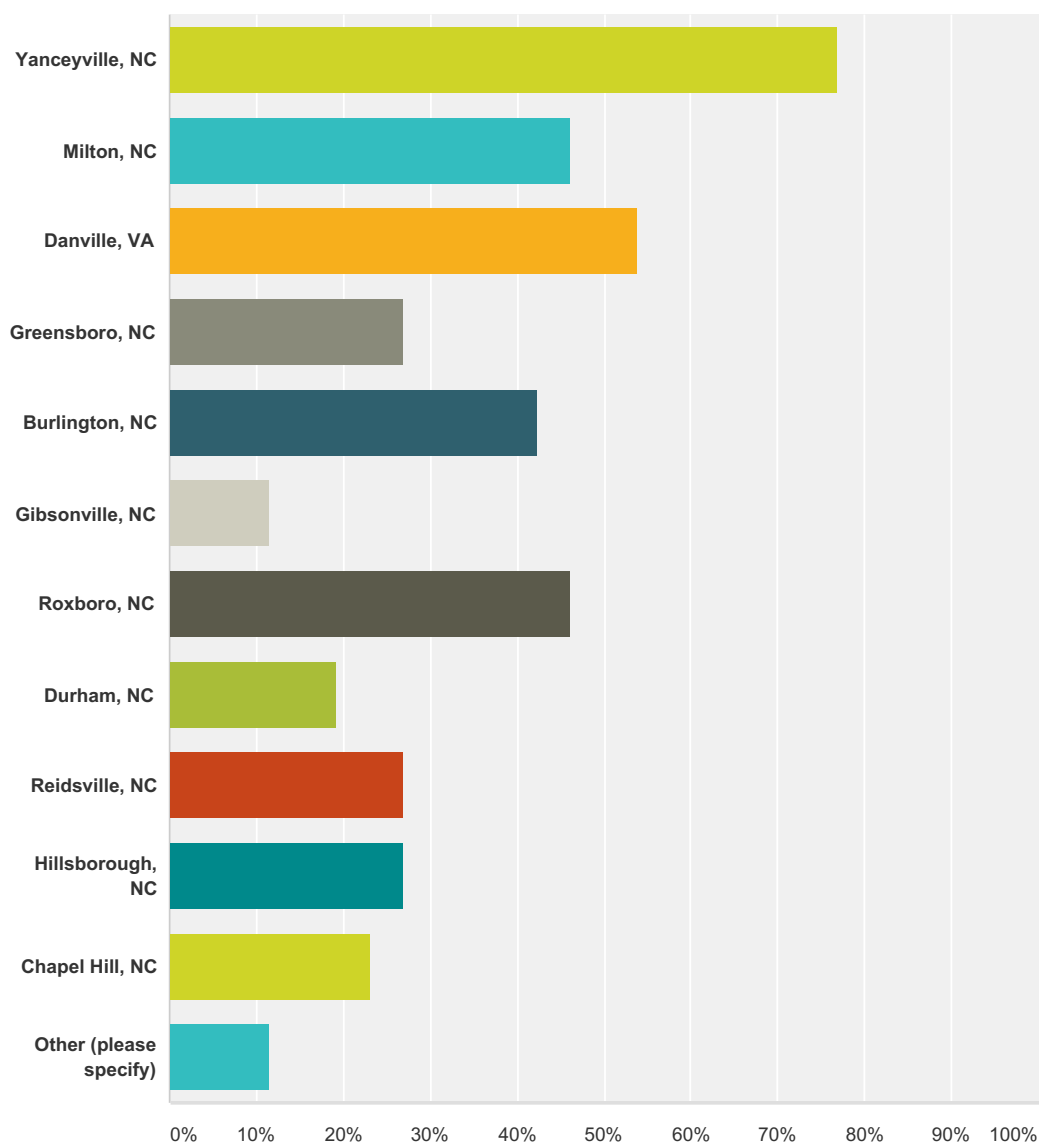
Answered: 25 Skipped: 4



Answer Choices	Responses	
1-9	44.00%	11
10-19	20.00%	5
20-29	12.00%	3
More than 30	24.00%	6
Total		25

Q16 To what areas would you like to have improved access to (please check all that apply)?

