



Comprehensive Transportation Plan



Vance County

November 2012

Comprehensive Transportation Plan for Vance County

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Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Vance County
City of Henderson
Town of Kittrell
Town of Middleburg
Kerr-Tar Rural Planning Organization

November 2012

Scott Walston, PE
Triangle Planning Group Supervisor

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Executive Summary

In January of 2011, the Transportation Planning Branch of the North Carolina Department of Transportation and Vance County initiated a study to cooperatively develop the Vance County Comprehensive Transportation Plan (CTP), which includes the city of Henderson, the town of Kittrell and the town of Middleburg. This is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover standard bridge replacements, routine maintenance, or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening, and public input. Refer to Figure 1 for the CTP maps, which were mutually endorsed/adopted in 2012. Implementation of the plan is the responsibility of Vance County, the city of Henderson, the town of Kittrell, the town of Middleburg, and NCDOT. Refer to Chapter 2 for information on the implementation process.

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

- **I-85:** Widen to a 6-lane divided freeway from the Granville County Line to the Warren County Line.
- **US 1:** Widen to a 4-lane divided freeway from the Franklin County Line to Beechtree Trail Road (SR 1104). Provide a 4-lane divided western bypass freeway facility from Beechtree Trail Road (SR 1104) to US 1 Business with a grade separation at Kittrell College Road (SR 1105) and interchanges to tie into the existing route. Provide a 4-lane divided freeway from US 1 Business to US 1 Business with a grade separation at South Lake Lodges Road (SR 1113).
- **US 1 Business (TIP Project R-2503):** Upgrade to a 4-lane other major thoroughfare from Peter Gill Road (SR 1548) to US 158 Business.
- **US 158 Bypass:** Upgrade to a 2-3 lane other major thoroughfare with center turn lane where necessary from Poplar Creek Road to I-85.
- **NC 39:** Widen to a 2-lane road with a 24 foot cross-section to a 4-lane divided boulevard from Franklin County to Stagecoach Road (SR 1329).
- **Dabney Drive (SR 1162):** Extend Corbitt Road to provide a one-way pair facility from US 158 Business to Cooper Drive. Upgrade to a 4-lane divided boulevard facility from Cooper Drive to US 158 Bypass.

- **Western Outer Loop (SR 1295):** Provide a 2-lane minor thoroughfare from Old County Home Road (SR 1101) to Lynnbank Road (SR 1115) and tie into US 1 Bypass.

Adopted by:

Vance County
Date: 08/06/12

City of Henderson
Date: 08/27/12

Town of Kittrell
Date: 11/05/12

Town of Middleburg
Date: 11/05/12

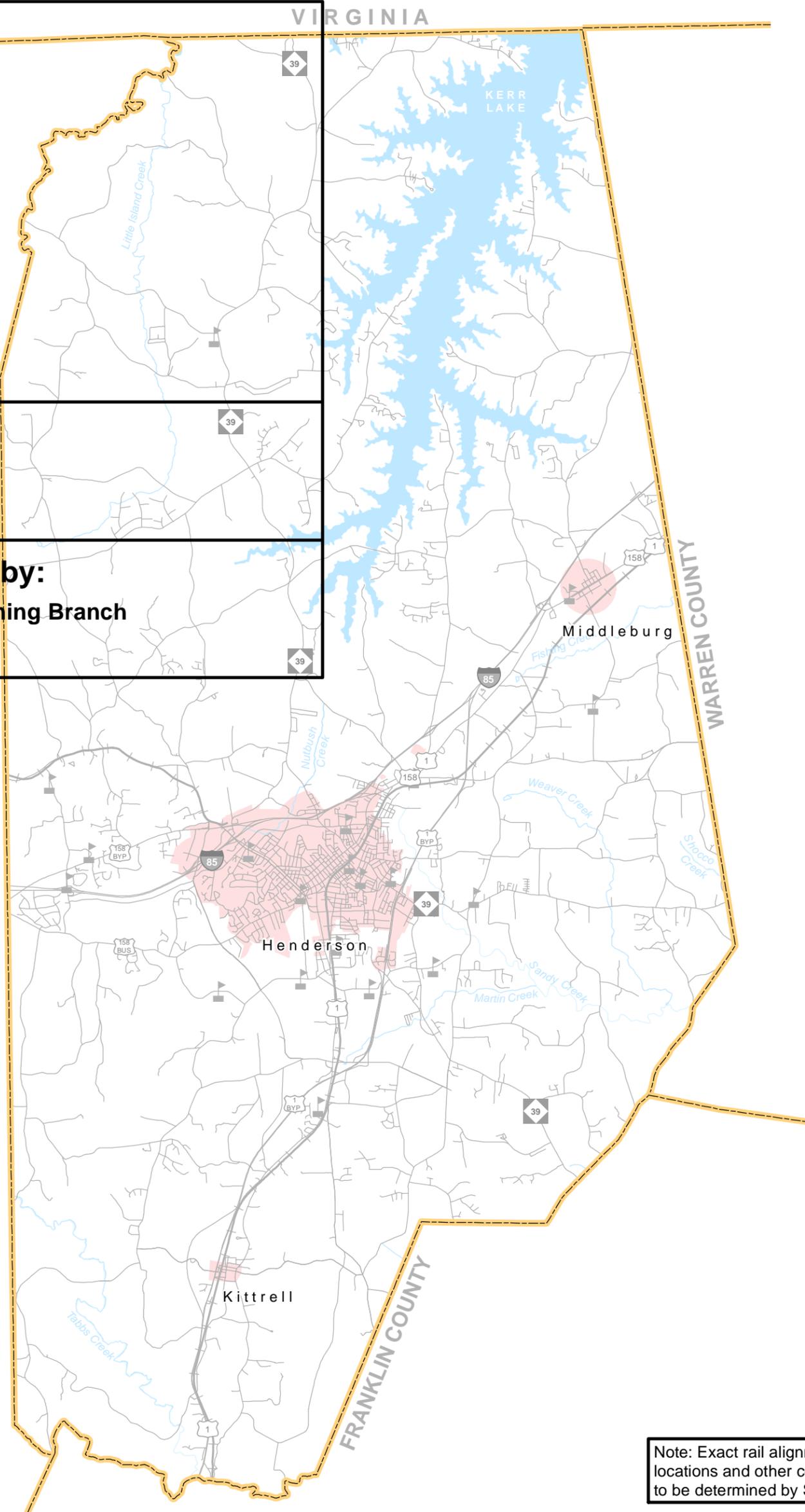
NCDOT
Date:

Endorsed by:

Kerr-Tar RPO
Date: 10/11/12

Recommended by:

Transportation Planning Branch
Date: 12/06/2012



Note: Exact rail alignment, grade separation locations and other corresponding projects to be determined by SEHSR project study.

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

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

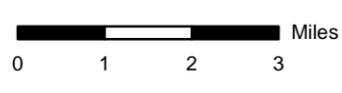
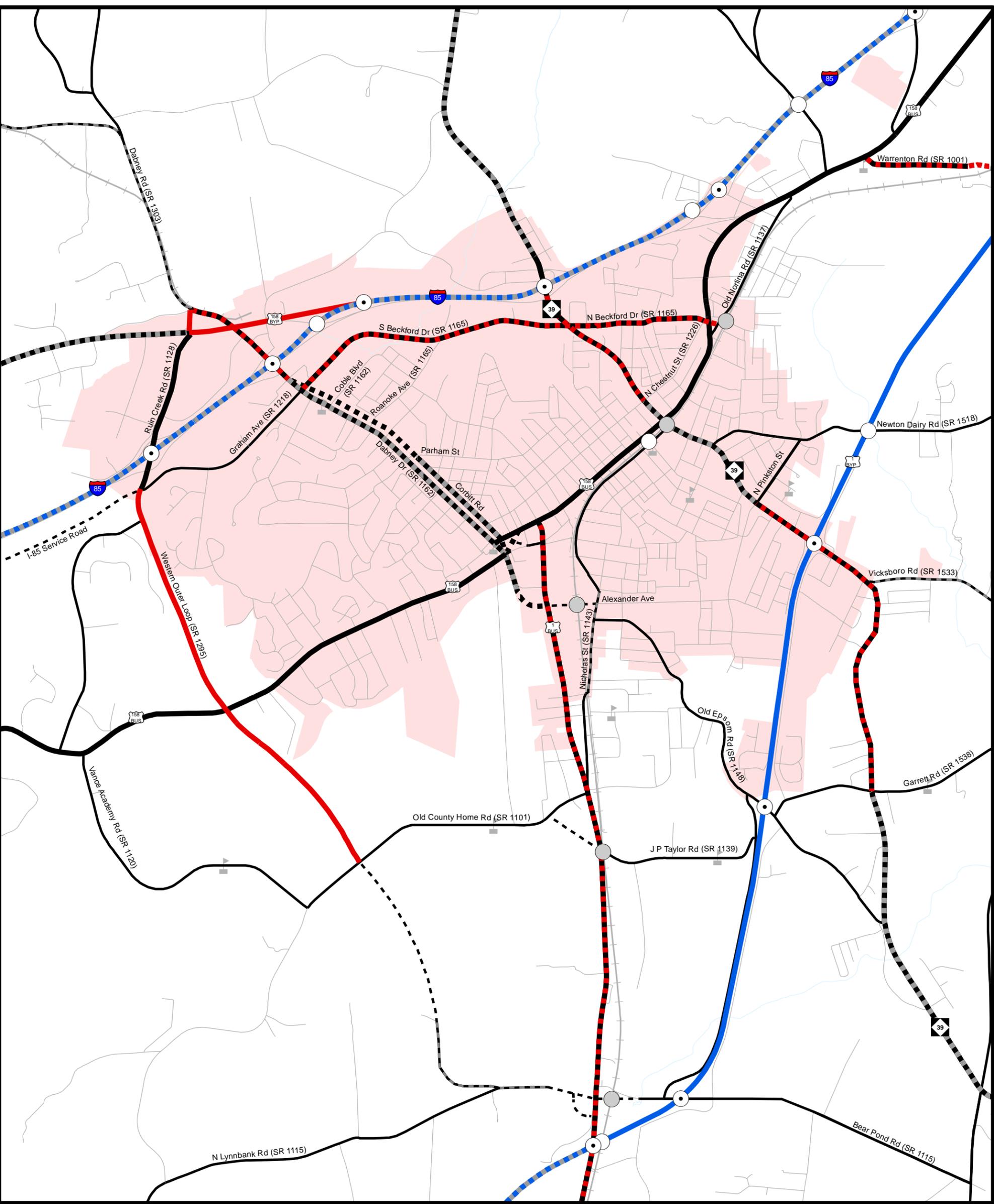


Figure 1 - Sheet 1

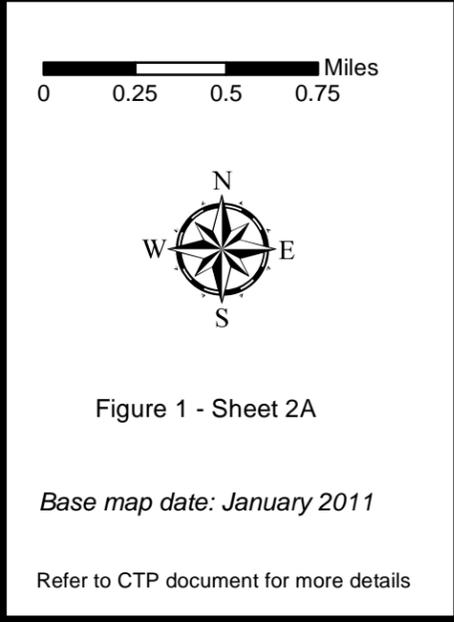
Base map date: January 2011
Refer to CTP document for more details



Vance County
North Carolina
RECOMMENDED
Comprehensive
Transportation Plan
Plan date: April 10, 2012

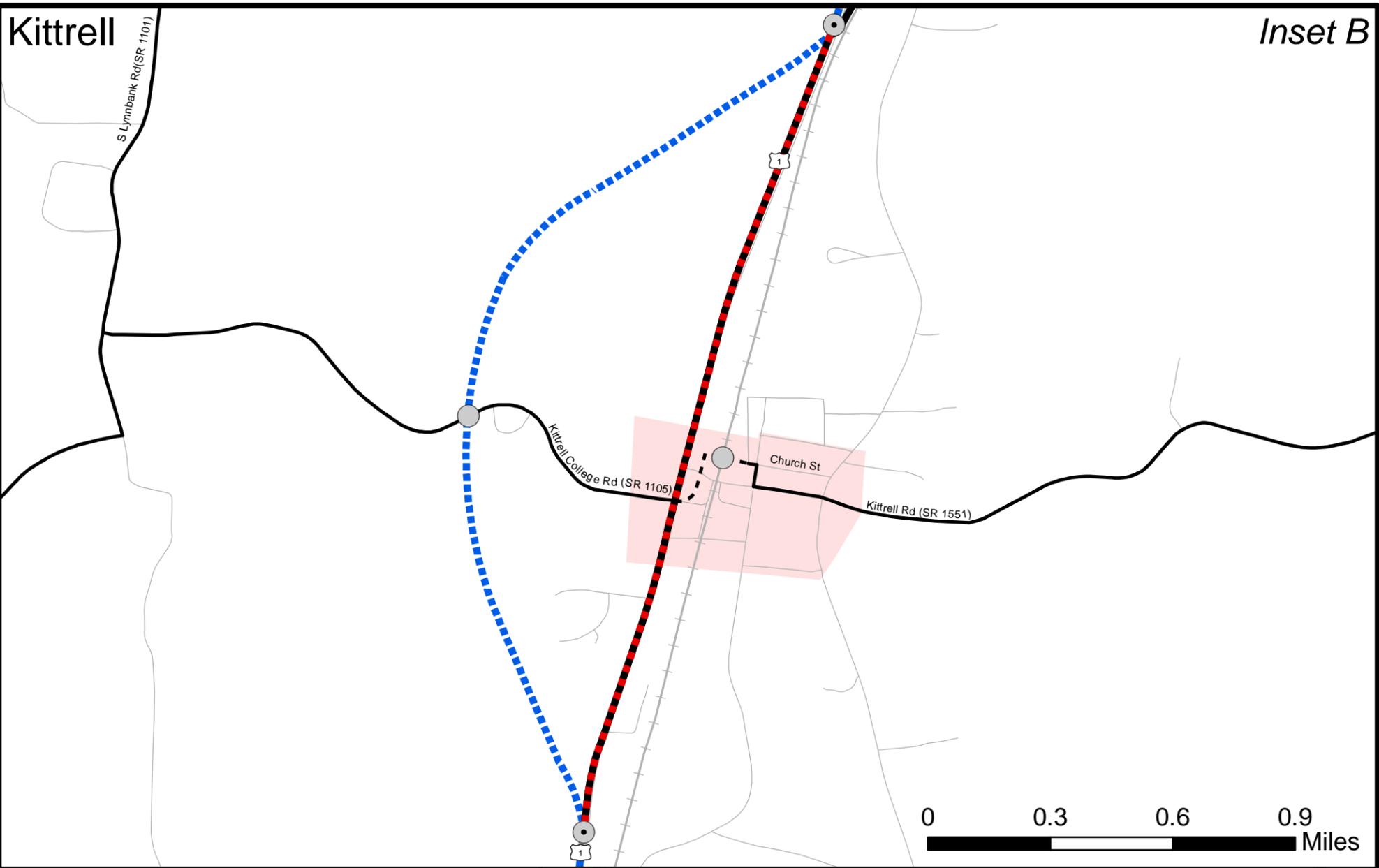


Freeways	Other Major Thoroughfares
Existing	Existing
Needs Improvement	Needs Improvement
Recommended	Recommended
Expressways	Minor Thoroughfares
Existing	Existing
Needs Improvement	Needs Improvement
Recommended	Recommended
Boulevards	Existing Interchange
Existing	Proposed Interchange
Needs Improvement	Proposed Interchange Improvement
Recommended	Existing Grade Separation
	Proposed Grade Separation

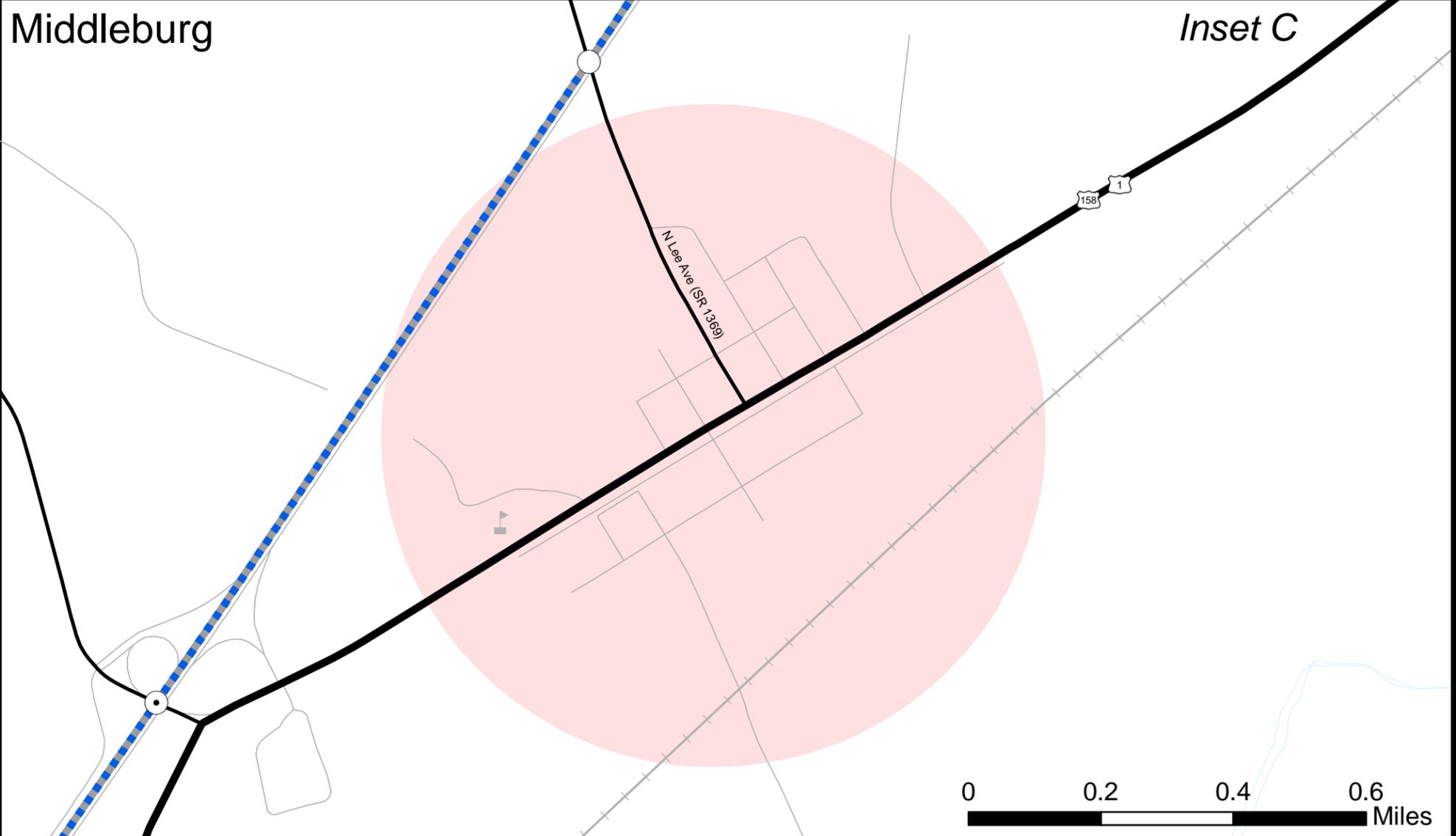


Highway Map
Inset A (Henderson)

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Plan date: April 12, 2012



Inset B



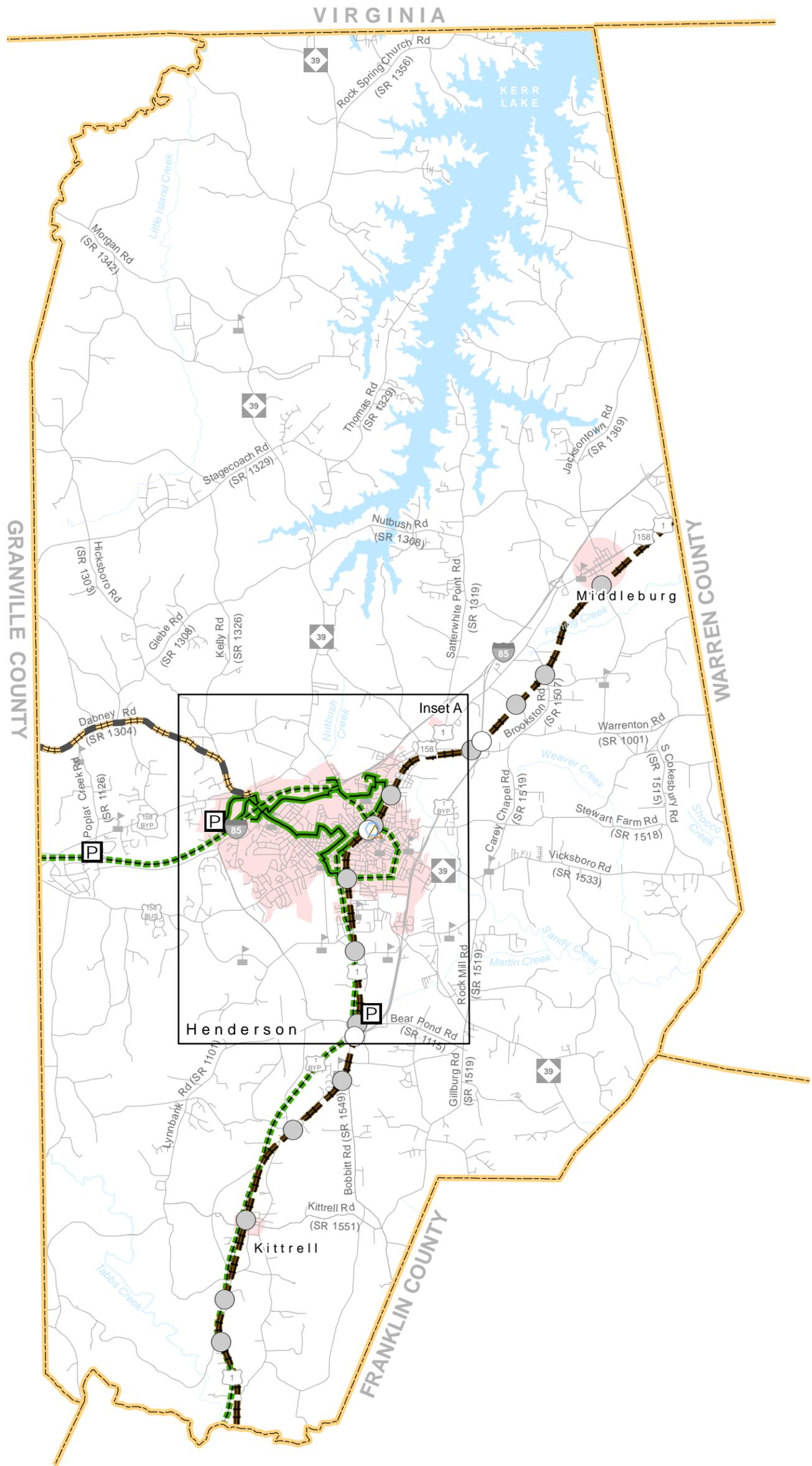
Inset C

<p>Freeways</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Expressways</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Boulevards</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended 	<p>Other Major Thoroughfares</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Minor Thoroughfares</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p> Existing Interchange Proposed Interchange Existing Grade Separation Proposed Grade Separation </p>
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Figure 1 - Sheet 2B
 Base map date: January 2011
 Refer to CTP document for more details

Highway Map
 Inset B (Kittrell) & C (Middleburg)

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 Plan date: March 19, 2012



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



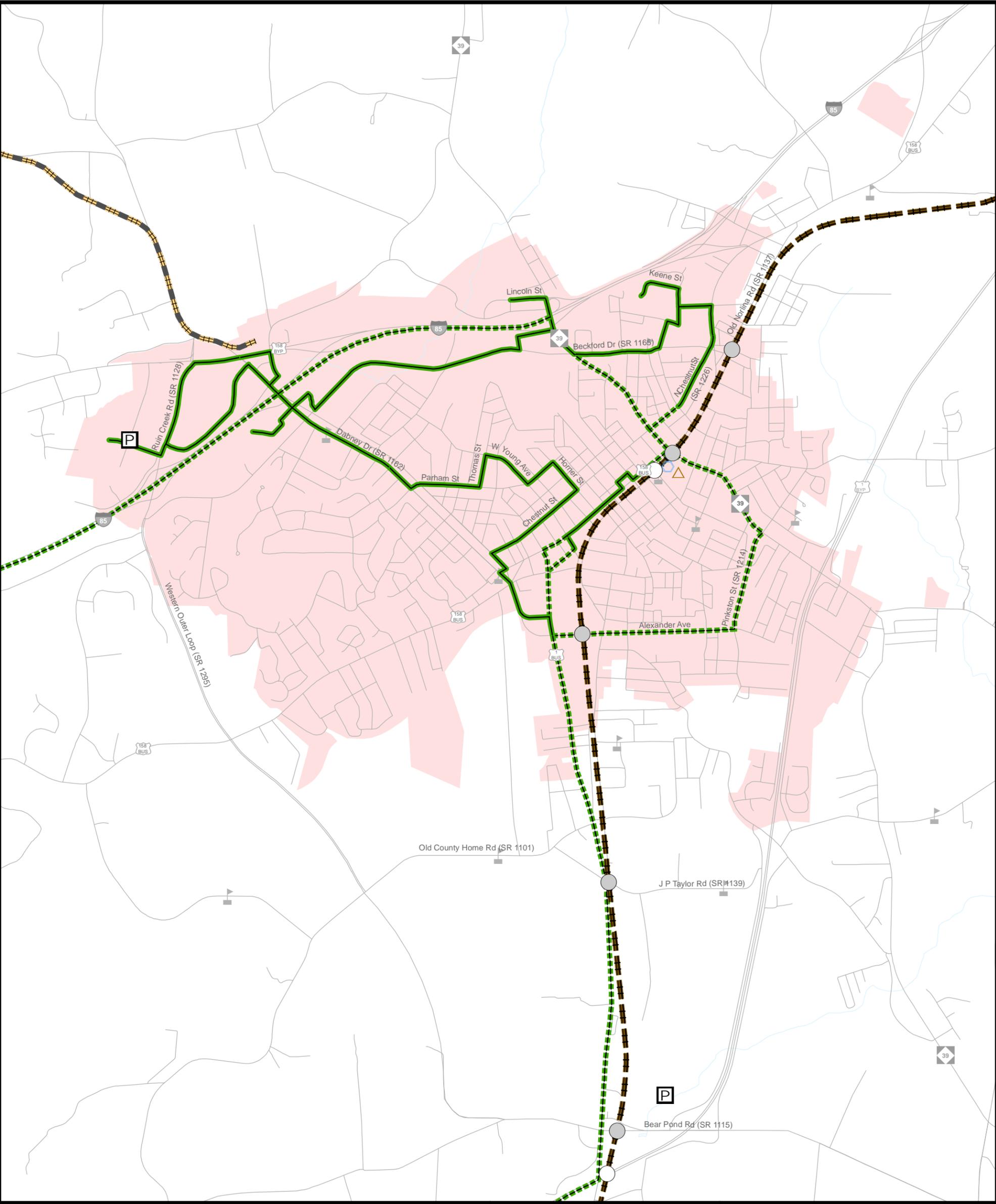
Figure 1 - Sheet 3

Base map date: January 2011
Refer to CTP document for more details

Public Transportation and Rail Map



Vance County
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Plan date: April 12, 2012



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



Figure 1 - Sheet 3A

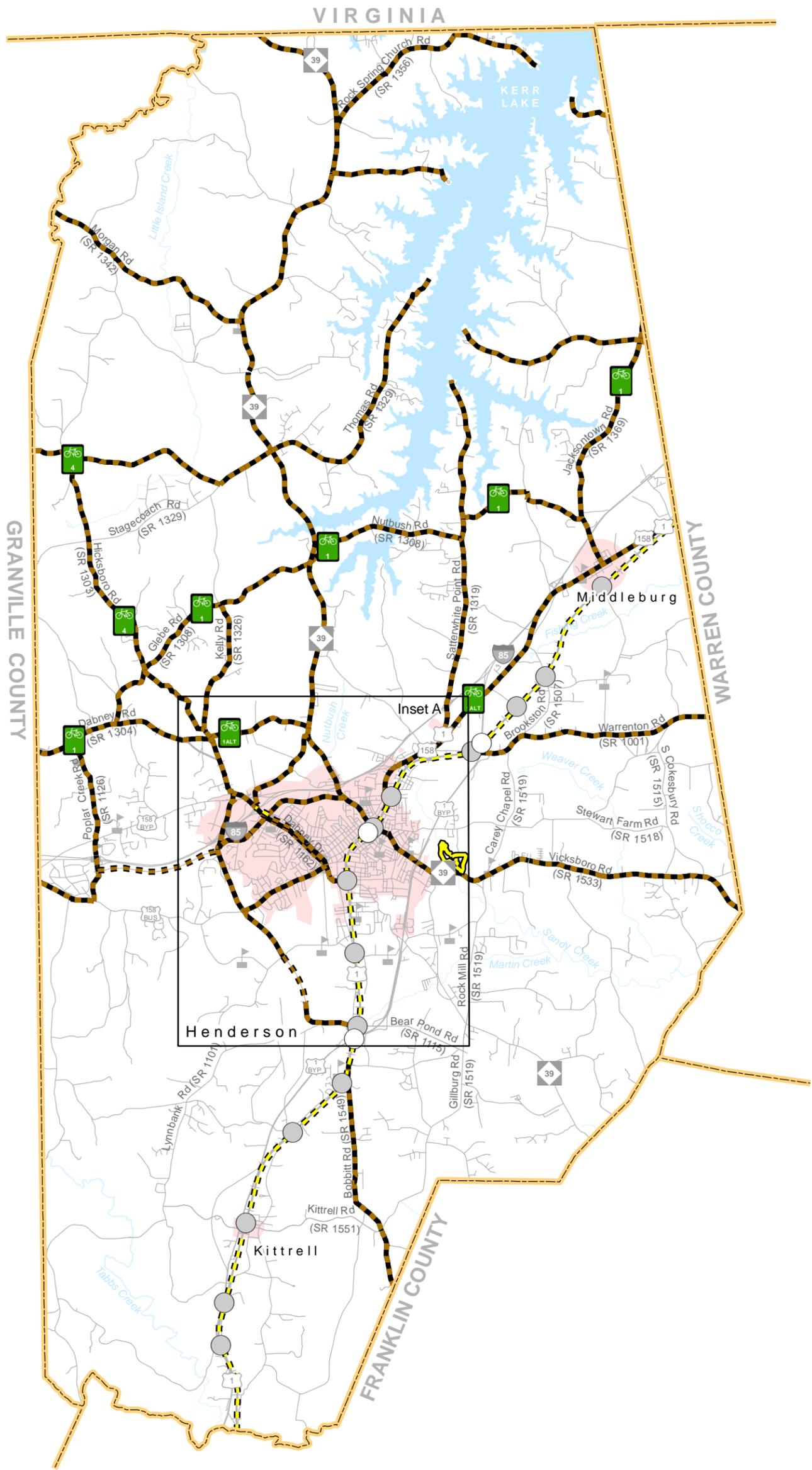
Base map date: January 2011
Refer to CTP document for more details

Public Transportation and Rail Map

Inset A (Henderson)



Vance County
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Plan Date: April 10, 2012



