



Comprehensive Transportation Plan



Davie County

June 2012

Comprehensive Transportation Plan

Davie County

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N.C. Department of Transportation

In Cooperation with:

Davie County
Town of Mocksville
Town of Cooleemee
Northwest Piedmont Rural Planning Organization

June 2012



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Table of Contents

Executive Summary	i
I. Analysis of the Existing and Future Transportation System	I-1
Analysis Methodology and Data Requirements	I-1
Roadway System Analysis	I-1
Traffic Crash Analysis	I-3
Bridge Deficiency Assessment	I-3
Public Transportation and Rail	I-13
Public Transportation	I-13
Rail	I-14
Bicycles and Pedestrians	I-14
Land Use	I-15
Consideration of the Natural and Human Environment	I-19
Public Involvement	I-23
II. Recommendations	II-1
Implementation	II-1
Problem Statements	II-2
Highway	II-2
Public Transportation and Rail	II-11
Bicycle	II-11
Pedestrian	II-14

Appendices

Appendix A: Resources and Contacts	A-1
Appendix B: Comprehensive Transportation Plan Definitions	B-1
Appendix C: CTP Inventory and Recommendations	C-1
Appendix D: Typical Cross-Sections	D-1
Appendix E: Level of Service Definitions.....	E-1
Appendix F: Traffic Crash Analysis	F-1
Appendix G: Bridge Deficiency Assessment	G-1
Appendix H: Public Involvement	H-1

List of Figures

Figure 1	Comprehensive Transportation Plan	iii
Figure 2	Existing Roadway Deficiency	I-5
Figure 3	Future Roadway Deficiency	I-7
Figure 4	Crash Locations Map	I-9
Figure 5	Deficient Bridges	I-11
Figure 6	Land Development Plan	I-17
Figure 7	Environmental Features	I-21
Figure 8	Typical Cross Sections	D-2
Figure 9	Level of Service Illustrations	E-2

List of Tables

Table 1	Environmental Features	I-19
Table 2	Restricted Environmental Features	I-20
Table 3	CTP Inventory and Recommendations	C-3
Table 4	Crash Locations	F-1
Table 5	Deficient Bridges	G-2

Executive Summary

In October of 2010, the Transportation Planning Branch of the North Carolina Department of Transportation and Davie County initiated a study to cooperatively develop the Davie County Comprehensive Transportation Plan (CTP), which includes Mocksville and Cooleemee. This study is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening, and public input. Refer to Figure 1 for the CTP maps, which were mutually adopted in 2012. Implementation of the plan is the responsibility of Davie County, its municipalities, and NCDOT. Refer to Chapter 2 for information on the implementation process.

This report documents the recommendations for improvements that are included in the Davie County CTP. The major recommendations for improvements are listed below. More detailed information about these and other recommendations can be found in Chapter 2. Additionally, all recommendations from the 2011 Mocksville CTP¹ were incorporated into this plan. For documentation of those recommendations, refer to the 2011 Mocksville CTP report.

Highway

I-40: Widen to a 6 lane freeway from Iredell County to the Winston-Salem MPO planning area at Redland Road (SR 1442).

US 64: TIP Project R-3602A – Widen to a 4 lane expressway from Davidson County to west of John Crotts Rd (SR 1602). Refer to the 2011 Mocksville CTP for information on additional recommended improvements on US 64.

US 158: Widen to a 3 lane major thoroughfare from Farmington Road (SR 1410) to US 64/US 601.

US 601: Widen to a 3 lane major thoroughfare with a center turn lane from Liberty Church Road (SR 1002) to Main Church Road (SR 1405); a 5 lane major thoroughfare with center turn lane from Main Church Road (SR 1405) to Fairfield Road (SR 1807); and a 3 lane major thoroughfare with a center turn lane from Fairfield Road (SR 1807) to NC 801.

¹ The 2011 Mocksville CTP can be viewed at:
<http://www.ncdot.gov/doh/preconstruct/tpb/PLANNING/MocksvilleCTP.html>

Public Transportation and Rail

There are no public transportation or rail improvements recommended in this CTP.

Bicycle

The recommendations for bicycle routes and the multiuse paths throughout the planning area were identified during the development of this CTP study. For detailed information on these facilities, refer to Chapter 2 of the report.

Pedestrian

The recommendations for pedestrian facilities throughout the planning area were identified during the development of this CTP. For a full listing of pedestrian recommendations, refer to Chapter 2 of this report.

Adopted by:

Davie County
Date: February 06, 2012

Town of Cooleemee
Date: January 16, 2012

Town of Mocksville
Date: February 07, 2012

NCDOT
Date: April 5, 2012

Endorsed by:

Northwest Piedmont RPO
Date: February 15, 2012

Recommended by:

Transportation Planning Branch
Date: February 27, 2012

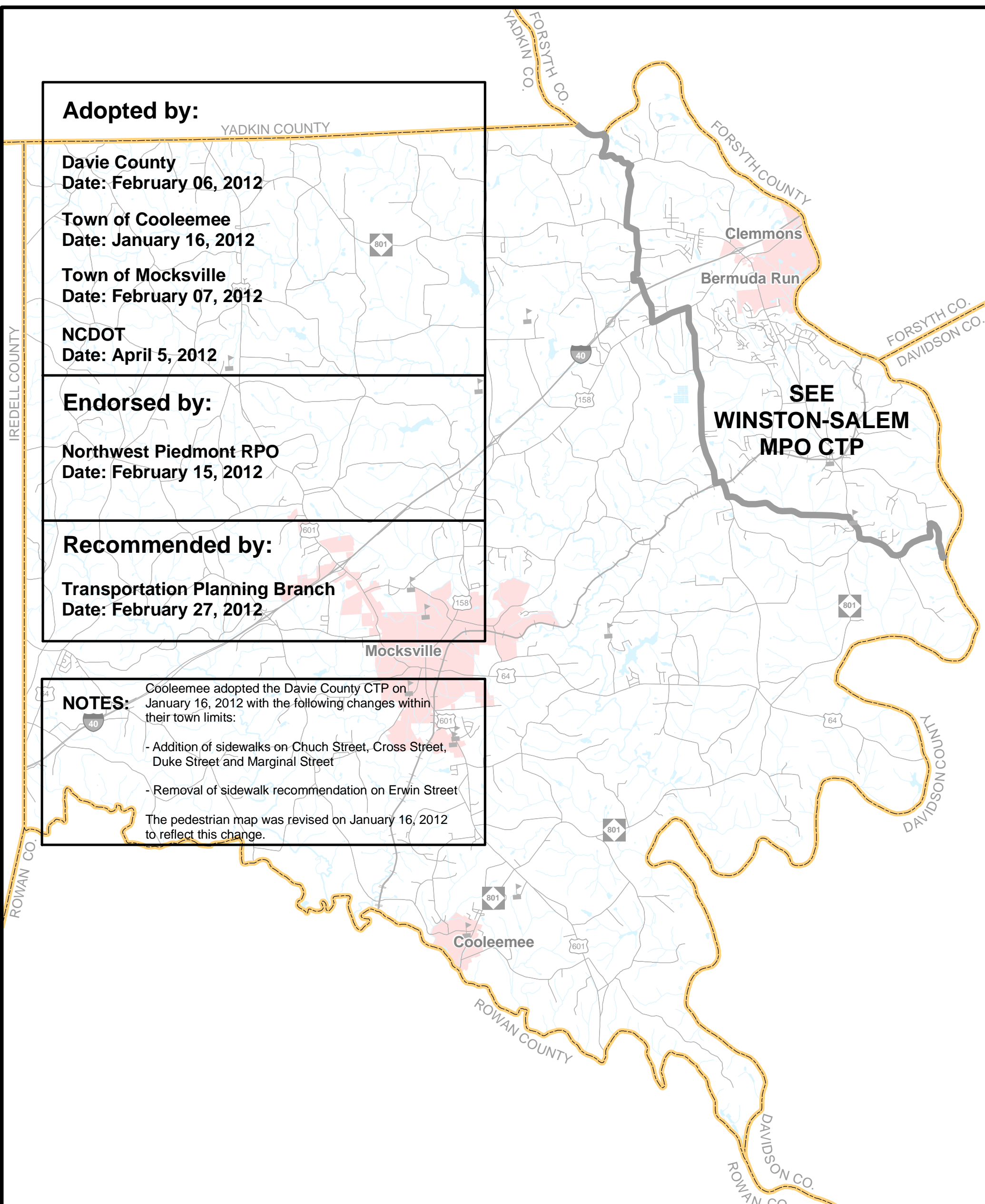
NOTES:

Cooleemee adopted the Davie County CTP on January 16, 2012 with the following changes within their town limits:

- Addition of sidewalks on Chuch Street, Cross Street, Duke Street and Marginal Street
- Removal of sidewalk recommendation on Erwin Street

The pedestrian map was revised on January 16, 2012 to reflect this change.

SEE WINSTON-SALEM MPO CTP



Sheet 1 Adoption Sheet

Sheet 2 Highway Map

Sheet 3 Public Transportation and Rail Map

Sheet 4 Bicycle Map

Sheet 5 Pedestrian Map

Legend

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

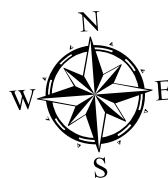


Figure 1 - Sheet 1 of 5

Base map date: October 21, 2010

Refer to CTP document for more details

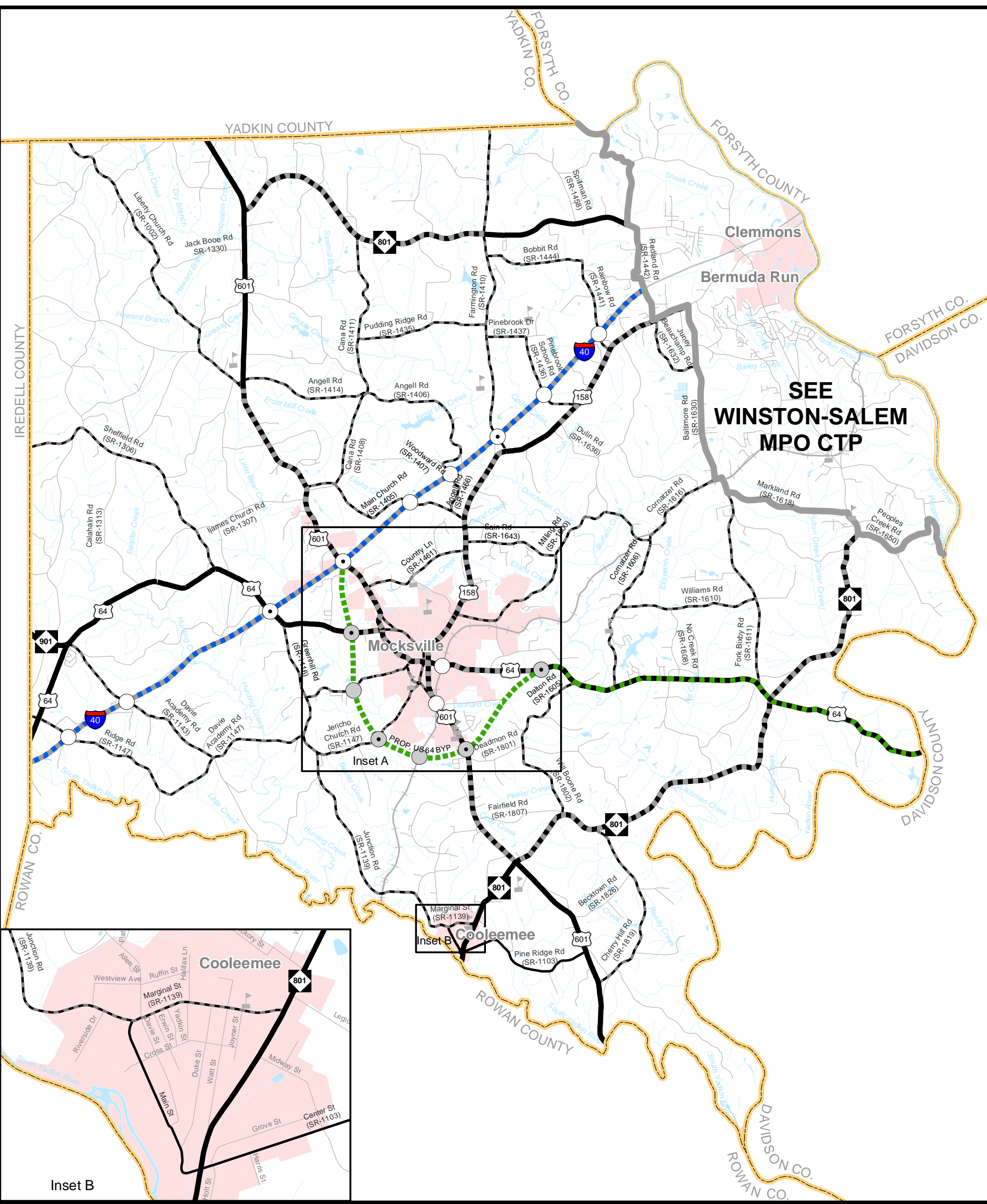


Davie County
North Carolina

Comprehensive Transportation Plan

Plan date: December 19, 2011

Revised: January 16, 2012



SEE WINSTON-SALEM MPO CTP

- | | |
|---|---|
| <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 |
| <ul style="list-style-type: none"> Existing Interchange Proposed Interchange Existing Grade Separation Proposed Grade Separation | |