Answered: 26 Skipped: 3



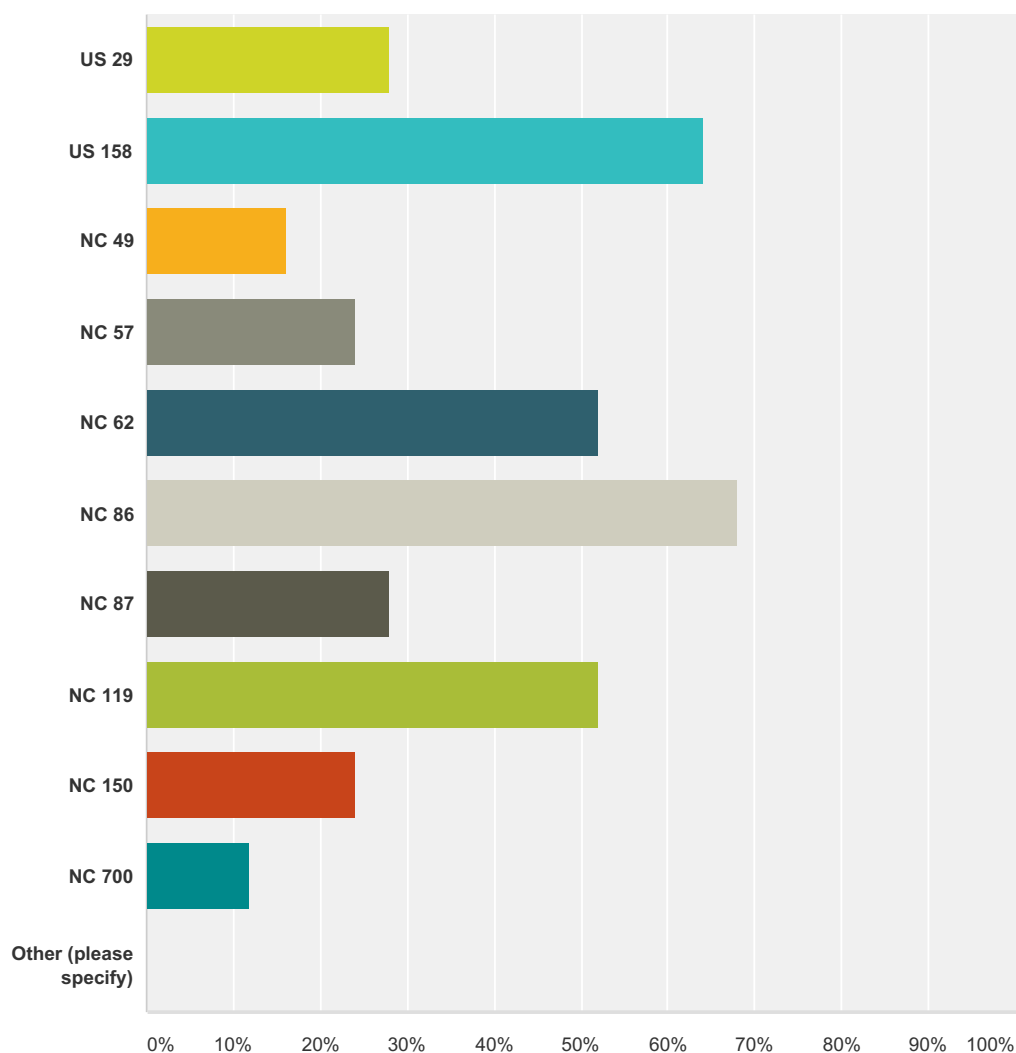
Answer Choices	Responses
Yanceyville, NC	76.92% 20
Milton, NC	46.15% 12
Danville, VA	53.85% 14
Greensboro, NC	26.92% 7
Burlington, NC	42.31% 11
Gibsonville, NC	11.54% 3

Roxboro, NC	46.15%	12
Durham, NC	19.23%	5
Reidsville, NC	26.92%	7
Hillsborough, NC	26.92%	7
Chapel Hill, NC	23.08%	6
Other (please specify)	11.54%	3
Total Respondents: 26		

#	Other (please specify)	Date
1	It would be great to have bicycles to rent to consumers who are not eligible for a drivers license or cannot afford the insurance. It would benefit the county to invest or partner with agencies who provide transportation options for employment or connect with programs that allows participants to purchase cars through programs such as Goodwill or Wheels for Hope. It would benefit the county transportation to have bicycle options available on the CATS vans. Hub locations throughout the county to larger cities for employment would be beneficial for those seeking opportunities outside the county. Have a hub location that would allow a consumer to place his or her bike on the van then get off van once in larger area and bike to work or that job interview.	7/20/2016 2:36 PM
2	four lane hwy from Yanceyville to Danville and 4 lane hwy from 158 Yanceyville to Hillsborough	7/20/2016 12:08 PM
3	Mebane	7/17/2016 3:14 PM

Q17 To what roads would you like to have improved access? (please check all that apply)

Answered: 25 Skipped: 4



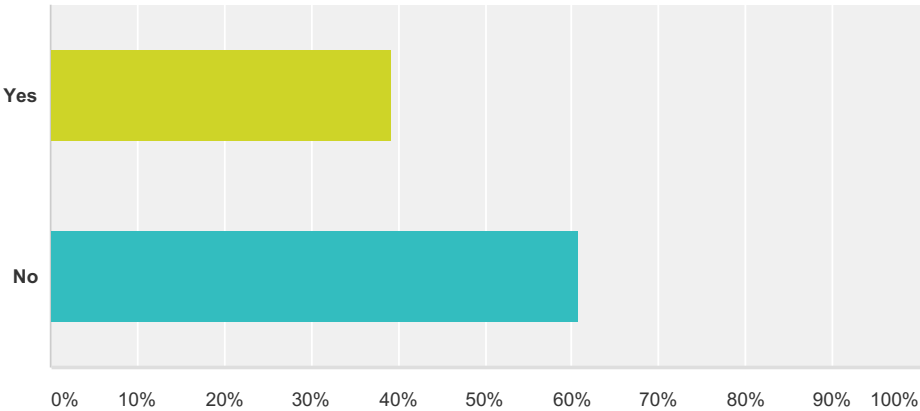
Answer Choices	Responses
US 29	28.00% 7
US 158	64.00% 16
NC 49	16.00% 4
NC 57	24.00% 6
NC 62	52.00% 13
NC 86	68.00% 17
NC 87	28.00% 7
NC 119	52.00% 13

NC 150	24.00%	6
NC 700	12.00%	3
Other (please specify)	0.00%	0
Total Respondents: 25		

#	Other (please specify)	Date
	There are no responses.	

Q18 Do you ride a bicycle?