On-road

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

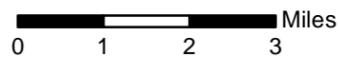


Figure 1 - Sheet 4

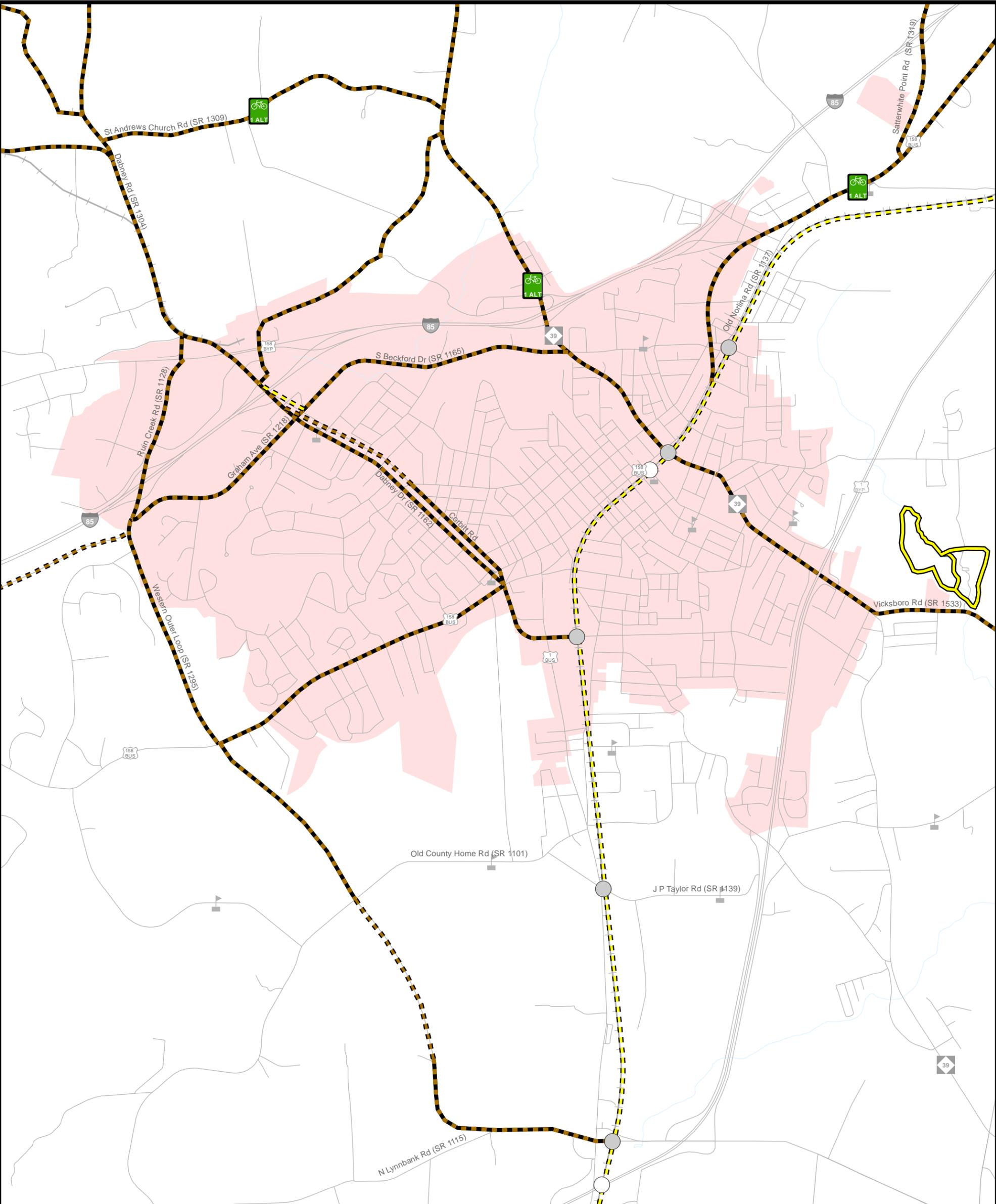
Base map date: January 2011

Refer to CTP document for more details

Bicycle Map



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Plan date: April 18, 2012



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

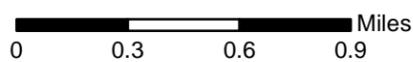


Figure 1 - Sheet 4A

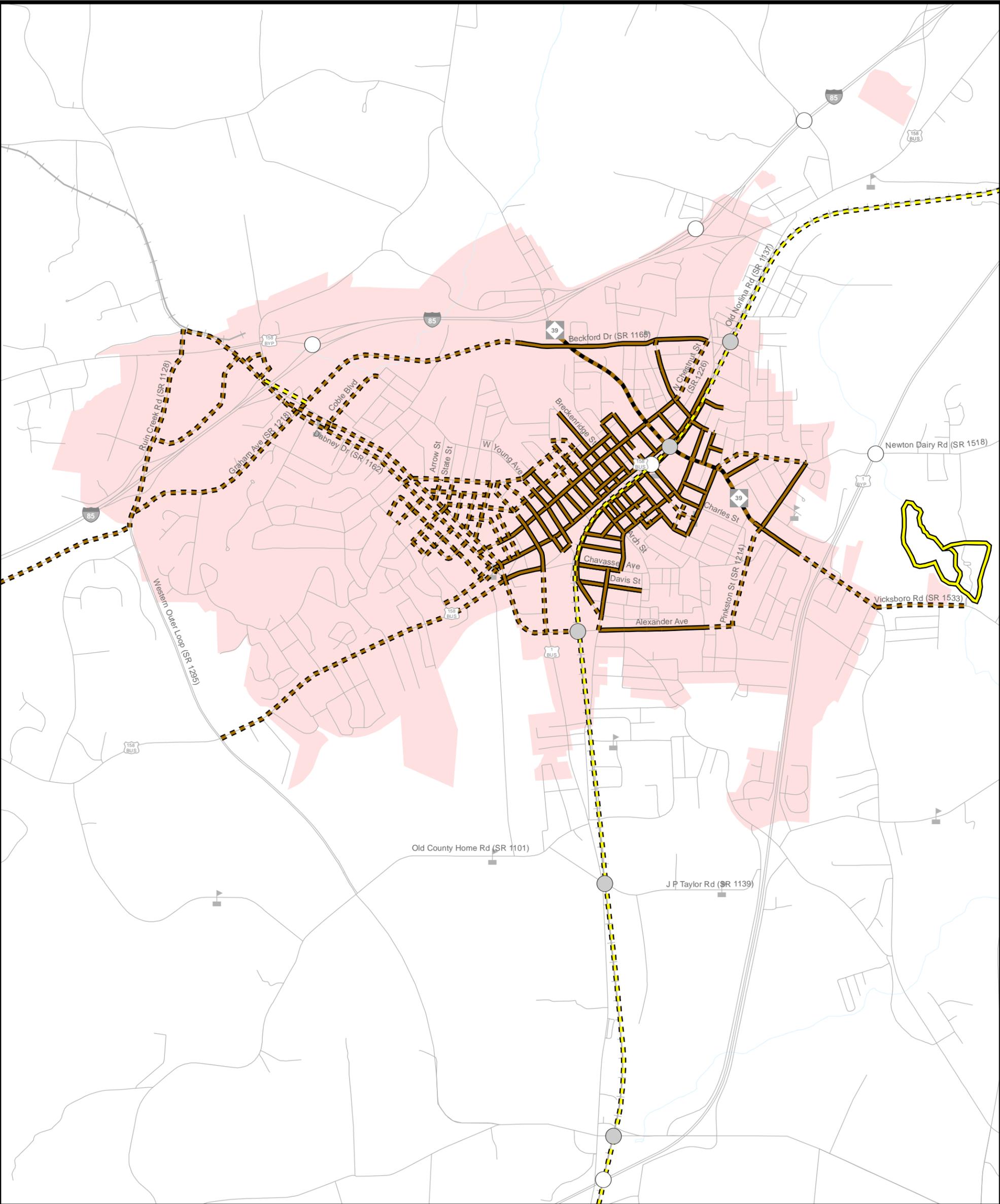
Base map date: January 2011

Refer to CTP document for more details

Bicycle Map
Inset A (Henderson)



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Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

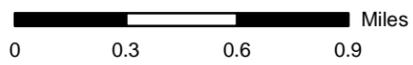


Figure 1 - Sheet 5A

Base map date: January 2011

Refer to CTP document for more details

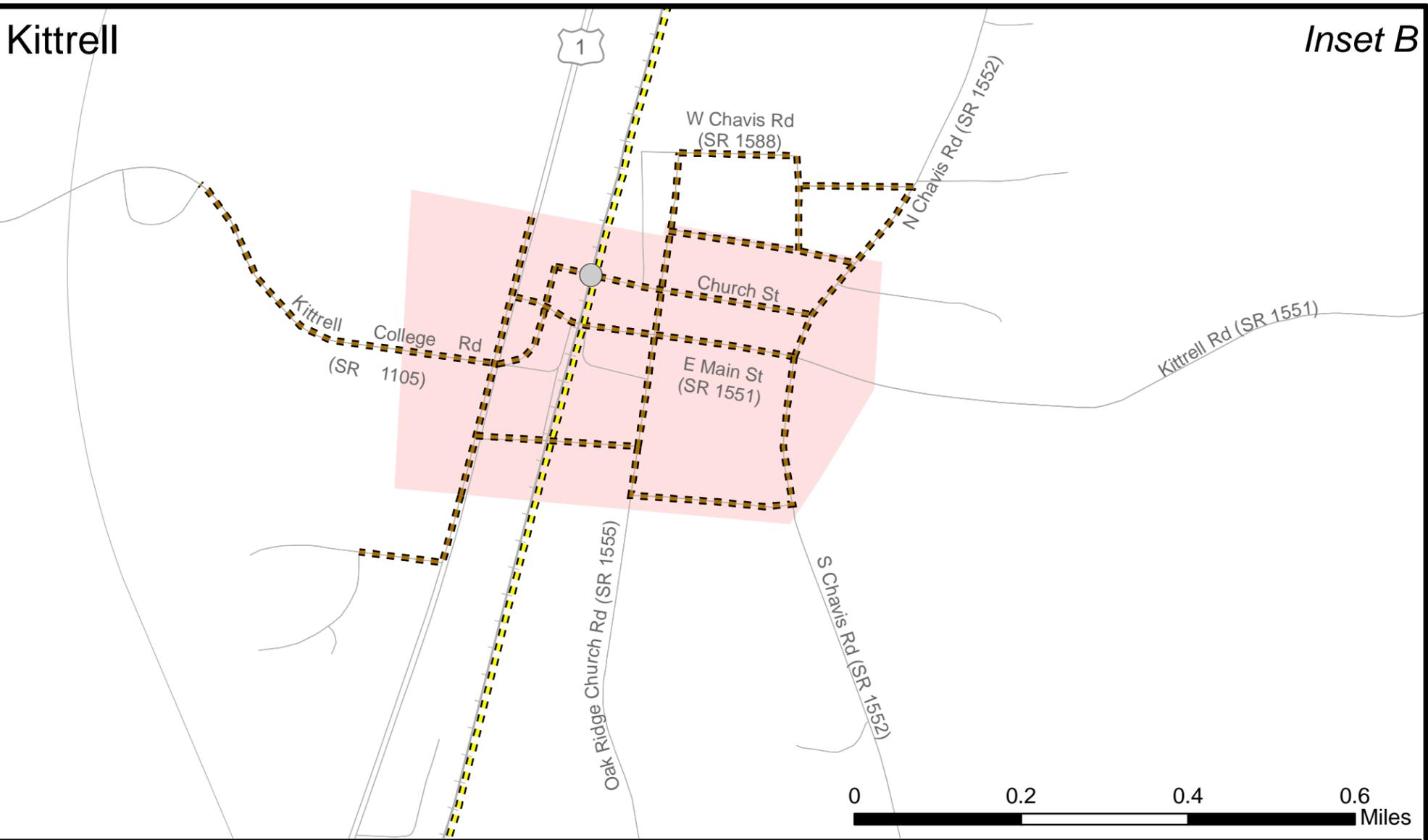
**Pedestrian Map
Inset A (Henderson)**



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Plan date: April 10, 2012

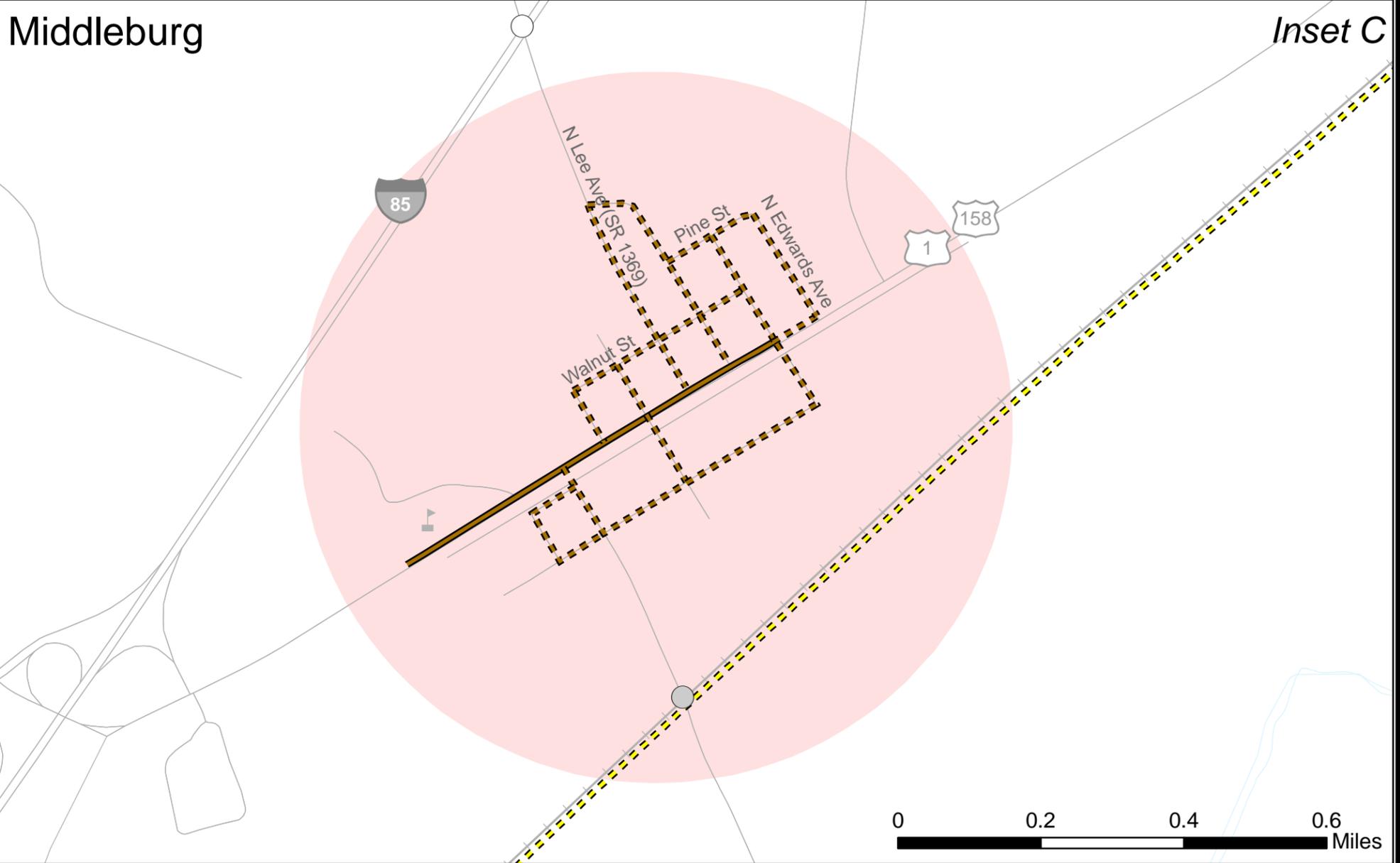
Kittrell

Inset B



Middleburg

Inset C



Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation



Figure 1 - Sheet 5B

Base map date: January 2011

Refer to CTP document for more details

Pedestrian Map

Inset B (Kittrell) & Inset C (Middleburg)



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I. Analysis of the Existing and Future Transportation System

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

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

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

Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

One of those statewide initiatives is the Strategic Highway Corridor (SHC) Vision Plan adopted by the Board of Transportation on September 2, 2004 and last revised on July

10, 2008. The SHC concept represents a timely initiative to protect and maximize the mobility and connectivity on a core set of highway corridors throughout North Carolina, while promoting environmental stewardship through maximizing the use of existing facilities to the extent possible, and fostering economic prosperity through the quick and efficient movement of people and goods.

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

In the development of this plan, travel demand was projected from 2007 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1991 to 2009. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Vance County CTP Committee (April 19, 2011).

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 Figure 2 and 3 for existing and future capacity deficiencies.

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

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

- Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

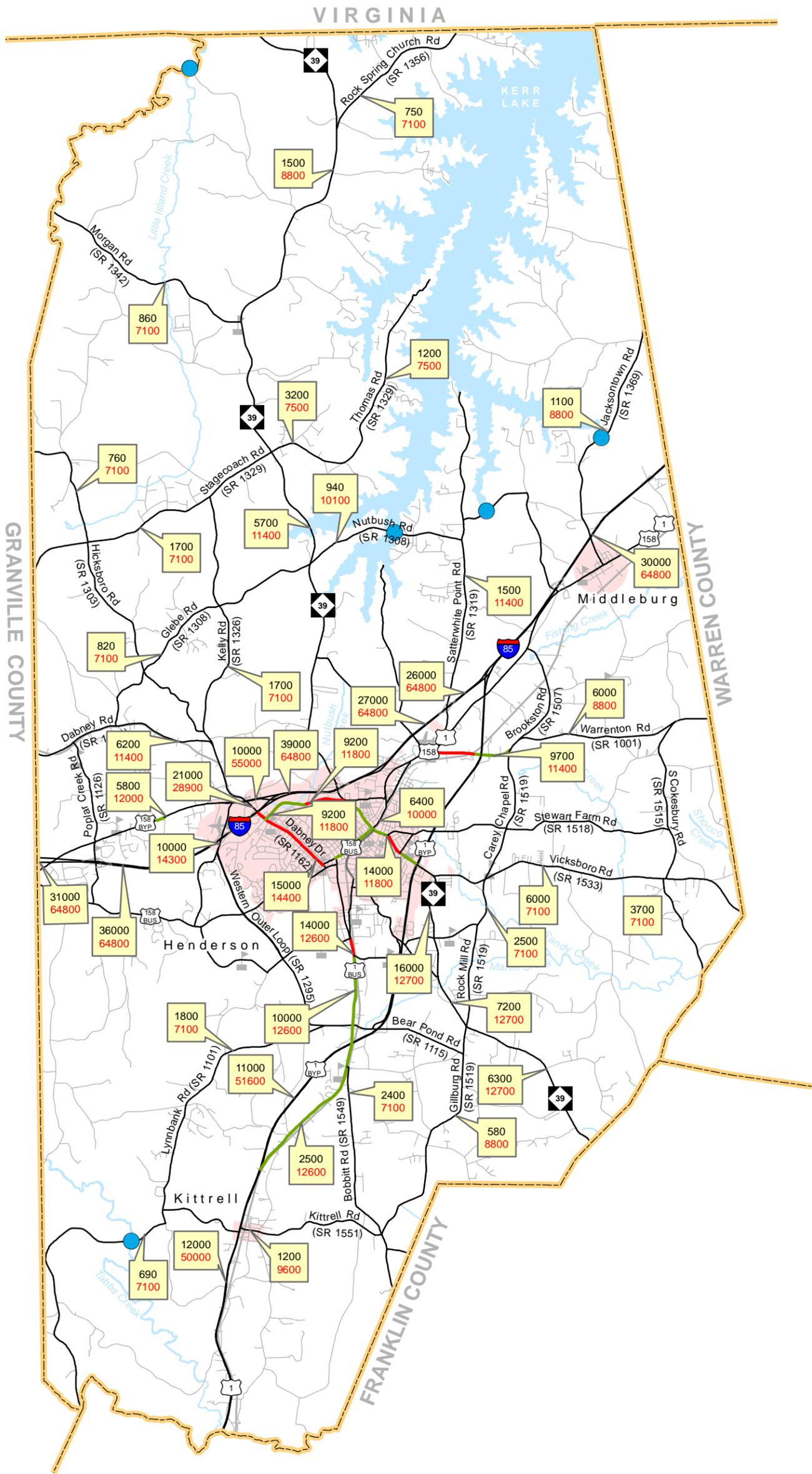
The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating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

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

Traffic Crash Analysis

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Vance County CTP for crashes occurring in the planning area between January 1, 2007 and December 31, 2009. During this period, a total of 25 intersections were identified as high crash locations as illustrated in Figure 4. Refer to Appendix F for a detailed crash analysis.

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- Airports
- Schools
- Flooding
- Local Road
- Below Capacity (v/c < 0.79)
- Near Capacity (v/c 0.80 - 0.99)
- Over Capacity (v/c > 1.00)
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- 0000 2007 Volumes
- 0000 2007 Capacity

0 1 2 3 Miles



Figure 2

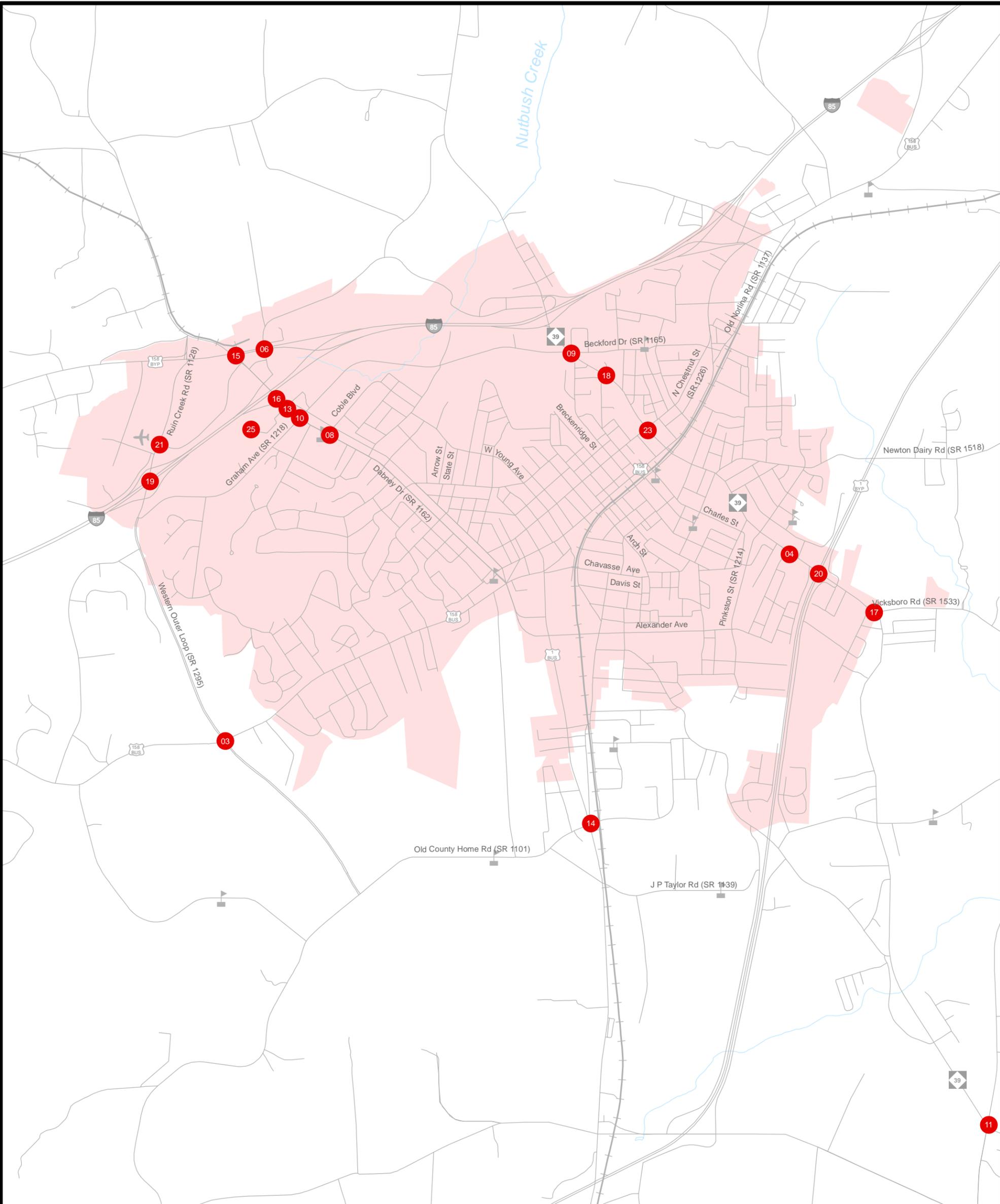
Base map date: January 2011

Refer to CTP document for more details

2007 Volumes and Roadway Deficiencies



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	Crash Locations (# Map Index)		County Boundary
	Schools		Water Bodies
	Airports		Municipal Boundary
	Roads		
	Railroads		
	Rivers and Streams		

0 0.25 0.5 0.75 Miles

Figure 5

Base map date: January 2011

Refer to CTP document for more details

Crash Locations
January 1, 2007 to December 31, 2009

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Bridge Deficiency Assessment

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

The NCDOT Structures Maintenance 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. 27 deficient bridges were identified within the planning area and are illustrated in Figure 6. Refer to Appendix G for more detailed information.

Public Transportation and Rail

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

Public Transportation

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

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

buses serve many cities and towns throughout the state and provide connections to locations in neighboring states and throughout the United States and Canada. Greyhound/Carolina Trailways operates in North Carolina. However, community, urban and regional transportation systems are providing increasing intercity service in North Carolina.

An inventory of existing and planned fixed public transportation routes for the county is presented on Sheet 3 and 3A of Figure 1. The Kerr Area Rural Transportation System (KARTS) is a regional public transportation system that is operated under the Kerr Area Transportation Authority and serves Franklin, Granville, Vance and Warren Counties. Currently, this system serves human service agencies and the general public through subscription, deviated fixed and demand response (dial-a-ride) routes while also providing out of area service to Durham, Chapel Hill and Raleigh. Greyhound, an intercity transportation system also operates in Henderson and provides service to many cities and towns throughout the United States and Canada. All recommendations for public transportation were coordinated with the local governments. Refer to Appendix A for contact information.

Rail

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

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

There are two major freight railroad companies that operate in North Carolina, CSX Transportation and Norfolk Southern Corporation. Also, there are more than 20 smaller freight railroads, known as shortlines. An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1.

Amtrak's passenger trains Carolinian, Silver Meteor, Palmetto and Silver Star travel non-stop through Vance County. CSX Transportation, which is a freight railroad company, operates in Vance County. The only active rail line in the county is the CSX S-line, which runs from Raleigh to Norlina through Kittrell, Henderson and Middleburg paralleling US 1 and US 1/158 in a north-south direction. The only train traffic currently on this line is a couple local freight trains per day serving the local rail customers between Raleigh and Norlina. This line originally connected Raleigh, Henderson and Norlina in North Carolina to Petersburg and Richmond in Virginia. It was part of a larger north-south mainline that provided freight and passenger rail service from New York to Florida.

The Southeast High Speed Rail (SEHSR) project which will run from Washington, DC to Charlotte, NC proposes to reconstruct/upgrade the portion of the S-line from Raleigh, North Carolina to Petersburg, Virginia. Realignment of the track, additional right-of-way, and potential railroad crossing closings may be required for safety reasons and will also significantly reduce existing passenger train travel times. All proposed crossing eliminations in the study area are associated with SEHSR. Sustaining livable communities along the proposed SEHSR route by maintaining and providing emergency service, pedestrian, and bicycle access will be a continued discussion with the towns affected. The SEHSR would provide limited station stops between Raleigh, North Carolina and Richmond, Virginia. There is a proposed stop in Henderson; however, the plan is not finalized. Additional freight service could be added along with Piedmont-type passenger service to provide more local passenger rail service. SEHSR could also lead to a light rail commuter service from Norlina to Raleigh; however, as standalone projects, these are unlikely to happen without the SEHSR being built.

All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

Bicycles & Pedestrians

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

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4, 4A, 5, 5A and 5B of Figure 1. The Carolina Connection (US Bike Route 1) which runs from Maine to Florida covers 200 miles in North Carolina and traverses Vance County. The North Line Trace (NC Bike Route 4) is a 400 mile bike route that runs through Vance County and is just south of the Virginia border from the

mountains to the coast of North Carolina. The Kerr-Tar Regional Council of Governments will be developing a regional bike plan between June 2012 and June 2014 that will recommend bicycle transportation connections between the region's lakes, towns, public lands, and landmarks within the Kerr-Tar region. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information.

Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2010 Vance County Land Use Plan, the 2007 Henderson Existing Land Use Map and the Henderson Future Land Use Map (May 10, 2010) were used to meet this requirement and are illustrated in Figures 7, 8 and 9, respectively.

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

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

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

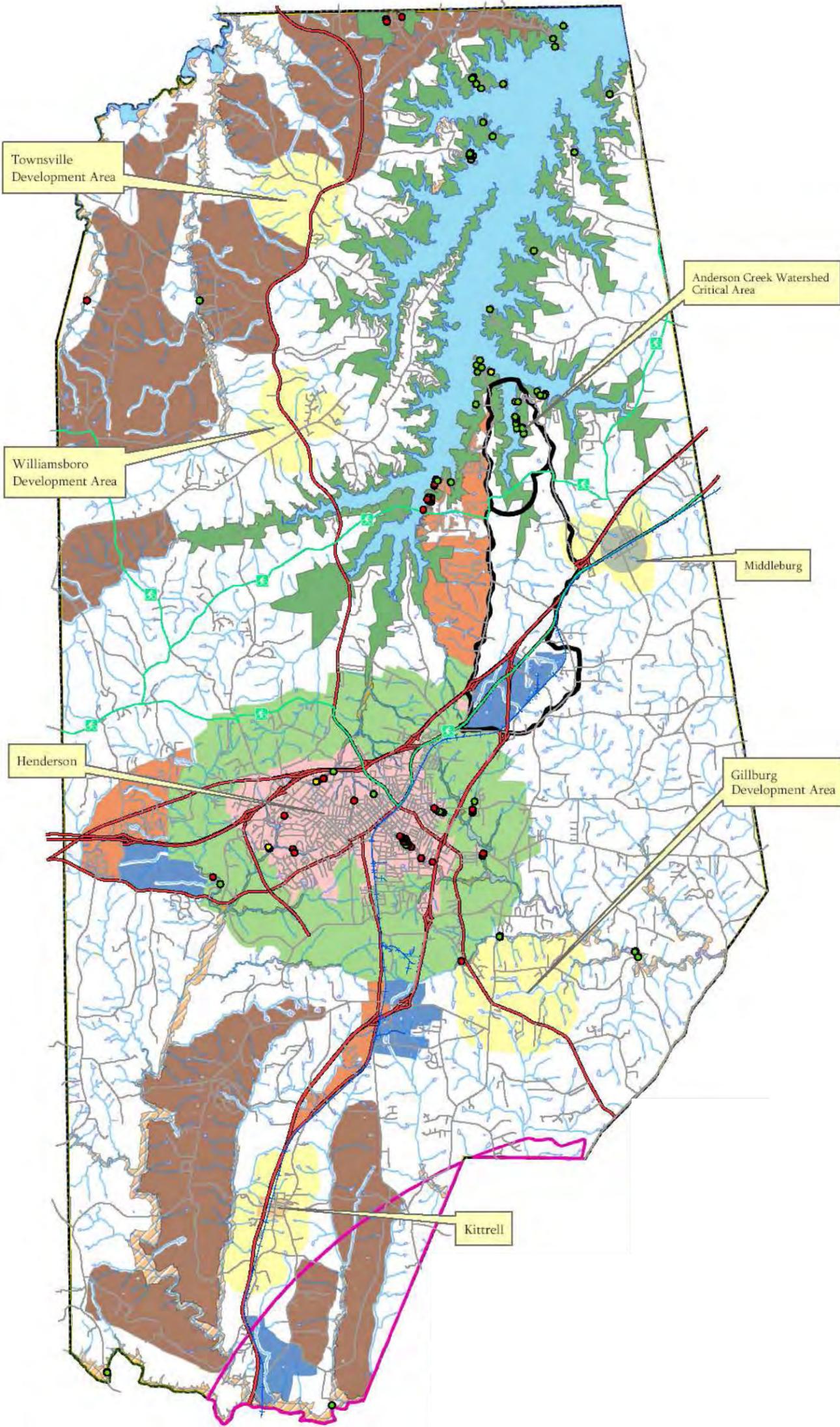
Vance County primarily anticipates growth in areas designated as a “Development Area” including Townsville, Williamsboro, Gillburg, Henderson, Middleburg and Kittrell as shown in Figure 7. Development areas, as depicted in Figure 7, encompass residential, commercial and public land uses. These areas tend to be established populated areas and are located throughout the County, typically along major routes.