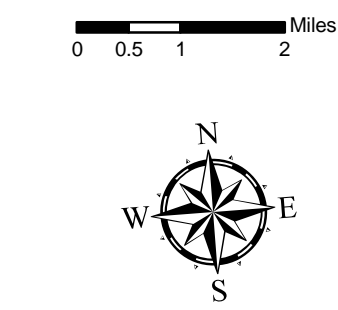


Figure 1 - Sheet 2 of 5

Base map date: October 21, 2010

Refer to CTP document for more details

Highway Map

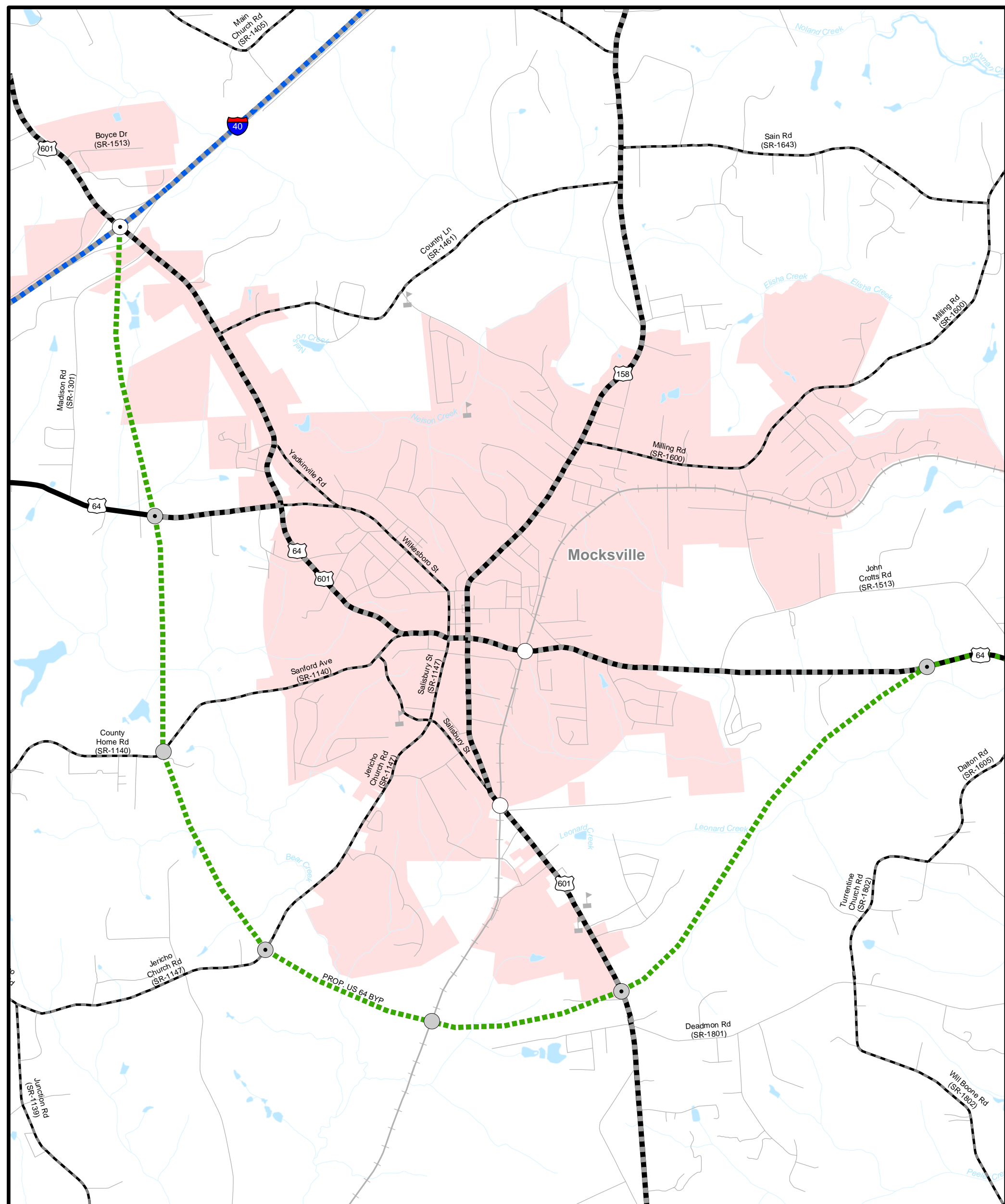


Davie County

Comprehensive Transportation Plan

Plan date: December 19, 2011

Revised: January 16, 2012



Freeways

- Existing
- Needs Improvement
- Recommended

Expressways

- Existing
- Needs Improvement
- Recommended

Boulevards

- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares

- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares

- Existing
- Needs Improvement
- Recommended

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

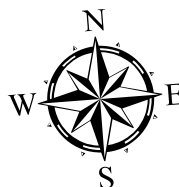
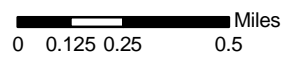


Figure 1 - Sheet 2A of 5

Base map date: October 21, 2010

Refer to CTP document for more details

**Highway Map
(Inset A)**



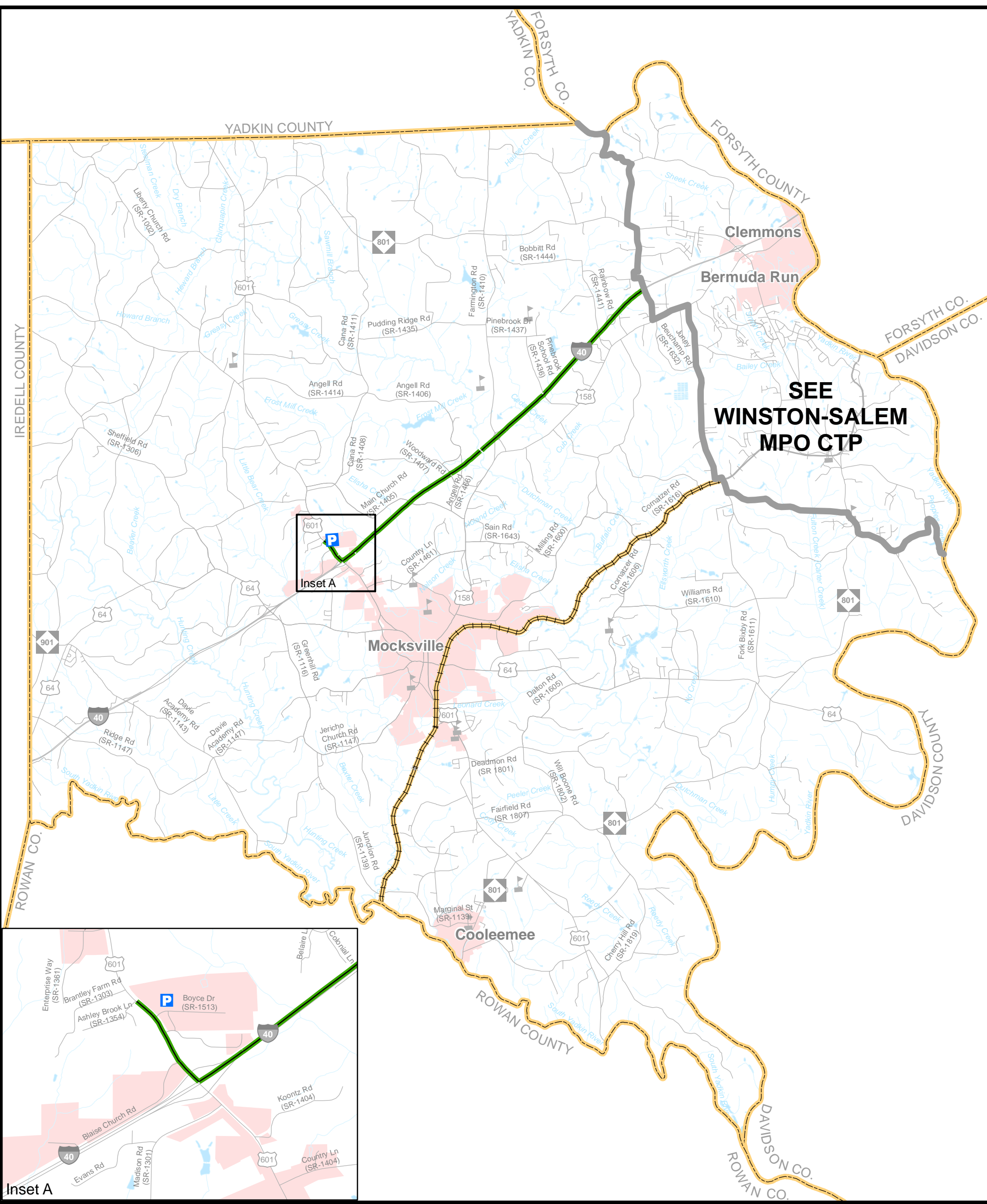
Davie County

Comprehensive

Transportation Plan

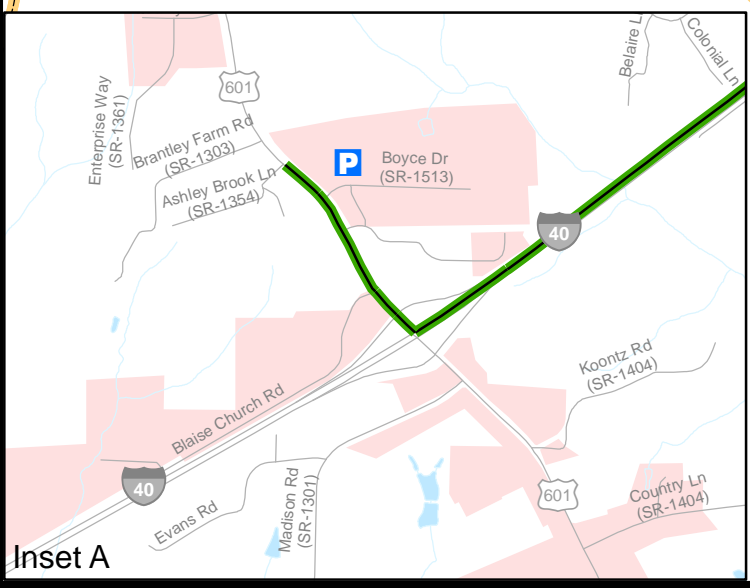
Plan date: December 19, 2011

Revised: January 16, 2012



SEE WINSTON-SALEM MPO CTP

Inset A



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

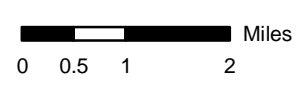


Figure 1 - Sheet 3 of 5
 Base map date: October 21, 2010
 Refer to CTP document for more details