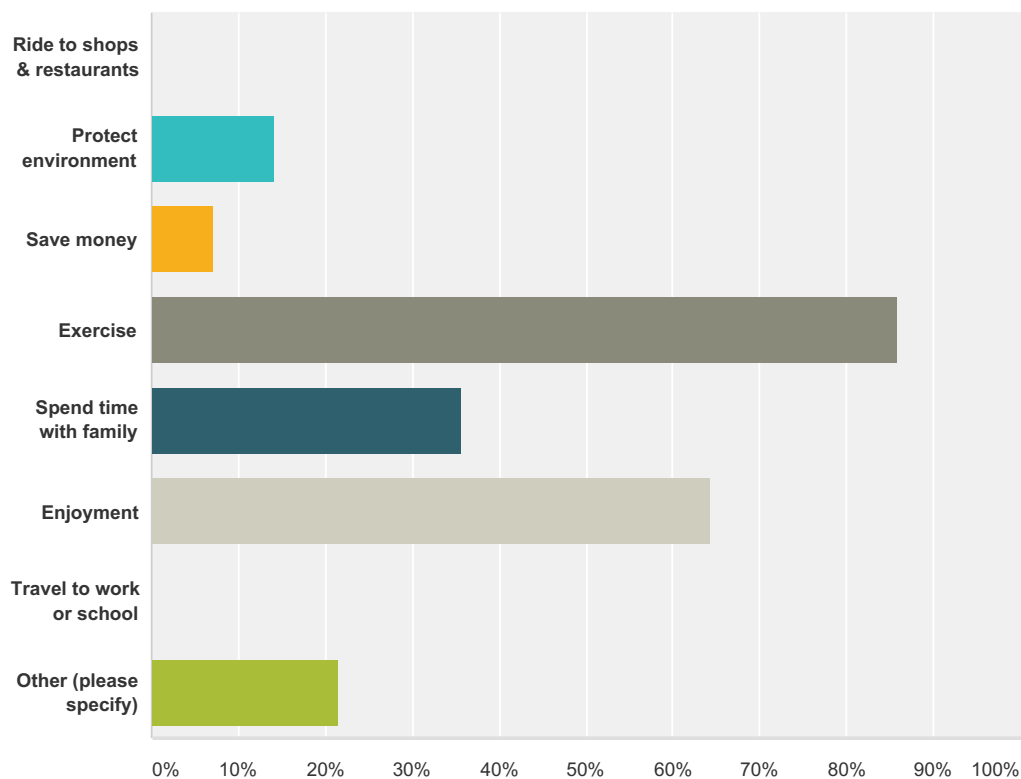
Answered: 28 Skipped: 1



Answer Choices	Responses	
Yes	39.29%	11
No	60.71%	17
Total		28

Q19 If yes, why do you ride a bicycle? (check all that apply)

Answered: 14 Skipped: 15

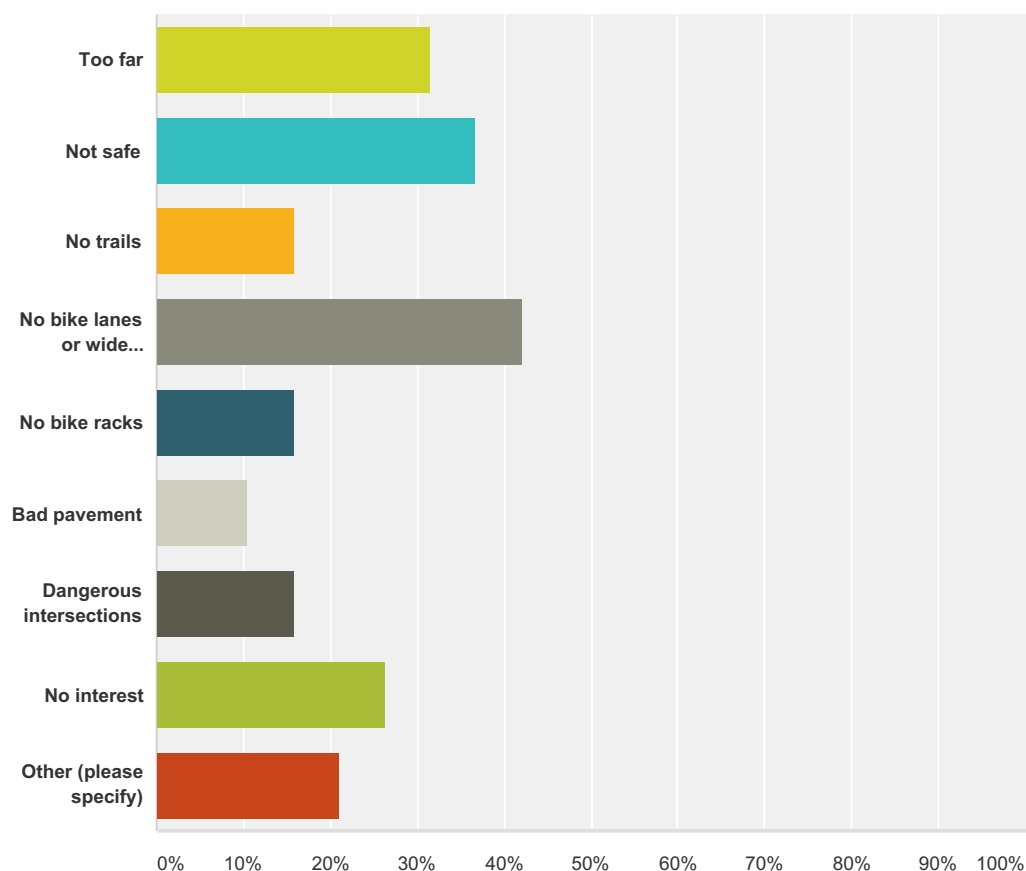


Answer Choices	Responses
Ride to shops & restaurants	0.00% 0
Protect environment	14.29% 2
Save money	7.14% 1
Exercise	85.71% 12
Spend time with family	35.71% 5
Enjoyment	64.29% 9
Travel to work or school	0.00% 0
Other (please specify)	21.43% 3
Total Respondents: 14	