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Land Use Map



Vance County North Carolina Comprehensive Transportation Plan



Municipalities

- Henderson
- ETJ
- Kittrell
- Middleburg

Structures in Floodplain

- Accessory Structure
- Commercial
- House

Use Classifications

- Transitional Development Areas
- Neighborhood Areas
- Industrial and Warehousing
- Development Communities
- Roads (Major)
- Roads (Minor)
- Bike Routes

Watershed Areas/Surface Water Areas

- Anderson Creek (WS-III)
- Tar River (WS-IV NSW)
- Army Corps. of Engineers Bndry
- Creeks/Streams
- 100 Year Floodplain
- Lakes/Ponds



Figure 6

Source: Figure taken from 2010
Vance County Land Use Plan

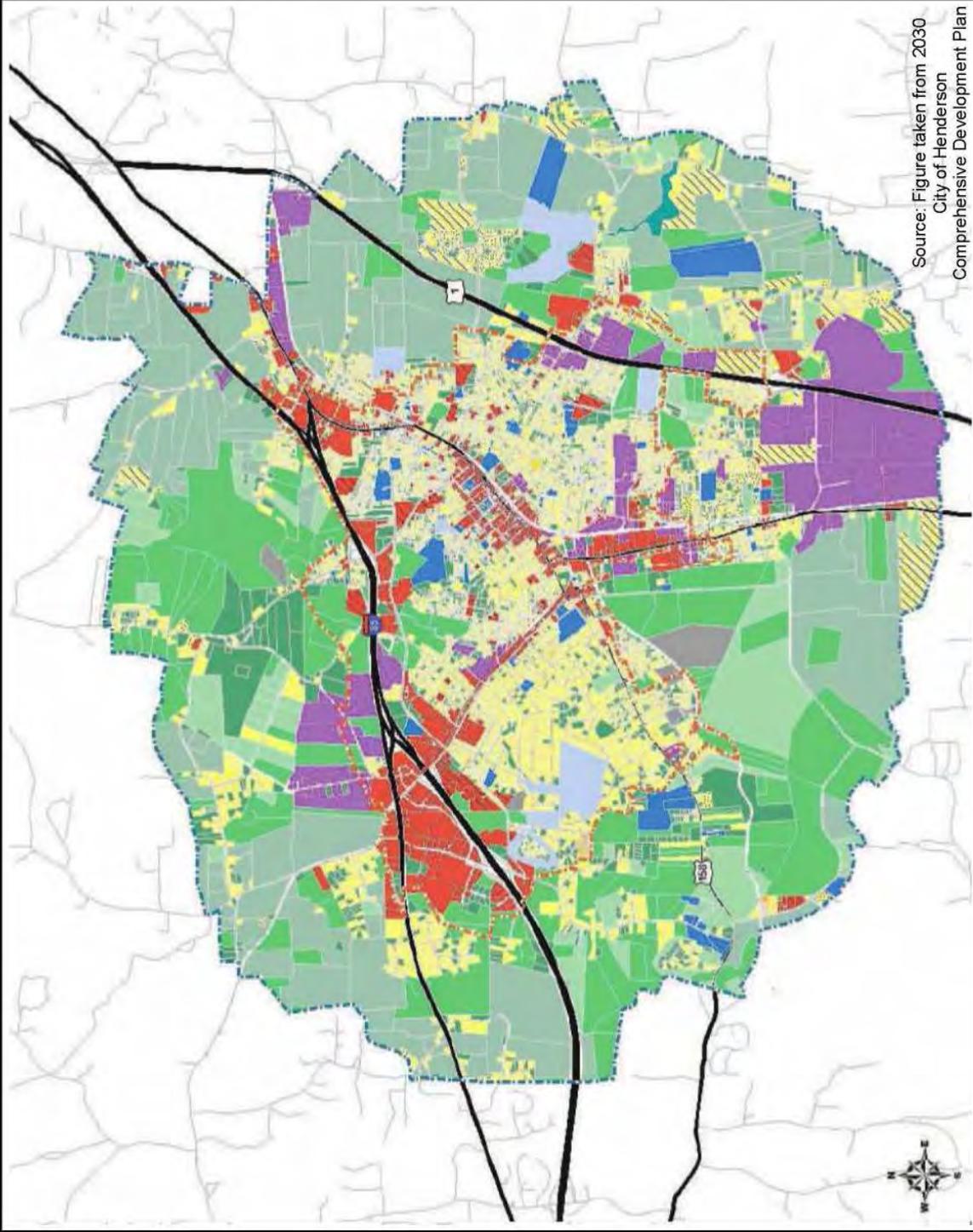
Henderson
Existing Land Use Map



Vance County
North Carolina
**Comprehensive
Transportation Plan**



Figure 8



Source: Figure taken from 2030
City of Henderson
Comprehensive Development Plan

Back of Figure

Henderson
Future Land Use Map



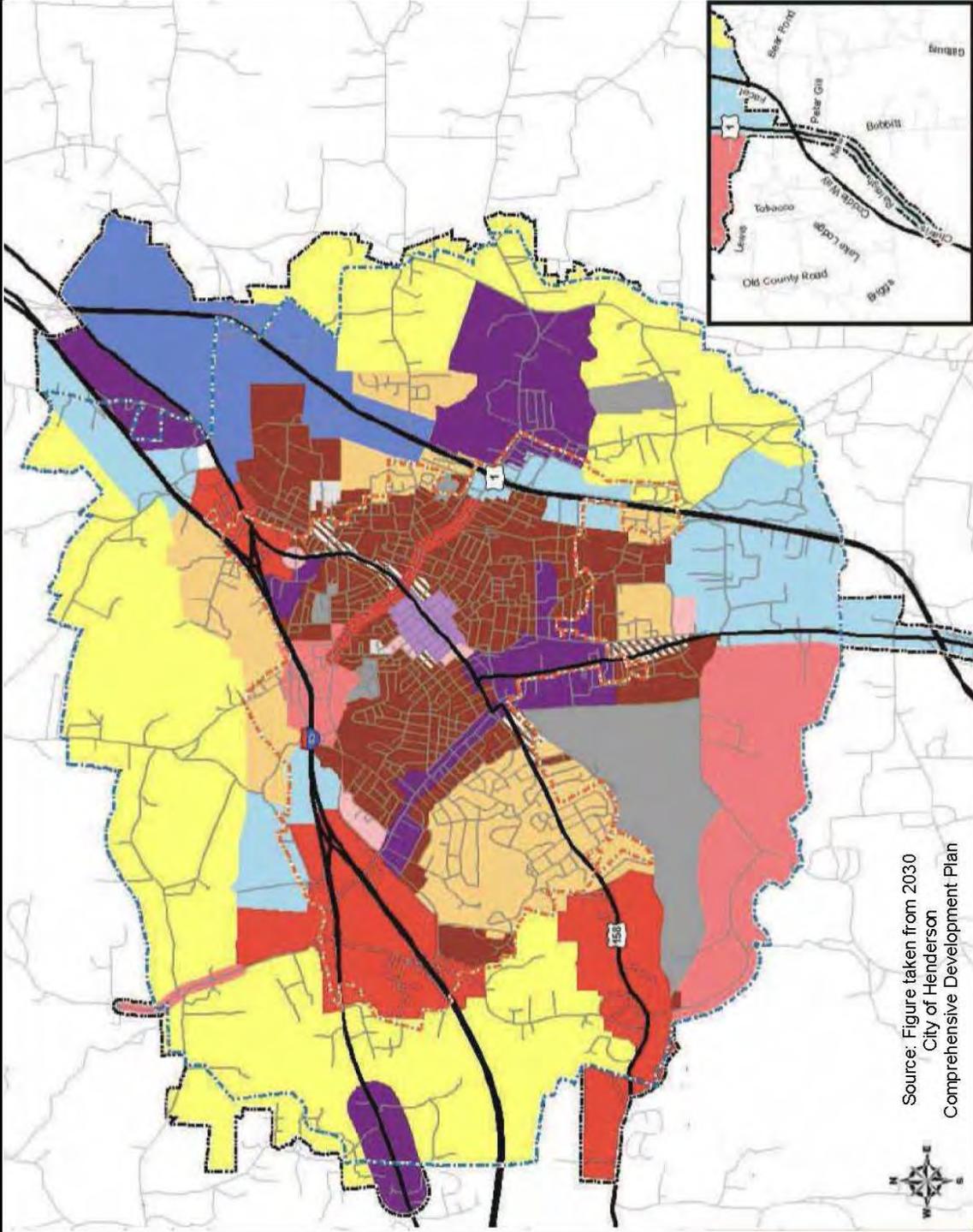
Vance County
North Carolina
**Comprehensive
Transportation Plan**

Future Land Use Map:
Land Use Categories

Legend	
	Primary Growth Area
	Secondary Growth Area
	Extended Growth Area
	Agricultural Conservation
	Urban Density
	Suburban Density
	Rural Density
	Institutional and Public Parks and Recreation
	Neighborhood Commercial
	Regional Commercial
	Mixed Use Community
	Downtown District
	Transitional Area
	Light Industrial
	Heavy Industrial



Figure 9



Source: Figure taken from 2030
City of Henderson
Comprehensive Development Plan



Back of Figure

Consideration of Natural and Human Environment

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

A full listing of environmental features that were examined as a part of this study is shown in the following tables utilizing the best available data. Environmental features occurring within Vance County are shown in Figure 10.

Table 1 – Environmental Features

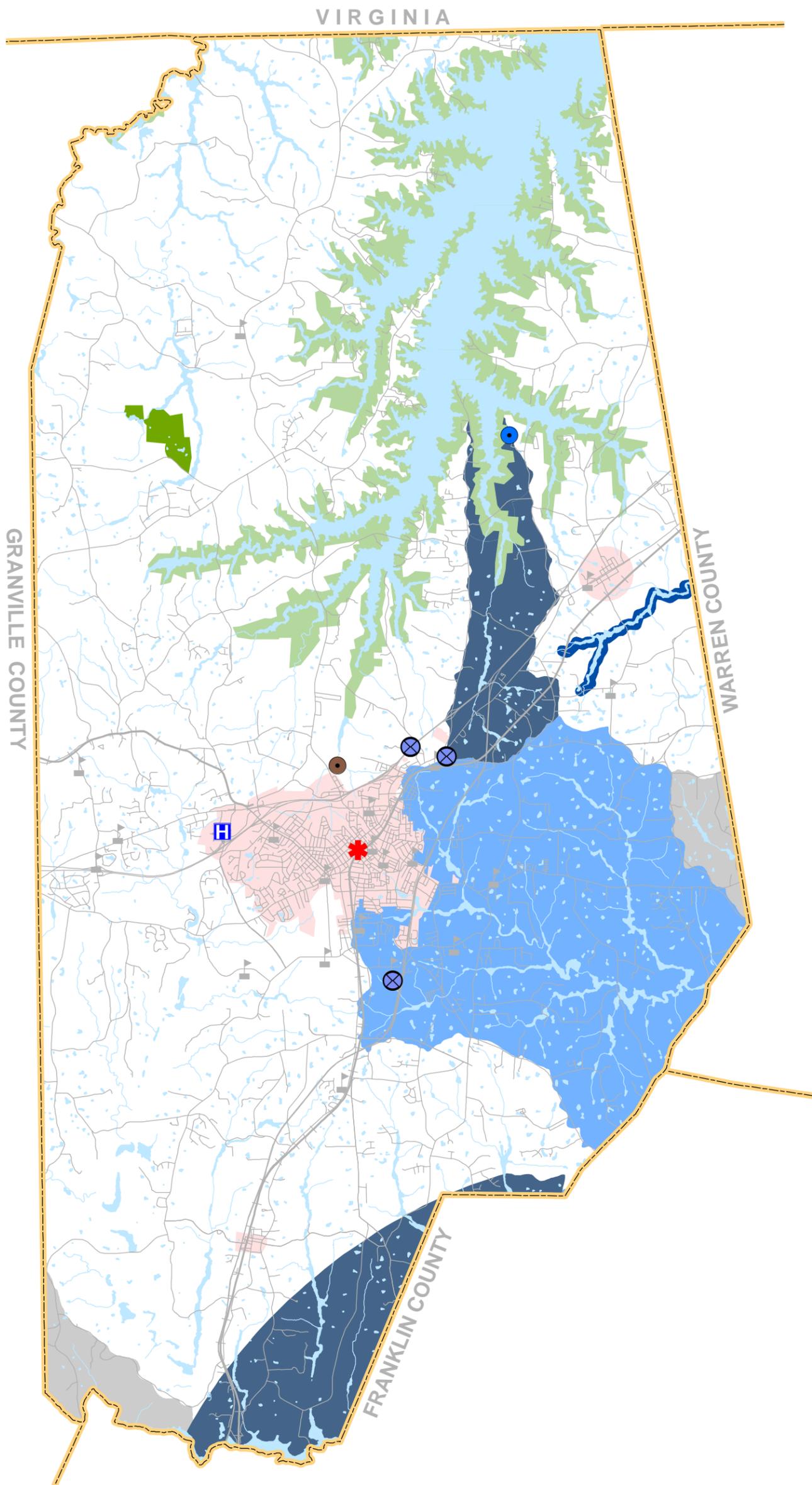
- | | |
|--|--|
| <ul style="list-style-type: none"> • Airport Boundaries • Bike Routes (NCDOT) • Colleges and Universities • Conservation Tax Credit Properties • Emergency Operation Centers • Federal Land Ownership • Hazardous Substance Disposal Sites • Hazardous Waste Facilities • High Quality Water and Outstanding Resource Water Management Zones • Hospital Locations • Land Trust Priority Areas | <ul style="list-style-type: none"> • National Wetlands Inventory • Railroads (1:24,000 scale) • Sanitary Sewer Systems – Discharges, Land Application Areas, Pipes, Pumps and Treatment Plants • Schools – Public and Non-Public • State Parks • Target Local Watersheds - EEP • Water Distribution Systems – Pipes, Pumps, Tanks, Treatment Plants, and Wells • Water Supply Watersheds • Wild and Scenic Rivers |
|--|--|

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

Table 2 – Restricted Environmental Features

- | | |
|---|--|
| <ul style="list-style-type: none"> • Archaeological Sites • Historic National Register Districts • Historic National Register Structures | <ul style="list-style-type: none"> • Macrosite Boundaries • Managed Areas • Megasite Boundaries |
|---|--|

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- Emergency Operation Centers
- Hazardous Waste Disposal Sites
- Schools
- Hospital Locations
- Airports
- Water Distribution Systems
- Sanitary Sewer Systems
- Roads
- Railroads
- County Boundary
- National Wetlands Inventory
- Federal Land Ownership
- Municipal Boundary
- Water Supply Watersheds
- High Quality Water Zones
- Target Local Watersheds
- Land Trust Priority Areas
- Conservation Tax Credit Properties



Figure 10

Base map date: January 2011

Refer to CTP document for more details

Environmental Features



Vance County

North Carolina

Comprehensive Transportation Plan

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.

The Kerr-Tar RPO requested the development of a comprehensive transportation plan for Vance County through a prioritized list of regional needs. A meeting was held with the Vance County Board of Commissioners in February 2011 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

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

The public involvement process included holding two public drop-in sessions in Vance County to present the proposed Comprehensive Transportation Plan to the public and solicit comments. The first meeting was held on May 16, 2012 at the Kittrell Fire Department; the second meeting was held on May 17, 2012 at the Kerr-Tar COG Office in Henderson. Each session was publicized in the local newspaper and was held from 4-7 pm. Additionally, notifications were sent out via email lists to Vance County Schools and the Kerr-Tar Council of Governments. No comment forms were submitted during these sessions.

A public hearing was held on August 6, 2012 during the Vance County Commissioners meeting, on August 27, 2012 during the city of Henderson Commissioners meeting, on November 5, 2012 during the town of Kittrell Commissioners meeting and on November 5, 2012 during the town of Middleburg Commissioners meeting. The purposes of these meetings were to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

The Kerr-Tar RPO endorsed the CTP on October 11, 2012. The North Carolina Department of Transportation mutually adopted the Vance County CTP on **DATE**.

II. Recommendations

This report documents the development of the 2035 Vance County CTP as shown in Figure 1. This chapter presents recommendations for each mode of transportation in Vance County. Refer to Appendix I for documentation of project alternatives and scenarios that were studied, but are not included in the adopted CTP.

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 Comprehensive Transportation Plan should be consistent with the other elements.

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

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

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

Problem Statements

The following chapter contains recommended improvements based on the ability of the existing system to serve current and anticipated travel volumes as the area continues to grow. The recommended plan represents a system of transportation elements including highway, rail, transit, bicycle and pedestrian, which will serve the anticipated traffic and land development needs for the County. The primary objective of this plan is to reduce traffic congestion and improve safety by eliminating both existing and projected deficiencies in the transportation system.

HIGHWAY

The recommended highway improvements are shown on Figure 1 Sheets 2, 2A, and 2B. The plan includes roadways within the planning area that fall into five categories: freeways, expressways, boulevards, other major thoroughfares, and minor thoroughfares. See Appendix B for a more detailed description of the different facility types and Appendix C for a roadway inventory.

Roadway properties, capacity deficiencies, environmental impacts, and land use plans were considered when developing recommendations. The following projects address capacity, mobility, connectivity and safety deficiencies in Vance County.

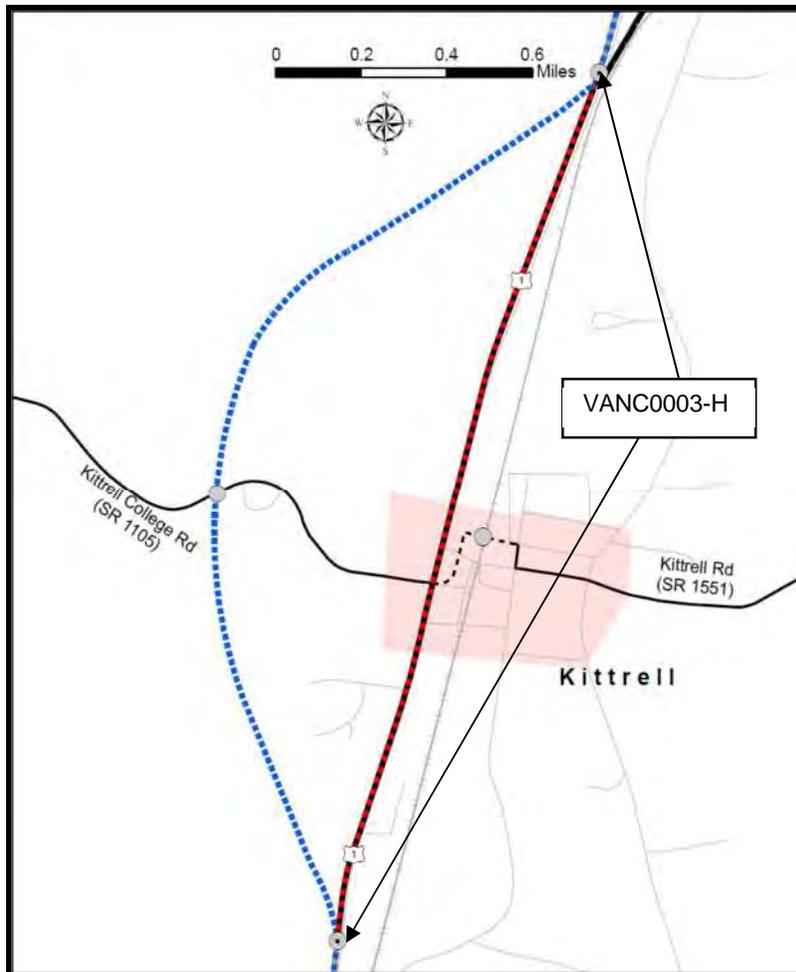
Unaddressed Deficiencies

US 158 Business (Dabney Drive (SR 1162) to Main Street)

US 158 Business (Garnett Street) is a 2-lane major thoroughfare that runs through the downtown district of Henderson. The current capacity of US 158 Business from Dabney Drive (SR 1162) to US 1 Business (Raleigh Road) is 10,000 vehicles per day (vpd) with 7,200 vpd in 2007 and 9,200 vpd in 2035. US 158 Business from US 1 Business (Raleigh Road) to NC 39 (Andrews Avenue) has a current capacity of 8,800 vpd with 8,200 vpd in 2007 and 10,500 vpd in 2035. The current capacity of US 158 Business from NC 39 to Main Street is 10,000 vpd with 6,400 vpd in 2007 and 8,200 vpd in 2035. Although this facility is expected to operate near or over capacity in 2035, this deficiency was not addressed through the Comprehensive Transportation Plan (CTP) recommendations since there is no room for improvement through the downtown area of Henderson. Several historic structures such as the Henderson Fire Station and Zollicoffer's Law Office would be impacted if US 158 Business were widened. There are also several historic districts along US 158 Business that would be impacted if the facility were widened.

NC 39 (Pinkston Street (SR 1214) to Chestnut Street (SR 1226))

NC 39 from Garrett Road (SR 1538) to Pinkston Street (SR 1214) is a 2-lane major thoroughfare that runs through a residential area in Henderson. NC 39 is already over capacity from Pinkston Street (SR 1214) to Chestnut Street (SR 1226), with 14,000 vehicles per day (vpd) in 2007 and a capacity of 11,800 vpd. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 3-lane facility with bicycle and pedestrian accommodations. This recommendation will give the facility a capacity of 13,000 vpd which will not accommodate the projected 21,800 vpd in 2035 but will provide safer accommodations for bicyclists and pedestrians. Approximately 50 homes and 7 businesses would be impacted if the facility were to be widened to a 4-lane divided boulevard facility to accommodate the projected traffic in 2035. Completion of the Western Outer Loop (SR 1295), improvements to Dabney Drive (SR 1162) and improving the US 1/I-85 interchange to accommodate all turning movements could potentially help alleviate some of the traffic along NC 39.



Project Location near Kittrell

IDENTIFIED PROBLEM

Existing US 1 from Beechtree Trail Road (SR 1104) to US 1 Business (Raleigh Road) is currently a 5-lane, undivided facility that does not meet the mobility goals of North Carolina's Strategic Highway Corridor Vision Plan. The primary purpose of improving US 1 is to meet North Carolina's Strategic Highway Corridor Vision for mobility and connectivity.

Justification of Need

US 1 is a major north-south US highway that runs for 2,377 miles from Maine to Florida. This facility is a vital artery in moving people and goods through North Carolina, connecting major urban areas, such as Raleigh and Cary, and ultimately connecting Virginia to South

Carolina. US 1 is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN) and is also part of the Strategic Highway Corridor (SHC) Vision Plan as a freeway that needs improvement.

US 1 is currently a 5-lane major thoroughfare from Beechtree Trail Road (SR 1104) to US 1 Business with a speed limit of 45-55 miles per hour (mph) and does not meet the Strategic Highway Corridor Vision Plan for mobility and connectivity. From Beechtree Trail Road (SR 1104) to Kittrell College Road (SR 1105), US 1 has an existing capacity of 33,000 vehicles per day (vpd) and an estimated 16,600 vpd in 2035. From Kittrell

College Road (SR 1105) to US 1 Business (Raleigh Road), US 1 has an existing capacity of 33,000 vpd and an estimated 22,100 vpd in 2035.

Community Vision and Problem History

The US 1 proposed project would be consistent with the vision and mobility goals developed by the Vance County CTP Committee to “ensure the integrity of the existing transportation system by encouraging integrated land use and transportation planning that serves existing development, supports future development, and is consistent with the County land use plan for preserving the natural environment and community character” and “preserving the rural character of the County while accommodating growth to targeted areas”.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID: VANC0006-H) is to provide a bypass facility from Beechtree Trail Road (SR 1104) to US 1 Business (Raleigh Road). A grade separation at Kittrell College Road (SR 1105) is recommended. Existing US 1 from Beechtree Trail Road (SR 1104) to US 1 Business (Raleigh Road) is currently a 5-lane undivided facility but is recommended to have a median barrier installed (TIP Project W-5317). This CTP proposed project would allow through traffic to move around the town of Kittrell without having to use the lower speed limit through the town, and disrupting adjacent land use.

Natural and Human Environmental Context

In the development of the Vance County CTP, three options were considered for US 1 from Beechtree Trail Road (SR 1104) to US 1 Business (Raleigh Road). A western bypass was chosen for improving US 1, since the potential human and environmental impacts would be higher if the existing was to be widened or an eastern bypass constructed. The selected CTP alternative minimizes the impacts to homes, businesses, and environmental features and will cross three wetlands. Kittrell Springs is the historical site of North Carolina’s first summer resort and is located on the west side of Kittrell which runs nearby to the proposed bypass and should be investigated further until a final alignment is selected. Refer to Appendix I for the additional alternatives studied but not selected.

Relationship to Land Use Plans

The existing Vance County Land Use Plan shows development communities along the proposed new location for US 1 around Kittrell. The CTP proposal for a 4-lane freeway

facility will allow Vance County to develop in a manner consistent with their land use map.

The CTP proposal for a bypass facility around Kittrell would ensure that the town is not split in half by an expansion of existing US 1 and would provide efficient and safe access that is consistent with the mobility goals of the Strategic Highway Corridor Vision.

Linkages to Other Plans and Proposed Project History

The proposal directly connects to the recommendation for US 1 (VANCO005-H) from the Franklin County Line to Beechtree Trail Road (SR 1104) to upgrade the facility to a 4-lane divided freeway. US 1's proposal is consistent with Vance County's Vision and Goals Statement developed by the committee to guide the CTP study to support existing development patterns and environmental sensitivity. Refer to Appendix H for the Vision and Goals Statement. Also see Appendix I for other alternatives considered for this proposal.

Multi-modal Considerations

The CTP does not include any multi-modal recommendations for bicycle, pedestrian or public transportation facilities along the proposed US 1 Bypass from Beechtree Trail Road (SR 1104) to US 1 Business (Raleigh Road).

Public/Stakeholder Involvement

NCDOT TPB and the Kerr-Tar RPO met with the town of Kittrell on February 6, 2012 to discuss the proposed bypass recommendation which was met with full support. No comments concerning this proposal were received during the public drop-in sessions held on May 15 and 16 from 4-7 pm.



Project Location within Henderson



Existing Dabney Drive

IDENTIFIED PROBLEM

Existing Dabney Drive (SR 1162) from US 158 Business to I-85 is currently over capacity in most sections with 12,000 to 29,000 vehicles per day (vpd) in 2007 and a capacity of 14,400 to 28,900 vpd. The primary purpose of improving Dabney Drive (SR 1162) is to relieve congestion on the existing facility such that a Level of Service (LOS) D can be achieved.

Justification of Need

Dabney Drive (SR 1162) is an important north-south corridor in the city of Henderson and is a vital connector between US 158 Business, US 158 Bypass, US 1 Business (Raleigh Road) and I-85. This facility is expected to continue experiencing growth and is a major roadway serving Northwest Henderson and the Central Business District (CBD). This section of Dabney Drive (SR 1162) serves a school, many commercial businesses and several residential communities.

Dabney Drive (SR 1162) is currently a major thoroughfare (4-lane cross section) from US 158 Business (Oxford Road) to US 158 Business (Garnett Street), a minor thoroughfare (3-lane cross section) from US 158 Business (Garnett Street) to Coble Boulevard, and a major thoroughfare (5-lane cross section) from Coble Boulevard to I-85 with a speed limit of 35 miles per hour (mph).

Section (From – To)	2007 AADT (vpd)	2035 AADT (vpd)	Current Capacity (vpd)
US 158 Business (Oxford Road) – US 158 Business (Garnett Street)	12,000	15,400	21,000
US 158 Business (Garnett Street) – Roanoke Avenue	15,000	19,200	14,400
Roanoke Avenue – Coble Boulevard	21,000	26,700	14,400
Coble Boulevard – I-85	29,000	43,000	49,200

Community Vision and Problem History

While the community envisions a transportation network that improves safety and congestion, the current levels of congestion along Dabney Drive (SR 1162) make access difficult for residents and visitors. Dabney Drive (SR 1162) is not conducive for bicyclists and pedestrians and does not follow the community's goal to promote roadways that allow and encourage alternative modes of transportation such as transit, walking and biking.

During the 2011 CTP public survey, Dabney Drive (SR 1162) was identified as the number one problem for safety, congestion and truck traffic (see Appendix H). Four high crash locations were identified along Dabney Drive (SR 1162) during the traffic crash analysis between the time period of January 1, 2007 and December 31, 2009 and can be seen in the table below:

Intersection	Crashes	Severity Index
Dabney Drive (SR 1162) – Coble Boulevard	12	4.08
Dabney Drive (SR 1162) – Cooper Drive	43	3.07
Dabney Drive (SR 1162) – Beckford Drive (SR 1165)	22	3.35
Dabney Drive (SR 1162) – I-85	14	2.59

Dabney Drive (SR 1162) was also identified in the 1995 Henderson Thoroughfare Plan from US 158 Business (Oxford Road) to I-85 as being over capacity but no recommendations were made.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID: VANC0013-H) is to provide a one-way pair facility (2-lanes each direction) from US 158 Business (Oxford Road) to Cooper Drive with

Dabney Drive (SR 1162), Corbitt Road and the abandoned rail corridor and a 6-lane boulevard facility from Cooper Drive to I-85. Dabney Drive (SR 1162) will carry southbound traffic while Corbitt Road and the extension on the abandoned rail corridor will carry northbound traffic.

The CTP proposal recommends removing the existing offset for US 158 Business as well as starting the southern termini of the one-way pair at US 158 Business (Garnett Street). A slip lane near US 158 Business (Garnett Street) is recommended to connect Dabney Drive (SR 1162) and Corbitt Road to allow the fire station access to both the northbound and southbound traffic lanes. The existing connections between Dabney Drive (SR 1162) and Corbitt Road are recommended to remain at Bane Avenue, Parham Street, Yadkin Street, Roanoke Avenue, and Coble Boulevard, although instead of full movement, they may be converted to right-in/right-out.

Converting Dabney Drive (SR 1162), Corbitt Road and the abandoned rail corridor into a one-way pair will change the capacity of the facility as shown in the table below. This proposal will alleviate the current capacity issues and will also be able to handle the estimated 15,400 to 26,700 vpd in 2035.

Section (From – To)	Current Capacity (vpd)	Proposed Capacity (vpd)
US 158 Business (Oxford Road) – US 158 Business (Garnett Street)	21,000	32,600
US 158 Business (Garnett Street) – Roanoke Avenue	14,400	32,600
Roanoke Avenue – Coble Boulevard	14,400	32,600
Coble Boulevard – I-85	28,900	49,200

Project phasing should be considered for this Dabney Drive (SR 1162) recommendation (VANC0013-H) and may progress as shown below.

1. Widen bridge with I-85 and construct median and new lanes between Cooper Drive and I-85.
2. Extend Corbitt Road on new location between Parham Street and Cooper Drive with bicycle and pedestrian accommodations.
3. Realign intersection with US 158 Business (Oxford Road/Garnett Street) area and resurface/restripe Dabney Drive (SR 1162) from US 158 Business (Oxford Road) to Cooper Drive to convert to a one-way facility.

Sidewalks and bike lanes are recommended from US 158 Business (Oxford Road) to Cooper Drive. Sidewalks and wide outside lanes to accommodate bicycles are

recommended from Cooper Drive to I-85. A multi-use path using the old railroad bridge is recommended along Dabney Drive from Beckford Drive (SR 1165) to Exchange Street.

Natural and Human Environmental Context

In the development of the Vance County CTP, two options were considered for improving traffic flow along Dabney Drive (SR 1162), which included widening existing or a one-way pair facility using Dabney Drive (SR 1162), Corbitt Road and the abandoned rail corridor. A one-way pair was chosen for improving Dabney Drive (SR 1162), due to potential human impacts to businesses and residents if the existing facility were to be widened. The selected CTP alternative minimizes the impacts to homes, businesses, and environmental features. Refer to Appendix I for the additional alternative considered but not included in the CTP.

Relationship to Land Use Plans

The existing city of Henderson Land Use Plan shows commercial, institutional, residential, and industry land uses along this section of Dabney Drive (SR 1162). The future city of Henderson Land Use Plan as seen in Figure 8 shows mixed use community and urban density along Dabney Drive (SR 1162).

The CTP proposal for a one-way pair facility (2 lanes each direction) from US 158 Business (Oxford Road) to Cooper Drive and a 6-lane boulevard facility from Cooper Drive to I-85 will allow Henderson to develop in a manner consistent with their land use map. A one-way pair/6-lane boulevard facility would eliminate many left turns with more right-in/right out turn movements and provide more efficient and safe access to Dabney Drive (SR 1162).

Linkages to Other Plans and Proposed Project History

In the 1995 Henderson Thoroughfare Plan, Dabney Drive (SR 1162) was identified as having capacity issues from US 158 Business (Oxford Road) to I-85 but no recommendations were made. The Dabney Drive (SR 1162) proposal directly connects to the recommendation for the Dabney Drive Extension (SR 1267) to connect it to Alexander Avenue (VANC0015-H) due to the proposed Southeast High Speed Rail (VANC0001-R) and to the proposal for Dabney Drive (VANC0014-H) from I-85 to US 158 Bypass to upgrade this facility to a 6-lane boulevard facility.

The Dabney Drive (SR 1162) proposal is consistent with Vance County's Vision and Goals Statement developed by the committee to guide the CTP study. Refer to Appendix H for the Vision and Goals Statement. This one-way pair/6-lane boulevard recommendation is consistent with many of the goals including environmental

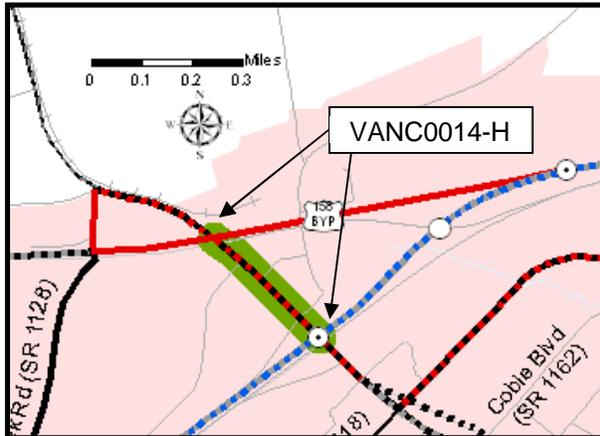
sensitivity, supporting existing development patterns, improving safety and congestion, and encouraging alternative modes of transportation.

Multi-modal Considerations

The CTP includes recommendations for bicycle, pedestrian and public transportation facilities around the city of Henderson. Sidewalks and bike lanes are recommended along Dabney Drive (SR 1162) from US 158 Business to Cooper Drive. Sidewalks and wide outside lanes to accommodate bicycles are recommended along Dabney Drive (SR 1165) from Cooper Drive to US 158 Bypass. A multi-use path is recommended along Dabney Drive (SR 1162) from Beckford Drive (SR 1165) to Exchange Street and can be seen on Sheets 4 and 4A of Figure 1. Pedestrian signals are recommended at Parham Street, Bane Avenue and Coble Boulevard to increase pedestrian safety along this corridor. The multi-modal facilities along Dabney Drive (SR 1162) do not significantly impact the traffic demand along this corridor. In addition, the Around Town Shuttle currently travels along Dabney Drive (SR 1162) from Parker Lane to Ruin Creek Road (SR 1128) but does not reduce the need to improve Dabney Drive (SR 1162) from I-85 to US 158 Bypass.

Public/Stakeholder Involvement

The initial one-way pair/6-lane boulevard recommendation for Dabney Drive (SR 1162) was presented to the Vance County CTP Committee during the August 16, 2011 meeting and was received with full support. The one-way pair concept was presented to the city of Henderson on October 10, 2011 and the city agreed that this was a concept to study further. One public comment received at the October 10, 2011 meeting was a concern for the residents that live in between Dabney Drive (SR 1162) and Corbitt Road and the impact of having traffic flow in the front and back yards of their houses. No comments were received for this proposal during the public drop-in sessions held on May 15 and 16 from 4-7 pm.



Project Location within Henderson



Existing Dabney Drive

IDENTIFIED PROBLEM

Existing Dabney Drive (SR 1162) from I-85 to US 158 Bypass is currently nearing capacity with 21,000 vehicles per day (vpd) in 2007 and a capacity of 28,900 vpd. The primary purpose of improving Dabney Drive (SR 1162) is to relieve congestion on the existing facility such that a Level of Service (LOS) D can be achieved.

Justification of Need

Dabney Drive (SR 1162) is an important north-south corridor in the city of Henderson and is a vital connector between US 158 Business, US 158 Bypass, US 1 Business (Raleigh Road) and I-85. It is expected to continue experiencing growth and is a major roadway serving Henderson and the Central Business District (CBD). This section of Dabney Drive (SR 1162) serves commercial businesses.

This section of Dabney Drive (SR 1162) is currently a major thoroughfare (5-lane cross section) with a speed limit of 35 miles per hour (mph). The section of Dabney Drive (SR 1162) from I-85 to US 158 Bypass is currently nearing capacity with 21,000 vpd and an existing capacity of 28,900 vpd and is anticipated to have 32,500 vpd in 2035.

Community Vision and Problem History

While the community envisions a transportation network that improves safety and congestion, the current levels of congestion make access difficult for residents and visitors. Dabney Drive (SR 1162) is not conducive for bicyclists and pedestrians and

does not follow the Vision and Goals developed by the Vance County CTP Committee to promote roadways that allow and encourage alternative modes of transportation such as transit, walking and biking.

During the 2011 CTP public survey, Dabney Drive (SR 1162) was identified as the number one problem for safety, congestion and truck traffic. Two crash locations were identified along Dabney Drive (SR 1162) during the traffic crash analysis between the time period of January 1, 2007 and December 31, 2009 and can be seen in the table below:

Intersection	Crashes	Severity Index
Dabney Drive (SR 1162) – US 158 Bypass	16	2.85
Dabney Drive (SR 1162) – I-85	14	2.59

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID: VANC0014-H) is to provide a 6-lane, boulevard facility along Dabney Drive (SR 1162) from I-85 to US 158 Bypass.

Converting Dabney Drive (SR 1162) into a boulevard will change the capacity of the facility from 28,900 vpd to 47,700 vpd and will also provide for better control of access. This proposal will alleviate the current capacity issues and will also be able to handle the estimated 32,500 vpd in 2035.