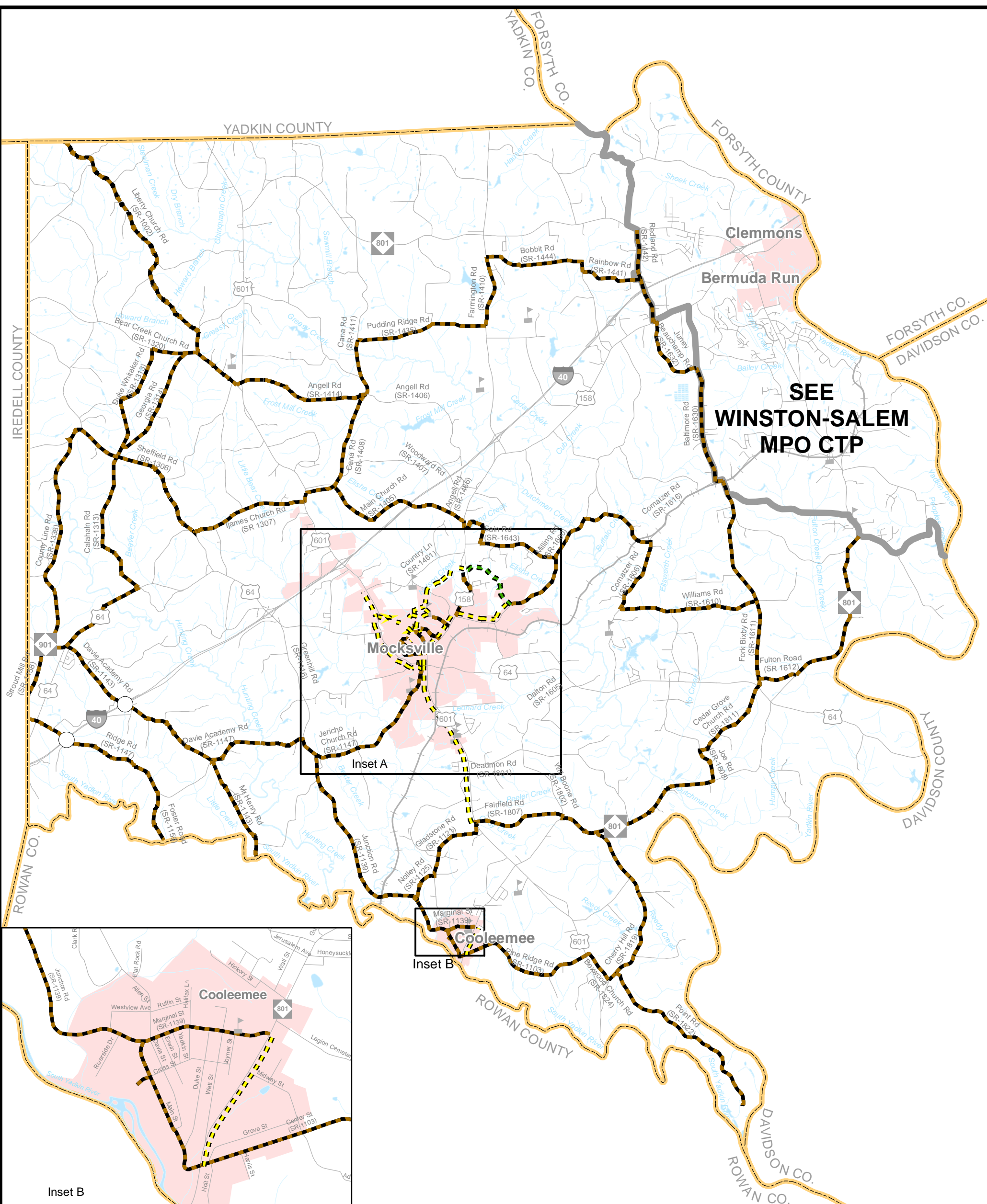
Public Transportation and Rail Map



Davie County

Comprehensive Transportation Plan

Plan date: December 19, 2011
 Revised: January 16, 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 | |

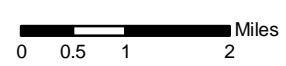


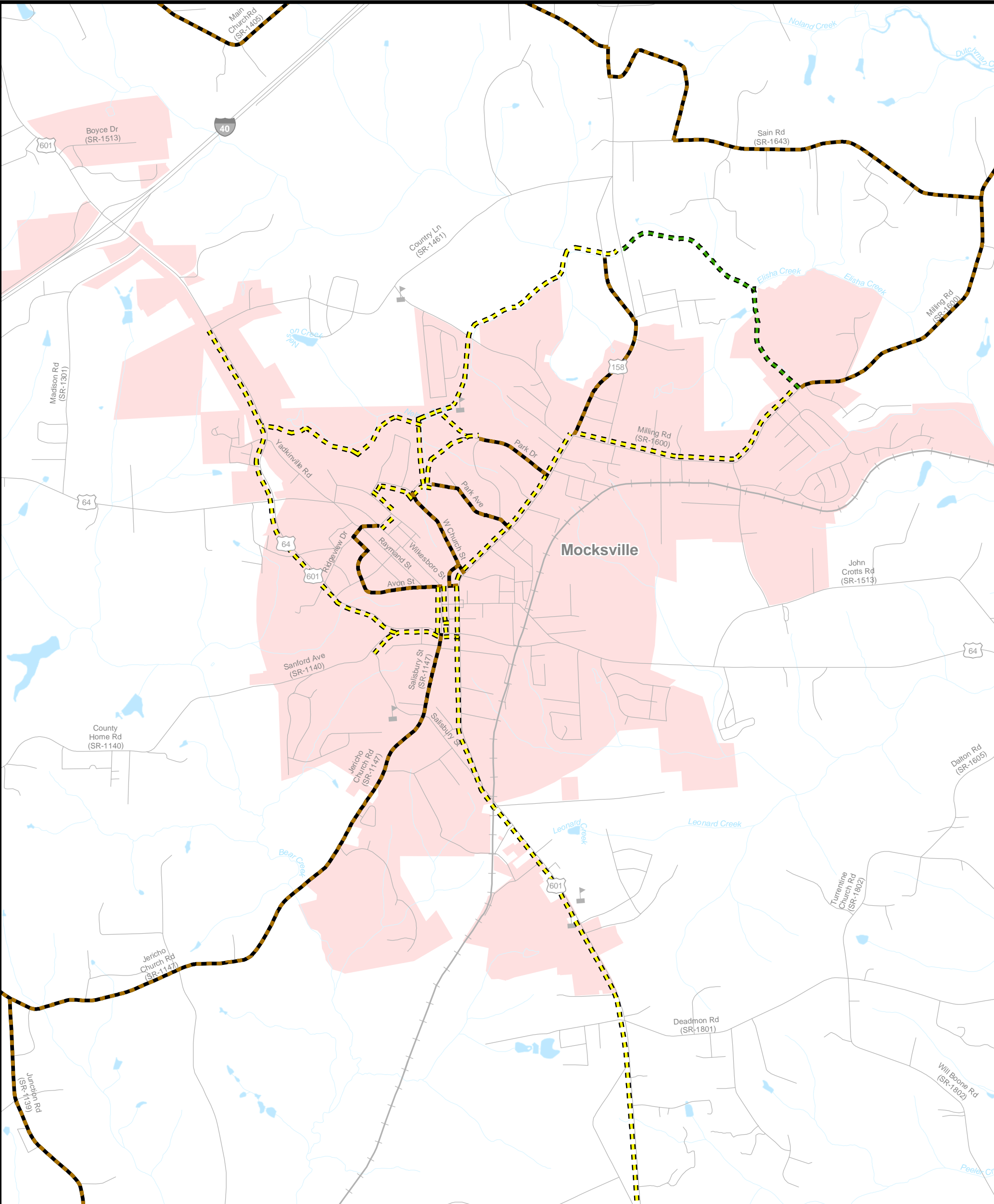
Figure 1 - Sheet 4 of 5
 Base map date: October 21, 2010
 Refer to CTP document for more details

Bicycle Map



Davie County

Comprehensive Transportation Plan
 Plan date: December 19, 2011
 Revised: January 16, 2012



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

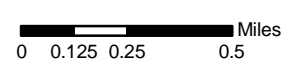


Figure 1 - Sheet 4A of 5

Base map date: October 21, 2010

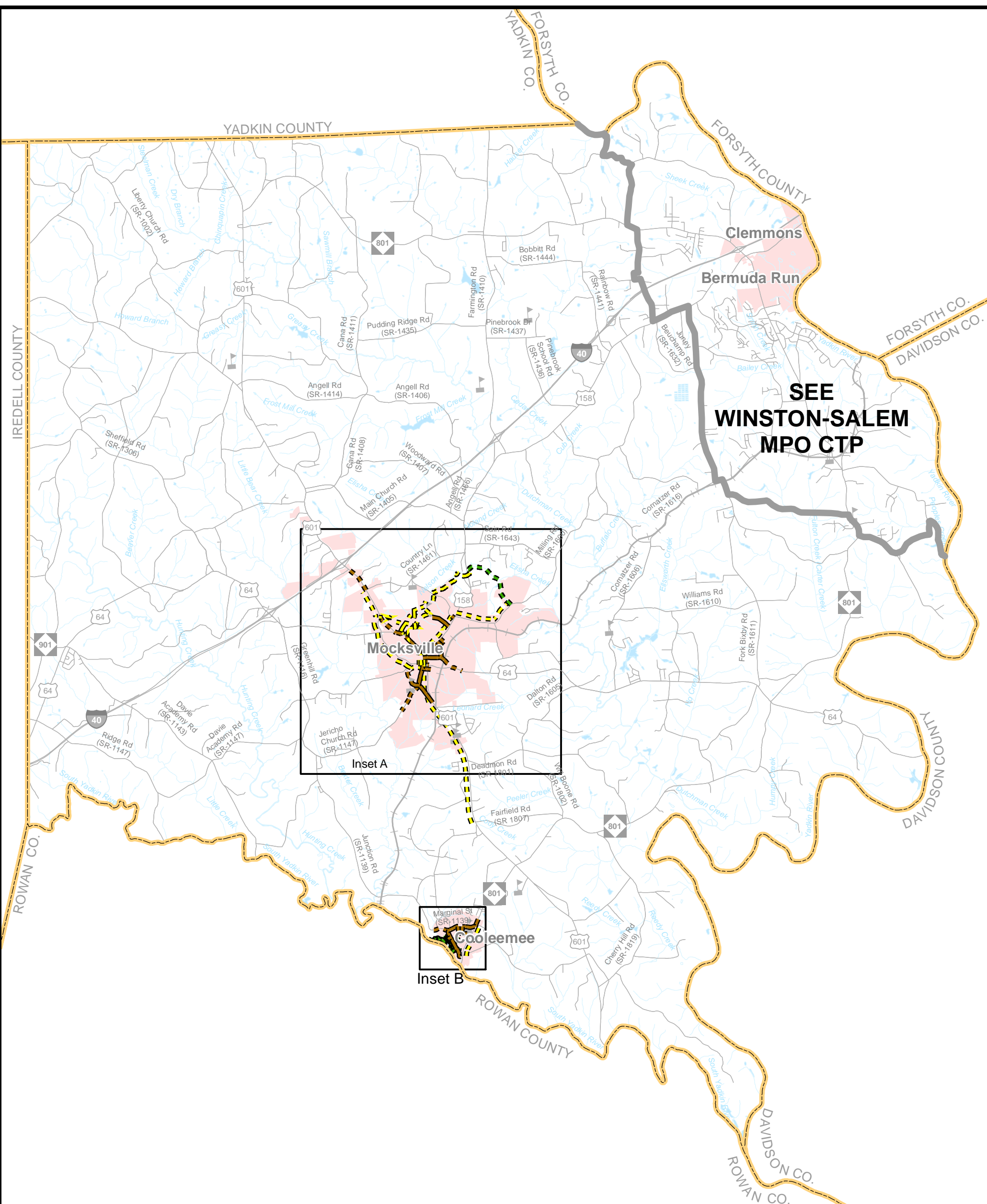
Refer to CTP document for more details

**Bicycle Map
(Inset A)**



Davie County

**Comprehensive
Transportation Plan**
Plan date: December 19, 2011
Revised: January 16, 2012



<p>Sidewalks</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended 	<p>Off-Road</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended
<p>Multi-Use Paths</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended 	<ul style="list-style-type: none"> Existing Grade Separation Proposed Grade Separation