#	Other (please specify)	Date
1	support charities	7/20/2016 9:37 PM
2	NA	7/20/2016 11:48 AM
3	N/A	7/17/2016 4:26 PM

Q20 If no, why don't you ride a bicycle? (check all that apply)

Answered: 19 Skipped: 10



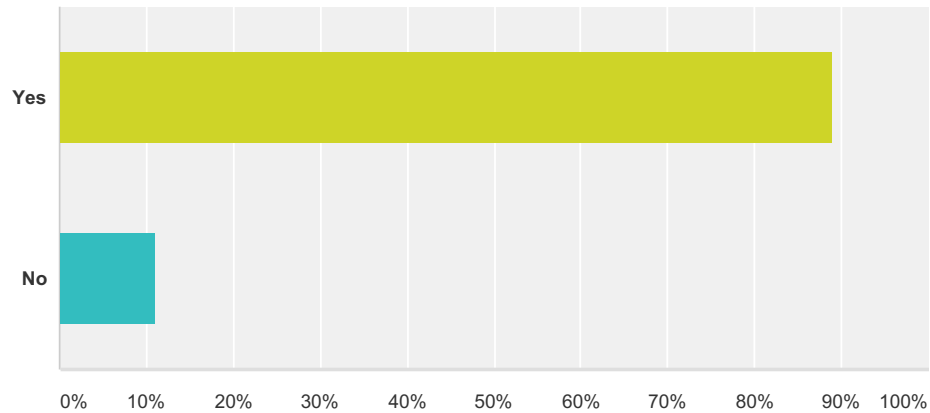
Answer Choices	Responses
Too far	31.58% 6
Not safe	36.84% 7
No trails	15.79% 3
No bike lanes or wide shoulders	42.11% 8
No bike racks	15.79% 3
Bad pavement	10.53% 2
Dangerous intersections	15.79% 3
No interest	26.32% 5
Other (please specify)	21.05% 4
Total Respondents: 19	

#	Other (please specify)	Date
1	Physical Disability	8/2/2016 1:57 PM

2	too old	7/24/2016 5:31 PM
3	I would consider riding my bicycle to work but road shoulders with high dropoffs make it unsafe for riding close to edge of road in heavier traffic including tractor trailers	7/20/2016 1:13 PM
4	Too old....fear of falling	7/17/2016 4:26 PM

Q21 Do you walk?

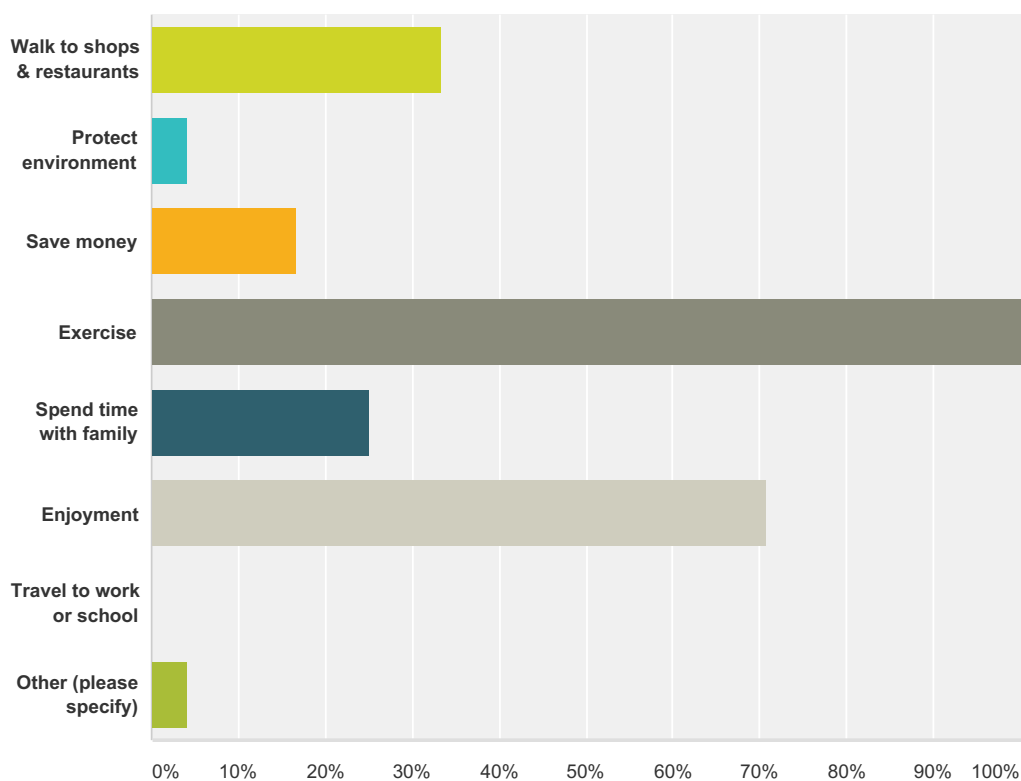
Answered: 27 Skipped: 2



Answer Choices	Responses	
Yes	88.89%	24
No	11.11%	3
Total		27

Q22 If yes, why do you walk? (check all that apply)