Sidewalks and shared bike lanes are recommended along Dabney Drive (SR 1162) from I-85 to US 158 Bypass. A multi-use path that uses the existing rail bridge is recommended from Beckford Drive (SR 1165) to Exchange Street.

Natural and Human Environmental Context

In the development of the Vance County CTP, two options were considered for improving traffic flow along Dabney Drive (SR 1162) from I-85 to US 158 Bypass. A 6-lane, boulevard facility was chosen for improving Dabney Drive (SR 1162) due to the minimal impacts it will have to the natural and human environments. The selected CTP alternative minimizes the impacts to homes, businesses, and environmental features. The other alternative that was studied is documented in Appendix I.

Relationship to Land Use Plans

The existing city of Henderson 2030 Comprehensive Development Plan shows commercial land uses along this section of Dabney Drive (SR 1162). The future city of Henderson Land Use Plan as seen in Figure 8 shows regional commercial along this section of Dabney Drive (SR 1162).

The CTP proposal for a 6-lane, boulevard facility from I-85 to US 158 Bypass will allow Henderson to develop in a manner consistent with their land use map. A boulevard facility would eliminate many left turns with more right-in/right out turn movements and provide more efficient and safe access to Dabney Drive (SR 1162).

Linkages to Other Plans and Proposed Project History

In the 1995 Henderson Thoroughfare Plan, Dabney Drive (SR 1162) was identified as being over capacity but no recommendations were made. The Dabney Drive (SR 1162) proposal directly connects to the recommendation for I-85 to widen to a 6-lane, divided facility (VANC0001-H). This section of Dabney Drive (SR 1162) also connects to the proposal (VANC0013-H) for Dabney Drive (SR 1162) to upgrade the facility to a 6-lane boulevard facility from Beckford Drive (SR 1165) to I-85.

The proposal for Dabney Drive (SR 1162) is consistent with Vance County's Vision and Goals Statements developed by the committee to guide the CTP study. Refer to Appendix H for the Vision and Goals Statement. This 6-lane boulevard recommendation is consistent with many of the goals including environmental sensitivity, supporting existing development patterns, improving safety and congestion, and encouraging alternative modes of transportation.

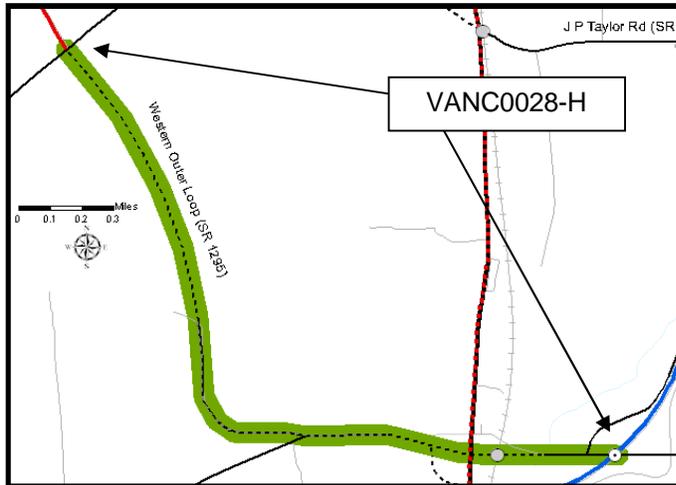
Multi-modal Considerations

The CTP includes recommendations for bicycle, pedestrian and public transportation facilities around the city of Henderson. Sidewalks and wide outside lanes for bicycles are recommended along Dabney Drive (SR 1162) from I-85 to US 158 Bypass and can be seen on Sheets 4 and 4A of Figure 1. The multi-modal facilities along Dabney Drive (SR 1162) do not significantly impact the traffic demand along this corridor. In addition, the Around Town Shuttle currently travels along Dabney Drive (SR 1162) from Parker Lane to Ruin Creek Road (SR 1128) but does not reduce the need to improve Dabney Drive (SR 1162) from I-85 to US 158 Bypass.

Public/Stakeholder Involvement

The recommendation for this section of Dabney Drive (SR 1162) was presented to the Vance County CTP Committee during the August 16, 2011 meeting and was received with full support. The proposal was presented to the city of Henderson on October 10,

2011 and the City agreed that this was definitely something to look into further. One public comment received at the October 10, 2011 meeting was a concern for the residents that live in between Dabney Drive (SR 1162) and Corbitt Road and the impact of having traffic flow in front and behind their houses. No comments were received for this proposal during the public drop-in sessions held on May 15 and 16 from 4-7 pm.



Project Location of Recommended Western Outer Loop

IDENTIFIED PROBLEM

The Western Outer Loop (SR 1295), which is currently incomplete, does not provide for the anticipated growth in the area, nor does it alleviate the through traffic which contributes to the capacity issues already seen on Dabney Drive (SR 1162). The completed section of the Western Outer Loop (SR 1295) currently runs from Ruin Creek Road (SR 1128) to Old County Home Road (SR 1101) and the remainder of the proposed Western Outer Loop (SR 1295) will run from Old County Home Road (SR

1101) to US 1 Bypass. This project is in the Transportation Improvement Program (TIP) but does not have a project number because it did not rank high enough to receive funding and is scheduled for reprioritization. The primary purpose of extending the Western Outer Loop (SR 1295) is to relieve the congestion created by the through traffic on existing Dabney Drive (SR 1162) and US 1 Business as well as providing for the expected growth and development of Henderson.

Justification of Need

The completed Western Outer Loop (SR 1295) will be an important north-south corridor in the western part of the city of Henderson and is a vital connector between I-85, US 158 Bypass, US 158 Business, US 1 Business and US 1 Bypass. Dabney Drive (SR 1162) is expected to continue experiencing growth and the Western Outer Loop (SR 1295), when completed, will be a major roadway serving western Henderson. The Western Outer Loop (SR 1295) serves mostly commercial and residential properties.

The Western Outer Loop (SR 1295) currently runs from Ruin Creek Road (SR 1128) to Old County Home Road (SR 1101) and is currently a 4-lane, boulevard facility with a speed limit of 55 miles per hour (mph). That section has an existing capacity of 25,800 vpd and is anticipated to have 11,600 vpd in 2035. Dabney Drive (SR 1162) is already over capacity from US 158 Business to I-85 and US 1 Business is already over or nearing capacity from US 1 Bypass to Old County Home Road (SR 1101).

Community Vision and Problem History

While the community envisions a transportation network that improves safety and congestion, the current levels of congestion along Dabney Drive (SR 1162) makes access difficult for residents and visitors. The existing Western Outer Loop (SR 1295) is incomplete and does not serve its intended purpose to relieve the congestion created by the through traffic on existing Dabney Drive (SR 1162) as well as providing for the expected growth and development of Henderson. Completing the Western Outer Loop (SR 1295) is consistent with the Vision and Goals Statements developed by the Vance County CTP Committee to develop a transportation network that improves safety and congestion.

During the 2011 CTP public survey, several respondents answered that they wanted the Western Outer Loop (SR 1295) completed. One crash location was identified along the Western Outer Loop (SR 1295) during the traffic crash analysis between the time period of January 1, 2007 and December 31, 2009 at the intersection of US 158 Business and had 10 crashes and a severity index of 11.54.

CTP PROJECT PROPOSAL

Project Description and Overview

The CTP proposed project (Local ID: VANC0031-H) for the Western Outer Loop (SR 1295) is to provide a 2-lane, minor thoroughfare on multi-lane right of way on new location extending it from Old County Home Road (SR 1101) to US 1 Bypass. The Western Outer Loop (SR 1295) will travel on new location from Old County Home Road (SR 1101) to Leon Frazier Road (SR 1116) and will connect with the existing Leon Frazier Road (SR 1116) and Lynnbank Road (SR 1115) until it reaches US 1 Bypass. Completing the Western Outer Loop (SR 1295) with a 2-lane minor thoroughfare will relieve congestion along Dabney Drive (SR 1295) which is currently over capacity in some sections.

Natural and Human Environmental Context

In the development of the Vance County CTP, the chosen Western Outer Loop (SR 1295) recommendation is consistent with the 1995 Henderson Thoroughfare Plan. A 2-lane, minor thoroughfare from Old County Home Road (SR 1101) to US 1 Bypass was recommended for completing the Western Outer Loop (SR 1295). This recommendation will have 2 stream crossings and will also hit a high quality water zone where it travels along existing North Lynnbank Road (SR 1115)/Bear Pond Road (SR 1115) but should have only minor, if any impacts to this area.

Relationship to Land Use Plans

The existing city of Henderson Land Use Plan shows commercial, residential and open space land uses in this area. The future city of Henderson Land Use Plan as seen in Figure 8 shows regional commercial and rural density along the existing and proposed Western Outer Loop (SR 1295).

The CTP proposal for a 2-lane, minor thoroughfare from Old County Home Road (SR 1101) to US 1 Bypass will allow Henderson to develop in a manner consistent with their land use map. A minor thoroughfare completing the Western Outer Loop (SR 1295) would reduce congestion along Dabney Drive (SR 1162) and will provide for the expected growth and development of Henderson.

Linkages to Other Plans and Proposed Project History

In the 1995 Henderson Thoroughfare Plan, the Western Outer Loop (SR 1295) was recommended as a 4-lane boulevard from Bear Pond Road (SR 1115) to Ruin Creek Road (SR 1128) with the portion from Ruin Creek Road (SR 1128) to Belmont Drive (SR 1101) being programmed in the TIP (U-2527). The reasoning for this recommendation was to provide for circumferential travel movements in the western sections of Henderson, provide for the expected growth and development, and also to relieve congestion created by through traffic on existing Dabney Drive (SR 1162). The recommendation in the Vance County CTP differs slightly from that of the 1995 Henderson Thoroughfare Plan in that the Western Outer Loop (SR 1295) ends at the US 1 Bypass instead of NC 39.

The Western Outer Loop (SR 1295) proposal is consistent with Vance County's Vision and Goals Statements developed by the committee to guide the CTP study. Refer to Appendix H for the Vision and Goals Statement. This 2-lane minor thoroughfare recommendation is consistent with the goal to develop a transportation network that improves safety and congestion.

Multi-modal Considerations

The CTP includes recommendations for wide outside bike lanes only along the existing portion of the Western Outer Loop (SR 1295) and is shown on Figure 1, Sheets 4 and 4A. This recommendation does not significantly impact the traffic demand along this corridor.

Public/Stakeholder Involvement

No comments on this proposal were received during the public drop-in sessions held on May 15 and 16 from 4-7 pm.

I-85 from Granville County Line to Warren County Line, Local ID: VANC0001-H

I-85 is a major east-west corridor in Vance County that runs along the north side of Henderson, connecting to major destinations in North Carolina such as Durham and other municipalities outside the state like Virginia and South Carolina. This facility is a vital artery in moving people and goods through North Carolina, connecting major urban areas, such as Durham and Greensboro, and ultimately connecting Virginia to South Carolina. I-85 is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN) and is also part of the Strategic Highway Corridor (SHC) Vision Plan as an existing freeway.

The primary purpose of improving I-85 is to relieve congestion due to capacity deficiencies on the existing facility such that a minimum Level of Service (LOS) D can be achieved. The current (2007) and estimated (2035) vehicles per day (vpd) along with the current capacity for each section of the facility can be seen in the table below.

Section (From – To)	2007 AADT (vpd)	2035 AADT (vpd)	Current Capacity (vpd)
Granville County Line – US 1 Bypass	32,000	58,900	60,000
US 1 Bypass – US 158 Business	27,000	49,700	60,000
US 158 Business – Ruin Creek Road (SR 1128)	35,000	64,000	60,000
Ruin Creek Road (SR 1128) – Warren County Line	31,000	57,000	60,000

The proposed Comprehensive Transportation Plan (CTP) project recommends upgrading I-85 from the Granville County Line to the Warren County Line to a 6-lane divided freeway facility. Additionally, the Ruin Creek Road (SR 1128) and Dabney Drive (SR 1162) interchanges will need to be redesigned to meet freeway interchange spacing standards. Existing I-85 interchanges at Ruin Creek Road (SR 1128) and Dabney Drive (SR 1162) are currently only 0.8 miles apart and a split diamond interchange is recommended. It was mentioned in the Henderson 1995 Thoroughfare Plan that I-85 would be nearing capacity in 2020. The current Granville and Warren County CTPs recommend I-85 be widened to a 6-lane divided freeway facility throughout their respective counties.

I-85 Service Road from Poplar Creek Road (SR 1126) to Western Outer Loop (SR 1295), Local ID: U-3836

The proposed project (U-3836) is to provide a 2-lane service road on new location south of I-85 and tying into Ruin Creek Road (SR 1128) at Graham Avenue (SR 1218). This recommendation would provide transportation infrastructure to support community growth and development as well as relieve some local traffic from I-85.

For additional information about this project, including the purpose and need, contact NCDOT PDEA.

I-85/US 1 Bypass Interchange, Local ID: I-3812

The existing I-85/US 1 Bypass interchange does not accommodate all turning movements. Concerns have been expressed by the town regarding truck traffic throughout the downtown streets of Henderson due to the lack of turning movements at the existing interchange. Industrial and commercial truck traffic coming from the west in the Poplar Creek area as well as Oxford in Granville County must travel through the downtown streets of Henderson because of the limited turning movements at the I-85/US 1 Bypass interchange.

The proposed project (I-3812) is to modify the existing interchange to accommodate all turning movements for the I-85 and US 1 Bypass. This proposal could reduce traffic in the downtown streets of Henderson and help with some of the existing congestion issues in city by providing turning movements from I-85 north onto US 1 Bypass south as well as turning movements from US 1 Bypass north to I-85 south. Both the 1995 Henderson Thoroughfare Plan and the 1995 Vance County Thoroughfare Plan recommends the I-85/US 1 Bypass be redesigned to accommodate all turning movements.

For additional information about this project, including the purpose and need, contact NCDOT PDEA.

US 1 from Franklin County Line to Beechtree Trail Road (SR 1104), Local ID: VANC0002-H

The primary purpose of improving US 1 is to meet North Carolina's Strategic Highway Corridor Vision for mobility and connectivity. US 1 is currently a 4-lane divided facility with partial control of access from the Franklin County Line to Beechtree Trail Road (SR 1104). The Comprehensive Transportation Plan (CTP) recommends upgrading US 1 from the Franklin County Line to Beechtree Trail Road (SR 1104) to a 4-lane freeway with full control of access. This recommendation will increase the capacity of US 1 from 45,200 vpd to 59,900 vpd.

US 1 is a major north-south US highway that runs for 2,377 miles from Maine to Florida. This facility is a vital artery in moving people and goods through North Carolina, connecting major urban areas, such as Raleigh and Cary, and ultimately connecting Virginia to South Carolina. US 1 is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN) and is also part of the Strategic Highway

Corridor (SHC) Vision Plan as a freeway that needs improvement. Existing US 1 is not anticipated to have any capacity issues with 13,000 vehicles per day (vpd) in 2007 and a capacity of 45,200 vpd.

US 1 from Wall Road (SR 1135) to US 1 Business, Local ID: W-5317

TIP Project W-5317 recommends installing a median barrier for safety along US 1 from Wall Road (SR 1135) in Franklin County to US 1 Business in Vance County.

For additional information about this project, including the purpose and need, contact NCDOT PDEA.

US 1 Business (Raleigh Road) from Peter Gill Road (SR 1548) to US 158 Business (Garnett Street), Local ID: R-2503

The proposed project (R-2503) is to widen US 1 Business (Raleigh Road) from Peter Gill Road (SR 1548) to Dabney Drive (SR 1267) to multi-lanes with curb and gutter. Due to the proposed Southeast High Speed Rail, the Around Town Shuttle was modified to travel along US 1 Business from the Dabney Drive Extension (SR 1267) to Dorsey Avenue. For further information regarding the transit recommendation, refer to the CTP recommended project VANC0001-T.

US 1 Business (Raleigh Road) runs from US 1 Bypass to US 158 Business (Garnett Street) and is currently a 2-lane other major thoroughfare with a speed limit varying from 35-55 miles per hour (mph). It is also on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). US 1 Business (Raleigh Road) from US 1 Bypass to JP Taylor Road (SR 1139) is nearing capacity with 10,000 vehicles per day (vpd) in 2007 and a capacity of 12,600 vpd and is anticipated to be over capacity in 2035 with an estimated 12,800 vpd. US 1 Business from JP Taylor Road (SR 1139) to Old County Home Road (SR 1101) is over capacity with 14,000 vpd in 2007 and a capacity of 12,600 vpd. One crash location was identified along US 1 Business (Raleigh Road) during the traffic crash analysis. The intersection of US 1 Business (Raleigh Road) and Old County Home Road (SR 1101) had 11 crashes with a severity index of 3.02 during the time period of January 1, 2007 and December 31, 2009.

For additional information about this project, including the purpose and need, contact NCDOT PDEA.

US 1 Bypass from US 1 Business to US 1 Business, Local ID: VANC0005-H

The primary purpose of improving US 1 Bypass is to meet North Carolina's Strategic Highway Corridor Vision for mobility and connectivity. US 1 Bypass is currently a 4-lane divided facility with partial control of access from US 1 Business to US 1 Business. The

Comprehensive Transportation Plan (CTP) recommends upgrading US 1 Bypass from US 1 Business to US 1 Business to a 4-lane freeway with full control of access. A grade separation is recommended at South Lake Lodges Road (SR 1113). A service road is recommended on the west side from Georges Lane to Edwards Road (SR 1114) and on the east side from South Lake Lodges Road (SR 1113) to Stone Ridge Drive (SR 1290). This recommendation will increase the capacity of US 1 from 51,600 vpd to 59,900 vpd.

US 1 Bypass is a major north-south US highway that runs for 2,377 miles from Maine to Florida. This facility is a vital artery in moving people and goods through North Carolina, connecting major urban areas, such as Raleigh and Cary, and ultimately connecting Virginia to South Carolina. US 1 Bypass is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN) and is also part of the Strategic Highway Corridor (SHC) Vision Plan as a freeway that needs improvement. Existing US 1 Bypass is not anticipated to have any capacity issues with 20,200 vehicles per day (vpd) and a capacity of 51,600 vpd.

**US 158 Bypass from Poplar Creek Road (SR 1126) to Ruin Creek Road (SR 1128),
Local ID: VANC0006-H**

The primary purpose of improving US 158 Bypass is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 2-lane other major thoroughfare with center turn lane where necessary.

US 158 Bypass is currently a 2-lane major thoroughfare from Poplar Creek Road (SR 1126) to Ruin Creek Road (SR 1128). Regional commercial and mixed use community is planned in the 2030 City of Henderson Land Use Plan and a transitional development area is shown on the 2010 Vance County Land Use map as seen in Figure 7.

US 158 Bypass from Poplar Creek Road (SR 1126) to Ruin Creek Road (SR 1128) is nearing capacity in 2035 with 10,700 vehicles per day (vpd) and a capacity of 12,000 vpd. The section from Ruin Creek Road (SR 1128) to Dabney Drive (SR 1162) is nearing capacity in 2007 with 7,900 vpd and a capacity of 10,000 vpd and is estimated to be over capacity in 2035 with 10,100 vpd. Two high crash locations were identified along US 158 Bypass in the traffic crash analysis that spanned from January 1, 2007 and December 31, 2009. The intersection of US 158 Bypass and Ross Mill Road (SR 1310) had 13 crashes and a severity index of 4.42 while the intersection of US 158 Bypass and Poplar Creek Road (SR 1126) had 16 crashes and a severity index of 4.24.

NC 39 from Franklin County Line to Garrett Road (SR 1538), Local ID: VANC0007-

H

The primary purpose of improving NC 39 from the Franklin County Line to Garrett Road (SR 1538) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 2-lane other major thoroughfare with center turn lane where necessary.

NC 39 is major north-south route for Vance County that runs from the Franklin County Line, through the city of Henderson to the Virginia Border and is on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). NC 39 is currently a 2-lane major thoroughfare from the Franklin County Line to Garrett Road (SR 1538). The community of Gillburg is shown on the 2010 Vance County Lane Use map as a transitional development area.

NC 39 from the Franklin County Line to Vanco Mill Road (SR 1148) is nearing capacity in 2035 with 12,000 vehicles per day (vpd) and a capacity of 12,700 vpd. One high crash location was identified along this section of NC 39 in the traffic crash analysis. The intersection of NC 39 and Gillburg Road (SR 1519) had 16 crashes and a severity index of 3.31 during the analysis period of January 1, 2007 and December 31, 2009. NC 39 from the Franklin County Line to the South Henderson Planning Area Boundary was included in the 1997 Vance County Thoroughfare Plan and was recommended to be widened to 4-lanes with curb and gutter. Based on the revised 2035 estimates, it does not warrant a 4-lane facility.

NC 39 from Garrett Road (SR 1538) to Pinkston Street (SR 1214); Local ID: VANC0008-H

The primary purpose of improving NC 39 from the Garrett Road (SR 1538) to Pinkston Street (SR 1214) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to 4-lane divided boulevard facility with bicycle and pedestrian accommodations.

NC 39 is major north-south route for Vance County that runs from the Franklin County Line, through the city of Henderson and to the Virginia Border and is on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). The Henderson Future Land Use Map shows rural density, mixed use community, light industrial and regional commercial along this section of NC 39.

From Garrett Road (SR 1538) to Garland Street (SR 1560), NC 39 is currently a 2-lane major thoroughfare that is already over capacity with 16,000 vehicles per day (vpd) in 2007 and a capacity of 12,700 vpd. From Garland Street (SR 1560) to Pinkston Street (SR 1214), NC 39 is currently a 4-lane undivided major thoroughfare that will be over capacity in 2035 with 25,000 vpd and a capacity of 22,100 vpd.

Two high crash locations were identified along this section of NC 39 in the traffic crash analysis. The intersection of NC 39 and Vicksboro Road (SR 1533) had 14 crashes and a severity index of 2.59 and the intersection of NC 39 and US 1 Bypass had 10 crashes and a severity index of 1.74 during the analysis period of January 1, 2007 and December 31, 2009. NC 39 from Bullock Street to Vicksboro Road (SR 1533) was recognized in the 1995 Henderson Thoroughfare Plan as nearing capacity but no recommendations were made.

NC 39 from Pinkston Street (SR 1214) to Chestnut Street (SR 1226), Local ID: VANC0009-H

NC 39 is major north-south route for Vance County that runs from the Franklin County Line, through the City of Henderson to the Virginia Border and is on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). The Henderson Future Land Use Map shows regional commercial along this section of NC 39.

From Pinkston Street (SR 1214) to Chestnut Street (SR 1226), NC 39 is currently a 2-lane major thoroughfare that is already over capacity with 14,000 vehicles per day (vpd) in 2007 and a capacity of 11,800 vpd. NC 39 from Bullock Street to Chestnut Street (SR 1226) was identified in the 1995 Henderson Thoroughfare Plan as being over capacity and was recommended to be widened to a 4-lane facility. The CTP recommendation is not consistent with the recommendation from the 1995 Henderson Thoroughfare Plan and will remain an unaddressed deficiency even with the recommended upgrade to the facility. Approximately 50 homes and 7 businesses would be impacted if the facility were to be widened to a 4-lane divided boulevard facility to accommodate the projected traffic in 2035. Completion of the Western Outer Loop (SR 1295), improvements to Dabney Drive (SR 1162) and improving the US 1/I-85 interchange to accommodate all turning movements could potentially help alleviate some of the traffic along NC 39.

The primary purpose of improving NC 39 from Pinkston Street (SR 1214) to Chestnut Street (SR 1226) is to reduce congestion due to capacity issues. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 3-lane facility with bicycle and pedestrian accommodations. This recommendation will not completely resolve the capacity issues but will provide safer accommodations for bicyclists and

pedestrians and is included in the unaddressed deficiencies section. Due to the proposed Southeast High Speed Rail, the route of the Around Town Shuttle was modified to travel along NC 39 from Pinkston Street (SR 1214) to Chestnut Street (SR 1226).

NC 39 from Chestnut Street (SR 1226) to I-85; Local ID: VANC0010-H

The primary purpose of improving NC 39 from the Chestnut Street (SR 1226) to I-85 is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 4-lane divided boulevard facility with bicycle and pedestrian accommodations.

NC 39 is major north-south route for Vance County that runs from the Franklin County Line, through the city of Henderson to the Virginia Border and is on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). The Henderson Future Land Use Map shows regional commercial and community commercial along this section of NC 39.

From Chestnut Street (SR 1226) to Beckford Drive (SR 1165), NC 39 is currently a 4-lane major thoroughfare that will be over capacity with 23,500 vehicles per day (vpd) in 2035 and a capacity of 23,000 vpd. From Beckford Drive (SR 1165) to I-85, NC 39 is currently a 5-lane major thoroughfare that will be nearing capacity in 2035 with 21,800 vpd and a capacity of 25,000 vpd.

Three high crash locations were identified along this section of NC 39 in the traffic crash analysis. The intersection of NC 39 and Beckford Drive (SR 1165) had 12 crashes and a severity index of 3.47, the intersection of NC 39 and Beck Avenue had 10 crashes and a severity index of 2.48, while the intersection of NC 39 and Chestnut Street (SR 1226) had 11 crashes and a severity index of 1.67 during the analysis period of January 1, 2007 and December 31, 2009. NC 39 from Chestnut Street (SR 1226) to I-85 was recognized in the 1995 Henderson Thoroughfare Plan as nearing capacity but no recommendations were made for this section.

NC 39 from I-85 to Stagecoach Road (SR 1329), Local ID: VANC0011-H

The primary purpose of improving NC 39 from I-85 to Stagecoach Road (SR 1329) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 2-3 lane other major thoroughfare with center turn lane where necessary and bicycle accommodations.

NC 39 is major north-south route for Vance County that runs from the Franklin County Line, through the City of Henderson to the Virginia Border and is on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). The Henderson Future Land Use Map shows community commercial, suburban density and rural density along this section of NC 39.

NC 39 is currently a 2-lane major thoroughfare from I-85 to Stagecoach Road (SR 1329). The section of NC 39 from the St Andrews Church Road (SR 1309) to Stagecoach Road (SR 1329) is nearing capacity in 2035 with 9,200 vehicles per day (vpd) and a capacity of 11,400 vpd. One high crash location was identified along this section of NC 39 in the traffic crash analysis. The intersection of NC 39 and Thomas Road (SR 1329) had 7 crashes and a severity index of 5.23 during the analysis period of January 1, 2007 and December 31, 2009. NC 39 in Henderson to Rock Spring Road (SR 1356) was included in the 1997 Vance County Thoroughfare Plan and was recommended to be widened to a 24' wide pavement width.

Beckford Drive (SR 1165) from Dabney Drive (SR 1162) to US 158 Business, Local ID: U-4916

The proposed project (U-4916) is to widen Beckford Drive (SR 1165) from Dabney Drive (SR 1162) to US 158 Business to multi-lanes. Due to the proposed Southeast High Speed Rail (SEHSR) (TIP Project: P-4404), Beckford Drive (SR 1165) was recommended to be extended from US 158 Business to connect to Old Norlina Road (SR 1147). Recommendations have also been made for sidewalks and wide paved shoulders for bicyclists and pedestrians.

Beckford Drive (SR 1165) is currently a 2-lane minor thoroughfare from Dabney Drive (SR 1162) to NC 39 and a 4-lane major thoroughfare from NC 39 to US 158 Business. Light industrial, urban density, regional commercial and community commercial is planned in the 2030 City of Henderson Land Use Plan along this route. Beckford Drive (SR 1165) from Dabney Drive (SR 1162) to Roanoke Avenue is nearing capacity with 9,200 vehicles per day (vpd) in 2007 and a capacity of 11,800 vpd. Beckford Drive (SR 1165) from Roanoke Avenue to NC 39 is over capacity with 12,000 vpd in 2007 and a capacity of 11,800 vpd. Two high crash locations were identified along Beckford Drive (SR 1165) in the traffic crash analysis. The intersection of Beckford Drive (SR 1165) and NC 39 (Andrews Avenue) had 12 crashes and a severity index of 3.47 while the intersection of Beckford Drive (SR 1165) and Dabney Drive (SR 1162) had 22 crashes and a severity index of 3.35.

For additional information about this project, including the purpose and need, contact NCDOT Project Development and Environmental Analysis (PDEA).

Warrenton Road (SR 1001) from US 1/158 to Brookston Road (SR 1507), Local ID: VANC0025-H

The primary purpose of improving Warrenton Road (SR 1001) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. The Comprehensive Transportation Plan (CTP) recommends upgrading this facility to a 4-lane divided boulevard with curb and gutter and wide outside lanes for bicycles.

Warrenton Road (SR 1001) from US 1/158 to Brookston Road (SR 1507) is currently a 2-lane minor thoroughfare. Heavy industrial land use is planned in the 2030 City of Henderson Land Use Plan along Warrenton Road (SR 1001) from US 158 Business to the Henderson City Limits. Warrenton Road (SR 1001) from US 158 Business to John Deere Road (SR 1608) is over capacity with 13,000 vehicles per day (vpd) and a capacity of 11,000 vpd. Warrenton Road (SR 1001) from John Deere Road (SR 1608) to Brookston Road (SR 1507) is nearing capacity with 9,700 vpd and a capacity of 11,400 vpd and is estimated to be over capacity in 2035 with 16,200 vpd. One high crash location was identified along Warrenton Road (SR 1001) in the traffic crash analysis. The intersection of Warrenton Road (SR 1001) and Brookston Road (SR 1507) had 10 crashes with a severity index of 3.22 during the time period of January 1, 2007 and December 31, 2009.

Minor Widening Improvements

- **Dabney Road (SR 1304) from Granville County Line to US 158 Bypass, Local ID: VANC0016-H**

Dabney Road (SR 1304) is a 2-lane minor thoroughfare that runs from the Granville County Line to US 158 Bypass. The primary purpose of improving Dabney Road (SR 1304) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. Dabney Road (SR 1304) from Poplar Creek Road (SR 1126) to US 158 Bypass is expected to be nearing capacity in 2035 with 10,400 vehicles per day (vpd) and a capacity of 11,400 vpd. The Comprehensive Transportation Plan (CTP) recommends upgrading Dabney Road (SR 1304) to a 2-3 lane minor thoroughfare with a center turn lane where necessary.

- **Nicholas Street (SR 1589) from St. Matthews Street (SR 1143) to Chavasse Avenue (SR 1228), Local ID: VANC0020-H**

Nicholas Street (SR 1589) is a 2-lane minor thoroughfare within Henderson that runs from St Matthews Street (SR 1143) to Chavasse Avenue (SR 1228). The primary purpose of improving Nicholas Street (SR 1589) is to reduce congestion

due to capacity issues in order to maintain a Level of Service (LOS) D. Nicholas Street (SR 1589) will be over capacity with 7,400 vehicles per day (vpd) in 2035 and a capacity of 7,100 vpd. The section of Nicholas Street (SR 1589) from Chavasse Avenue (SR 1228) to South Williams Street (SR 1143) has on street parking. The Comprehensive Transportation Plan (CTP) recommends upgrading Nicholas Street (SR 1589) from Chavasse Avenue (SR 1228) to St. Matthews Street (SR 1143) to provide 11-foot lanes.

- **Nutbush Road (SR 1308) from NC 39 to Satterwhite Point Road (SR 1319), Local ID: VANC0022-H**

Nutbush Road (SR 1308) is a 2-lane minor thoroughfare that runs from NC 39 to Satterwhite Point Road (SR 1319) which many campers and boaters use to access Kerr Lake. The primary purpose of improving Nutbush Road (SR 1308) is to accommodate recreational traffic. The Comprehensive Transportation Plan (CTP) recommends that Nutbush Road (SR 1308) be widened to a facility with 12-foot lanes and wide paved shoulders.

- **Thomas Road (SR 1329) from NC 39 to Will Jefferson Road (SR 1331), Local ID: VANC0023-H**

Thomas Road (SR 1329) is a 2-lane minor thoroughfare that runs from NC 39 to Kerr Lake. The primary purpose of improving Thomas Road (SR 1329) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. Thomas Road (SR 1329) will be nearing capacity from NC 39 to Will Jefferson Road (SR 1331) in 2035 with 6,700 vehicles per day (vpd) and a capacity of 7,500 vpd. The Comprehensive Transportation Plan recommends that Thomas Road (SR 1329) be widened to a facility with 12-foot lanes.

- **Vicksboro Road (SR 1533) from NC 39 to Warren County Line, Local ID: VANC0024-H**

Vicksboro Road (SR 1533) is a 2-lane minor thoroughfare that runs from NC 39 to the Warren County Line. The primary purpose of improving Vicksboro Road (SR 1533) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. Vicksboro Road (SR 1533) between Carey Chapel Road (SR 1519) and Club Pond Road (SR 1531) is nearing capacity with 6,000 vehicles per day (vpd) and a capacity of 7,100 vpd. The section of Vicksboro Road (SR 1533) between NC 39 and South Cokesbury Road (SR 1515) will be over capacity in 2035 with 9,300-12,700 vpd and a capacity of 7,100-10,500 vpd. The Vance County Comprehensive Transportation Plan (CTP) recommends that Vicksboro Road (SR 1533) be upgraded to a 2-3 lane minor thoroughfare.

- **Warrenton Road (SR 1001) from Brookston Road (SR 1507) to Allison Cooper Road (SR 1501), Local ID: VANC0027-H**

Warrenton Road (SR 1001) is a 2-lane minor thoroughfare that runs from US 1/158 to the Warren County Line. The primary purpose of improving Warrenton Road (SR 1001) is to reduce congestion due to capacity issues in order to maintain a Level of Service (LOS) D. Warrenton Road (SR 1001) between Brookston Road (SR 1507) and Allison Cooper Road (SR 1502) is expected to be over capacity with 10,200 vehicles per day (vpd) in 2035 and a capacity of 8,800 vpd. The Comprehensive Transportation Plan (CTP) recommends that Warrenton Road (SR 1001) be widened to a facility with 12-foot lanes and wide shoulders.

Southeast High Speed Rail (SEHSR) Improvements

All the below improvements are related to the SEHSR (TIP Project: P-3819), and all projects in the CTP are consistent with current plans for this project. Please refer to www.sehsr.org for further information regarding these proposed projects.