0 0.5 1 2 Miles

Figure 1 - Sheet 5 of 5

Base map date: October 21, 2010

Refer to CTP document for more details

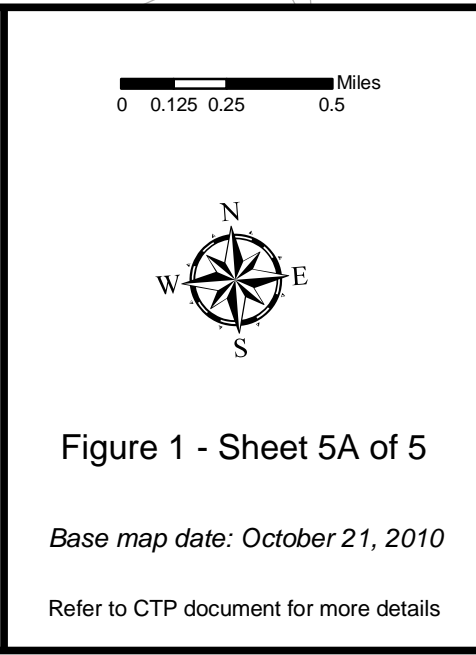
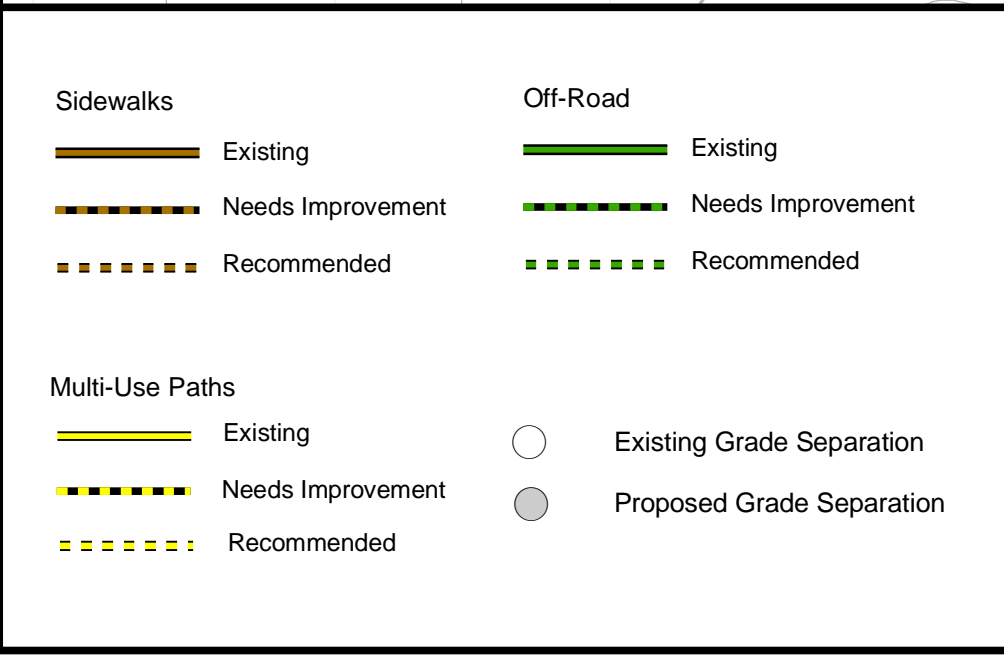
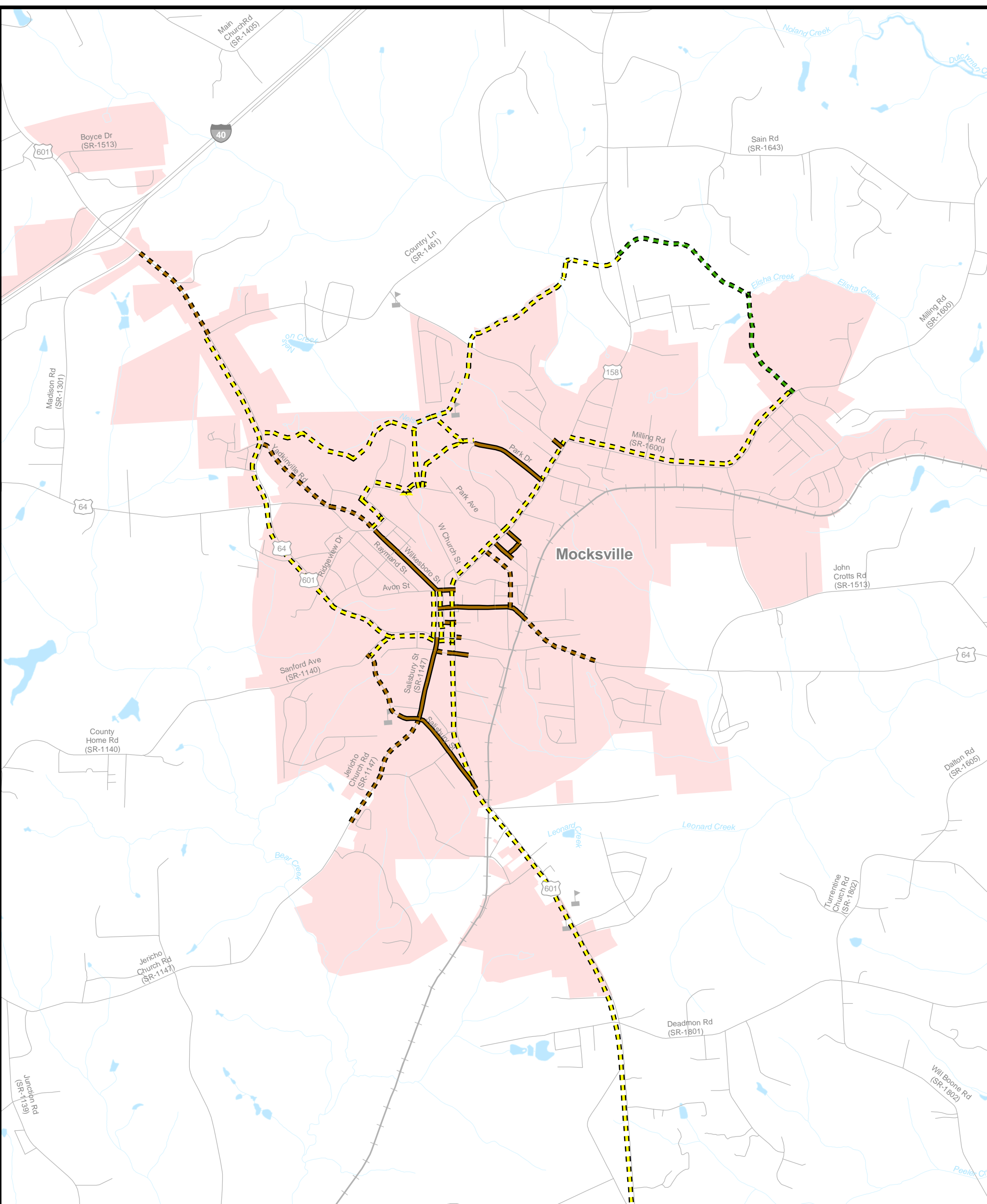
Pedestrian Map

Davie County

Comprehensive Transportation Plan

Plan date: December 19, 2011

Revised: January 16, 2012

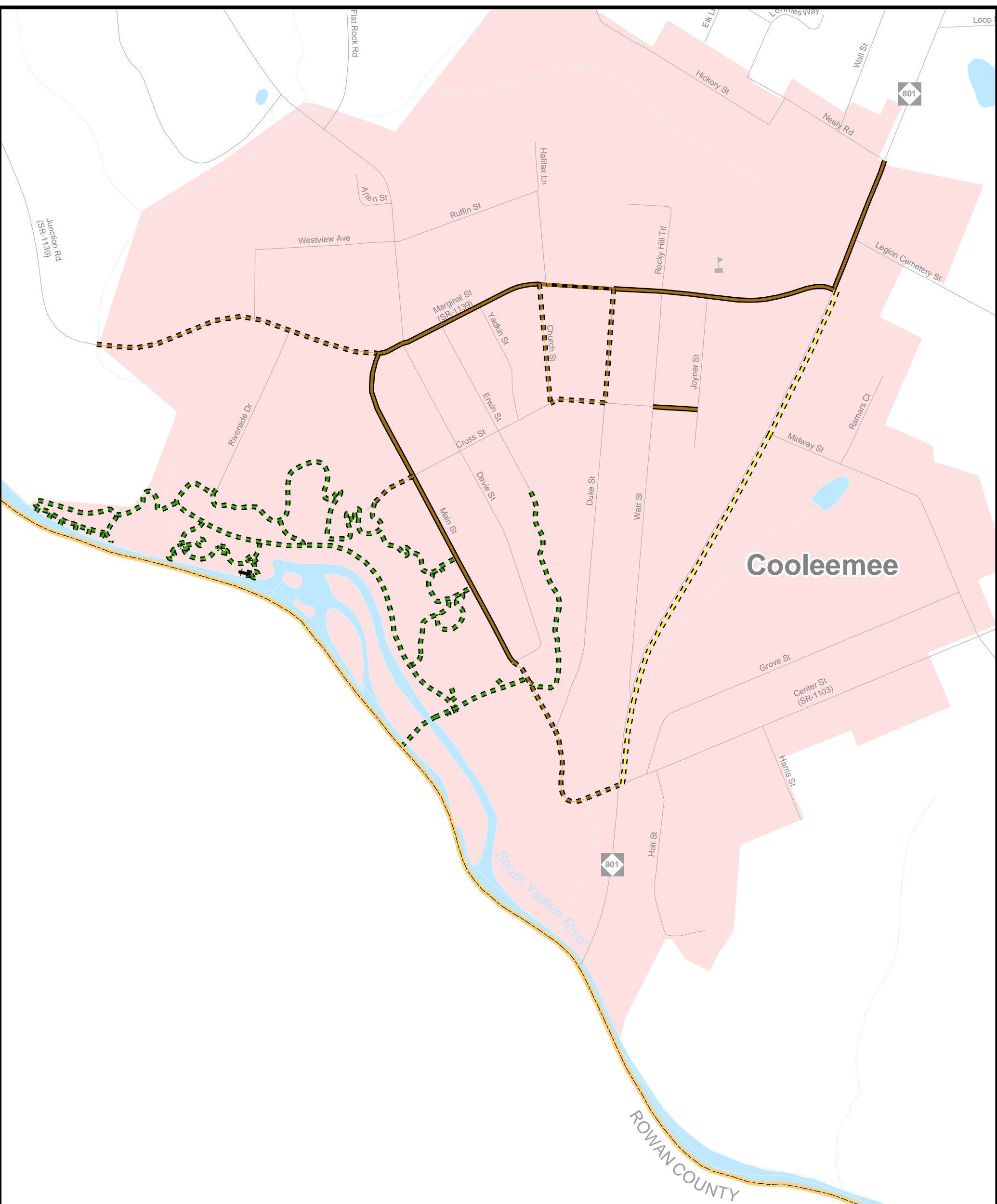


**Pedestrian Map
(Inset A)**

Davie County

**Comprehensive
Transportation Plan**

Plan date: December 19, 2011
Revised: January 16, 2012



Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

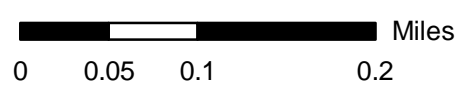


Figure 1 - Sheet 5B of 5

Base map date: October 21, 2010

Refer to CTP document for more details

Pedestrian Map (Inset B)



Davie County

Comprehensive Transportation Plan
 Plan date: December 19, 2011
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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 Plan¹ adopted by the Board of Transportation on September 2, 2004 and last revised on July

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

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

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

In the development of this plan, travel demand was projected from 2010 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2010. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Davie County CTP steering committee in August of 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 Figures 2 and 3 for existing and future capacity deficiencies.