Answered: 24 Skipped: 5

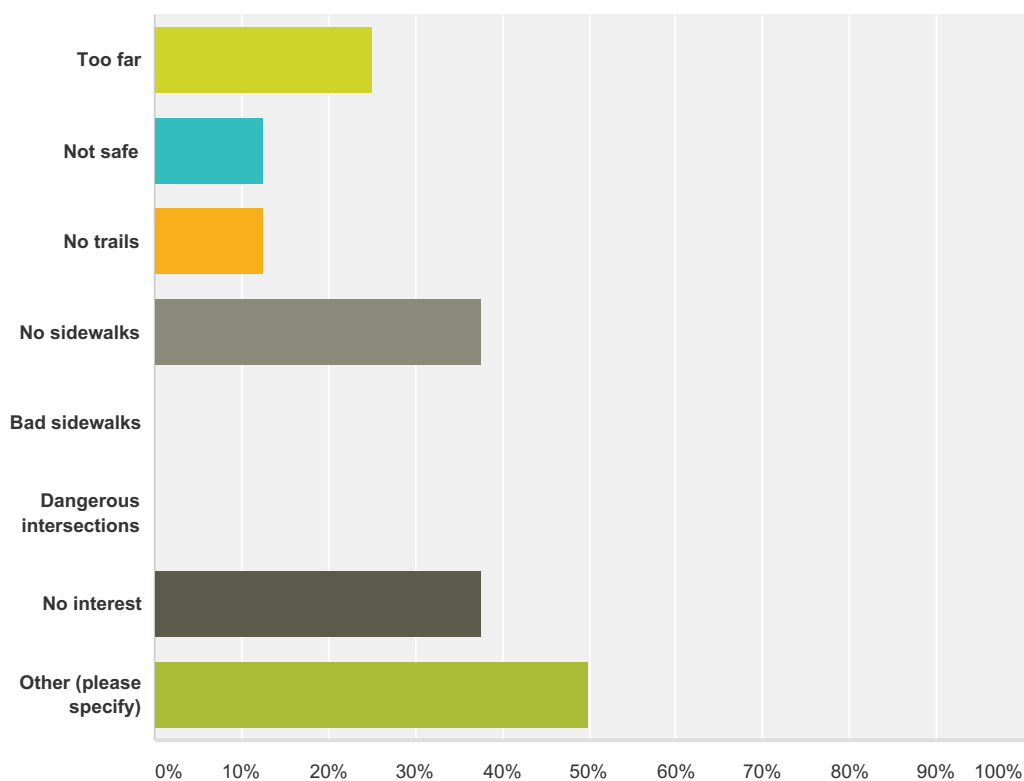


Answer Choices	Responses
Walk to shops & restaurants	33.33% 8
Protect environment	4.17% 1
Save money	16.67% 4
Exercise	100.00% 24
Spend time with family	25.00% 6
Enjoyment	70.83% 17
Travel to work or school	0.00% 0
Other (please specify)	4.17% 1
Total Respondents: 24	

#	Other (please specify)	Date
1	Keep fit and visit neighbors	7/17/2016 1:06 PM

Q23 If no, why don't you walk? (check all that apply)

Answered: 8 Skipped: 21

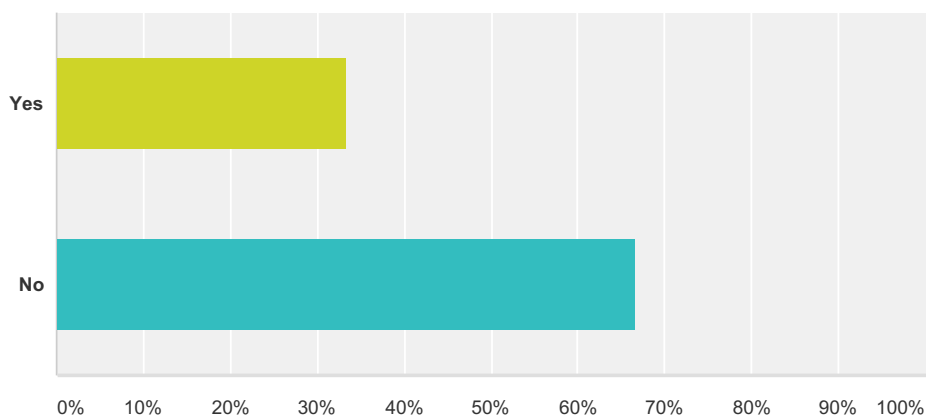


Answer Choices	Responses
Too far	25.00% 2
Not safe	12.50% 1
No trails	12.50% 1
No sidewalks	37.50% 3
Bad sidewalks	0.00% 0
Dangerous intersections	0.00% 0
No interest	37.50% 3
Other (please specify)	50.00% 4
Total Respondents: 8	

#	Other (please specify)	Date
1	because i ride bike	9/16/2016 11:39 AM
2	In the more rural areas its too dangerous to walk or ride a bicycle due to no sidewalks, or walking trails, or distance needing to travel. It would be great to have hub stops throughout the county not just in Yanceyville.	7/20/2016 2:36 PM
3	LAZY	7/20/2016 11:48 AM
4	N/A	7/17/2016 4:26 PM

Q24 Would you use designated bus routes if provided?