- **US 1 Business from US 1 Bypass to Peter Gill Road (SR 1548), Local ID: VANC00004-H**

The Comprehensive Transportation Plan (CTP) recommends a realignment of US 1 Business from Van Zandt Lane to Peter Gill Road (SR 1548) due to the proposed SEHSR. The following section of the facility has sufficient capacity through the 2035 planning period and should remain a 2-lane major thoroughfare.

- **Bear Pond Road (SR 1115) from US 1 Business to US 1 Bypass, Local ID: VANC0012-H**

The Comprehensive Transportation Plan (CTP) recommends Bear Pond Road (SR 1115) be realigned to intersect with US 1 Business 0.6 miles south of the existing intersection due to the proposed SEHSR. Bear Pond Road (SR 1115) has sufficient capacity and should remain a 2-lane minor thoroughfare.

- **Dabney Drive Extension (SR 1267) from Dabney Drive (SR 1165) to Nicholas Street (SR 1143), Local ID: VANC0015-H**

Dabney Drive extension (SR 1267) currently intersects with US 1 Business. The Comprehensive Transportation Plan (CTP) recommends that this intersection be moved farther south to intersect with US 1 Business and be extended to connect with Alexander Avenue due to the proposed SEHSR.

- **JP Taylor Road (SR 1139) from US 1 Business to Warehouse Road (SR 1216), Local ID: VANC0017-H**
 JP Taylor Road (SR 1139) currently intersects with US 1 Business. The Comprehensive Transportation Plan (CTP) recommends that JP Taylor Road (SR 1139) be extended to intersect with Old County Home Road (SR 1101) near Julia Avenue due to the proposed SEHSR.
- **Kittrell Road (SR 1551) from US 1 to Chavis Road (SR 1552), Local ID: VANC0018-H**
 Kittrell Road (SR 1551) currently intersects with US 1. The Comprehensive Transportation Plan (CTP) recommends several road closings in Kittrell and a new alignment of Kittrell Road (SR 1551) due to the proposed SEHSR. Kittrell College Road (SR 1105) will realign with Church Street and railroad crossings at Main Street (SR1551) and McClannahan Street will be closed.
- **North Beckford Drive (SR 1165) from NC 39 to US 158 Business, Local ID: VANC0019-H**
 Beckford Drive (SR 1165) currently intersects with Chestnut Street (SR 1226). The Comprehensive Transportation Plan (CTP) recommends that Beckford Drive (SR 1165) be extended to intersect with Old Norlina Road (SR 1137) due to the proposed SEHSR.
- **North Lynnbank Road (SR 1115) from Edwards Road (SR 1114) to US 1 Business, Local ID: VANC0021-H**
 The Comprehensive Transportation Plan (CTP) recommends Lynnbank Road (SR 1115) be realigned to intersect with US 1 Business 0.6 miles south of the existing intersection due to the proposed SEHSR. It is also recommended that a 2-lane minor thoroughfare be constructed from Lynnbank Road (SR 1115) and connecting with US 1 Business near Brookwood Lane.
- **Warrenton Road (SR 1001) from US 158 Business to Brookston Road (SR 1507), Local ID: VANC0026-H**
 The Comprehensive Transportation Plan (CTP) recommends that Warrenton Road (SR 1001) be realigned more north than the existing roadway just west of John Deere Road (SR 1608) due to the proposed SEHSR.

PUBLIC TRANSPORTATION & RAIL

The Kerr Area Rural Transportation System is a public system operating under the Kerr Area Rural Transportation Authority. It is a regional community system with 43 service vehicles that serves human service agencies and the public through subscription, deviated fixed and dial-a-ride routes. Operations are from 5 am to 7:30 pm on weekdays and from 8 am to 5 pm on Saturdays with out-of-area service to Durham, Chapel Hill and Raleigh. The Around Town Shuttle operates in Henderson Monday through Saturday from 7 am to 7:45 pm. With the proposed additions to the transit system in Vance County, a proposed park and ride lot is recommended at the hospital, at the US 1/158 and Poplar Creek Road (SR 1126) intersection and at the US 1 and Bear Pond Road (SR 1115) intersection.

The proposed Southeast High Speed Rail (SEHSR) Corridor will run along the existing rail line in Vance County that runs from the Franklin County Line to the Warren County Line with a proposed stop in Henderson. Average speeds are anticipated to be between 85-87 miles per hour (mph). If funding is made available, the SEHSR could be implemented between 2018 and 2022. A proposed rail stop and intermodal connector is recommended on US 158 Business (Garnett Street) near the SEHSR. With the proposed rail, several road crossings will be closed along with several proposed grade separations. These proposed road crossings and grade separations are not final and are subject to change.

Southeast High Speed Rail Proposed Grade Separations:

- Oak Ridge Church Road (SR 1555)
- Church Street
- Edwards Road (SR 1114)
- Wild Life Lane
- Bear Pond Road (SR 1115)
- JP Taylor Road (SR 1139)
- Dabney Drive (SR 1162)
- NC 39
- Beckford Drive (SR 1165)
- Warrenton Road (SR 1001)
- Brookston Road (SR 1507)
- Greystone Road

Southeast High Speed Rail Proposed Road Closings:

- Oak Ridge Church Road (SR 1555)
- Beechtree Trail Road (SR 1104)
- McClanahan Street
- Main Street
- North Chavis Road (SR 1552)
- Cole Lane
- Bobbitt Road (SR 1549)
- Eastern Minerals Road
- Miriam Street
- Chavasse Avenue (SR 1228)
- West Spring Street
- Orange Street
- Winder Street
- Montgomery Street
- Rock Spring Street
- Harris Street

- Welcome Avenue (SR 1138)
- Warehouse Road (SR 1216)
- North Oliver Drive (SR 1509)
- Currin Road (SR 1506)

Public Transportation

Kerr Area Rural Transit System (KARTS) provides a demand-responsive transit service, with an emphasis on medical transportation. KARTS and the CTP Committee recommended some public transportation routes for the plan along with some modifications to the existing Around Town Shuttle due to the proposed SEHSR (TIP Project: P-3819).

Henderson Around Town Shuttle, Local ID: VANC0001-T

The Comprehensive Transportation Plan (CTP) recommends the following changes to the current Around Town Shuttle due to the proposed Southeast High Speed Rail (SEHSR) (TIP Project: P-3819) road closings.

- US 1 Business (Dabney Drive Extension to Dorsey Avenue)
- NC 39 (Pinkston Street to Chestnut Street)
- Alexander Avenue (Pinkston Street to US 1 Business)
- Chestnut Street (Rock Spring Street to NC 39)
- Dorsey Avenue (US 1 Business to West Young Avenue)
- Pinkston Street (Alexander Avenue to NC 39)

Service to Durham, Local ID: VANC0002-T

The Comprehensive Transportation Plan (CTP) recommends changing the current paratransit service to Durham to a fixed bus route system along the following route from the proposed intermodal connector in Henderson:

- NC 39 (Chestnut Street to I-85)
- I-85 (NC 39 to Granville County Line)

Service to Butner, Local ID: VANC0003-T

The Comprehensive Transportation Plan (CTP) recommends a fixed bus route system along the following route from the proposed intermodal connector in Henderson:

- US 1 (Franklin County Line to US 1 Bypass)
- US 1 Bypass (US 1 Business to US 1 Business)
- US 1 Business (US 1 Bypass to Garnett Street)
- US 158 Business (US 1 Business to NC 39)

Park-and-Ride Lots

The CTP proposed the following park-and-ride lots. All locations are based on current available information and are subject to change based on further study in the future.

- **Ruin Creek Road Lot, Local ID: VANC0004-T**
The Comprehensive Transportation Plan (CTP) recommends a park-and-ride lot near the Maria Parham Medical Center. This lot would provide access to the Around Town Shuttle (VANC0001-T) and the proposed bus route to Durham (VANC0003-T).
- **Poplar Creek Road (SR 1128) Lot, Local ID: VANC0005-T**
The Comprehensive Transportation Plan (CTP) recommends a park-and-ride lot near the intersection of Poplar Creek Road (SR 1128) and I-85. This lot would provide access to the proposed bus route to Durham (VANC0003-T).
- **Bear Pond Road (SR 1115) Lot, Local ID: VANC0006-T**
The Comprehensive Transportation Plan (CTP) recommends a park-and-ride lot near the intersection of Bear Pond Road (SR 1115) and US 1 Bypass. This lot would provide access to the proposed bus route to Butner (VANC0002-T).

Rail

The Southeast High Speed Rail (SEHSR) corridor is one of five originally proposed high speed passenger rail corridors designated by the US Department of Transportation (USDOT) in 1992. The proposed SEHSR project was designated as running from Washington, DC to Charlotte, NC with maximum speeds of 110 mph and is part of an overall plan to extend service from the existing high speed rail on the Northeast Corridor (Boston to Washington) to points in the Southeast.

The Recommendation Report for the SEHSR from Richmond, Virginia to Raleigh, North Carolina was released in April 2012 and proposed the following alignments for the SEHSR in Vance County.

Alternative NC3 is the recommended preferred alternative for Section O which begins north of Middleburg and extends to the Greystone Quarry north of Henderson. This alternative minimizes wetland, noise, and vibration impacts, and has the fewest residential relocations. There are greater impacts to stream and riparian buffers; however, these impacts will be fully mitigated, and the design work will be coordinated with the United States Army Corps of Engineers (USACE).

Alternative NC1 is the recommended preferred alternative for Section P which begins north of Henderson and ends north of Kittrell. Alternatives NC1, NC2 and NC3 were on a common alignment for this section to maximize the use of existing railroad right-of-way through Henderson.

Alternative NC1 is the recommended preferred alternative for Section Q which begins north of Kittrell and extends to the Tar River. Alternative NC1 and NC3 were common for this section. This alternative has slightly greater impacts to prime and important farmland and forested uplands, and three more residential relocations compared to Alternative NC2, with other impacts being comparable between alternatives. Alternative NC2 was not selected due to the lower limiting speed and negative rating for operability and constructability.

Southeast High Speed Rail (Franklin County Line to Warren County Line), Local ID: P-3819

The Comprehensive Transportation Plan (CTP) recommends a high speed rail along the existing rail corridor that runs from the Franklin County Line to the Warren County Line. Alternative NC3 was selected for Section O, NC1 for Section P and NC 1 for Section Q. For further information regarding the Southeast High Speed Rail (SEHSR) recommendation, refer to www.sehsr.org. All minor highway improvements related to the SEHSR are listed in the highway recommendations section of Chapter 2.

Rail Stops

- **Rail Stop (Henderson), Local ID: VANC0001-R**

The Comprehensive Transportation Plan (CTP) recommends a rail stop/station in Henderson near the intersection of NC 39 and US 158 Business next to the rail corridor in conjunction with future commuter rail opportunity. The proposed rail stop is included in the SEHSR recommendation; however, the plan is not finalized.

Intermodal Connectors

- **Intermodal Connector (Henderson), Local ID: VANC0002-R**

The Comprehensive Transportation Plan (CTP) recommends an intermodal connector in Henderson near the intersection of NC 39 and US 158 Business and will be located in the same vicinity as the proposed SEHSR rail stop in Henderson and is intended to accommodate both rail and transit services.

BICYCLE

The Bicycle Element is shown on Figure 1, Sheets 4 and 4A. NCDOT strives to make walking and biking in North Carolina better, safer, and more enjoyable. Information on funding, safety, education, laws, policies, maps and projects for these modes can be found on the NCDOT Division of Bicycle and Pedestrian web site.

Before any improvements are made to these facilities, the Division of Bicycle and Pedestrian Transportation should be consulted.

The Comprehensive Transportation Plan (CTP) recommends a 5' paved shoulder along the following facilities to accommodate bicycle travel:

- **VANC0001-B:** I-85 Service Road, from Poplar Creek Road (SR 1126) to Ruin Creek Road (SR 1128)
- **VANC0002-B:** US 1/158 from Spring Valley Road (SR 1317) to Warren County Line
- **VANC0003-B:** US 158 Business from Granville County Line to Poplar Creek Road (SR 1126)
- **VANC0011-H:** NC 39 from I-85 to Stagecoach Road (SR 1329)
- **VANC0006-B:** NC 39 from Stagecoach Road (SR 1329) to Virginia Border
- **VANC0007-B:** Anderson Creek Road (SR 1374) from Satterwhite Point Road (SR 1319) to Flemingtown Road (SR 1371)
- **VANC0009-B:** Bobbitt Road (SR 1549) from Franklin County Line to US 1 Business
- **VANC0010-B:** Bullocksville Park Road (SR 1366) from Jacksontown Road (SR 1369) to End of Road
- **VANC0011-B:** Burnside Road (SR 1335) from Hicksboro Road (SR 1303) to Stagecoach Road (SR 1329)
- **VANC0012-B:** County Line Road (SR 1361) from Warren County Line to End of Road
- **VANC0016-H:** Dabney Road (SR 1304) from Granville County Line to Ruin Creek Road (SR 1128)
- **VANC0014-B:** Exchange Street from Prosperity Drive to Dabney Drive (SR 1162)
- **VANC0015-B:** Flemingtown Road (SR 1371) from Anderson Creek Road (SR 1374) to Jackson Royster Road (SR 1400)
- **VANC0016-B:** Glebe Road (SR 1308) from Dabney Road (SR 1304) to NC 39
- **VANC0018-B:** Haywood Wright Road (SR 1311) from Ross Mill Road (SR 1310)

- **VANC0020-B:** Hibernia Road (SR 1347) from NC 39 to End of Road
- **VANC0021-B:** Hicksboro Road (SR 1303) from Burnside Road (SR 1335) to Dabney Road (SR 1304)
- **VANC0022-B:** Jackson Royster Road (SR 1400) from Flemingtown Road (SR 1371) to Jacksontown Road (SR 1369)
- **VANC0023-B:** Jacksontown Road (SR 1369) from US 1/158 to Warren County Line
- **VANC0024-B:** Kelly Road (SR 1326) from Dabney Road (SR 1304) to Glebe Road (SR 1308)
- **VANC0025-B:** Morgan Road (SR 1342) from Granville County Line to NC 39
- **VANC0026-B:** North Lee Avenue (SR 1369) from US 1/158 to I-85
- **VANC0022-H:** Nutbush Road (SR 1308) from NC 39 to Satterwhite Point Road (SR 1319)
- **VANC0027-B:** Poplar Creek Road (SR 1126) from US 158 Business to US 158 Bypass
- **VANC0028-B:** Prosperity Drive from US 158 Bypass to Exchange Street
- **VANC0029-B:** Rev. Henderson Road (SR 1359) from Rock Spring Church Road (SR 1356) to End of Road
- **VANC0030-B:** Ridgeway Brewery Road from Jacksontown Road (SR 1369) to Warren County Line
- **VANC0031-B:** Rock Spring Church Road (SR 1356) from NC 39 to Virginia Border
- **VANC0032-B:** Ross Mill Road (SR 1310) from US 158 Bypass to Haywood Wright Road (SR 1311)
- **VANC0034-B:** Satterwhite Point Road (SR 1319) from US 1/158 to End of Road
- **VANC0035-B:** South Lynnbank Road (SR 1115) from Western Outer Loop (SR 1295) to US 1 Business
- **VANC0036-B:** Stagecoach Road (SR 1329) from Burnside Road (SR 1335) to NC 39
- **VANC0037-B:** St. Andrews Church Road (SR 1309) from Hicksboro Road (SR 1303) to NC 39
- **VANC0038-B:** Stovall Road (SR 1336) from Granville County Line to Hicksboro Road (SR 1303)
- **VANC0023-H:** Thomas Road (SR 1329) from NC 39 to Will Jefferson Road (SR 1331)
- **VANC0039-B:** Thomas Road (SR 1329) from Will Jefferson Road (SR 1331) to End of Road
- **VANC0024-H:** Vicksboro Road (SR 1533) from NC 39 to Warren County Line

- **VANC0027-H:** Warrenton Road (SR 1001) from Brookston Road (SR 1507) to Warren County Line
- **VANC0028-H:** Western Outer Loop (SR 1295) from Old County Home Road (SR 1101) to Lynnbank Road (SR 1115)

The Comprehensive Transportation Plan (CTP) recommends a 4' paved shoulder along the following facilities to accommodate bicycle travel:

- **VANC0004-B:** US 158 Business from Western Outer Loop (SR 1295) to Dabney Drive (SR 1162)
- **VANC0017-B:** Graham Avenue (SR 1218) from Western Outer Loop (SR 1295) to Dabney Drive (SR 1162)
- **VANC0041-B:** Poplar Creek Road (SR 1126) from US 158 Bypass to Dabney Road (SR 1304)

The Comprehensive Transportation Plan (CTP) recommends wide outside lanes along the following facilities to accommodate bicycle travel:

- **VANC0005-B:** US 158 Business from Crozier Street to Spring Valley Road (SR 1317)
- **VANC0008-H:** NC 39 from US 1 Bypass to Pinkston Street (SR 1214)
- **VANC0009-H:** NC 39 from Pinkston Street (SR 1214) to Chestnut Street (SR 1226)
- **VANC0010-H:** NC 39 from Chestnut Street (SR 1226) to I-85
- **VANC0008-B:** Beckford Drive (SR 1165) from Dabney Drive (SR 1162) to NC 39
- **VANC0013-H:** Dabney Drive (SR 1162) from US 158 Business to I-85
- **VANC0014-H:** Dabney Drive (SR 1162) from I-85 to US 158 Bypass
- **VANC0013-B:** Dabney Drive Extension (SR 1267) from US 158 Business to US 1 Business
- **VANC0033-B:** Ruin Creek Road (SR 1128) from Western Outer Loop (SR 1295) to Dabney Road (SR 1304)
- **VANC0025-H:** Warrenton Road (SR 1001) from John Deere Road (SR 1608) to Brookston Road (SR 1507)
- **VANC0040-B:** Western Outer Loop (SR 1295) from Graham Avenue (SR 1218) to Old County Home Road (SR 1101)

PEDESTRIAN

The Pedestrian Element is shown on Figure 1 Sheets 5, 5A, and 5B and calls for the following pedestrian facilities.

Sidewalks

Henderson:

- **VANC0001-P:** I-85 Service Road from Poplar Creek Road (SR 1126) to Ruin Creek Road (SR 1128)
- **VANC0004-P:** US 1 Business from Dorsey Avenue to Dabney Drive Extension (SR 1267)
- **VANC0005-P:** US 158 Business from Western Outer Loop (SR 1295) to Dabney Drive (SR 1162)
- **VANC0008-H:** NC 39 from Vicksboro Road (SR 1533) to Liberty Street
- **VANC0009-H:** NC 39 from Pinkston Street (SR 1214) to Chestnut Street (SR 1226)
- **VANC0010-H:** NC 39 from Chestnut Street (SR 1226) to I-85
- **VANC0006-P:** 2nd Street from Corbitt Road to Park Avenue
- **VANC0008-P:** Alexander Avenue from Pinkston Street (SR 1214) to Harriet Street
- **VANC0009-P:** Bane Avenue from Wadill Street to Parham Street (SR 1312)
- **VANC0010-P:** Beacon Avenue from Corbitt Road to 2nd Street
- **VANC0011-P:** Beckford Drive (SR 1165) from Dabney Drive (SR 1162) to Parrish Mill Road
- **VANC0012-P:** Berry Avenue from Corbitt Road to Parham Street (SR 1312)
- **VANC0015-P:** Chestnut Street (SR 1226) from Rock Spring Street (SR 1356) to Beckford Drive (SR 1165)
- **VANC0016-P:** Chestnut Street (SR 1226) from Dabney Drive (SR 1162) to Zollicoffer Avenue
- **VANC0019-P:** Coble Boulevard from Dabney Drive (SR 1162) to Nelson Street
- **VANC0020-P:** Cypress Drive from Willowood Drive to Dabney Drive (SR 1162)
- **VANC0013-H:** Dabney Drive (SR 1162) from US 158 Business to I-85
- **VANC0014-H:** Dabney Drive (SR 1162) from I-85 to US 158 Bypass
- **VANC0021-P:** Dabney Drive Extension (SR 1267) from US 158 Business to US 1 Business
- **VANC0016-H:** Dabney Road (SR 1304) from Ruin Creek Road (SR 1128) to US 158 Bypass

- **VANC0022-P:** Deer Court Crossing from Dabney Drive (SR 1162) to Dabney Drive (SR 1162)
- **VANC0023-P:** Exchange Street from Prosperity Drive to Dabney Drive (SR 1162)
- **VANC0024-P:** Garnett Street Extension from Yowland Road to Deer Court Crossing
- **VANC0025-P:** Graham Avenue (SR 1218) from Ruin Creek Road (SR 1128) to Dabney Drive (SR 1162)
- **VANC0026-P:** Granite Street from Chestnut Street (SR 1226) to Parham Street (SR 1312)
- **VANC0027-P:** Hargrove Street from Corbitt Road to Orange Street
- **VANC0028-P:** Harrison Avenue from Montgomery Street to Charles Street
- **VANC0029-P:** Horner Street from Parham Street (SR 1312) to Chestnut Street (SR 1226)
- **VANC0034-P:** Mc Coin Avenue from Corbitt Road to 2nd Street
- **VANC0035-P:** Mitchell Street from College Street to Clark Street
- **VANC0036-P:** North Cooper Drive from Ruin Creek Road (SR 1128) to Dabney Drive (SR 1162)
- **VANC0020-H:** Nicholas Street (SR 1589) from Alexander Avenue to Williams Street
- **VANC0043-P:** Oak Street from Cedarwood Drive to Garnett Street Extension
- **VANC0044-P:** Orange Street from Parham Street (SR 1312) to Pettigrew Street
- **VANC0045-P:** Parham Street (SR 1312) from Burwell Avenue (SR 1355) to Orange Street
- **VANC0046-P:** Parham Street (SR 1312) from Dabney Drive (SR 1162) to West Young Avenue
- **VANC0047-P:** Park Avenue from Corbitt Road to Parham Street (SR 1312)
- **VANC0049-P:** Perry Street to US 158 Business to End of Road
- **VANC0050-P:** Pettigrew Street from Orange Street to Sims Street
- **VANC0051-P:** Pine Street (SR 1172) from Dabney Drive (SR 1162) to Rollins Avenue
- **VANC0052-P:** Pine Street from North Washington Avenue to North Edwards Avenue
- **VANC0053-P:** Pinkston Street (SR 1214) from Alexander Avenue to NC 39
- **VANC0054-P:** Prosperity Drive from Trade Street to Exchange Street
- **VANC0055-P:** Rock Spring Street (SR 1356) from Rowland Street to Highland Avenue
- **VANC0056-P:** Rock Spring Street (SR 1356) from Kittrell Street to Beckford Drive (SR 1165)
- **VANC0057-P:** Rollins Avenue from Pine Street (SR 1172) to Bane Avenue

- **VANC0058-P:** Ruin Creek Road (SR 1128) from Graham Ave (SR 1218) to Dabney Drive (SR 1162)
- **VANC0062-P:** Sims Street from Orange Street to Pettigrew Street
- **VANC0065-P:** Sunset Avenue from Wadill Street to Dabney Drive (SR 1162)
- **VANC0066-P:** Trade Street from Dabney Drive (SR 1162) to Prosperity Drive
- **VANC0067-P:** Turner Avenue from Zene Street to Carolina Avenue
- **VANC0024-H:** Vicksboro Road (SR 1533) from NC 39 to Fox Pond Road (SR 1612)
- **VANC0068-P:** Wadill Street from Bane Avenue to Sunset Avenue
- **VANC0070-P:** Walnut Street from Orange Street to Pettigrew Street
- **VANC0071-P:** Water Street from NC 39 to Pinkston Street (SR 1214)
- **VANC0072-P:** West Belle Street from Hargrove Street (SR 1347) to Parham Street (SR 1312)
- **VANC0075-P:** Williams Street (SR 1143) from Nicholas Street (SR 1589) to Maple Street
- **VANC0076-P:** West Young Avenue from Hargrove Street (SR 1347) to Parham Street (SR 1312)
- **VANC0077-P:** Zollicoffer Avenue from Mc Coin Avenue to US 158 Business

Kittrell:

- **VANC0002-P:** US 1 from Kittrell Vance Avenue to Kittrell North Municipal Boundary
- **VANC0013-P:** Chavis Road (SR 1552) from Kittrell Road (SR 1551) to East Chavis Lane (SR 1588)
- **VANC0017-P:** Chinaberry Street from Oak Ridge Church Road (SR 1555) to Chavis Road (SR 1552)
- **VANC0018-P:** Church Street from Kittrell College Road (SR 1105) to North Chavis Road (SR 1552)
- **VANC0030-P:** Kittrell College Road (SR 1105) from Church Street to Long Creek Circle (SR 1235)
- **VANC0031-P:** Kittrell Vance Avenue from Dixie Drive to US 1
- **VANC0032-P:** Main Street from US 1 to North Chavis Road (SR 1552)
- **VANC0033-P:** McClannahan Street from US 1 to Oak Ridge Church Road (SR 1555)
- **VANC0048-P:** Perkinson Street (SR 1555) from 3rd Street to West Chavis Road (SR 1588)
- **VANC0064-P:** South Street from Oak Ridge Church Road (SR 1555) to Chavis Road (SR 1552)

- **VANC0073-P:** West Chavis Lane (SR 1588) from Williams Street to North Chavis Road (SR 1552)
- **VANC0074-P:** Williams Street from McClanahan Street to West Chavis Road (SR 1588)

Middleburg:

- **VANC0003-P:** US 1/158 from North Jackson Avenue to North Edwards Avenue
- **VANC0007-P:** 3rd Street from Williams Street to North Chavis Road (SR 1552)
- **VANC0014-P:** Chestnut Street from South Broad Street to South Jackson Avenue
- **VANC0037-P:** North Edwards Avenue from Pine Street to US 1/158
- **VANC0038-P:** North Hawkins Avenue from Walnut Street to US 1/158
- **VANC0039-P:** North Jackson Avenue from Pine Street to US 1/158
- **VANC0040-P:** North Lee Avenue (SR 1369) from US 1/158 to North Washington Avenue
- **VANC0041-P:** North Plummer Avenue from Walnut Street to Chestnut Street
- **VANC0042-P:** North Washington Avenue from North Lee Avenue (SR 1369) to US 1/158
- **VANC0059-P:** South Broad Street from US 1/158 to Chestnut Street
- **VANC0060-P:** South Carroll Street from US 1/158 to Chestnut Street
- **VANC0061-P:** South Hawkins Avenue from US 1/158 to Chestnut Street
- **VANC0063-P:** South Jackson Avenue from US 1/158 to Chestnut Street
- **VANC0069-P:** Walnut Street from North Plummer Avenue to North Jackson Avenue

Multi-Use Paths

- **VANC0001-M:** Dabney Drive (SR 1162) from Beckford Drive (SR 1165) to Exchange Street
- **VANC0002-M:** CSX S-Line proposed multi-use trail from Franklin County Line to Warren County Line. The multi-use path is a separate project from the Southeast High Speed Rail (SEHSR) project study. Even though it is a separate project, the trail concept would be parallel to and outside the rail right-of-way (ROW), but within the SEHSR study corridor (refer to www.sehsr.org/faq.html). Please refer to www.sehsr.org or the NCDOT Rail Division for more details on this project. This project is currently programmed for a planning and environmental study under TIP Project: EB-5128.

The exact alignment and type of facility through Vance County is to be determined. Figure 1, Sheets 4, 4A, 5, 5A, and 5B showing the multi-use path along the rail corridor will not be exact and only represent the concept and desire for a multi-use pathway in the vicinity of the SEHSR and connectivity of that pathway throughout Vance County and beyond.

APPENDICES

Appendix A Resources and Contacts

North Carolina Department of Transportation

Customer Service Office

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

1-877-DOT-4YOU

(1-877-368-4968)

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

Secretary of Transportation

1501 Mail Service Center

Raleigh, NC 27699-1501

(919) 707-2800

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

Board of Transportation Member

2612 N. Duke Street

Durham, NC 27704

(919) 220-4600

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

Highway Division Engineer

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

2612 N. Duke Street

Durham, NC 27704

(919) 220-4600

<http://www.ncdot.gov/doh/operations/division5/>

Division Project Manager

Contact the Division Project Manager with questions concerning transportation projects within each Division.

2612 N. Duke Street

Durham, NC 27704

(919) 220-4600

Division Construction Engineer

Contact the Division Construction Engineer for information concerning major roadway improvements under construction.

2612 N. Duke Street
Durham, NC 27704
(919) 220-4600

Division Traffic Engineer

Contact the Division Traffic Engineer for information concerning traffic signals, highway signs, pavement markings and crash history.

2612 N. Duke Street
Durham, NC 27704
(919) 220-4600

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

2612 N. Duke Street
Durham, NC 27704
(919) 220-4600

Division Maintenance Engineer

Contact the Division Maintenance Engineer information regarding maintenance of all state roadways, improvement of secondary roads and other small improvement projects. The Division Maintenance Engineer also oversees the District Offices, the Bridge Maintenance Unit and the Equipment Unit.

2612 N. Duke Street
Durham, NC 27704
(919) 220-4600

District Engineer

Contact the District Engineer for information on outdoor advertising, junkyard control, driveway permits, road additions, subdivision review and approval, Adopt A Highway program, encroachments on highway right of way, issuance of oversize/overwidth permits, paving priorities, secondary road construction program and road maintenance.

321 Gillburg Road
Henderson, NC 27537
(252) 492-0111

Transportation Planning Branch (TPB)

Contact the Transportation Planning Branch for information on long-range multi-modal planning services, including Strategic Highway Corridors.

1554 Mail Service Center
Raleigh, NC 27699-1554
(919) 707-0900

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

Kerr-Tar Rural Planning Organization (RPO)

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

1724 Graham Avenue / P.O. Box 709
Henderson, NC 27536
(252) 436-2048

<http://www.kerrtarcog.org>

Strategic Planning Office

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

1501 Mail Service Center
Raleigh, NC 27699
(919) 715-0951

<https://apps.dot.state.nc.us/dot/directory/authenticated/UnitPage.aspx?id=11054>

Project Development & Environmental Branch (PDEA)

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

1548 Mail Service Center
Raleigh, NC 27699-1548
(919) 707- 6000

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

Secondary Roads Unit

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

1535 Mail Service Center
Raleigh, NC 27699-1535
(919) 707- 2500

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

Program Development Branch

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

1534 Mail Service Center
Raleigh, NC 27699-1534
(919) 707- 4610

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

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

1550 Mail Service Center
Raleigh, NC 27699-1550
(919) 707 - 4670

<http://www.ncdot.org/transit/nctransit/>

Rail Division

Contact the Rail Division for rail information throughout the state.

1553 Mail Service Center
Raleigh, NC 27699-1553
(919) 707 - 4700

<http://www.bytrain.org/>

Division of Bicycle and Pedestrian Transportation

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

1552 Mail Service Center
Raleigh, NC 27699-1552
(919) 707-2600

<http://www.ncdot.gov/transit/bicycle/>

Structure Management Unit

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

1565 Mail Service Center
Raleigh, NC 27699-1565
(919) 707 - 6400

http://www.ncdot.gov/doh/operations/dp_chief_eng/maintenance/bridge/

Roadway Design Unit

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

1584 Mail Service Center

Raleigh, NC 27699-1582

(919) 707 – 6200

<http://www.ncdot.gov/doh/preconstruct/highway/roadway>

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

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

Appendix B

Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

- **Freeways**

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

- **Expressways**

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

- **Boulevards**

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

- **Other Major Thoroughfares**

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

- **Minor Thoroughfares**

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

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

Bicycle Map

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

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

Pedestrian Map

- **Sidewalk-Existing** – Paved paths (including but not limited to concrete, asphalt, brick, stone, or wood) on both sides of a highway facility and within the highway right-of-way that are adequate to safely accommodate pedestrian traffic.

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

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

Appendix C

CTP Inventory and Recommendations

Assumptions/ Notes:

- **Local ID:** This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.
- **Jurisdiction:** Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.
- **Existing Cross-Section:** Listed under '(ft)' is the approximate width of the roadway from edge of pavement to edge of pavement. Listed under 'lanes' is the total number of lanes, with the letter 'D' if the facility is divided.
- **Existing ROW:** The estimated existing right-of-way is based on the NCDOT GIS Roadway Characteristics layer. These right-of-way amounts are approximate and may vary.
- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using NCLOS, as documented in Chapter I.
- **Existing and Proposed AADT** (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2035 AADT E+C' is an estimate of the volume in 2035 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012 - 2019 Transportation Improvement Program (TIP). The '2035 AADT with CTP' is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter I.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended as part of the CTP.
- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.
- **Tier:** Tiers are defined as part of the North Carolina Multimodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- **Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H=highway, T= public transportation, R= rail, B= bicycle, and P= pedestrian).