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

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

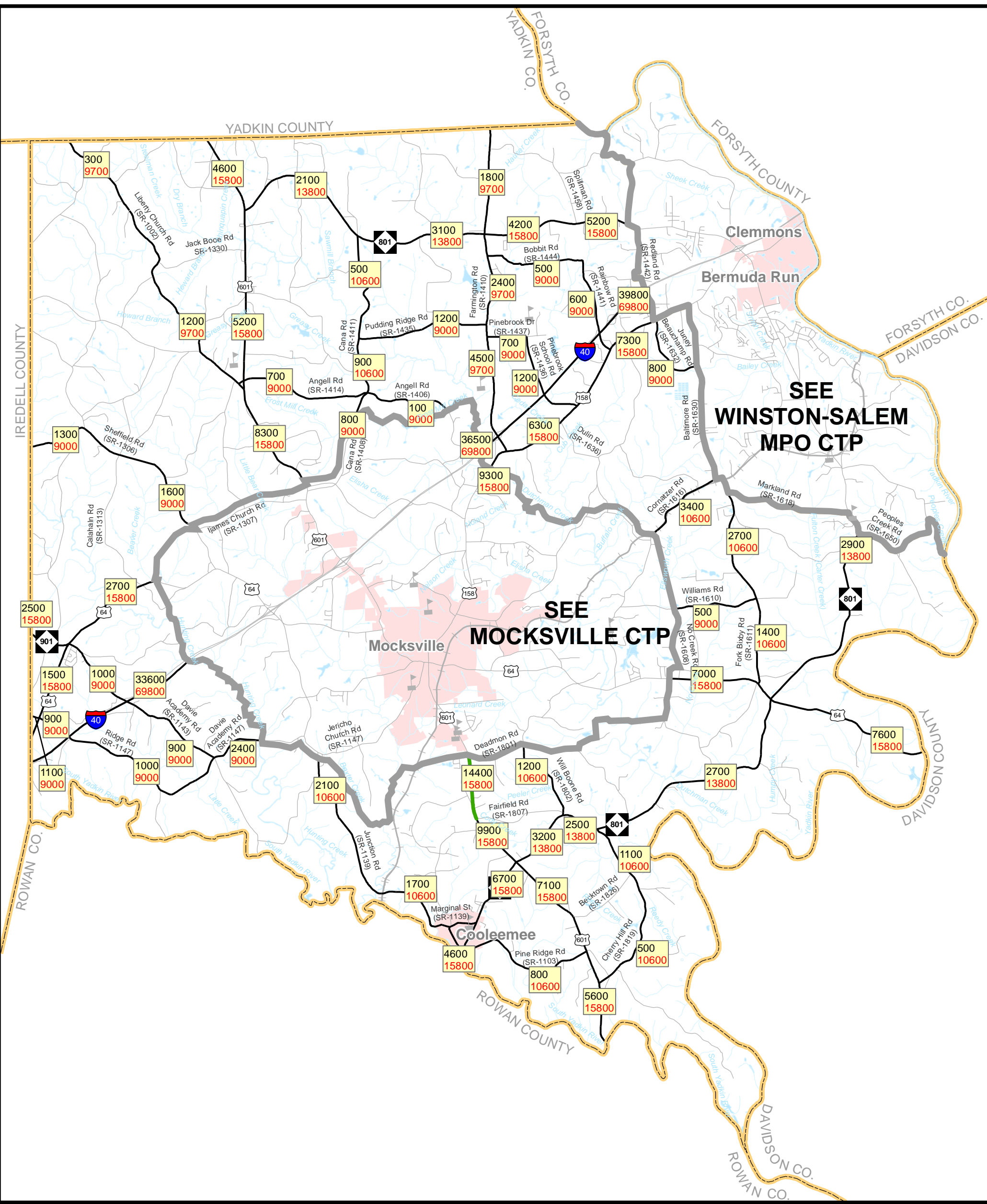
Traffic Crash Analysis

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 Davie County CTP for crashes occurring in the planning area between January 1, 2008 and December 31, 2010. During this period, a total of 8 intersections were identified as having a high number of crashes as illustrated in Figure 4. Refer to Appendix F for a detailed crash analysis.

Bridge Deficiency Assessment

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

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



SEE WINSTON-SALEM MPO CTP

SEE MOCKSVILLE CTP

Legend

- Schools
- Near Capacity
- Over Capacity
- Study Roads
- 2010 Volumes (AADT)
2010 Capacity
- Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- Planning Boundary
- County Boundary

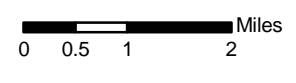
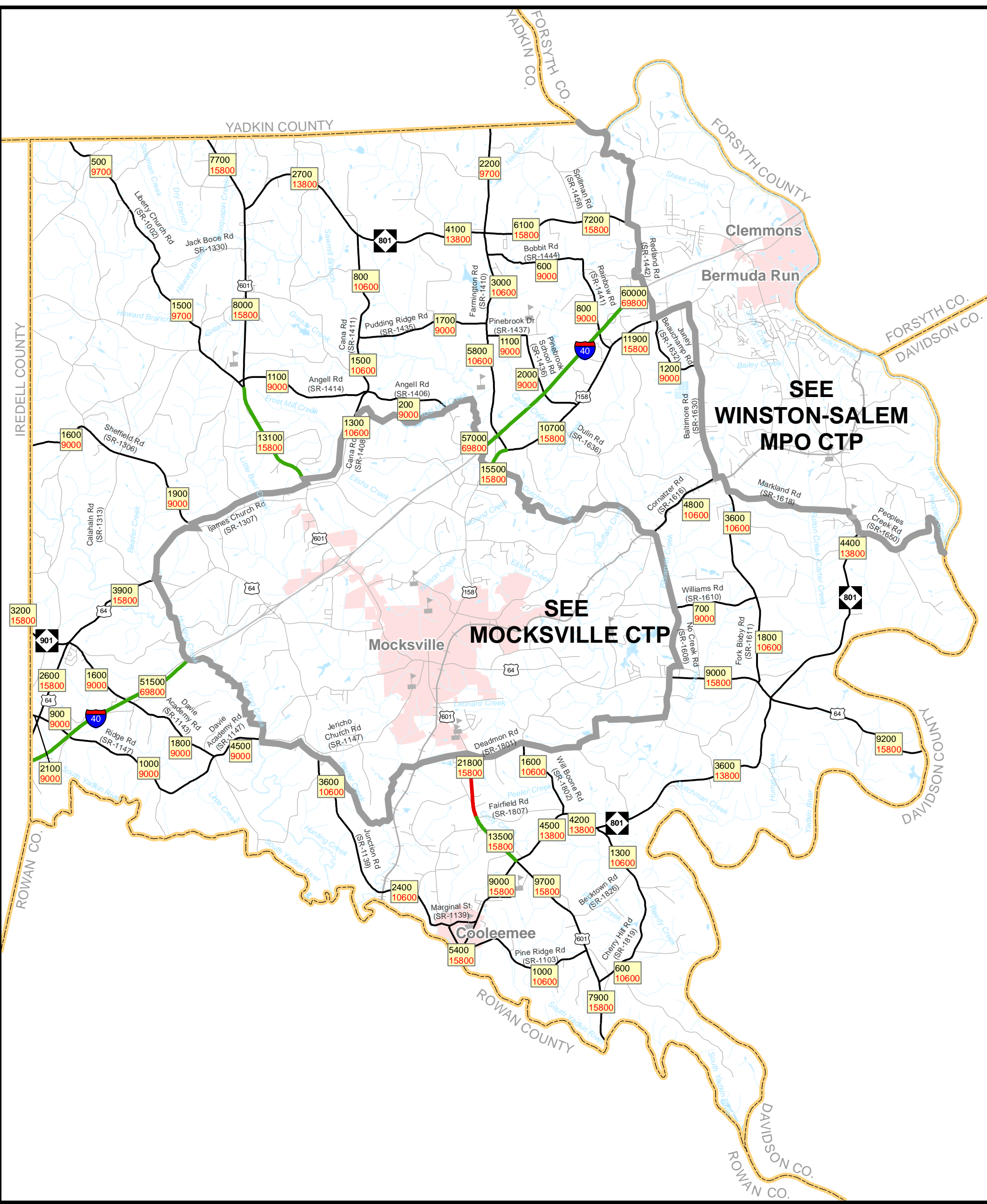


Figure 2

2010 Volumes and Capacity Deficiencies

Davie County Comprehensive Transportation Plan

Base map date: October 21, 2010



Legend

- Roads
- Schools
- Railroads
- Near Capacity
- Over Capacity
- Study Roads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- Planning Boundary
- County Boundary
- 7000 2035 Volumes (AADT)
- 15800 2010 Capacity

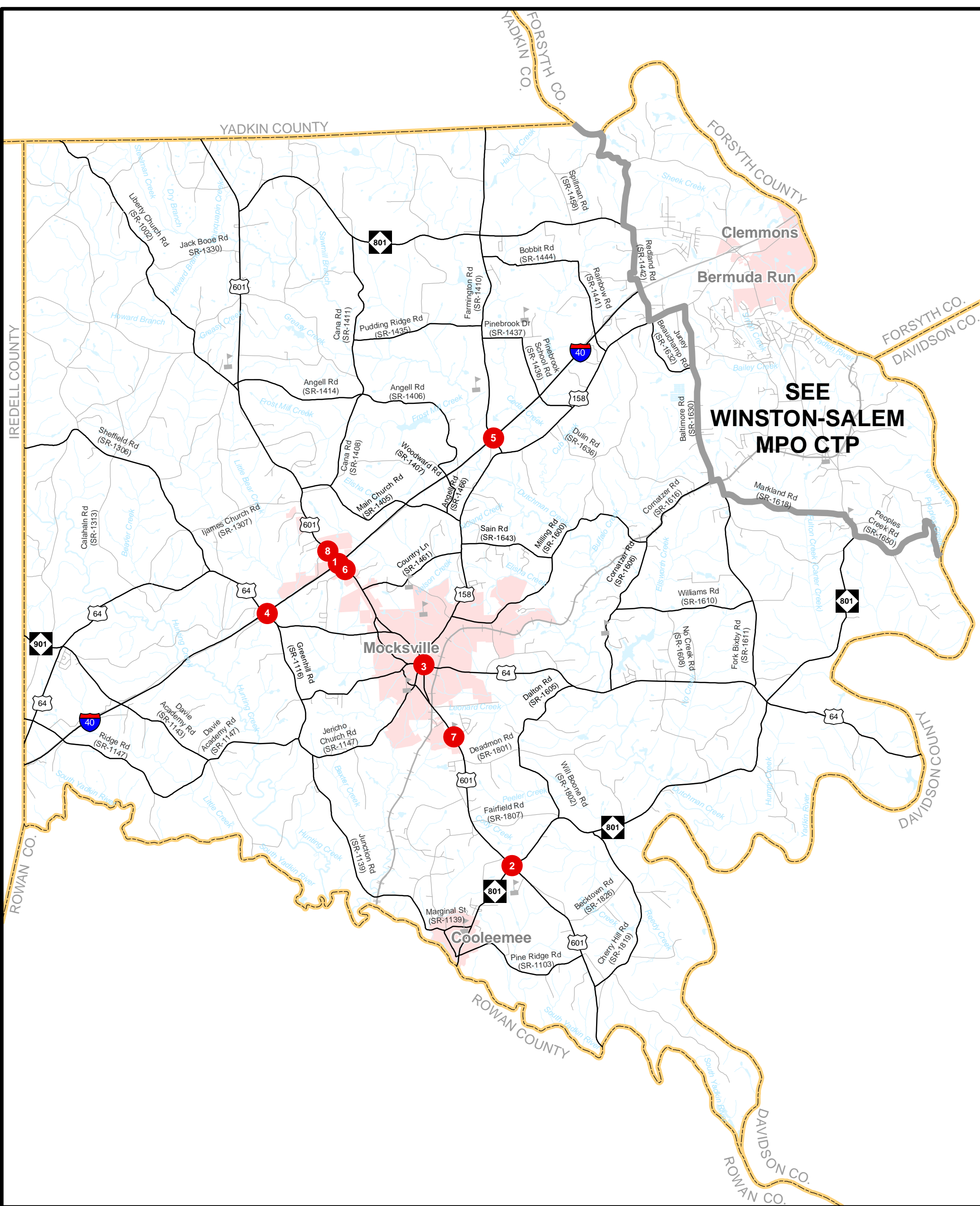


Base map date: October 21, 2010

Figure 3

2035 Volumes and Capacity Deficiencies

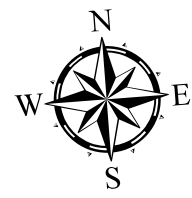
Davie County Comprehensive Transportation Plan