Answered: 27 Skipped: 2



Answer Choices	Responses
Yes	33.33% 9
No	66.67% 18
Total	27

#	If yes, to where?	Date
1	to PCC and grocery stores	10/3/2016 9:50 AM
2	Milton to other Caswell communities	7/20/2016 9:37 PM
3	To larger areas to shop, for the exercise, and if needed for employment.	7/20/2016 2:36 PM
4	Area within or just outside Yanceyville city limits. I have good health now and I'm not suggesting something like CDOT. For people that want to help the environment and take advantage of local stores and shops and not have to be concerned about parking or wear and tear on their vehicle, it would be a welcomed change.	7/20/2016 1:13 PM
5	Milton to Yanceyville, Milton to Danville	7/17/2016 3:14 PM
6	Yancyville senior center	7/17/2016 1:06 PM

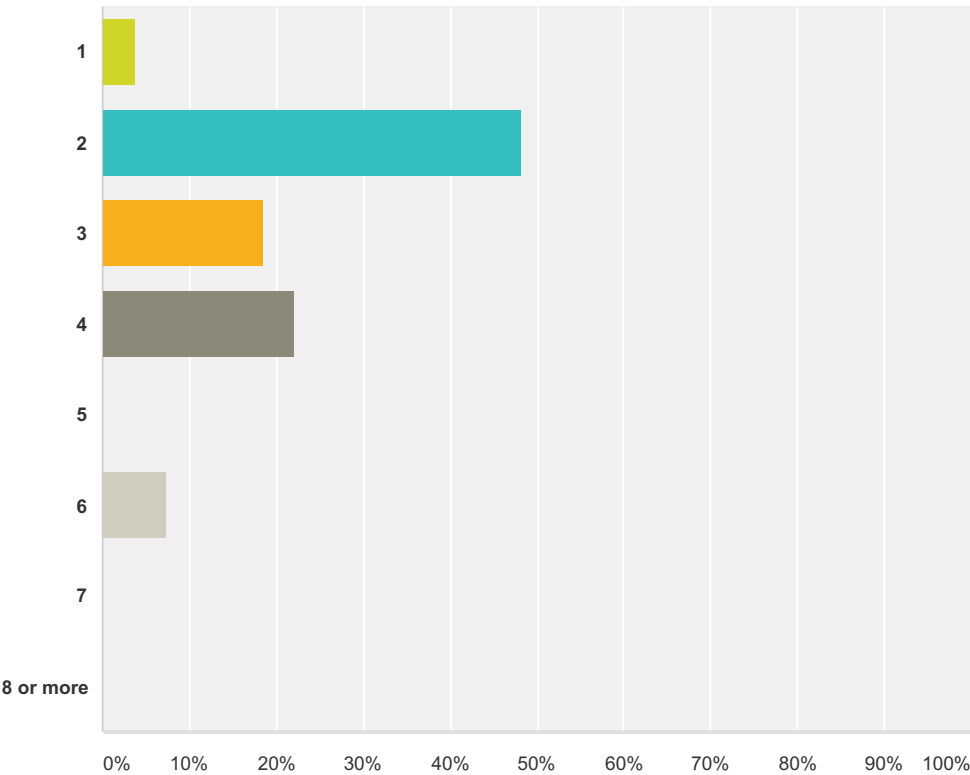
Q25 What do you consider to be the major transportation issues in Caswell County?

Answered: 25 Skipped: 4

#	Responses	Date
1	no major bus system.	10/3/2016 9:50 AM
2	cell phones in the hands of drivers	9/16/2016 11:39 AM
3	Traffic increasing on hwy 86. Need better intersections, turn lanes, widening, additional lanes	9/14/2016 8:22 AM
4	Not enough state level law enforcement.	8/2/2016 1:57 PM
5	Bad roads, dips, broken areas	8/1/2016 6:01 PM
6	There is no access to transportation for residents who are just wanting to get to the grocery store.	8/1/2016 3:07 PM
7	No interstate access	8/1/2016 1:23 PM
8	Increased vehicles passing thru county	7/27/2016 6:05 PM
9	town of milton speeders absolutely no regards for speed limits	7/24/2016 5:31 PM
10	Major roads were not constructed with consideration of future growth in commercial transportation. Now, commercial transportation is becoming an issue morning, noon and night.	7/23/2016 6:10 AM
11	We have limited public transportation. The seniors do have CATS to go/from the doctors, Senior Center, and sometimes the grocery store in Yanceyville. In the 50's & 60's we had a busline that ran from Semora, Milton, and Danville.	7/22/2016 8:54 PM
12	Need some more expressway type roads. 86N and 86S would be the most helpful	7/22/2016 9:55 AM
13	LACK OF TIE TO MAJOR MARKETS, WHICH IS MAKING CASWELL COUNTY STAGNANT. WE NEED INDUSTRY FOR SUCCESS.	7/21/2016 10:53 PM
14	lack of interstate and/or four lane highways	7/20/2016 9:37 PM
15	Not community friendly in the sense that it cannot benefit everyone due to distance and economic circumstances. Caswell needs an affordable transportation options that would allow those in the Pelham area or Milton for example to get to areas or places that are too far in distance like Danville or Burlington. Many consumers who are not working state lack of transportation to larger areas is a big factor in not working. Caswell does not offer transportation as a hub which would allow a person to get on the van or bus at one location with or without a bike to another county or state (Danville, VA) at different times throughout the day or evening for personal or business. Currently, I think its only setup for medical transportation certain days to certain location. Whatever transportation is decide on needs to be affordable similar to what Rockingham County has in place (\$1 each way). It would be great to have bicycle/moped or a similar cheap transportation resource available for people to rent like in other counties.	7/20/2016 2:36 PM
16	Lack of lanes that would be safe for pedestrians and/or bicyclists.	7/20/2016 1:13 PM
17	so many citizens relying on federal government to take care of their needs instead of finding employment -- family members charging other family members to take them places, i.e. -doctor-grediness	7/20/2016 12:08 PM
18	fact begin it's a very rural county	7/20/2016 12:01 PM
19	NO PUBLIC TRANSPORTATION	7/20/2016 11:48 AM
20	NO PUBLIC TRANSPORTATION	7/20/2016 11:41 AM
21	Transportation for clients that have to go out of county for appointments and never enough drivers to transport.	7/20/2016 11:15 AM
22	Few options for low-income residents	7/19/2016 5:09 PM
23	NC 57 is a major Raleigh/Roanoke shortcut Re-route trucks to NC 119/US158	7/17/2016 4:26 PM
24	Traffic is too heavy and fast coming through the Town of Milton. 18 wheel trucks travel to fast coming through Milton.	7/17/2016 3:14 PM
25	Taking seniors and disabled to Dr appt and therapy sessions	7/17/2016 1:06 PM