TABLE 3 - CTP INVENTORY AND RECOMMENDATIONS

		HIGHWAY																	
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System				CTP Classification	Tier	Other Modes			
		From	To			Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)				Cross-Section	ROW (ft)	
VANIC0001-H	I-85	Granville County Line	Ruin Creek Rd (SR 1128)	Vance County	3.5	67	4D	170	65	60000	31000	57000	57000	90700	6A	300	F	Sta	T
VANIC0001-H	I-85	Ruin Creek Rd (SR 1128)	Dabney Dr (SR 1162)	Henderson	0.8	67	4D	160-170	65	60000	35000	64400	64400	90700	6A	300	F	Sta	T
VANIC0001-H	I-85	Dabney Dr (SR 1162)	NC 39	Henderson	1.6	67	4D	160-170	65	60000	39000	71800	71800	90700	6A	300	F	Sta	T
VANIC0001-H	I-85	NC 39	US 158 Business (Garnett St)	Henderson	0.7	67	4D	100-125	65	60000	34000	62600	62600	90700	6A	300	F	Sta	-
VANIC0001-H	I-85	US 158 Business (Garnett St)	Satterwhite Point Rd (SR 1319)	Vance County	2.2	67	4D	80-125	65	60000	27000	49700	49700	90700	6A	300	F	Sta	-
VANIC0001-H	I-85	Satterwhite Point Rd (SR 1319)	US 1 Bypass	Vance County	1.0	67	4D	80	65	60000	26000	47800	47800	90700	6A	300	F	Sta	-
VANIC0001-H	I-85	US 1 Bypass	US 1/158	Vance County	2.0	67	4D	80	65	60000	37000	58900	58900	90700	6A	300	F	Sta	-
VANIC0001-H	I-85	US 1/158	Warren County Line	Vance County	2.8	67	4D	80	65	60000	30000	55200	55200	90700	6A	300	F	Sta	-
U-3836	I-85 Service Road	Poplar Creek Rd	Western Outer Loop (SR 1296)	Vance County	2.3	-	-	-	-	-	-	-	-	10200	2E	60	Min	Sub	B P
VANIC0002-H	US 1	Franklin County Line	Beechtree Trail Rd (SR 1104)	Vance County	2.7	48	4D	100	55	45200	13000	16600	16600	59900	4A	300	F	Sta	T
W-5317	US 1	Beechtree Trail Rd (SR 1104)	Kitrell College Rd (SR 1105)	Kitrell	1.1	62	5	75-150	45	33000	13000	16600	16600	40100	4E	135	B	Sta	T
W-5317	US 1	Kitrell College Rd (SR 1105)	US 1 Business (Raleigh Rd)	Kitrell	1.2	48	5	100	55	33000	12000	22100	18800	40100	4E	135	B	Sta	T
VANIC0003-H	US 1 (Kitrell Bypass)	Beechtree Trail Rd (SR 1104)	US 1 Business (Raleigh Rd)	Vance County	2.4	-	-	-	-	-	-	-	-	62000	4A	300	F	Sta	-
VANIC0004-H	US 1 Business (Raleigh Rd)	US 1 Bypass	Peter Gill Rd (SR 1548)	Vance County	2.4	22	2	100	55	12600	2500	3200	3200	12600	ADQ	-	Maj	Reg	-
R-2503	US 1 Business (Raleigh Rd)	Peter Gill Rd (SR 1548)	US 1 Bypass	Vance County	0.4	22	2	100	55	12600	5800	7400	7400	41200	4C	110	B	Reg	-
R-2503	US 1 Business (Raleigh Rd)	US 1 Bypass	JP Taylor Rd (SR 1139)	Vance County	1.6	22	2	100	55	12600	10000	12800	12800	41200	4C	110	B	Reg	-
R-2503	US 1 Business (Raleigh Rd)	JP Taylor Rd (SR 1139)	Old County Home Rd (SR 1101)	Vance County	0.4	36	2	100	45	12600	14000	17900	17900	41200	4C	110	B	Reg	-
R-2503	US 1 Business (Raleigh Rd)	Old County Home Rd (SR 1101)	Dorsey Ave	Henderson	0.8	36	2	0-100	35	12600	7000	9000	9000	41200	4C	110	B	Reg	-
R-2503	US 1 Business (Raleigh Rd)	Dorsey Ave	US 158 Business (Garnett St)	Henderson	0.1	36	2	0	35	12600	7300	9300	9300	41200	4C	110	B	Reg	-
		Warrenton Rd (SR 1001)	Satterwhite Point Rd (SR 1319)	Vance County	0.4	64	5	100	55	33500	15000	19200	19200	33500	5A	100	Maj	Reg	B
		Satterwhite Point Rd (SR 1319)	US 1 Bypass	Vance County	1.2	22	2	60	55	12600	3300	4200	4200	12600	2A	60	Maj	Reg	B
		US 1 Bypass	Brookston Rd (SR 1507)	Vance County	1.2	24	2	100-260	55	12600	3900	5000	5000	12600	2A	60	Maj	Reg	B
		Brookston Rd (SR 1507)	Flemingtown Rd (SR 1371)	Middleburg	2.0	22	2	100	55	12600	5700	7300	7300	12600	2A	60	Maj	Reg	B
		Flemingtown Rd (SR 1371)	Warren County Line	Middleburg	1.9	22	2	100	55	12600	5400	6900	6900	12600	ADQ	-	Maj	Reg	-

HIGHWAY

Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System						2035 Proposed System						CTP Classification	Tier	Other Modes
		From	To			Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)					
VANC0006-H	US 1 Bypass	US 1 Bus (Raleigh Rd)	S Lake Lodges Rd (SR 1113)	Vance County	0.6	48	4D	90	55	51600	2500	3200	3200	59900	4A	300	F	Sta	T	
VANC0005-H	US 1 Bypass	S Lake Lodges Rd (SR 1113)	Bear Pond Rd (SR 1115)	Vance County	1.3	48	4D	90-130	55	51600	11000	20200	20200	59900	4A	300	F	Sta	T	
	US 1 Bypass	Bear Pond Rd (SR 1115)	Old Epsom Rd	Vance County	1.7	48	4D	130	55	51600	9700	17800	17800	51600	ADQ	-	F	Sta	-	
	US 1 Bypass	Old Epsom Rd	NC 39	Henderson	1.5	48	4D	130	55	51600	12000	18700	18700	51600	ADQ	-	F	Sta	-	
	US 1 Bypass	NC 39	Warrenton Rd (SR 1001)	Vance County	1.7	48	4D	130	55	51600	10000	15600	15600	51600	ADQ	-	F	Sta	-	
	US 1 Bypass	Warrenton Rd (SR 1001)	I-85	Vance County	1.4	48	4D	130	55	51600	74000	11500	11500	51600	ADQ	-	F	Sta	-	
	US 158 Business	Granville County Line	Crest Rd	Vance County	4.5	18	2	60	55	11100	3200	4100	4100	11100	2A	60	Maj	Reg	B	
	US 158 Business	Crest Rd	Dabney Dr (SR 1162)	Henderson	1.3	44	4	0	35	22100	5400	6900	6900	22100	2D	90	Maj	Reg	B P	
	US 158 Business (Consistent with Dabney Dr (SR 1162))	Dorsey Ave	US 158 Business (Garrett St)	Henderson	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	US 158 Business	Dabney Dr (SR 1162)	NC 39 (Andrew Ave)	Henderson	0.9	43	2	0-60	30	8800	8200	10500	10500	8800	-	-	Maj	Reg	-	
	US 158 Business	NC 39 (Andrews Ave)	Main St	Henderson	0.7	33	2	60-100	35	10000	6400	8200	8200	10000	ADQ	-	Maj	Reg	-	
	US 158 Business	Main St	Bickett St (SR 1271)	Henderson	0.6	52	5	100	45	45000	11000	14100	14100	45000	5A	100	Maj	Reg	B	
	US 158 Business	Bickett St (SR 1271)	Warrenton Rd (SR 1001)	Henderson	0.5	64	5	100	55	46100	15000	19200	19200	45000	5A	100	Maj	Reg	B	
	US 158 Business	Dabney Dr (SR 1162)	Perry Ave	Henderson	0.1	-	-	-	-	-	-	-	-	11600	2C	50	Maj	Reg	-	
	US 158 Bypass	Granville County Line	Poplar Creek Rd (SR 1128)	Vance County	1.2	24	2	200	55	12000	2900	3700	3700	12000	ADQ	-	Maj	Reg	-	
VANC0006-H	US 158 Bypass	Poplar Creek Rd (SR 1128)	Ruin Creek Rd (SR 1128)	Vance County	0.6	24	2	200	55	12000	5800	10700	10700	14200	3A	80	Maj	Reg	-	
	US 158 Bypass	Ruin Creek Rd (SR 1128)	Dabney Dr (SR 1162)	Henderson	0.3	110	4	120	45	55000	7900	10100	10100	55000	ADQ	-	Maj	Reg	-	
	US 158 Bypass	Dabney Dr (SR 1162)	I-85	Henderson	0.6	110	4	120	35	55000	10000	12800	12800	55000	ADQ	-	Maj	Reg	-	
VANC0007-H	NC 39	Franklin County Line	Foster Rd (SR 1544)	Vance County	0.8	24	2	60	55	12700	6300	9800	9800	14200	3A	80	Maj	Reg	-	
VANC0007-H	NC 39	Foster Rd (SR 1544)	Gilburg Rd (SR 1519)	Vance County	2.5	24	2	60-100	55	12700	7700	12000	12000	14200	3A	80	Maj	Reg	-	
VANC0007-H	NC 39	Gilburg Rd (SR 1519)	Vanco Mill Rd (SR 1148)	Vance County	1.1	24	2	60	55	12700	7200	11200	11200	14200	3A	80	Maj	Reg	-	
VANC0007-H	NC 39	Vanco Mill Rd (SR 1148)	Garrett Rd (SR 1538)	Vance County	0.7	24	2	100	55	12700	5200	8100	8100	14200	3A	80	Maj	Reg	-	
VANC0008-H	NC 39	Garrett Rd (SR 1538)	Garland St (SR 1560)	Vance County	1.0	24	2	60-100	45	12700	16000	25000	25000	35100	4C	110	B	Reg	B P	
VANC0008-H	NC 39	Garland St (SR 1560)	US 1 Bypass	Henderson	0.5	44	4	100	45	22100	16000	25000	25000	35100	4C	110	B	Reg	B P	
VANC0008-H	NC 39	US 1 Bypass	Pinkston St (SR 1214)	Henderson	0.4	44	4	100	35	22100	17000	26500	26500	27800	4C	110	B	Reg	B P	

HIGHWAY

Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System				CTP Classification	Tier	Other Modes		
		From	To			Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)				Cross-Section	ROW (ft)
VANC0009-H	NC 39	Pinkston St (SR 1214)	Water St (SR 1518)	Henderson	0.4	37	2	60	35	11800	14000	21800	20800	13000	3B	80	Reg	T B P
VANC0009-H	NC 39	Water St (SR 1518)	Chestnut St (SR 1226)	Henderson	0.2	37	2	60	35	11800	-	22800	21800	13000	3B	80	Reg	T B P
VANC0010-H	NC 39	Chestnut St (SR 1226)	Beckford Dr (SR 1166)	Henderson	0.3	52	4	0-60	35	23000	15000	23400	22400	27800	4C	110	B	B P
VANC0010-H	NC 39	Beckford Dr (SR 1166)	I-85	Henderson	0.3	52	5	60-80	35	25000	14000	21800	20800	27800	4C	110	B	B P
VANC0011-H	NC 39	I-85	St Andrews Church Rd (SR 1309)	Henderson	1.3	24	2	60-80	55	11400	5000	7800	7800	14200	3A	80	Reg	B
VANC0011-H	NC 39	St Andrews Church Rd (SR 1309)	Spring Valley Rd (SR 1317)	Vance County	1.4	24	2	60	55	11400	5900	9200	9200	14200	3A	80	Reg	B
VANC0011-H	NC 39	Spring Valley Rd (SR 1317)	Stagecoach Rd (SR 1329)	Vance County	4.1	24	2	60	55	11400	5700	8900	8900	14200	3A	80	Reg	B
	NC 39	Stagecoach Rd (SR 1329)	Rice Rd (SR 1341)	Vance County	1.6	20	2	60	55	8800	4400	5600	5600	11400	2A	60	Reg	B
	NC 39	Rice Rd (SR 1341)	Hibernia Rd (SR 1347)	Vance County	4.5	20	2	60	55	8800	2500	3200	3200	11400	2A	60	Reg	B
	NC 39	Hibernia Rd (SR 1347)	Rock Spring Church Rd (SR 1356)	Vance County	0.8	20	2	60	55	8800	1500	1900	1900	11400	2A	60	Reg	B
	NC 39	Rock Spring Church Rd (SR 1356)	Virginia Border	Vance County	2.7	20	2	60	55	8800	620	800	800	11400	2A	60	Reg	-
	Anderson Creek Rd (SR 1374)	Satterwhite Point Rd (SR 1319)	Flemingtwn Rd (SR 1371)	Vance County	1.4	20	2	0	55	8800	630	800	800	11400	2A	60	Min	B
VANC0012-H	Bear Pond Rd (SR 1115)	US 1 Business (Raleigh Rd)	US 1 Bypass	Vance County	0.4	18	2	0	55	11000	4900	6300	6300	11000	ADQ	-	Sub	-
	Bear Pond Rd (SR 1115)	US 1 Bypass	Gilburg Rd (SR 1519)	Vance County	1.6	18	2	0	55	7100	2700	4900	4900	7100	ADQ	-	Sub	-
	Belmont Dr (SR 1101)	Francis Ave (SR 1117)	US 1 Business (Raleigh Rd)	Vance County	0.1	22	2	0	55	10100	4100	6200	6200	10100	ADQ	-	Sub	-
	Bobbitt Rd (SR 1549)	Franklin County Line	Bristol Meadows Rd (SR 1622)	Vance County	2.9	18	2	0	55	7100	1100	1700	1700	11400	2A	60	Min	B
	Bobbitt Rd (SR 1549)	Bristol Meadows Rd (SR 1622)	US 1 Business (Raleigh Rd)	Vance County	1.4	18	2	0	55	7100	2400	4400	4400	11400	2A	60	Min	B
	Brookston Rd (SR 1507)	Warrenton Rd (SR 1001)	Carver School Rd (SR 1505)	Vance County	1.4	18	2	60	55	7100	1900	3200	3200	7100	ADQ	-	Sub	-
	Brookston Rd (SR 1507)	Carver School Rd (SR 1505)	US 1/158	Vance County	2.9	18	2	60	55	7100	720	1300	1300	7100	ADQ	-	Sub	-
	Carey Chapel Rd (SR 1519)	Vicksboro Rd (SR 1533)	Newton Dairy Rd (SR 1518)	Vance County	1.0	18	2	0	55	11000	2900	5200	5200	11000	ADQ	-	Sub	-
	Carey Chapel Rd (SR 1519)	Newton Dairy Rd (SR 1518)	Vincent Hoyle Rd (SR 1566)	Vance County	0.7	18	2	0	55	11000	3300	6100	6100	11000	ADQ	-	Sub	-
	Carey Chapel Rd (SR 1519)	Vincent Hoyle Rd (SR 1566)	Warrenton Rd (SR 1001)	Vance County	0.8	18	2	0	55	11000	3400	6200	6200	11000	ADQ	-	Sub	-

HIGHWAY																	
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes
		From	To			Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section			
	Charlie Grissom Rd (SR 1101)	Franklin County Line	Egypt Mountain Rd (SR 1100)	Vance County	2.1	18	2	0	55	7100	620	1000	7100	ADQ	-	Sub	-
	Charlie Grissom Rd (SR 1101)	Egypt Mountain Rd (SR 1100)	Fairport Rd (SR 1103)	Vance County	1.0	18	2	0	55	7100	770	1400	7100	ADQ	-	Sub	-
	Charlie Grissom Rd (SR 1101)	Fairport Rd (SR 1103)	S Lynnbank Rd (SR 1101)	Vance County	2.6	18	2	0	55	7100	690	1200	7100	ADQ	-	Sub	-
	Corbett Rd (Consistent with Dabney Dr (SR 1162))	US 158 Business	Parham St	Henderson	0.7	24	2	0	35	11600	-	-	-	-	-	-	-
	Corbett Rd (Consistent with Dabney Dr (SR 1162))	Parham St	I-85	Henderson	0.9	-	-	-	-	-	-	-	-	-	-	-	-
	Corbett Rd (Consistent with Dabney Dr Ext (SR 1162))	US 158 Business	US 158 Business	Henderson	0.1	-	-	-	-	-	-	-	-	-	-	-	-
VANC0013-H	Dabney Dr (SR 1162)	Oxford Rd (US 158 Business)	US 158 Bus (Garnett St)	Henderson	< 0.1	44	4	0	35	21000	12000	15400	14700	4C ¹	110	Maj	Sub B P
VANC0013-H	Dabney Dr (SR 1162)	US 158 Bus (Garnett St)	Roanoke Ave	Henderson	0.9	36	3	60	35	14400	15000	19200	18500	4C ¹	110	Maj	Sub B P
VANC0013-H	Dabney Dr (SR 1162)	Roanoke Ave	Coble Blvd	Henderson	0.2	36	3	60	35	14400	21000	26700	25400	4C ¹	110	Maj	Sub B P
VANC0013-H	Dabney Dr (SR 1162)	Coble Blvd	Cooper Drive	Henderson	0.3	52	5	60	35	28900	29000	45200	43000	4C ¹	110	B	Sub B P M
VANC0013-H	Dabney Dr (SR 1162)	Cooper Drive	I-85	Henderson	0.1	52	5	60	35	28900	29000	45200	43000	6B ¹	150	B	Sub B P M
VANC0014-H	Dabney Dr (SR 1162)	I-85	US 158 Bypass	Henderson	0.3	52	5	60	35	28900	21000	32500	31000	6B	150	B	Sub B P M
VANC0015-H	Dabney Dr Ext (SR 1267)	US 158 Business	US 1 Business	Henderson	0.3	52	5	80	35	28900	7900	8800	8800	5A	100	Maj	Sub -
VANC0015-H	Dabney Dr Ext (SR 1267)	Dabney Dr Ext (SR 1267)	US 1 Business	Henderson	0.2	-	-	-	-	-	-	-	-	5A	100	Maj	Sub -
VANC0015-H	Dabney Dr Ext (SR 1267)	US 1 Business	Nicholas St (SR 1143)	Henderson	0.3	-	-	-	-	-	-	-	-	2A	60	Min	Sub -
VANC0016-H	Dabney Rd (SR 1304)	Granville County Line	Hicksboro Rd (SR 1303)	Vance County	3.5	24	2	0	55	11400	990	1300	1300	2A	80	Min	Sub B
VANC0016-H	Dabney Rd (SR 1303)	Hicksboro Rd (SR 1303)	Ruin Creek Rd (SR 1128)	Vance County	1.0	24	2	0-60	55	11400	6200	10400	10400	3A	80	Min	Sub B
VANC0016-H	Dabney Rd (SR 1162)	Ruin Creek Rd (SR 1128)	US 158 Bypass	Vance County	0.3	22	2	60	35	10500	5400	8400	8400	3A	80	Min	Sub -
	Dorsey Ave	US 158 Business	US 1 Business	Henderson	0.2	36	3	0	35	14400	-	-	-	ADQ	-	Min	Sub -
	E Main St (SR 1551)	S Chavis Rd (SR 1552)	N Williams St	Kittrell	0.2	18	2	0	35	9600	1200	2200	2200	ADQ	-	Min	Sub -

HIGHWAY

Local ID	Section		Jurisdiction	Dist. (mi)	2007 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
	From	To			Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
	Facet Rd (SR 1231)	Bear Pond Rd (SR 1115)	Old Epsom Rd (SR 1148)	Vance County	1.8	2	0	55	11400	3700	4700	4700	11400	ADQ	-	Sub	-
	Flemingtown Rd (SR 1371)	US 1/158	Anderson Creek Rd (SR 1374)	Vance County	2.0	2	0	55	7100	780	1000	1000	11400	2A	60	Sub	B
	Garrett Rd (SR 1538)	Vanco Mill Rd (SR 1148)	NC 39	Vance County	0.6	2	60	45	7800	2400	4600	4600	7800	ADQ	-	Sub	-
	Garrett Rd (SR 1538)	NC 39	Rock Mill Rd (SR 1519)	Vance County	0.5	2	60	45	7800	2300	4400	4400	7800	ADQ	-	Sub	-
	Gilburg Rd (SR 1519)	Bobbit Rd (SR 1549)	Abbott Rd (SR 1547)	Vance County	2.3	2	0	55	7100	370	600	600	7100	ADQ	-	Sub	-
	Gilburg Rd (SR 1519)	Abbott Rd (SR 1547)	Bear Pond Rd (SR 1115)	Vance County	1.7	20	0	55	8800	580	1100	1100	8800	ADQ	-	Sub	-
	Gilburg Rd (SR 1519)	Bear Pond Rd (SR 1115)	NC 39	Vance County	0.5	20	0	55	10700	3100	4800	4800	10700	ADQ	-	Sub	-
	Glebe Rd (SR 1306)	Dabney Rd (SR 1304)	Glover Rd (SR 1306)	Vance County	0.5	18	0	55	7100	570	1000	1000	11400	2A	60	Sub	B
	Glebe Rd (SR 1308)	Glover Rd (SR 1306)	Hicksboro Rd (SR 1303)	Vance County	0.8	18	0	55	7100	720	1300	1300	11400	2A	60	Sub	B
	Glebe Rd (SR 1308)	Hicksboro Rd (SR 1303)	Kelly Road (SR 1326)	Vance County	1.9	18	0	55	7100	820	1500	1500	11400	2A	60	Sub	B
	Glebe Rd (SR 1308)	Kelly Road (SR 1326)	NC 39	Vance County	2.0	18	0	55	7100	570	1000	1000	11400	2A	60	Sub	B
	Graham Ave (SR 1218)	Western Outer Loop (SR 1295)	Dabney Drive (SR 1162)	Henderson	1.1	20	2	100	35	10700	9800	9800	10700	2D	90	Sub	-
	Hicksboro Rd (SR 1303)	Dabney Rd (SR 1304)	Glebe Rd (SR 1308)	Vance County	2.0	18	2	55	7100	760	1300	1300	7100	2A	60	Sub	-
	Hicksboro Rd (SR 1303)	Glebe Rd (SR 1308)	Stagecoach Rd (SR 1329)	Vance County	2.8	18	2	55	7100	1200	1500	1500	11400	2A	60	Sub	B
	Hicksboro Rd (SR 1303)	Stagecoach Rd (SR 1329)	Stovall Rd (SR 1336)	Vance County	1.7	18	2	55	7100	1200	1700	1700	11400	2A	60	Sub	B
	Jacksontown Rd (SR 1369)	Middleburg Municipal Boundary	Cedar Cove Rd (SR 1370)	Vance County	1.5	18	2	100	55	1900	3400	3400	11400	2A	60	Sub	B
	Jacksontown Rd (SR 1369)	Cedar Cove Rd (SR 1370)	Warren County Line	Vance County	3.0	20	2	60-100	55	8800	1400	1400	11400	2A	60	Sub	B
	JP Taylor Rd (SR 1139)	Facet Rd (SR 1231)	Warehouse Rd (SR 1216)	Vance County	0.7	24	2	55	11400	3700	4700	4700	11400	ADQ	-	Sub	-
	JP Taylor Rd (SR 1139)	Warehouse Rd (SR 1216)	US 1 Business (Raleigh Rd)	Vance County	0.2	24	2	55	11400	3400	6300	6300	11400	ADQ	-	Sub	-
VANC0017-H	JP Taylor Rd (SR 1139)	US 1 Business (Raleigh Rd)	Old County Home Rd (SR 1101)	Vance County	0.3	-	-	-	-	-	-	-	11400	2A	60	Sub	-
	Kelly Rd (SR 1326)	Hicksboro Rd (SR 1303)	Glebe Rd (SR 1308)	Vance County	2.5	18	2	60	55	1700	3100	3100	7100	2A	60	Sub	-
	Kelly Rd (SR 1326)	Glebe Rd (SR 1308)	Stagecoach Rd (SR 1329)	Vance County	2.1	20	2	60	55	980	1800	1800	8800	ADQ	-	Sub	-

HIGHWAY

Local ID	Section		2007 Existing System										2035 Proposed System					Other Modes
	Facility	From	To	Jurisdiction	Dist. (mi)	Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+G	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	
	Kitrell College Rd (SR 1109)	S Lynnbank Rd (SR 1101)	US 1	Kitrell	1.6	18	2	0	55	7100	1300	2400	7100	ADQ	-	Min	Sub	-
VANC0018-H	Kitrell Rd (SR 1551)	S Chavis Rd (SR 1552)	Black Horse Ln	Kitrell	2.3	18	2	0	35	7100	790	1200	7100	ADQ	-	Min	Sub	-
	Kitrell Rd (SR 1549)	Black Horse Ln	Bobbitt Rd (SR 1549)	Vance County	0.1	18	2	0	55	7100	790	1200	7100	ADQ	-	Min	Sub	-
	Milton Stainback Rd (SR 1512)	S Cokesbury Rd (SR 1513)	Old Warrenton Rd (SR 1001)	Vance County	0.2	18	2	60	55	7100	-	-	7100	ADQ	-	Min	Sub	-
	Morgan Rd (SR 1342)	Granville County Line	Hicksboro Rd (SR 1303)	Vance County	1.5	18	2	0	55	7100	790	1300	11400	2A	60	Min	Sub	B
	Morgan Rd (SR 1342)	Hicksboro Rd (SR 1303)	NC 39	Vance County	2.9	18	2	0	55	7100	860	1400	11400	2A	60	Min	Sub	B
U-4916/ VANC0019-H	N Beckford Dr (SR 1165)	NC 39	US 158 Bus (Garnett St)	Henderson	0.8	48	4	100	35	27800	4900	6300	27800	4C	110	Maj	Sub	-
	Newton Dairy Rd (SR 1518)	Sunnyview Rd	US 1 Bypass	Vance County	0.4	20	2	0	35	10700	2600	3300	10700	ADQ	-	Min	Sub	-
	Newton Dairy Rd (SR 1518)	US 1 Bypass	Carey Chapel Rd (SR 1519)	Vance County	1.4	20	2	0	45	10000	1700	2200	10000	ADQ	-	Min	Sub	-
VANC0020-H	Nicholas St (SR 1143)	Miriam St	S Williams St (SR 1143)	Henderson	0.6	18	2	0	35	7100	5800	7400	11700	2C	50	Min	Sub	P
	N Lee Avenue (SR 1399)	US 1/158	Middleburg Municipal Boundary	Middleburg	0.5	18	2	0	55	7100	2200	3700	11400	2A	60	Min	Sub	B
	N Lynnbank Rd (SR 1101)	Community House Rd (SR 1107)	Old County Home Rd (SR 1120)	Vance County	1.2	18	2	0	55	7100	2000	3600	7100	ADQ	-	Min	Sub	-
	N Lynnbank Rd (SR 1115)	Old County Home Rd (SR 1120)	Edwards Rd (SR 1114)	Vance County	1.5	18	2	0	55	7100	1800	3300	7100	ADQ	-	Min	Sub	-
VANC0021-H	N Lynnbank Rd (SR 1115)	Edwards Rd (SR 1114)	US 1 Business (Raleigh Rd)	Vance County	0.9	18	2	0	55	7100	2400	4300	7100	ADQ	-	Min	Sub	-
	N Pinkston St (SR 1214)	NC 39	Water St (SR 1518)	Henderson	0.4	36	2	0	35	11800	2200	2800	11800	ADQ	-	Min	Sub	-
VANC0022-H	Nurbush Rd (SR 1308)	NC 39	Hedrick Rd (SR 1403)	Vance County	2.1	22	2	0	55	10100	940	2000	14200	2A	60	Min	Sub	B
VANC0022-H	Nurbush Rd (SR 1308)	Hedrick Rd (SR 1403)	Satterwhite Point Rd (SR 1319)	Vance County	0.9	22	2	0	55	10100	1400	2900	14200	2A	60	Min	Sub	B
	N Williams St (SR 1555)	E Main St (SR 1551)	W Church St (SR 1579)	Kitrell	0.1	20	2	60	35	9600	-	-	9600	ADQ	-	Min	Sub	-
	N Williams St (SR 1143)	E Montgomery St	NC 39	Henderson	0.3	24	2	0	35	11800	1700	2200	11800	ADQ	-	Min	Sub	-
	Old County Home Rd (SR 1101)	Vance Academy Rd (SR 1120)	Francis Ave (SR 1117)	Vance County	1.8	22	2	0	55	10100	2900	5300	10100	ADQ	-	Min	Sub	-

		HIGHWAY										2007 Existing System										2035 Proposed System									
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section (ft)	ROW (ft)	CTP Classification	Tier	Other Modes													
		From	To																												
	Old Epsom Rd (SR 1148)	Nicholas St (SR 1589)	Fuller St (SR 1141)	Henderson	0.9	20	0	25	9600	3100	3900	3900	9600	ADQ	-	ADQ	Sub	-													
	Old Epsom Rd (SR 1148)	Fuller St (SR 1141)	US 1 Bypass	Henderson	0.7	20	0	35	9600	4500	7700	7700	9600	ADQ	-	ADQ	Sub	-													
	Old Norlina Rd (SR 1137)	US 158 Business (Garnett St)	Main St	Henderson	0.1	22	2	35	10500	2300	2900	2900	10500	ADQ	-	ADQ	Sub	-													
	Old Norlina Rd (SR 1137)	Main St	US 158 Business (Garnett St)	Henderson	0.8	22	2	35	10500	1200	1500	1500	10500	ADQ	-	ADQ	Sub	-													
	Old Warrenton Rd (SR 1001)	Milton Stainback Rd (SR 1512)	Warrenton Rd (SR 1001)	Vance County	0.5	20	2	55	8800	180	200	200	8800	ADQ	-	ADQ	Sub	-													
	Poplar Creek Rd (SR 1126)	US 158 Business	US 158 Bypass	Vance County	1.2	24	2	55	11400	1900	4000	4000	11400	2A	60	2A	Sub	B													
	Poplar Creek Rd (SR 1126)	US 158 Bypass	Dabney Rd (SR 1304)	Vance County	1.9	20	2	45	8000	1100	2300	2300	8000	2B	60	2B	Sub	B													
	Rock Mill Rd (SR 1519)	NC 39	Finch Rd (SR 1540)	Vance County	1.9	18	2	55	7100	2000	3600	3600	7100	ADQ	-	ADQ	Sub	-													
	Rock Mill Rd (SR 1519)	Finch Rd (SR 1540)	Ennis Murphy Rd (SR 1534)	Vance County	1.0	18	2	55	7100	3200	5800	5800	7100	ADQ	-	ADQ	Sub	-													
	Rock Mill Rd (SR 1519)	Ennis Murphy Rd (SR 1534)	Vicksboro Rd (SR 1533)	Vance County	0.2	18	2	55	7100	2500	4600	4600	7100	ADQ	-	ADQ	Sub	-													
	Rock Spring Church Rd (SR 1356)	NC 39	Virginia Border	Vance County	3.1	18	2	60	7100	750	1100	1100	11400	2A	60	2A	Sub	B													
	Rocky Fork Rd (SR 1550)	Franklin County Line	Bobbit Rd (SR 1549)	Vance County	0.4	18	2	55	7100	940	1300	1300	7100	ADQ	-	ADQ	Sub	-													
	Ruin Creek Rd (SR 1128)	US 158 Business	Western Outer Loop (SR 1295)	Vance County	1.5	20	2	35	9600	3500	6300	6300	9600	ADQ	-	ADQ	Sub	-													
	Ruin Creek Rd (SR 1128)	Western Outer Loop (SR 1295)	US 158 Bypass	Henderson	0.9	48	4	35	21000	10000	15600	15600	21000	5A	100	5A	Sub	B P													
	Ruin Creek Rd (SR 1302)	US 158 Bypass	Dabney Rd (SR 1304)	Henderson	0.1	48	5	35	21000	6400	11600	11600	21000	5A	100	5A	Sub	B P													
	Satterwhite Point Rd (1319)	US 1/158	I-85	Vance County	0.7	24	2	0	11400	2700	5000	5000	11400	2A	60	2A	Sub	B													
	Satterwhite Point Rd (1319)	I-85	Coopers Grove Rd (SR 1377)	Vance County	1.2	24	2	0	11400	2800	4700	4700	11400	2A	60	2A	Sub	B													
	Satterwhite Point Rd (1319)	Coopers Grove Rd (SR 1377)	Anderson Creek Rd (SR 1374)	Vance County	2.3	24	2	0	11400	1500	2800	2800	11400	2A	60	2A	Sub	B													
U-4916	S Beckford Dr (SR 1165)	Dabney Dr (SR 1162)	Roanoke Ave	Henderson	0.9	24	2	0	11800	9200	11700	11700	27800	4C	110	4C	Sub	B P													
U-4916	S Beckford Dr (SR 1165)	Roanoke Ave	NC 39	Henderson	0.7	24	2	0-100	11800	12000	18700	18700	27800	4C	110	4C	Sub	B P													
	S Cokesbury Rd (SR 1515)	Vicksboro Rd (SR 1533)	Tower Rd (SR 1513)	Vance County	2.2	20	2	0	8800	1300	2400	2400	8800	ADQ	-	ADQ	Sub	-													

HIGHWAY

Local ID	Section		Jurisdiction	Dist. (mi)	2007 Existing System					2035 Proposed System					CTP Classification	Other Modes			
					From	To	Cross-Section (ft)	Lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP			Proposed Capacity (vpd)	Cross-Section	ROW (ft)
	S Cokesbury Rd (SR 1513)	Tower Rd (SR 1513)	Vance County	0.2	18	2	0	55	7100	2100	2700	7100	ADQ	-	Sub	-			
	S Lynnbank Rd (SR 1101)	Charlie Grissom Rd (SR 1101)	Vance County	2.3	18	2	0	55	7100	1500	1900	7100	2A	60	Sub	-			
	Southerland Mill Rd (SR 1523)	Warren County Line	Vance County	1.5	18	2	0	45	7500	680	1200	7500	ADQ	-	Sub	-			
	Spring Valley Lake Rd (SR 1318)	Spring Valley Rd (SR 1317)	Vance County	3.0	18	2	0	45	7500	680	900	7500	ADQ	-	Sub	-			
	Spring Valley Rd (SR 1317)	US 158 Business (Garnett St)	Vance County	0.4	18	2	0	35	7100	2100	2700	7100	ADQ	-	Sub	-			
	Spring Valley Rd (SR 1317)	Spring Valley Lake Rd (SR 1318)	Vance County	0.3	18	2	0	55	7100	2100	2700	7100	ADQ	-	Sub	-			
	Spring Valley Rd (SR 1317)	Spring Valley Lake Rd (SR 1318)	Vance County	2.1	18	2	0	55	7100	1200	1800	7100	ADQ	-	Sub	-			
	St Matthews St (SR 1143)	US 1 Business (Raleigh Rd)	Henderson	0.6	18	2	0	55	7100	970	1200	7100	ADQ	-	Sub	-			
	Stagecoach Rd (SR 1329)	Granville County Line	Vance County	4.0	18	2	0	55	7100	1700	3100	7100	ADQ	-	Sub	-			
	Stagecoach Rd (SR 1329)	Burnside Rd (SR 1335)	Vance County	1.2	18	2	0	55	7100	2300	2900	11400	2A	60	Sub	B			
	Stewart Farm Rd (SR 1518)	Carey Chapel Rd (SR 1519)	Vance County	3.1	18	2	0	55	11000	350	500	11000	ADQ	-	Sub	-			
	Stovall Rd (SR 1336)	Granville County Line	Vance County	0.6	18	2	0	55	7100	380	600	11400	2A	60	Sub	B			
	S Williams St (SR 1143)	Nicholas St (SR 1143)	Henderson	0.8	30	2	0	35	11800	6200	7500	11800	ADQ	-	Sub	-			
VANC0023-H	Thomas Rd (SR 1329)	NC 39	Vance County	0.7	18	2	0	45	7500	3200	6700	11400	2A	60	Sub	-			
	Thomas Rd (SR 1329)	Will Jefferson Rd (SR 1331)	Vance County	4.2	18	2	0	45	7500	1200	2500	7500	ADQ	60	Sub	-			
	Vance Academy Rd (SR 1120)	Old County Home Rd (SR 1120)	Vance County	1.8	20	2	60	55	8800	2800	4400	8800	ADQ	-	Sub	-			
	Vanco Mill Rd (SR 1148)	US 1 Bypass	Vance County	0.9	20	2	0	55	8800	2800	4700	8800	ADQ	-	Sub	-			
VANC0024-H	Vicksboro Rd (SR 1533)	Swain Dr (SR 1561)	Vance County	0.3	18	2	0	45	10500	7000	12700	13200	3A	80	Sub	B			
VANC0024-H	Vicksboro Rd (SR 1533)	Swain Dr (SR 1561)	Vance County	0.6	20	2	60	45	10500	5700	10500	13200	3A	80	Sub	B			
VANC0024-H	Vicksboro Rd (SR 1533)	Carey Chapel Rd (SR 1519)	Vance County	0.3	18	2	60	55	7100	6000	10900	13200	3A	80	Sub	B			
VANC0024-H	Vicksboro Rd (SR 1533)	Club Pond Rd (SR 1531)	Vance County	1.2	18	2	60	55	7100	4700	9300	13200	3A	80	Sub	B			