SEE WINSTON-SALEM MPO CTP

Legend

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



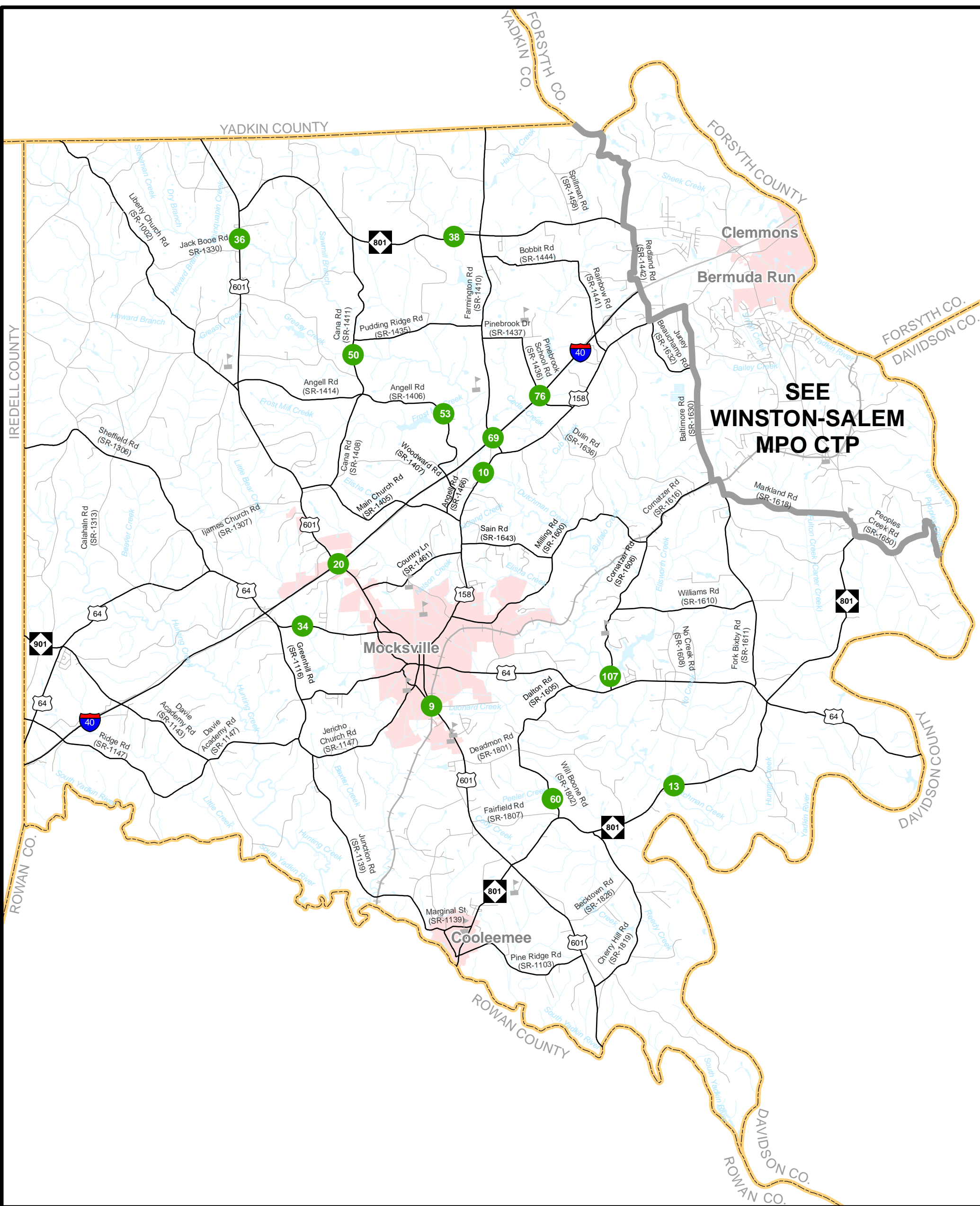
Base map date: October 21, 2010

Refer to Table 4 in Appendix F for more details

Figure 4

Crash Locations
January 1, 2008 to Decemer 31, 2010

**Davie County
Comprehensive
Transportation Plan**



- Legend**
- # Deficient Bridges (# Bridge Number)
 - Schools
 - Study Roads
 - Roads
 - Railroads
 - Rivers and Streams
 - Water Bodies
 - Municipal Boundary
 - Planning Boundary
 - County Boundary



Base map date: October 21, 2010

Refer to Table 5 in Appendix G for more details

Figure 5
Deficient Bridges
 Davie County
 Comprehensive
 Transportation Plan

Public Transportation and Rail

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

Public Transportation

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

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

An inventory of existing and planned fixed public transportation routes for the planning area is presented on Sheet 3 of Figure 1. Route 14, the Davie County Express is a fixed-route bus service between Mocksville and Winston-Salem, currently operated by the Piedmont Authority for Regional Transportation (PART). Within the planning area, the bus route is on I-40 from the northern planning area boundary to US 601 interchange; and from the interchange to the park and ride lot on US 601 north of I-40. The Yadkin Valley Public Transportation, currently operated by Yadkin Valley Economic Development District Inc. and NCDOT Public Transportation Division, provides demand response services in the county. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information.

Rail

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

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back every day. 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. Norfolk Southern Corporation currently operates the rail system that serves the area. The rail line goes through central Davie County from Rowan County to Forsyth County and only provides freight service. There are no planned rail improvements within the area. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

Bicycles & Pedestrians

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

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. The information utilized to develop these elements was received from the Northwest Piedmont RPO in coordination with the Davie County. There are no regional or statewide facilities within the area. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information.

Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2005 Davie County Land Development Plan was used to meet this requirement and is illustrated in Figure 6.

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:

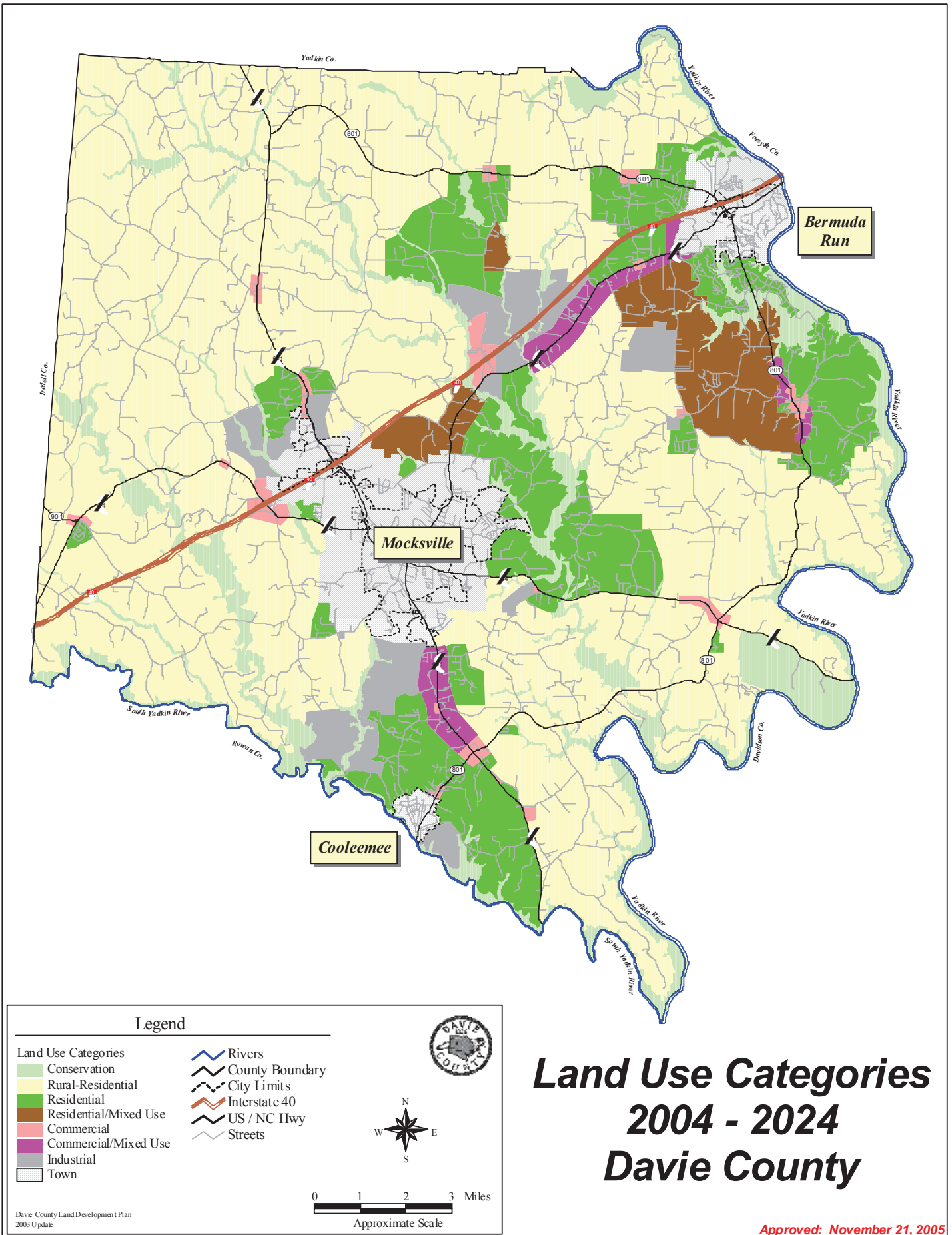
- Residential: Land devoted to the housing of people, with the exception of hotels and motels which are considered commercial.
- Commercial: Land devoted to retail trade including consumer and business services and their offices; this may be further stratified into retail and special retail classifications. 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.

Future land use, as depicted in Figure 6, shows that the planning area is predominantly rural residential. Davie County anticipates growth primarily along the major travel corridors as well around the towns of Mocksville and Cooleemee. The residential development patterns that have occurred in Mocksville and Cooleemee Townships will continue well into the future. Commercial and mixed use centers are will be clustered along the major travel corridors such as I-40, US 64, US 158, US 601 and NC 801. Industrial areas are anticipated to be within in close proximity to municipalities and also along the major travel corridors. Conservation areas are distributed within the county, primarily along the major water bodies and will continue to grow in Davie County.

Figure 6



Consideration of Natural and Human Environment

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

A full listing of environmental features that are examined as a part of a CTP study is shown in the following tables utilizing the best available data. Environmental features occurring within the Davie County are shown in Figure 7 and are highlighted Tables 1 and 2.