Q26 How many people, including yourself, live in your household?

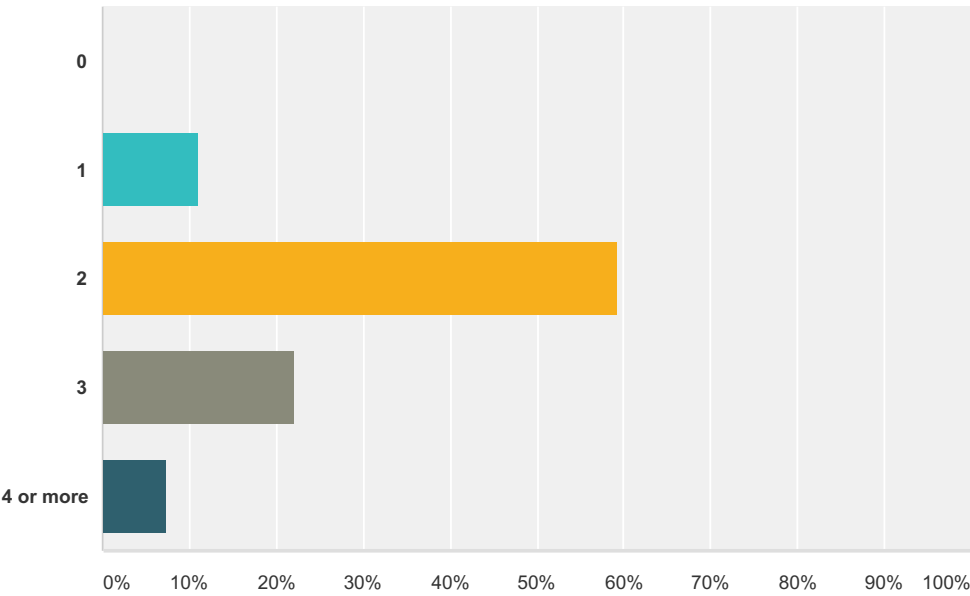
Answered: 27 Skipped: 2



Answer Choices	Responses	
1	3.70%	1
2	48.15%	13
3	18.52%	5
4	22.22%	6
5	0.00%	0
6	7.41%	2
7	0.00%	0
8 or more	0.00%	0
Total		27

Q27 How many drivers are in your household?

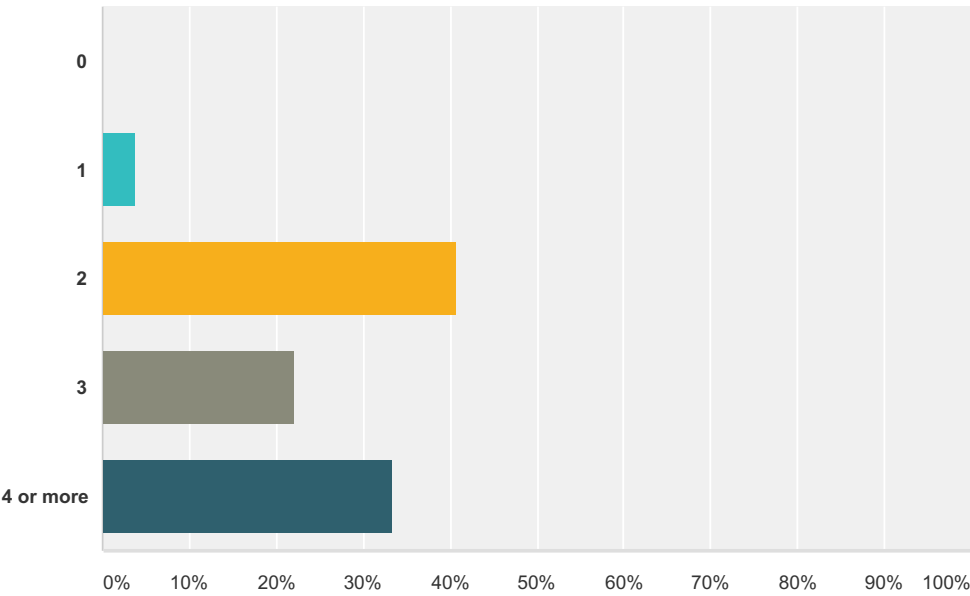
Answered: 27 Skipped: 2



Answer Choices	Responses
0	0.00%0
1	11.11%3
2	59.26%16
3	22.22%6
4 or more	7.41%2
Total	27

Q28 How many vehicles are in your household?