HIGHWAY																			
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System					CTP Classification	Other Modes			
		From	To			Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section			ROW (ft)	Tier	
VANCO024-H	Wicksboro Rd (SR 1533)	Weidons Mill Rd (SR 1526)	Steed Dickerson Rd (SR 1516)	Vance County	1.7	18	2	60	55	7100	3700	6300	6300	6300	11400	2A	60	Min	Sub B
VANCO024-H	Wicksboro Rd (SR 1524)	Steed Dickerson Rd (SR 1516)	Warren County Line	Vance County	1.0	18	2	0	55	7100	2500	4600	4600	4600	11400	2A	60	Min	Sub B
VANCO025-H	Warrenton Rd (SR 1001)	US 1/158	John Deere Rd (SR 1608)	Vance County	0.8	24	2	60	55	11000	13000	20000	20000	20000	43500	4C	110	B	Sub -
VANCO025-H	Warrenton Rd (SR 1001)	John Deere Rd (SR 1608)	US 1 Bypass	Vance County	0.2	24	2	60-100	55	11400	11000	18700	18700	18700	43500	4C	110	B	Sub B
VANCO025-H	Warrenton Rd (SR 1001)	US 1 Bypass	Ellington Rd (SR 1591)	Vance County	0.6	24	2	100	55	11400	9700	16200	16200	16200	43500	4C	110	B	Sub B
VANCO025-H	Warrenton Rd (SR 1001)	Ellington Rd (SR 1591)	Brookston Rd (SR 1507)	Vance County	0.3	24	2	100	55	11400	8200	13700	13700	13700	43500	4C	110	B	Sub B
VANCO027-H	Warrenton Rd (SR 1001)	Brookston Rd (SR 1507)	Allison Cooper Rd (SR 1501)	Vance County	1.6	20	2	100	55	8800	6000	10200	10200	10200	11400	2A	60	Min	Sub B
VANCO027-H	Warrenton Rd (SR 1001)	Allison Cooper Rd (SR 1501)	Warren County Line	Vance County	2.0	20	2	100	55	8800	3600	5500	5500	5500	11400	2A	60	Min	Sub B
	Water St (SR 1518)	NC 39	Pinkston St (SR 1214)	Henderson	0.5	20	2	0	35	10500	3300	5100	5100	5100	10500	ADQ	-	Min	Sub P
	Water St (SR 1518)	Pinkston St (SR 1214)	Sunnyview Rd	Henderson	0.2	20	2	0	35	10500	3300	4200	4200	4200	10500	ADQ	-	Min	Sub -
	W Church St (SR 1579)	N Williams St (SR 1555)	Cemetery St	Kittrell	<0.1	18	2	0	35	7100	-	-	-	-	7100	ADQ	-	Min	Sub -
	W Church St (SR 1579)	Cemetery St	US 1	Kittrell	0.3	-	-	-	-	-	-	-	-	-	11800	2C	50	Min	Sub -
	Western Outer Loop (SR 1295)	Old County Home Rd (SR 1101)	US 158 Business	Vance County	1.1	24	4D	100	55	25800	-	10200	10200	12100	25800	4C	110	B	Sub B
	Western Outer Loop (SR 1295)	US 158 Business Loop (SR 1295)	Graham Avenue (SR 1218)	Vance County	1.2	24	4D	100	55	25800	-	11600	11600	9700	25800	4C	110	B	Sub B
VANCO028-H	Western Outer Loop (SR 1295)	Lynbank Rd (SR 1115)	Old County Home Rd (SR 1101)	Vance County	1.6	-	-	-	-	-	-	-	-	5000	11400	2A	60	Min	Sub B

The recommendation is for a one-way pair to convert existing Dabney Drive, Corbett Rd, and the abandoned rail corridor. Southbound traffic will travel along existing Dabney Drive and northbound traffic will travel along Corbett Rd and the abandoned rail corridor.

PUBLIC TRANSPORTATION AND RAIL

TABLE 4 - PUBLIC TRANSPORTATION

Local ID	Facility/ Route	Section (From - To)	Speed Limit (mph)	Distance (mi)	Existing System		Proposed System		Other Modes
					Type	Type	Type	Type	
VANC0001-T	Around Town Shuttle	NC 39 - Granville County Line	35-45	13.8	-	-	Bus	-	H B P
VANC0002-T	Service to Durham	Henderson - Durham	35-55	7.0	-	-	Bus	-	H B P
VANC0003-T	Service to Butner	Henderson - Butner	35-55	12.1	-	-	Bus	-	H P
VANC0004-T	Ruin Creek Road Park and Ride Lot	Serve VANC0001-T and VANC0002-T	-	-	-	-	Park and Ride Lot	-	-
VANC0005-T	Poplar Creek Road Park and Ride Lot	Serve VANC0002-T	-	-	-	-	Park and Ride Lot	-	-
VANC0006-T	Bear Pond Road Park and Ride Lot	Serve VANC0003-T	-	-	-	-	Park and Ride Lot	-	-

Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to Chapter 2. All recommendations for the Around Town Shuttle shown in this table are based on the railroad crossings proposed due to the Southeast High Speed Rail project.

TABLE 5 - RAIL

Local ID	Facility/ Route	Section (From - To)	Class	Speed Limit (mph)	Distance (mi)	Existing System		Proposed System		Other Modes
						Type	ROW (ft)	Type	ROW (ft)	
P-3819	Southeast High Speed Rail	Franklin County Line - Warren County Line	-	varies	20.7	Freight	-	High Speed Rail	-	B P
VANC0001-R	Henderson Rail Stop	-	-	-	-	-	-	Rail Stop	-	-
VANC0002-R	Henderson Intermodal Connector	-	-	-	-	-	-	Intermodal Connector	-	-

BICYCLE AND PEDESTRIAN 1

TABLE 6 - BICYCLE

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Cross-Section (ft)	Lanes	Type	Cross-Section	
VANC0001-B	I-85 Service Rd	Poplar Creek Rd (SR 1126) - Rain Creek Rd (SR 1128)	2.26	Concurrent with I-85 Service Rd - see Highway Table				H P
VANC0002-B	US 1/158	Spring Valley Rd (SR 1317) - Warren County Line	5.90	Concurrent with US 1/158 - see Highway Table				
VANC0003-B	US 158 Business	Granville County Line - Poplar Creek Rd (SR 1126)	1.07	2	On-Road	2A		
VANC0004-B	US 158 Business	Western Outer Loop (SR 1295) - Dabney Dr (SR 1162)	1.70	Concurrent with US 158 Bus - see Highway Table				P
VANC0005-B	US 158 Bus (Garnett St)	Crozier St - Spring Valley Rd (SR 1317)	1.40	Concurrent with US 158 Bus - see Highway Table				
VANC0006-H	NC 39	US 1 Bypass - Pinkston St (SR 1214)	0.78	Concurrent with NC 39 - see Highway Table				H P
VANC0007-H	NC 39	Pinkston St (SR 1214) - Chestnut St (SR 1226)	0.87	Concurrent with NC 39 - see Highway Table				H P
VANC0008-H	NC 39	Chestnut St (SR 1226) - I-85	6.74	Concurrent with NC 39 - see Highway Table				H
VANC0009-B	Anderson Creek Rd (SR 1374)	Stagcoach Rd (SR 1329) - Virginia Border	9.45	Concurrent with NC 39 - see Highway Table				
VANC0010-B	Beckford Dr (SR 1165)	Satterwhite Point Rd (SR 1319) - Flemington Rd (SR 1371)	1.30	Concurrent with Anderson Creek Rd - see Highway Table				
VANC0011-B	Bobbit Rd (SR 1549)	Dabney Dr (SR 1162) - NC 39	1.60	Concurrent with Beckford Dr - see Highway Table				H P
VANC0012-B	Bullockville Park Rd (SR 1366)	Franklin County Line - US 1 Business	4.22	Concurrent to Bobbit Rd - see Highway Table				
VANC0013-H	Burnside Rd (SR 1361)	Jacksontown Rd (SR 1369) - End of Road	3.68	18	2	On-Road	2A	
VANC0014-H	Dabney Dr (SR 1162)	Hicksboro Rd (SR 1303) - Stagcoach Rd (SR 1329)	3.12	20	2	On-Road	2A	
VANC0015-H	Dabney Dr Ext (SR 1267)	Warren County Line - End of Road	0.97	20	2	On-Road	2A	
VANC0016-H	Dabney Dr (SR 1162)	US 158 Bus - I-85	1.60	Concurrent with Dabney Dr - see Highway Table				H P
VANC0017-B	Dabney Dr (SR 1162)	I-85 - US 158 Byp	0.34	Concurrent with Dabney Dr - see Highway Table				H P
VANC0018-B	Dabney Dr (SR 1162)	US 158 Bus - US 1 Bus	0.58	Concurrent with Dabney Dr Ext - see Highway Table				H P
VANC0019-B	Dabney Dr (SR 1162)	Granville County Line - US 158 Bypass	4.59	Concurrent with Dabney Dr - see Highway Table				H
VANC0020-B	Flemington Rd (SR 1371)	Prosperity Dr - Dabney Dr (SR 1162)	0.16	2	On-Road	3B		
VANC0021-B	Glebe Rd (SR 1308)	Anderson Creek Rd (SR 1374) - Jackson Royster Rd (SR 1400)	0.16	Concurrent with Flemington Rd - see Highway Table				
VANC0022-B	Glebe Rd (SR 1308)	Dabney Dr (SR 1304) - NC 39	5.20	Concurrent with Glebe Rd - see Highway Table				
VANC0023-B	Haywood Wright Rd (SR 1311)	Western Outer Loop (SR 1295) - Dabney Dr (SR 1162)	1.08	20	2	On-Road	2D	P
VANC0024-B	Hickory Rd (SR 1303)	NC 39 - Ross Mill Rd (SR 1310)	0.80	20	2	On-Road	2A	
VANC0025-B	Jackson Royster Rd (SR 1400)	NC 39 - End of Road	2.28	18	2	On-Road	2A	
VANC0026-B	Jacksontown Rd (SR 1369)	Burnside Rd (SR 1335) - Dabney Rd (SR 1304)	4.48	Concurrent with Hicksboro Rd - see Highway Table				
VANC0027-B	Kelly Rd (SR 1326)	Flemington Rd (SR 1371) - Jacksontown Rd (SR 1369)	1.10	20	2	On-Road	2A	
VANC0028-B	N Lee Ave (SR 1369)	I-85 - Warren County Line	3.70	Concurrent with Jacksontown Rd - see Highway Table				
VANC0029-B	Nurtubush Rd (SR 1308)	Hicksboro Rd (SR 1303) - Glebe Rd (SR 1308)	2.50	Concurrent with Kelly Rd - see Highway Table				
VANC0030-B	Poplar Creek Rd (SR 1126)	Granville County Line - NC 39	4.40	Concurrent with Morgan Rd - see Highway Table				
VANC0031-B	Prosperity Dr	US 1/158 - I-85	3.00	Concurrent with N Lee Ave - see Highway Table				H
VANC0032-B	Rev Henderson Rd (SR 1359)	NC 39 - Satterwhite Point Rd (SR 1319)	3.10	Concurrent with Nurtubush Rd - see Highway Table				
VANC0033-B	Ridgeway Dr (SR 1329)	US 158 Bus - Dabney Rd (SR 1304)	0.14	36	3	On-Road	3B	
VANC0034-B	Rock Spring Church Rd (SR 1356)	US 158 Byp - Exchange St	1.66	20	2	On-Road	2A	
VANC0035-B	Ross Mill Rd (SR 1310)	Rock Spring Church Rd (SR 1356) - End of Road	0.10	18	2	On-Road	2A	
VANC0036-B	Satterwhite Point Rd (SR 1319)	Jacksontown Rd (SR 1369) - Warren County Line	3.10	Concurrent with Rock Spring Church Rd - see Highway Table				
VANC0037-B	St Andrews Church Rd (SR 1329)	NC 39 - Rev Henderson Rd (SR 1359)	0.88	20	2	On-Road	2A	
VANC0038-B	Stovall Rd (SR 1336)	Haywood Wright Rd (SR 1311) - US 158 Byp	4.20	Concurrent with Run Creek Rd - see Highway Table				P
VANC0039-B	Thomas Rd (SR 1329)	Graham Ave (SR 1218) - Dabney Rd (SR 1304)	0.61	Concurrent with Satterwhite Point Rd - see Highway Table				
VANC0040-B	Thomas Rd (SR 1329)	US 1/158 - End of Road	1.16	Concurrent with S Lymbank Rd - see Highway Table				
VANC0041-B	Thomas Rd (SR 1329)	Western Outer Loop (SR 1295) - US 1 Business	1.95	Concurrent with Stagcoach Rd - see Highway Table				
VANC0042-B	Thomas Rd (SR 1329)	Burnside Rd (SR 1335) - NC 39	0.60	20	2	On-Road	2A	
VANC0043-B	Thomas Rd (SR 1329)	Hicksboro Rd (SR 1303) - NC 39	0.70	Concurrent with Stovall Rd - see Highway Table				
VANC0044-B	Thomas Rd (SR 1329)	NC 39 to Will Jefferson Rd (SR 1331)	4.20	Concurrent with Thomas Rd - see Highway Table				H
VANC0045-B	Thomas Rd (SR 1329)	Will Jefferson Rd (SR 1331) - End of Road	5.80	Concurrent with Thomas Rd - see Highway Table				H
VANC0046-B	Thomas Rd (SR 1329)	NC 39 - Warren County Line	1.10	Concurrent with Vicksboro Rd - see Highway Table				
VANC0047-B	Thomas Rd (SR 1329)	John Deere Rd (SR 1608) - Brookston Rd (SR 1507)	3.60	Concurrent with Warrenton Rd - see Highway Table				
VANC0048-B	Thomas Rd (SR 1329)	Brookston Rd (SR 1507) - Warren County Line	2.40	Concurrent with Warrenton Rd - see Highway Table				
VANC0049-B	Thomas Rd (SR 1329)	Graham Ave (SR 1218) - Old County Home Rd (SR 1101)	2.20	Concurrent with Western Outer Loop - see Highway Table				
VANC0050-B	Thomas Rd (SR 1329)	Old County Home Rd (SR 1101) - Lymbank Rd (SR 1115)	2.20	Concurrent with Western Outer Loop - see Highway Table				

BICYCLE AND PEDESTRIAN¹

TABLE 7 - PEDESTRIAN

Local ID	Facility / Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other
				Type	Side of Street	Type	Side of Street	
VANC0001-P	I-85 Service Road	Poplar Creek Rd (SR 1126) - Rumin Creek Rd (SR 1128)	2.26	-	-	Sidewalks	Both	Modbus
VANC0002-P	US 1	Kittrell South PAB - Kittrell North PAB	0.40	-	-	Sidewalks	Both	H
VANC0003-P	US 1/158	N Jackson Ave - N Edwards Ave	0.10	-	-	Sidewalks	Both	B
VANC0004-P	US 1 Business	Dabney Dr Ext (SR 1267) - Dorsey Ave	0.33	-	-	Sidewalks	Both	H
VANC0005-P	US 158 Business	Western Outer Loop (SR 1295) - Dabney Dr (SR 1162)	1.70	-	-	Sidewalks	Both	B
VANC0008-H	NC 39	Vicksboro Rd (SR 1533) - Liberty St	0.50	-	-	Sidewalks	Both	HTB
VANC0009-H	NC 39	Pinkston St (SR 1214) - Chestnut St (SR 1226)	0.87	-	-	Sidewalks	Both	HTB
VANC0010-H	NC 39	Chestnut St (SR 1226) - I-85	0.85	-	-	Sidewalks	Both	HTB
VANC0006-P	2nd St	Corbett Rd - Park Ave	0.34	-	-	Sidewalks	Both	-
VANC0007-P	3rd St	Williams St - N Chavis Rd (SR 1552)	0.20	-	-	Sidewalks	Both	-
VANC0008-P	Alexander Ave	Pinkston St (SR 1214) - Harriet St	0.15	-	-	Sidewalks	Both	T
VANC0009-P	Bane Ave	Wadell St - Parham St (SR 1312)	0.41	-	-	Sidewalks	Both	-
VANC0010-P	Beacon Ave	Corbett Rd - 2nd St	0.15	-	-	Sidewalks	Both	HTB
VANC0011-P	Beckford Dr (SR 1165)	Dabney Dr (SR 1162) - Parrish Mill Rd	1.33	-	-	Sidewalks	Both	-
VANC0012-P	Berry Ave	Corbett Rd - Parham St (SR 1312)	0.12	-	-	Sidewalks	Both	-
VANC0013-P	Chavis Rd (SR 1552)	Kittrell Rd (SR 1551) - E Chavis Ln (SR 1588)	0.25	-	-	Sidewalks	Both	-
VANC0014-P	Chestnut St	S Jackson Ave - S Broad St	0.44	-	-	Sidewalks	Both	-
VANC0015-P	Chestnut St (SR 1226)	Rock Spring St (SR 1356) - Beckford Dr (SR 1165)	0.36	-	-	Sidewalks	Both	-
VANC0016-P	Chestnut St (SR 1226)	Dabney Dr (SR 1162) - Zollicoffer Ave	0.14	-	-	Sidewalks	Both	-
VANC0017-P	Chinaberry St	Oak Ridge Church Rd (SR 1555) - Chavis Rd (SR 1552)	0.22	-	-	Sidewalks	Both	-
VANC0018-P	Church St	Kittrell College Rd (SR 1105) - N Chavis Rd (SR 1552)	0.30	-	-	Sidewalks	Both	-
VANC0019-P	Coble Blvd	Dabney Dr (SR 1162) - Nelson St	0.41	-	-	Sidewalks	Both	-
VANC0020-P	Cypress Dr	Willowood Dr - Dabney Dr (SR 1162)	0.18	-	-	Sidewalks	Both	-
VANC0013-H	Dabney Dr (SR 1162)	US 158 Bus - I-85	1.60	-	-	Sidewalks	Both	-
VANC0014-H	Dabney Dr (SR 1162)	I-85 - US 158 Byp	0.34	-	-	Sidewalks	Both	-
VANC0021-P	Dabney Dr Ext (SR 1267)	US 158 Bus - US 1 Bus	0.80	-	-	Sidewalks	Both	-
VANC0016-H	Dabney Rd (SR 1304)	Ruin Creek Rd (SR 1128) - US 158 Byp	0.23	-	-	Sidewalks	Both	-
VANC0022-P	Deer Court Crossing	Dabney Dr (SR 1162) - Dabney Dr (SR 1162)	0.18	-	-	Sidewalks	Both	-
VANC0023-P	Exchange St	Dabney Dr (SR 1162) - Prosperity Dr	0.10	-	-	Sidewalks	Both	-
VANC0024-P	Garnett St Ext	Yowland Rd to Deer Court Crossing	0.25	-	-	Sidewalks	Both	-
VANC0025-P	Graham Ave (SR 1218)	Ruin Creek Road (SR 1128) - Dabney Dr (SR 1162)	1.10	-	-	Sidewalks	Both	B
VANC0026-P	Granite St	Chestnut St (SR 1226) - Parham St (SR 1312)	0.24	-	-	Sidewalks	Both	-
VANC0027-P	Hargrove St	Corbett Rd - Orange St	0.75	-	-	Sidewalks	Both	-
VANC0028-P	Harrison Ave	Montgomery St - Charles St	0.16	-	-	Sidewalks	Both	-
VANC0029-P	Homer St	Parham St (SR 1312) - Chestnut St (SR 1226)	0.20	-	-	Sidewalks	Both	-
VANC0030-P	Kittrell College Rd (SR 1105)	Church St - Long Creek Cir (SR 1235)	0.60	-	-	Sidewalks	Both	-
VANC0031-P	Kittrell Vance Ave	US 1 - Dixie Dr	0.11	-	-	Sidewalks	Both	-
VANC0032-P	Main St	US 1 - N Chavis Rd (SR 1552)	0.35	-	-	Sidewalks	Both	-
VANC0033-P	McClanahan St	US 1 - Oak Ridge Church Rd (SR 1555)	0.19	-	-	Sidewalks	Both	-
VANC0034-P	McCoin Ave	Corbett Rd - 2nd St	0.20	-	-	Sidewalks	Both	-
VANC0035-P	Mitchell St	College St - Clark St	0.19	-	-	Sidewalks	Both	-
VANC0036-P	N Cooper Dr	Ruin Creek Rd (SR 1228) - Dabney Dr (SR 1162)	0.72	-	-	Sidewalks	Both	-
VANC0037-P	N Edwards Ave	Pine St - US 1/158	0.18	-	-	Sidewalks	Both	-
VANC0038-P	N Hawkins Ave	Walnut St - US 1/158	0.08	-	-	Sidewalks	Both	-
VANC0020-H	Nicholas St (SR 1589)	Alexander Ave - Williams St	0.07	-	-	Sidewalks	Both	H
VANC0039-P	N Jackson Ave	Pine St - US 1/158	0.17	-	-	Sidewalks	Both	-

BICYCLE AND PEDESTRIAN¹
TABLE 7 - PEDESTRIAN

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Type	Side of Street	Type	Side of Street	
VANC0040-P	N Lee Ave (SR 1369)	US 1/158 - N Washington Ave	0.30	-	-	Sidewalks	Both	-
VANC0041-P	N Plummer Ave	Walnut St - US 1/158	0.08	-	-	Sidewalks	Both	-
VANC0042-P	N Washington Ave	N Lee Ave (SR 1369) - US 1/158	0.32	-	-	Sidewalks	Both	-
VANC0043-P	Oak St	Cedarwood Dr - Garnett St Ext	0.62	-	-	Sidewalks	Both	-
VANC0044-P	Orange St	Parham St (SR 1312) - Pettigrew St	0.10	-	-	Sidewalks	Both	-
VANC0045-P	Parham St (SR 1312)	Burwell Ave (SR 1355) - Orange St	0.12	-	-	Sidewalks	Both	-
VANC0046-P	Parham St (SR 1312)	Dabney Dr (SR 1162) - W Young Ave	0.64	-	-	Sidewalks	Both	-
VANC0047-P	Park Ave	Corbett Rd - Parham St (SR 1312)	0.31	-	-	Sidewalks	Both	-
VANC0048-P	Perkinson St (SR 1555)	3rd St - W Chavis Rd (SR 1588)	0.10	-	-	Sidewalks	Both	-
VANC0049-P	Perry St	US 158 Business - End of Road	0.25	-	-	Sidewalks	Both	-
VANC0050-P	Pettigrew St	Orange St - Sims St	0.15	-	-	Sidewalks	Both	-
VANC0051-P	Pine St (SR 1172)	Dabney Dr (SR 1162) - Rollins Ave	0.13	-	-	Sidewalks	Both	-
VANC0052-P	Pine St	N Washington Ave - N Edwards Ave	0.14	-	-	Sidewalks	Both	-
VANC0053-P	Pinkston St (SR 1214)	Alexander Ave - NC 39	0.56	-	-	Sidewalks	Both	T
VANC0054-P	Prosperity Dr	Trade St - Exchange St	0.10	-	-	Sidewalks	Both	-
VANC0055-P	Rock Spring St (SR 1356)	Rowland St - Highland Ave	0.06	-	-	Sidewalks	Both	-
VANC0056-P	Rock Spring St (SR 1356)	Kittrell St - Beckford Dr (SR 1165)	0.08	-	-	Sidewalks	Both	-
VANC0057-P	Rollins Ave	Pine St (SR 1172) - Bane Ave	0.20	-	-	Sidewalks	Both	-
VANC0058-P	Ruin Creek Rd (SR 1128)	Graham Ave (SR 1218) - Dabney Dr (SR 1162)	1.10	-	-	Sidewalks	Both	B
VANC0059-P	S Broad St	Chestnut St - US 1/158	0.15	-	-	Sidewalks	Both	-
VANC0060-P	S Carroll St	Chestnut St - US 1/158	0.11	-	-	Sidewalks	Both	-
VANC0061-P	S Hawkins Ave	US 1/158 - Chestnut St	0.11	-	-	Sidewalks	Both	-
VANC0062-P	Sims St	Orange St - Pettigrew St	0.07	-	-	Sidewalks	Both	-
VANC0063-P	S Jackson Ave	US 1/158 - Chestnut St	0.11	-	-	Sidewalks	Both	-
VANC0064-P	South St	Oak Ridge Church Rd (SR 1555) - Chavis Rd (SR 1552)	0.19	-	-	Sidewalks	Both	-
VANC0065-P	Sunset Ave	Wadill St - Dabney Dr (SR 1162)	0.20	-	-	Sidewalks	Both	-
VANC0066-P	Trade St	Dabney Dr (SR 1162) - Prosperity Dr	0.10	-	-	Sidewalks	Both	-
VANC0067-P	Turner Ave	Zene St - Carolina Ave	0.13	-	-	Sidewalks	Both	-
VANC0024-H	Vicksboro Rd (SR 1533)	NC 39 - Fox Pond Rd (SR 1612)	0.46	-	-	Sidewalks	Both	H
VANC0068-P	Wadhill St	Bane Ave - Sunset Ave	0.11	-	-	Sidewalks	Both	-
VANC0069-P	Walnut St	N Plummer Ave - N Jackson Ave	0.27	-	-	Sidewalks	Both	-
VANC0070-P	Walnut St	Orange St - Pettigrew St	0.07	-	-	Sidewalks	Both	-
VANC0071-P	Water St	NC 39 - Pinkston St (SR 1214)	0.50	-	-	Sidewalks	Both	-
VANC0072-P	W Belle St	Hargrove St (SR 1347) - Parham St (SR 1312)	0.15	-	-	Sidewalks	Both	-
VANC0073-P	W Chavis Ln (SR 1588)	Williams St - N Chavis Rd (SR 1552)	0.18	-	-	Sidewalks	Both	-
VANC0074-P	Williams St	McClanahan St - W Chavis Rd (SR 1588)	0.36	-	-	Sidewalks	Both	-
VANC0075-P	Williams St (SR 1143)	Nicholas St (SR 1589) - Maple St	0.10	-	-	Sidewalks	Both	-
VANC0076-P	W Young Ave	Hargrove St (SR 1347) - Parham St (SR 1312)	0.10	-	-	Sidewalks	Both	-
VANC0077-P	Zollicoffer Ave	Mc Coim Ave - Garnett St (US 158 Business)	0.12	-	-	Sidewalks	Both	-

Appendix D

Typical Cross Sections

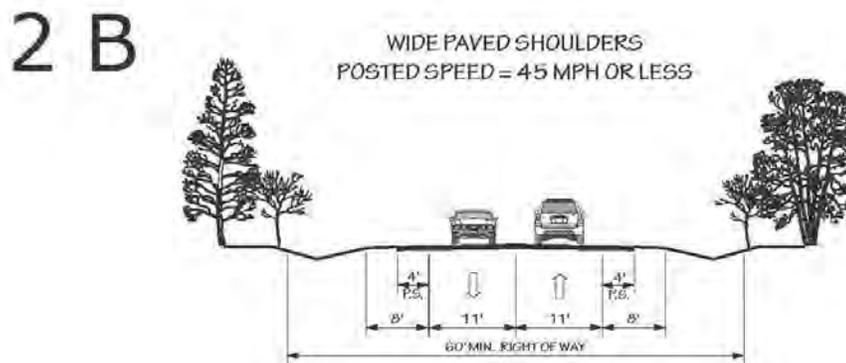
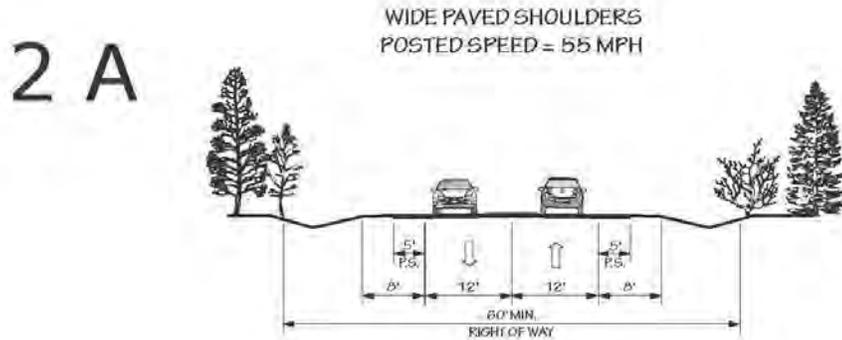
Cross section requirements for roadways vary according to the capacity and level of service to be provided. Universal standards in the design of roadways are not practical. Each roadway section must be individually analyzed and its cross section determined based on the volume and type of projected traffic,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

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

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

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

FIGURE 10
TYPICAL HIGHWAY CROSS SECTIONS
2 LANES



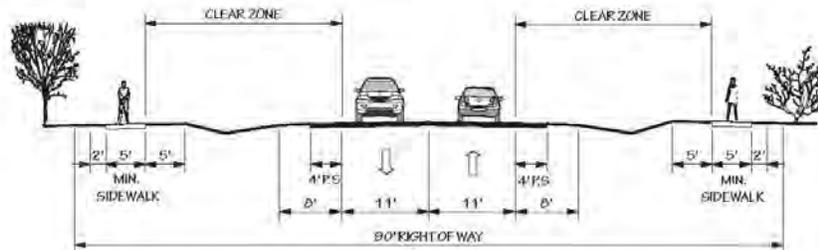
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

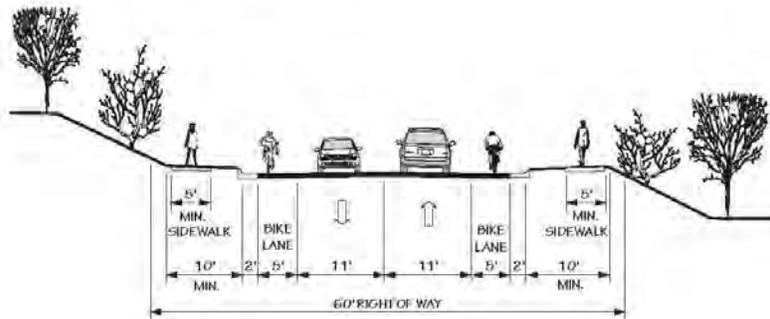
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



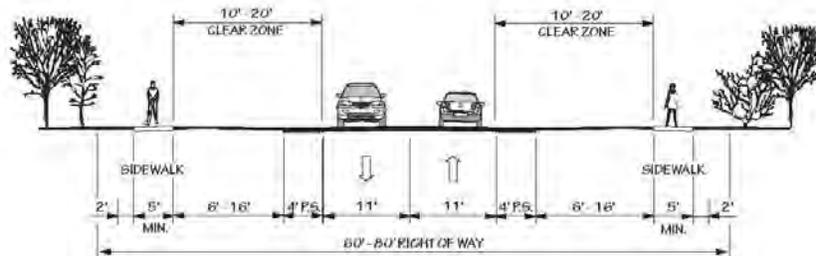
2 E

CURB AND GUTTER WITH BIKE LANES AND SIDEWALKS



2 F

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



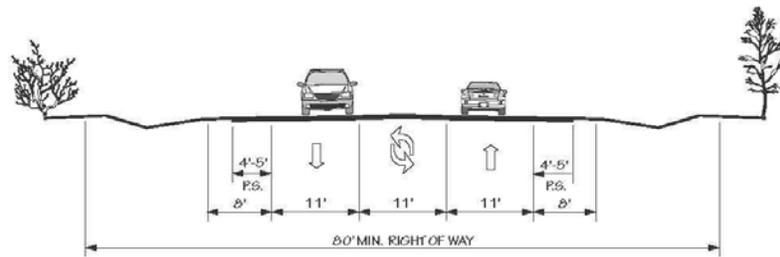
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