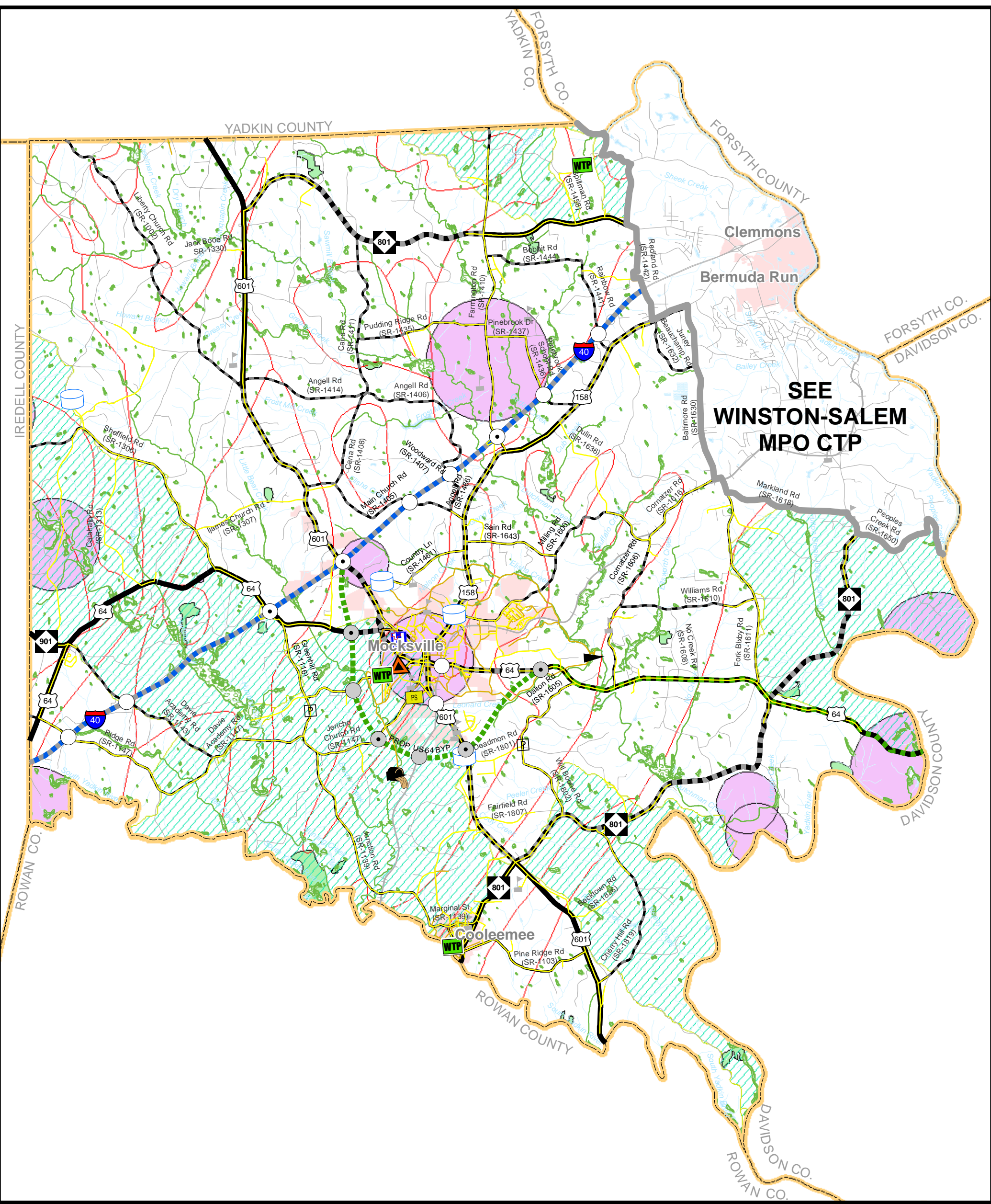
Table 1 – Environmental Features

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

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

Table 2 – Restricted Environmental Features

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



- Legend**
- Emergency Operation Center
 - Hospital Location
 - Water Treatment Plant
 - Water Distribution Tank
 - Water Distribution Pump
 - Sanitary Treatment Plant
 - Sanitary Pump
 - Sanitary Discharge
 - Hazardous Waste Facility
 - Water Distribution Pipe
 - Sanitary Pipes
 - National Wetland Inventory
 - National Wetland Inventory
 - Water Supply Watershed

- Geology
- Significant Natural Heritage Areas
- Natural Heritage Element Occurrence
- Schools
- Railroads
- Roads
- Rivers
- Water Bodies
- Municipal Boundary
- Planning Boundary
- County Boundary

0 0.5 1 2 Miles



Base map date: October 21, 2010

Figure 7
Environmental Features
 Davie County
 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.

A meeting was held with the Davie County Board of Commissioners in August 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 Davie County CTP Steering Committee, which included a staff representative from Davie County, Cooleemee, and the Northwest Piedmont RPO, 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; one in Mocksville and another in Cooleemee, to present the proposed CTP to the public and solicit comments. The first meeting was held on October 25, 2011 at the Davie County Administration Building, and the second meeting was held on November 21, 2011 at the Cooleemee Town Hall. Each session was publicized in the local newspaper.

A public hearing was held on January 16, 2012 during the Cooleemee Board of Commissioners meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting with an amendment to remove a proposed sidewalk on Erwin Street and add sidewalks to Church Street, Cross Street, Duke Street, and Marginal Street. The pedestrian map was revised on January 16, 2012 to reflect this change.

A public hearing was held on February 6, 2012 during the Davie County Board of Commissioners meeting. The CTP was adopted during this meeting.

A public hearing was held on February 7, 2012 during the Mocksville Board of Commissioners meeting. The CTP was adopted during this meeting.

The Northwest Piedmont RPO endorsed the CTP on February 15, 2012. The North Carolina Department of Transportation voted to mutually adopt the Davie County CTP on April 5, 2012.

II. Recommendations

The 2012 Davie County CTP is shown in Figure 1. This chapter presents recommendations for each mode of transportation in Davie County.

Implementation

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

Initiative for implementing the CTP rests predominately with the policy boards and citizens of the county and its municipalities. As transportation needs throughout the state exceed available funding, it is imperative that the local planning area aggressively pursue funding for priority projects. Projects should be prioritized locally and submitted to the Northwest Piedmont 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 Act¹ (NEPA) or the North Carolina (or State) Environmental Policy Act² (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.

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

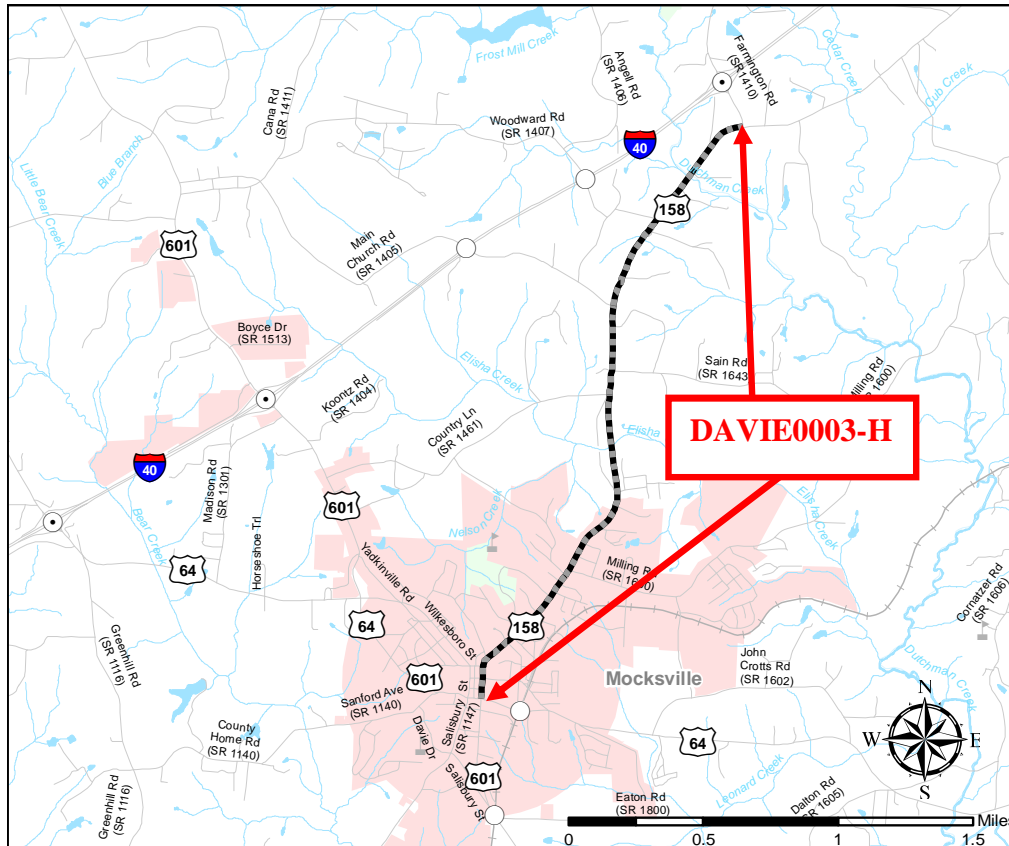
² For more information on SEPA, visit: <http://www.doa.nc.gov/clearing/faq.aspx>

Problem Statements

HIGHWAY

US 158 Proposed improvements from Farmington Road (SR 1410) to US 64/US 601

Local ID: DAVIE0003-H
Last Updated: 5/16/12



Identified Problem

By 2035, US 158 is projected to be near or over capacity from Farmington Road (SR 1410) to US 64/US 601. Improvements are needed to accommodate projected traffic volumes such that a minimum of LOS D can be achieved.

Justification of Need

US 158 is a north-south corridor through Davie County, connecting Mocksville to other urban centers such as Bermuda Run and Winston-Salem.

The existing US 158 is a 2 lane facility with 12 foot lanes and is on the regional tier of NC Multimodal Investment Network³ (NCMIN). It is classified as a minor arterial on the Federal Functional Classification System⁴.

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

⁴ For more information on functional classification, visit: <http://www.ncdot.gov/doh/preconstruct/tpb/FCS/>

By 2035, the entire segment within the planning area is projected to be near or over capacity based on providing a LOS D. From Farmington Road (SR 1410) to Dutchman Creek, Annual Average Daily Traffic (AADT) is projected to increase from 9,300 vehicles per day (vpd) in 2010 to 15,500 vpd in 2035, compared to a LOS D capacity of 15,800 vpd. From the Dutchman Creek to Dogwood Lane (SR 1677), traffic is projected to increase from a range of 9,300 - 10,200 vpd in 2009 to a range of 14,000 - 15,500 vpd in 2035, compared to a LOS D capacity of 15,800 vpd. From Dogwood Lane (SR 1677) to Gaither Street, traffic is projected to increase from a range of 9,300 - 12,000 vpd in 2009 to a range of 14,000 - 17,000 vpd in 2035, compared to a LOS D capacity of 13,900 vpd. From Gaither Street to US 601/US 64, traffic is projected to increase from 12,200 vpd in 2009 to 13,600 vpd, compared to a LOS D capacity of 13,900 vpd.

Community Vision and Problem History

The US 158 corridor is parallel to I-40 between Mocksville and Winston-Salem. Area residents use this facility as an alternate route to I-40 between Mocksville, Bermuda Run and Winston-Salem. Within the planning area, land use along the US 158 corridor is predominantly rural residential.

This deficiency was first identified in the 1992 Mocksville Thoroughfare Plan and also in the 2003 Davie County Thoroughfare Plan.

CTP Project Proposal

Project Description and Overview

The CTP project proposal (Local ID DAVIE0003-H) is to widen US 158 from a 2 lane to a 3 lane major thoroughfare with center turn lane from Farmington Road (SR 1410) to US 64/US 601. This project also includes accommodation for bicycle and pedestrian facilities. The proposed improvements would reduce congestion and provide efficient mobility for through traffic by removing left turns from through movement.