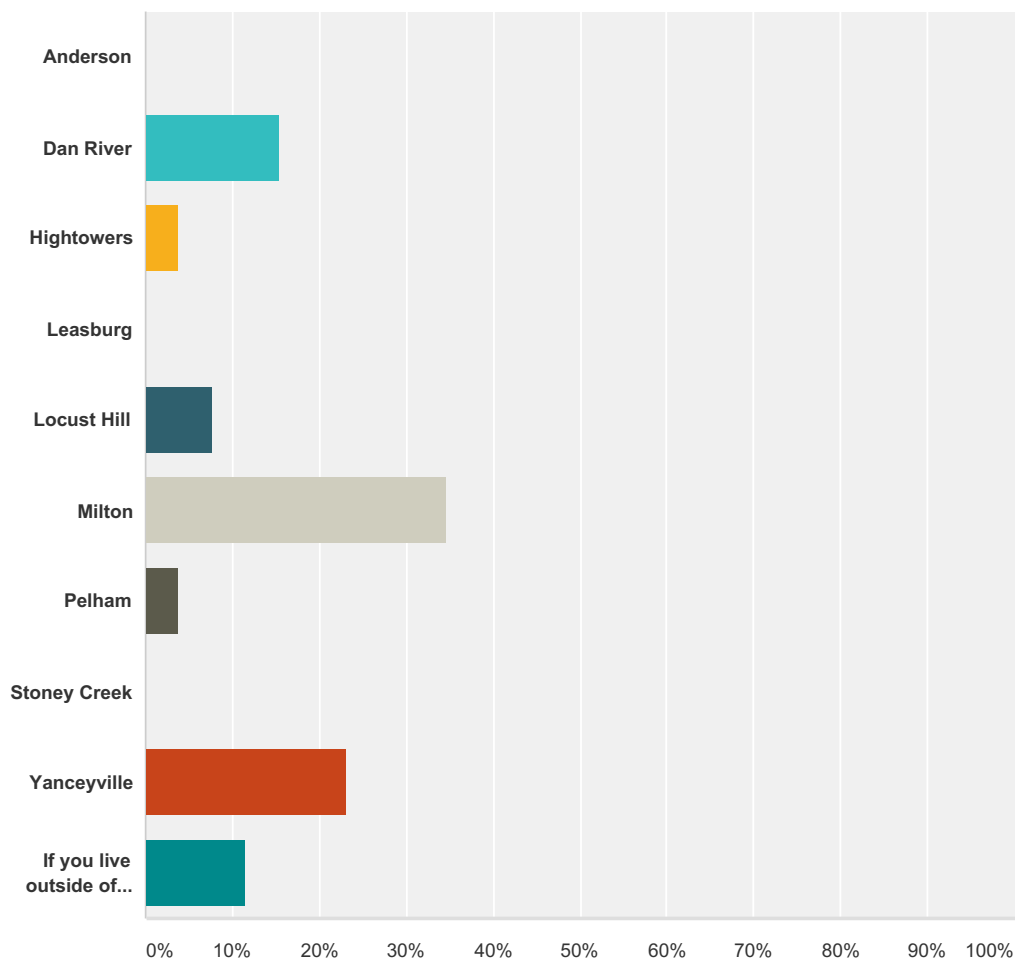
Answered: 27 Skipped: 2



Answer Choices	Responses
0	0.00%0
1	3.70%1
2	40.74%11
3	22.22%6
4 or more	33.33%9
Total	27

Q29 In which township do you live (Please reference the map that follows and check only one box)

Answered: 26 Skipped: 3



Answer Choices	Responses
Anderson	0.00% 0
Dan River	15.38% 4
Hightowers	3.85% 1
Leasburg	0.00% 0
Locust Hill	7.69% 2
Milton	34.62% 9
Pelham	3.85% 1
Stoney Creek	0.00% 0
Yanceyville	23.08% 6
If you live outside of Caswell County, where?	11.54% 3

Total	26
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#	If you live outside of Caswell County, where?	Date
1	Roxboro	7/22/2016 9:56 AM
2	REIDSVILLE	7/20/2016 11:42 AM
3	Danville, Va but work in county	7/20/2016 11:15 AM

Public Meetings

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

Public Drop-in Session: March 14, 2017

Location: Thomas Day House & Union Tavern

Time: 5:00 – 7:00pm

Comments: This meeting was held to solicit public input on the DRAFT Caswell County CTP maps. Five (5) attendees participated in the workshop. A few comments were received. Operational improvements at the NC 62/Broad Street signalized intersection and new sidewalks along Holder Street and Palmers Alley were recommended.

Public Drop-in Session: March 20, 2017

Location: Caswell County Historic Courthouse

Time: 4:00 – 6:00pm

Comments: This meeting was held to solicit public input on the DRAFT Caswell County CTP maps. Six (6) attendees participated in the workshop. A few comments were received. New sidewalks along Dillard School Drive and School Drive were recommended

Public Hearings

Public hearings were held throughout Caswell County on the following dates:

Locale	Date
Caswell County	May 1, 2017
Town of Milton	May 9, 2017
Town of Yanceyville	May 9, 2017

The public hearings held on these dates were to solicit additional input on the CTP prior to local adoptions. Minor comments for needed improvements on Dillard School Drive and School Drive due to the new senior living building by the Dillard School Redevelopment LLC were recommended. The CTP was locally adopted during these meetings.

Appendix I

Existing Transportation Plans

The following Comprehensive Transportation Plan (CTP) for areas within the county that was previously adopted is listed below and may be viewed on the web at the following link.

- ❖ 2009 Caswell County Comprehensive Transportation Plan

<https://connect.ncdot.gov/projects/planning/Pages/Comprehensive-Transportation-Plans.aspx?county=caswell>