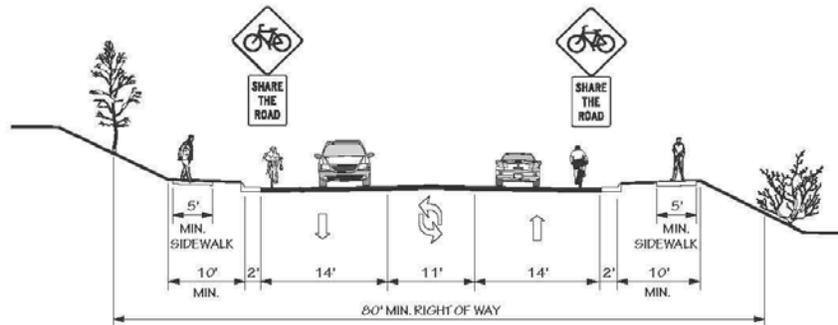
3 A

WIDE PAVED SHOULDERS



3 B

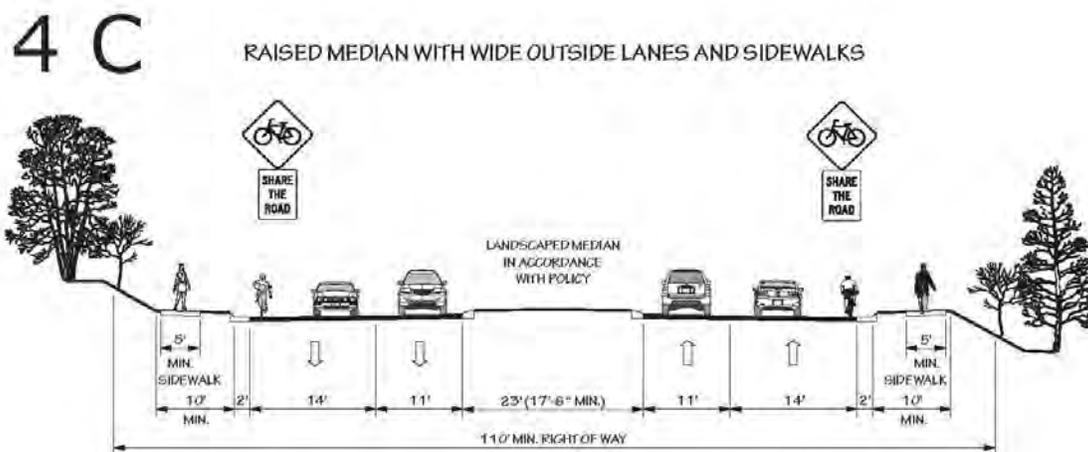
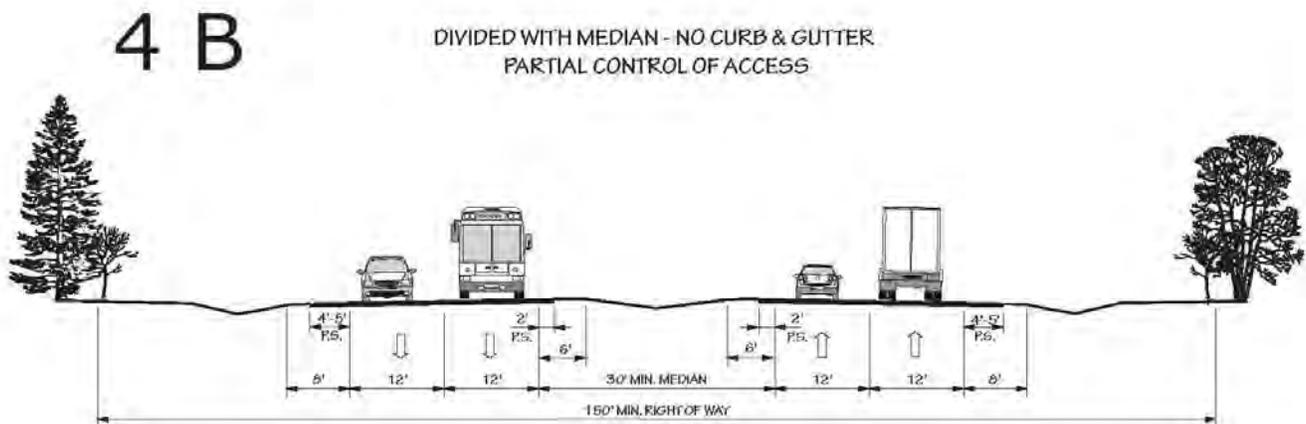
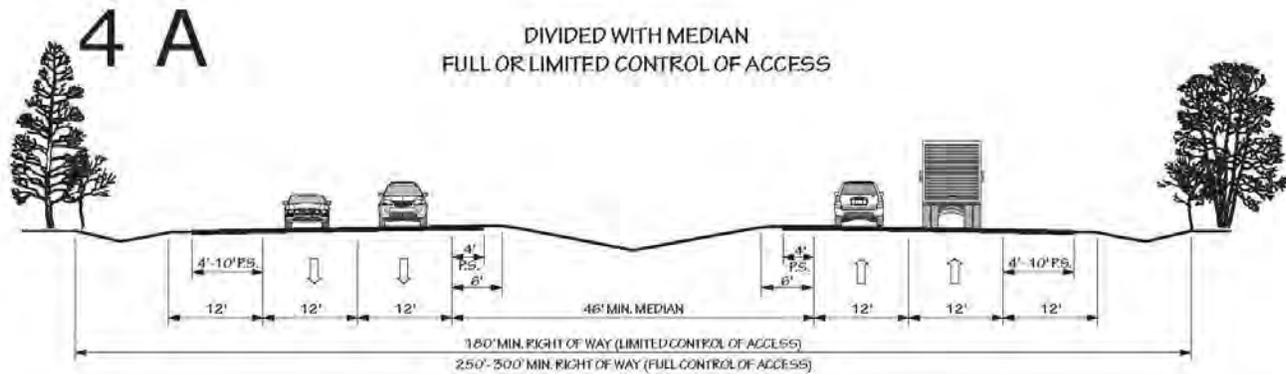
CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES



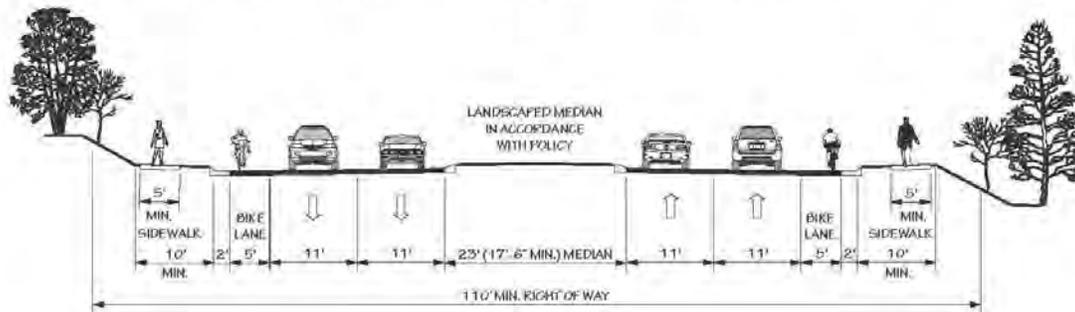
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

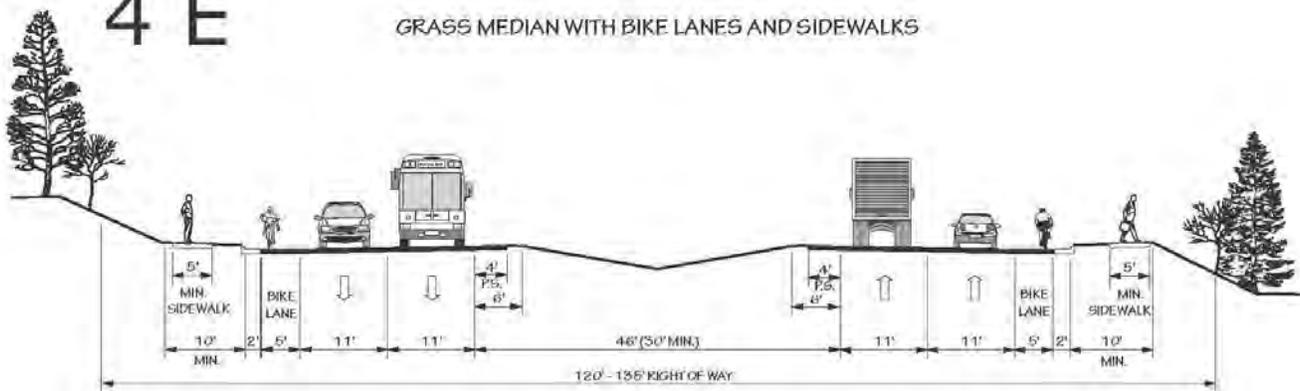
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

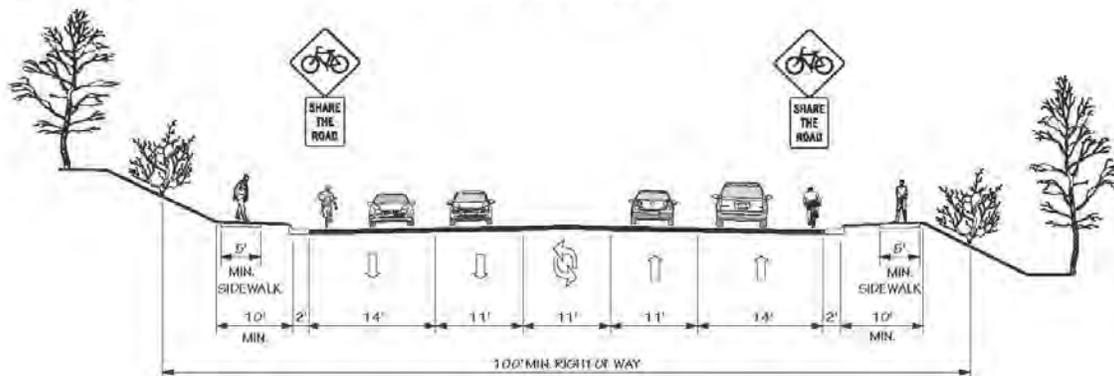
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES



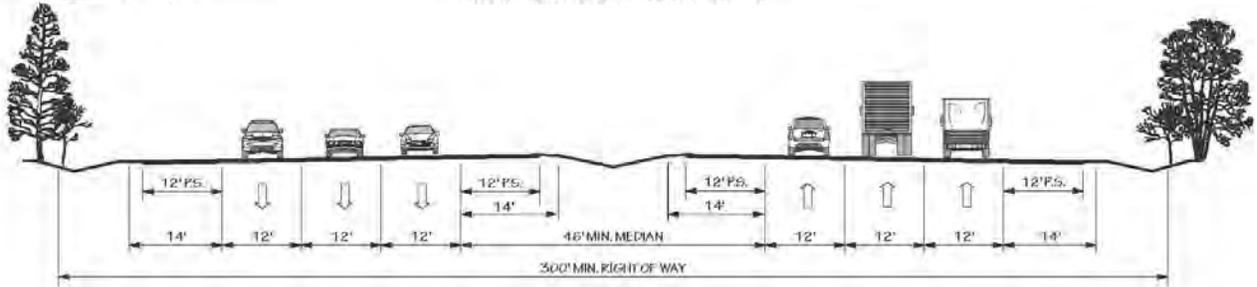
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

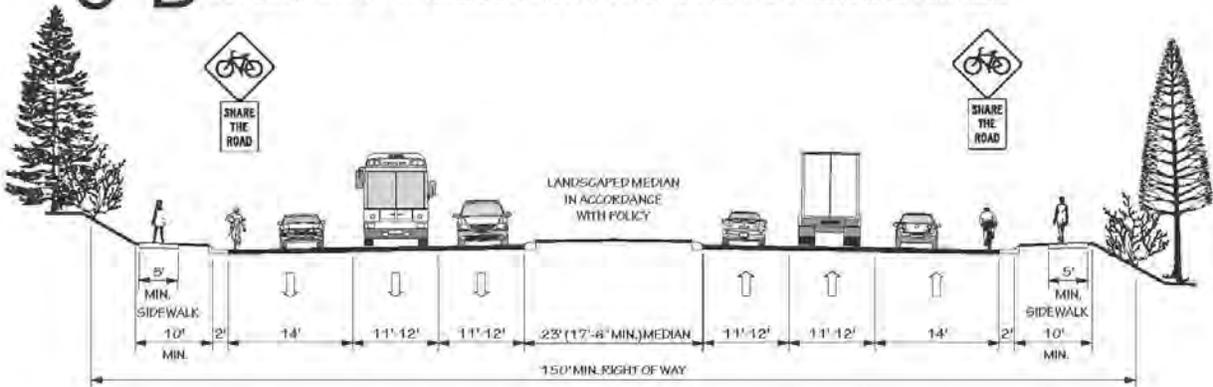
6 A

DIVIDED WITH GRASS MEDIAN



6 B

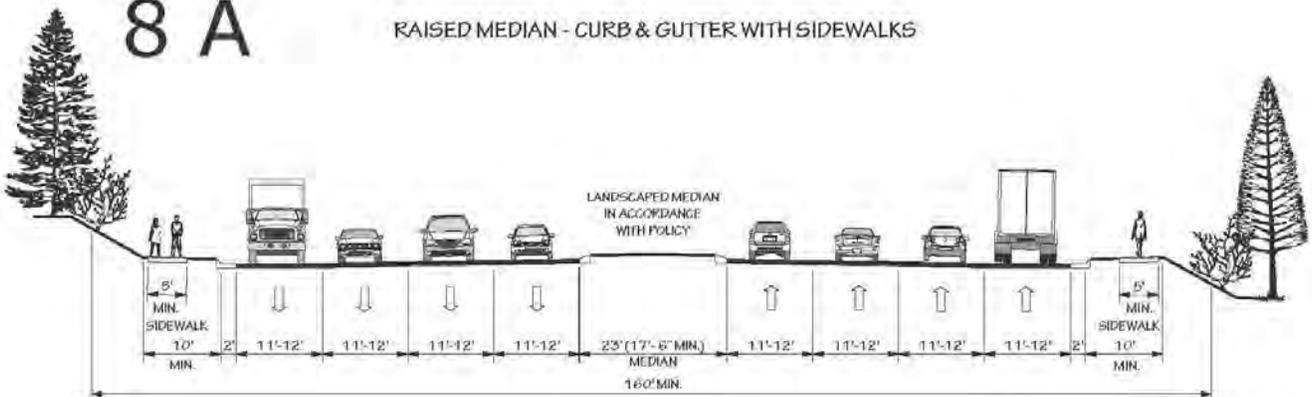
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS

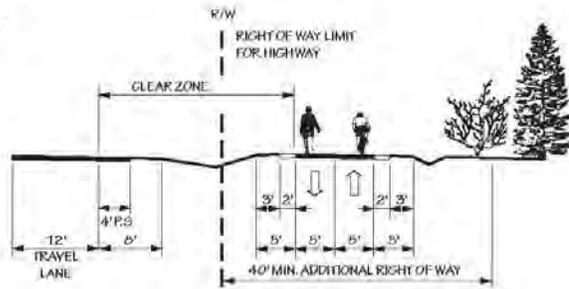


Revised 12/07/2010

TYPICAL MULTI - USE PATH

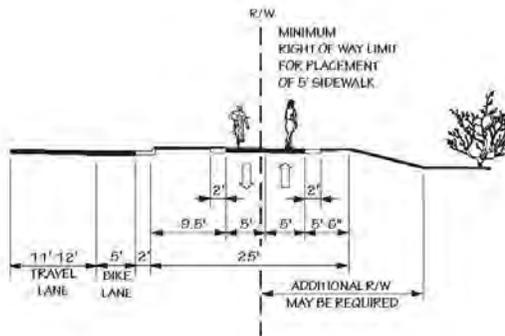
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Revised 12/07/2010

Appendix E

Level of Service Definitions

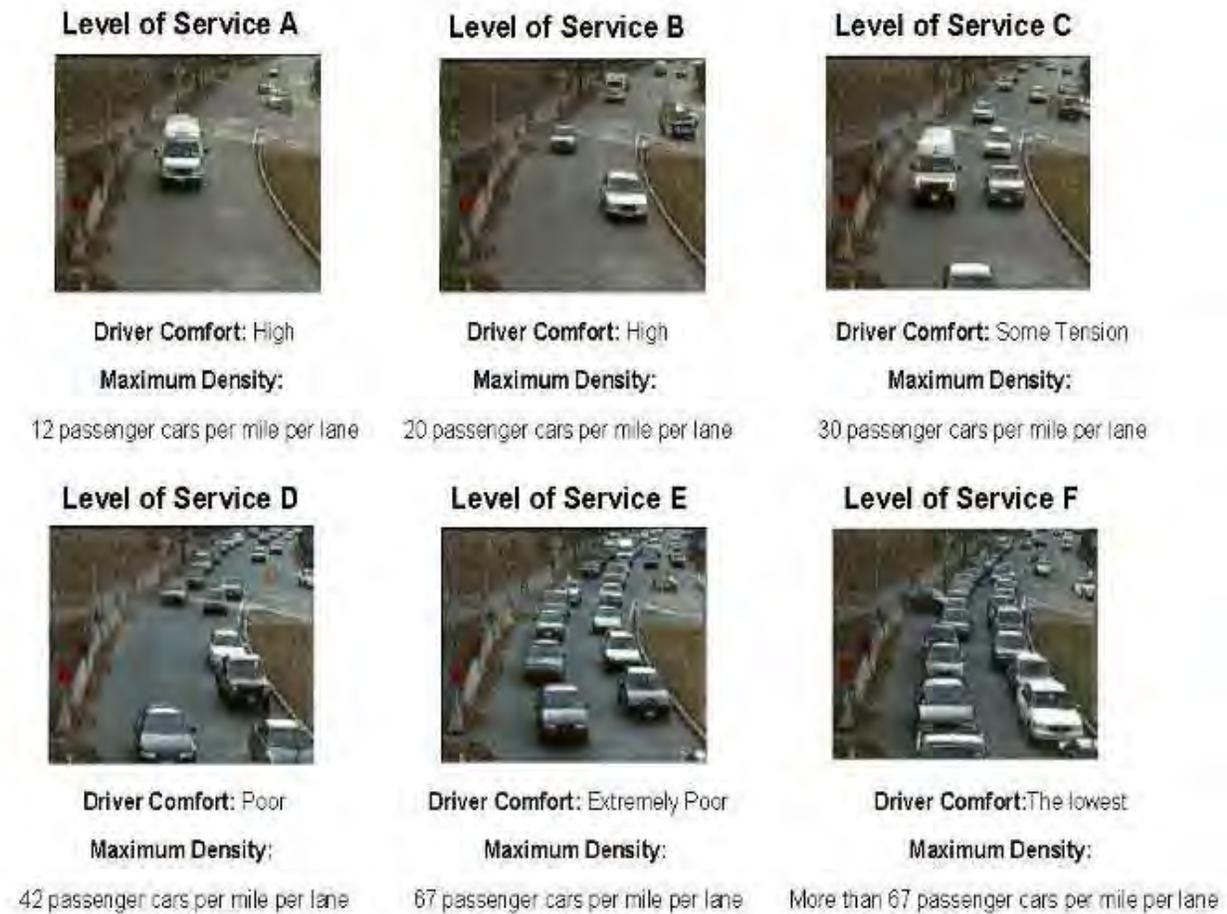
The relationship of travel demand compared to the roadway capacity determines the level of service (LOS) of a roadway. Six levels of service identify the range of possible conditions. Designations range from LOS A, which represents the best operating conditions, to LOS F, which represents the worst operating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

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

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

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

Figure 12 - Level of Service Illustrations



Source: 2000 Highway Capacity Manual

Appendix F Traffic Crash Analysis

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

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

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

Table 9 depicts a summary of the crashes occurring in the planning area between January 1, 2007 and December 31, 2009. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's 4.56 index. The "Total" column indicates the total number of accidents reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 9 – High Crash Locations

Map Index	Intersection	Average Severity	Total Crashes
1	US 158 and Parrott Road (SR-1127)	42.6	2
2	Peter Gill Road (SR-1548) and Bobbitt Road (SR-1549)	28.73	5
3	US 158 Business and Western Outer Loop (SR 1295)	11.54	10
4	Andrews Avenue (NC 39) and Bullock Street	6.18	10
5	NC 39 and Thomas Road (SR-1329)	5.23	7
6	US 158 Bypass and Ross Mill Road (SR 1310)	4.42	13
7	US 158 Bypass and Poplar Creek Road (SR 1126)	4.24	16
8	Coble Boulevard and Dabney Drive (SR 1162)	4.08	12

9	Andrews Avenue (NC 39) and Beckford Drive (SR 1165)	3.47	12
10	Beckford Drive (SR 1165) and Dabney Drive (SR 1162)	3.35	22
11	NC 39 and Gillburg Road (SR 1519)	3.31	16
12	Warrenton Road (SR 1001) and Brookston Road (SR 1507)	3.22	10
13	Cooper Drive and Dabney Drive (SR 1162)	3.07	43
14	Raleigh Road (US 1) and Old County Home Road (SR 1101)	3.02	11
15	US 158 Bypass and Dabney Drive (SR 1162)	2.85	16
16	I-85 and Dabney Drive (SR 1162)	2.59	14
17	NC 39 and Vicksboro Road (SR 1533)	2.59	14
18	Andrews Avenue (NC 39) and Beck Avenue	2.48	10
19	I-85 and Ruin Creek Road (SR 1128)	2.14	13
20	US 1 and Andrews Avenue (NC 39)	1.74	10
21	Cooper Drive (SR 1501) and Ruin Creek Road (SR 1128)	1.74	10
22	I-85 and Fleming Town Road (SR 1371)	1.67	11
23	Andrews Avenue (NC 39) and Chestnut Street	1.67	11
24	I-85 and US 1	1.62	12
25	Cooper Drive (SR 1501) and Walmart	1.00	10

The NCDOT is actively involved with investigating and improving many of these locations. To request a more detailed analysis for any of the locations listed in Table 9, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in Appendix A.

Appendix G

Bridge Deficiency Assessment

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

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

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

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

A bridge must be classified as deficient in order to qualify for Federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges within the planning area are listed in Table 10.

Table 10 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
14	NC 39	US 1 Bypass	Functionally Obsolete	
24	Rice Road (SR 1341)	Little Island Creek	Structurally Deficient; Functionally Obsolete	
27	NC 39	I-85	Functionally Obsolete	
28	Vanco Mill Road (SR 1148)	US 1 Bypass	Functionally Obsolete	
30	NC 39	Crooked Run Creek	Functionally Obsolete	
31	Dabney Drive (SR 1162)	I-85	Functionally Obsolete	
32	Stewart Farm Road (SR 1518)	US 1 Bypass	Functionally Obsolete	
34	NC 39	Flat Creek	Functionally Obsolete	
36	Anderson Creek Road (SR 1374)	Kerr Lake	Structurally Deficient	B-4945
38	US 1 Bypass NBL	SCL Railroad	Functionally Obsolete	
45	Carey Chapel Road (SR 1519)	Martin Creek	Functionally Obsolete	
52	Stewart Farm Road (SR 1518)	Weaver Creek	Structurally Deficient	
53	Southerland Mill Road (SR 1523)	Sandy Creek	Structurally Deficient; Functionally Obsolete	B-4827
54	Parham Road (SR 1312)	I-85	Structurally Deficient; Functionally Obsolete	
55	Spring Valley Road (SR 1317)	I-85	Functionally Obsolete	
56	Weldon Mill Road (SR 1526)	Sandy Creek	Structurally Obsolete	B-4828
57	Satterwhite Point Road (SR 1319)	I-85	Functionally Obsolete	
60	Mabry Mill Road (SR 1322)	I-85	Functionally Obsolete	
61	I-85 NBL	Flemingtown Road (SR 1371)	Functionally Obsolete	
63	I-85 SBL	Flemingtown Road (SR 1371)	Structurally Deficient; Functionally Obsolete	
64	Jackson Town Road (SR 1369)	I-85	Functionally Obsolete	
67	Old County Home Road (SR 1120)	Red Bud Creek	Structurally Deficient; Functionally Obsolete	B-5319
70	Kelly Road (SR 1326)	Flat Creek	Structurally Deficient	
78	Morgan Road (SR 1342)	Little Island Creek	Functionally Obsolete	
89	Nutbush Road (SR 1308)	Kerr Lake	Functionally Obsolete	

Appendix H Public Involvement

This appendix documents the public involvement process, including a list of the advisory committee members, vision statement, the goals and objectives survey results, and public workshops held during the development of the CTP.

Committee Members

Member	Alternate	Organization
Claiborne Woods	Kevin Perdue	Vance County Schools
Ray Bullock	Ruth Nance	Town of Middleburg
Brian Short	Jason Reavis	Vance County Emergency Management
Harold Henrich	N/A	Vance County Fire and Emergency
Nancy Wilson	Lynn Harper	Vance County Tourism
Rob Brink	Ann Hudson	Karts
Major Charles Sparrow	Curtis Brame	Vance County Sheriff's Office
Lawrence Pulley	Jerry Joyner	Town of Kittrell
Erris Dunston	Pete Sokalski	City of Henderson
Jordan McMillen	Tom Anderson	Vance County Planning and Development Dept.
Ruth Brummitt	Agnes Harvin	Vance County Planning Board
Mike Ciriello	N/A	Kerr-Tar Rural Planning Organization

Vision and Goals Statement

Vision

Improve the regional connectivity of Vance County through a sustainable multimodal transportation network that promotes and supports economic development compatible with the environment and land use patterns. Provide safe, reliable, efficient and affordable transportation choices throughout Vance County and education to the public on those alternatives to enhance quality of life for its residents.

Goals

1. Promote a countywide and regionally integrated, multi-modal transportation system that encourages public health and safety and is creative, affordable and accessible to all users.
2. Ensure the integrity of the existing transportation system by encouraging integrated land use and transportation planning that serves existing development, supports future development, and is consistent with the county land use plan for preserving the natural environment and community character.
3. Encourage right of way preservation to ensure expansion of the existing and future roadway projects.
4. Promote roadways that allow and encourage alternative modes of transportation such as transit, walking and biking.

5. Encourage identification and consideration of sustainable practices and environment sensitivity.
6. Preserve the rural character of the county while accommodating growth to targeted areas.
7. Encourage a network that provides better connectivity and mobility throughout Vance County to Kerr Lake and surrounding areas.
8. Educate the public on general transportation issues, alternative forms of transportation, and traffic safety.
9. Develop a transportation network that improves safety and congestion.
10. Support the tourism industry by promoting a safe and efficient transportation system that improves travel to state parks, such as Kerr Lake and connects visitors to urban and rural areas within the county.

Goals and Objectives Survey Results

1. Survey respondents were asked where they lived.

County	Responses	Percentage
Vance, NC	361	76.4%
Henderson	316	66.9%
Kittrell	26	5.5%
Middleburg	2	0.4%
Other	17	3.6%
Franklin, NC	26	5.5%
Granville, NC	25	5.3%
Warren, NC	20	4.2%
Wake, NC	18	3.6%
Mecklenburg, VA	10	2.1%
Durham, NC	5	1.1%
Brunswick, NC	1	0.2%
Cumberland, NC	1	0.2%
Halifax, NC	1	0.2%
Nash, NC	1	0.2%
Northampton, NC	1	0.2%
Person, NC	1	0.2%

2. Survey respondents were asked in which county they were employed.

Work	Responses	Percentage
Vance, NC	432	80.0%
Granville, NC	18	3.3%
Franklin, NC	14	2.6%
Durham, Nc	12	2.2%
Warren, NC	11	2.0%
Wake, NC	6	1.1%

Mecklenburg, VA	1	0.2%
Multiple Counties	14	2.6%
Unemployed	12	2.2%
Retired	20	3.7%

3. Survey respondents were asked if they had to go out of there way because the most direct route is too congested. 38% of the respondents answered yes with the top 6 locations listed below.

Specific Locations of Congestion	
Location	Responses
Dabney Drive	117
Andrews Avenue (NC 39)	38
Raleigh Road (US 1)	11
Garnett Street	5
Old County Home Road	4
US 158	2

4. Survey respondents were asked to select 3 improvements that should be considered to address traffic congestion in the county. The top 5 responses are listed below.

Improvement	Responses	Percentage
Improve intersection design such as better traffic signal timing	277	55.7%
Widen existing roads	222	44.7%
Add turn lanes at specific intersections	182	36.6%
Improve pavement and bridges	176	35.4%
Add new and improve existing sidewalks	122	24.5%

5. Survey respondents were asked to rate the importance of certain transportation goals. The top 4 goals are listed below with the responses ranking "Very Important" or "Important" included.

Transportation Goal	Responses	Percentage
Economic Growth	449	11.3%
Environmental Protection	416	10.5%
Consistent Travel Times	377	9.5%
Community and Rural Character Preservation	355	9.0%

6. Survey respondents were asked if they would use any of the following transportation methods if they were established or improved.

Transportation Method	Yes Responses	Percentage	No Responses	Percentage
Public Bus Service	177	37.8%	291	62.2%
Park-n-Ride Lots	151	33.5%	300	66.5%
Sidewalks	321	69.9%	138	30.1%
On-Road Bike Lanes	136	30.7%	307	69.3%
Off Road Walking/Biking Trails	276	61.1%	176	38.9%
Commuter Rail	259	56.9%	196	43.1%

7. Survey respondents were asked to provide locations in need of improvement (flooding, widening, maintenance, etc.). The top rated responses for each category are provided below.

Issue	Comments	Responses
Bicycle	- Better roads for cyclists - Bike lanes along Beckford Dr, Chestnut St, Corbitt Rd, Dabney Dr, Graham Ave, and Oxford Rd	9
Pedestrian	- More pedestrian facilities - Sidewalks on Andrews Ave, Beckford Dr, Dabney Dr, Satterwhite Point Rd - More pedestrian crossings	13
Transit	- Increased service in and around Vance County	2
Rail	- High speed rail	3
Maintenance	- Tree trimming/trash pickup - Flooding/storm drain maintenance (Dabney Dr, NC 39, Nutbush Rd, Norlina Rd) - Pot holes/paving (Dabney Dr, NC 39)	95
Highway	- Widening (NC 39, Dabney Dr) - Intersection Improvements (Dabney Dr/Graham Ave, Dabney Dr/McDonald's, Dabney Dr/Beckford Dr, NC 39/Thomas Rd, I-85/Ruin Creek Rd, Ruin Creek Rd/Maria Parham Medical Center) - Finish Western Loop - Finish US 1/I-85 Interchange	292

8. Survey respondents were asked if truck traffic was a problem in their area. 17% answered yes with the top 5 locations listed below.

Truck Traffic	
Location	Responses
Dabney Drive	19
Andrews Avenue	13
US 1	10
I-85	7
Flemingtown Rd	4

9. Survey respondents were asked about safety concerns they had in Vance County. The top 10 responses are listed below. Other general concerns included:

<u>Concern</u>	<u>Responses</u>
- I 85 Signage	10
- Safer roads for cyclists	10
- More pedestrian facilities	8
- Dabney Dr/Graham Ave Intersection	5
- NC 39/Gillburg Rd Intersection	3

Location	Safety Issues				Responses
	Vehicle	Pedestrian	Bicycle	Truck	
Dabney Dr	X	X	X	X	101
NC 39 (Andrews Ave)	X	X	X	X	49
US 1 (Raleigh Rd)	X	X	X	X	18
Beckford Dr	X	X	X	-	9
Oxford Rd	-	X	X	-	8
Ruin Creek Rd	X	X	-	-	6
Garnett St	X	X	-	X	5
Dabney Rd	X	X	-	X	4
Stagecoach Rd	X	X	X	X	4
Thomas Rd	X	X	X	X	4

10. Survey respondents were asked what other transportation issues they would like to see addressed and the top responses are listed below.

Transportation Issue	Notes	Responses
Public Transportation	- Want a mass transit system - Better service to elderly and disabled - More access to rural areas - Better public awareness	47

	- Service to RDU, Durham, etc.	
High Speed Rail	- Want a stop in Henderson - Concern about road closings	25
Maintenance	- Pot holes, rough pavement - Upkeep of rural roads - Maintenance of shrubbery along road - Drainage/flooding issues	22
Bicycle Facilities	- More facilities	12
Pedestrian Facilities	- More facilities (sidewalks and schools) - Sidewalks to schools - Sidewalks near the hospital	11
Intersections	- Better signal timing - Want more signalized intersections and additional passing and turning lanes - Less 4-way/3-way stops	5
Western Loop	- Complete it	8

11. Survey Respondents were asked where they received this survey. The top 5 responses are listed below.

Location	Responses	Percentage
Website Link	167	33.4%
School	113	22.6%
Work	49	9.8%
Maria Parham Medical Center	30	6.0%
KARTS	29	5.8%

Public Involvement

The public involvement process included public survey and holding two public drop-in sessions in Vance County to present the proposed Comprehensive Transportation Plan to the public and solicit comments. A total of 528 surveys were collected. The first public drop-in session was held on May 16, 2012 at the Kittrell Fire Department; the second session was held on May 17, 2012 at the Kerr-Tar COG Office in Henderson. Each session was publicized in the local newspaper and was held from 4-7 pm. Additionally, notifications were sent out via email lists to Vance County Schools and the Kerr-Tar Council of Governments. No comment forms were submitted during these sessions.

Appendix I

Additional Transportation Alternatives & Scenarios Studied

This appendix includes documentation for alternatives and scenarios that were studied but not included in the CTP.

Proposed Improvements to US 1 (Beechtree Trail Road to US 1 Business)

Three alternatives were studied for improvements to US 1: western bypass, eastern bypass and building on existing. The western bypass was selected due to the minimal impacts it would have on human and environmental features, including, three wetland crossings, and 88 acres of vacant land.

An eastern bypass would have more significant impacts to the human and natural environment than the western bypass alternative, including, two wetland crossings, four grade separations for roadways, two grade separations for railroads, 33 residential properties and would also impact 55 acres of vacant land.

Building a freeway on existing would have more significant to the human and natural environment than the western bypass alternative, including, 28 residential properties, six commercial properties, 51 acres of vacant land. Service roads would also need to be constructed to serve the town of Kittrell which could have more human and environmental impacts.

In regards to traffic demand, the US 1 bypass around Kittrell can accommodate 2035 traffic demand. Since the other alternatives were eliminated early in the development of the CTP recommendations, alternatives were not drawn on a map for consideration.

Proposed Improvements to NC 39 (Pinkston Street to Chestnut Street)

A 4-lane divided boulevard was considered for NC 39 from Pinkston Street to Chestnut Street, but due to the estimated 55 homes and businesses that would be impacted; this alternative was not selected for this section of NC 39. Instead, a 3-lane facility was recommended for this section of NC 39 with bicycle and pedestrian facilities. This recommendation will improve the capacity of NC 39 but will not solve the deficiencies of the facility. This alternative was eliminated early in the development of the CTP recommendations.

Proposed Improvements to Dabney Drive (US 158 Business to US 158 Bypass)

A one-way pair with Dabney Drive, Corbitt Road and the abandoned rail corridor from US 158 Business to Cooper Drive and a 6-lane boulevard from Cooper Drive to US 158 Bypass was recommended for Dabney Drive. The other alternative that was considered for Dabney Drive was widening the existing from US 158 Business to US 158 Bypass. This alternative was not chosen due to the significant impacts it would have to the human environment. An estimated 50 houses and 30 businesses would be impacted if

the existing facility were to be widened to a boulevard facility. This alternative was eliminated early in the development of the CTP recommendations.