Linkages to Other Plans and Proposed Project History

The proposed improvements for US 158 directly connects to the proposed US 64/US 601 widening as well as improvements to Main Church Road (SR 1405), Sain Road (SR 1643), Milling Road (SR 1600) and Country Lane Road (SR 1461).

The 1992 Mocksville Thoroughfare Plan recommended implementing a bypass east of Mocksville, from north of the US 158 and Milling Road (SR 1600) intersection to the US 601 and Eaton Road (SR 1800) intersection to relieve the anticipated future congestion on US 158 through downtown Mocksville. The 2003 Davie County Thoroughfare Plan recommended widening US 158 to four lanes from Farmington Road (SR 1410) to the Mocksville planning area boundary north of the US 158 and Milling Road (SR 1600) intersection.

Land Use Patterns

Current land use along the US 158 corridor is primarily rural residential with the historic district extending from north of Milling Road (SR 1600) to US 64. The Central Business

District (CBD) extends from just south of Cherry Street to Maple Street, south of US 64. The 2005 Mocksville Land Use Plan⁵ indicates that future land use along the corridor will transition to high density urban residential with a small pocket of commercial development just south of Elisha Creek. According to the 2005 Davie County Land Development Plan⁶, future land use between Sain Road (SR 1636) and Farmington Road (SR 1410) is expected to include residential/mixed use, commercial and industrial developments.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, the proposed improvements to US 158 have the potential to impact the historic district which lies within the Mocksville CBD. Commercial and residential buildings with driveways on US 158 may also be impacted. There is a water distribution system tank located in the vicinity of Milling Road (SR 1600) and there are water and sewer pipes along US 158. The proposed project crosses Dutchman Creek, Elisha Creek and one unnamed stream that are on the National Wetlands Inventory. Additionally, NCDOT's Structures Management Unit has rated bridge #10 over Dutchman Creek as functionally obsolete.

Multi-modal Considerations

A multi-use path is recommended adjacent to US 158 from Milling Road (SR 1600) to US 64/US 601. On-road bicycle accommodations are recommended along US 158 from Main Church Road (SR 1405) to Oak Grove Church Road (SR 1642) and from Dogwood Lane (SR 1677) to Milling Road (SR1600).

Public/ Stakeholder Involvement

Respondents to Goals and Objectives (G&O) Survey question that asked, "What areas would the community most like to have improved access?" ranked Winston-Salem at the top. Improving US 158 will improve access to Bermuda Run and Winston Salem, in addition to serving as an alternate to I-40. In the response to the question that asked, "Are you concerned with safety or crash problems at any specific locations?", US 158 was the most identified facility particularly in the vicinity of Milling Road (SR 1600) intersection.

During the July 2010 public workshop held for the Mocksville CTP⁷, truck traffic that passes through residential neighborhoods was identified as a concern. Trucks from US 64 east to the US 601/I-40 interchange and the truck stop north of I-40 avoid travelling through the CBD by using the following residential streets: John Crotts Road (SR 1602), Bethel Church Road (SR 1601), Milling Road (SR 1600), US 158, Campbell Road (SR 1400), and Country Lane (SR 1461). Respondents to the G&O Survey question that asked, "Is truck traffic a problem in the area?", also identified the intersection of US 158 and Milling Road (SR 1600) as one of the problem areas.

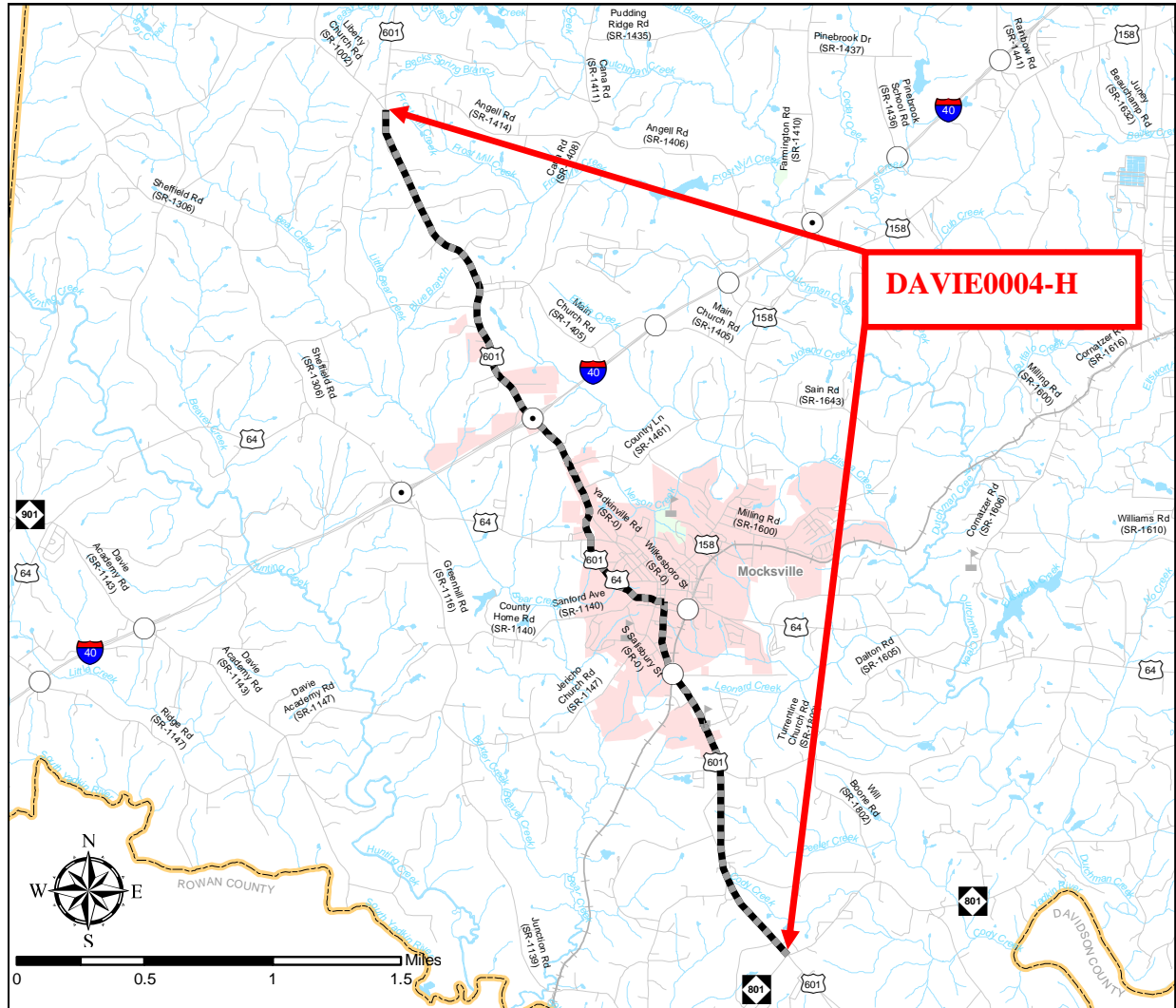
⁵ 2005 Mocksville Land Use Plan: <http://www.nwprpo.org/Projects/LandUsePlans/Mocksville%20LUP.pdf>

⁶ 2005 Davie County Land Development Plan: <http://www.daviecountync.gov/DocumentView.aspx?DID=122>

⁷ 2011 Mocksville CTP: <http://www.ncdot.gov/doh/preconstruct/tpb/PLANNING/MocksvilleCTP.html>

US 601 Proposed improvements from Liberty Church Road (SR 1002) to NC 801

**Local ID: DAVIE0004-H
Last Updated: 5/16/12**



Identified Problem

US 601 from Liberty Church Road (SR 1002) to NC 801 is projected to be near or over capacity by 2035. The primary purpose of this project is to accommodate projected traffic volumes such that a minimum Level of Service (LOS) D can be achieved.

Justification of Need

US 601 is a major north-south corridor in Davie County, connecting Mocksville with rural areas along the central region of the county. The facility is a vital artery in moving people and goods through North Carolina, connecting major corridors such as US 74, I-85, I-40, US 421, and I-74.

US 601 is classified as a minor arterial on the Federal Functional Classification System and is on the regional tier of the North Carolina Multimodal Investment Network (NCMIN). US 601 currently has a variable cross section as follows: a 2 lane cross section with 12 foot lanes from NC 801 to Deadmon Road (SR 1801); a 3 lane cross section with 12 foot lanes from Deadmon Road (SR 1801) to Eaton Road; a 2 lane cross section with 11 foot lanes from Eaton Road to US 64; a 3 lane cross section with 12 foot lanes from US 64 to Koontz Road; a 5 lane cross section with 12 foot lanes from Koontz Road to I-40; a 4 lane undivided cross section with 12 foot lanes from I-40 to Boyce Drive (SR 1513); and a 2 lane cross section with 12 foot lanes from Boyce Drive (SR 1513) to Liberty Church Road (SR 1002).

By 2035, this entire segment of US 601 is projected to be near or over capacity based on providing a LOS D. The Annual Average Daily Traffic (AADT) projections are as follows:

- From NC 801 to Fairfield Road (SR 1807), traffic is projected to increase from 9,900 vehicles per day (vpd) in 2010 to 13,500 vpd in 2035, compared to a LOS D capacity of 15,800 vpd.
- From Fairfield Road (SR 1807) to Deadmon Road (SR 1801), traffic is projected to increase from 14,400 vpd in 2010 to 21,800 vpd in 2035, compared to a LOS D capacity of 15,800 vpd.
- From Deadmon Road (SR 1801) to Eaton Road (SR 1800), traffic is projected to increase from 18,500 vpd in 2009 to 26,200 vpd in 2035, compared to a LOS D capacity of 18,200 vpd.
- From Eaton Road (SR 1800) to US 64/US 158 intersection, traffic is projected increase from 18,500 vpd in 2009 to 26,200 vpd in 2035, compared to a LOS D capacity of 13,900 vpd.
- From US 64/US 158 intersection to Koontz Road (SR 1404), traffic is projected to increase from a range of 13,500 - 17,800 vpd in 2009 to a range of 23,200 – 27,100 vpd in 2035, compared to a LOS D capacity of 18,200 vpd.
- From Koontz Road (SR 1404) to I-40, traffic is projected to increase from 19,400 vpd in 2009 to 33,400 vpd in 2035, compared to a LOS D capacity of 32,400 vpd.
- From I-40 to Boyce Drive (SR 1513), traffic is projected to increase from 19,400 vpd in 2009 to 33,400 vpd in 2035, compared to a LOS D capacity of 31,600 vpd.
- From Boyce Drive (SR 1513) to Main Church Road (SR 1405), traffic is projected to increase from 10,400 vpd in 2009 to 18,300 vpd in 2035, compared to a LOS D capacity of 15,800 vpd.
- From Main Church Road (SR 1405) to Liberty Church Road (SR 1405), traffic is projected to increase from 8,300 vpd in 2010 to 13,100 vpd in 2035, compared to a LOS D capacity of 15,800 vpd.

Improvements are needed to relieve congestion and improve mobility along this facility.

Community Vision and Problem History

Due to US 601 being a major thoroughfare through Davie County, as well as having a connection to I-40, the county envisions significant growth along its corridor. Current

development activities along US 601 include residential, institutional, commercial and industrial which are anticipated to expand largely to industrial and commercial enterprises. Moderate residential and mixed uses are planned along the corridor.

This route was previously identified as deficient in the 1992 Mocksville Thoroughfare plan and in the 2003 Davie County Thoroughfare Plan.

CTP Project Proposal

Project Description and Overview

The CTP project proposal (Local ID DAVIE0004-H) is to widen US 601 to a 3 lane major thoroughfare with a center turn lane from Liberty Church Road (SR 1002) to Main Church Road (SR 1405); a 5 lane major thoroughfare with center turn lane from Main Church Road (SR 1405) to Fairfield Road (SR 1807); and a 3 lane major thoroughfare with a center turn lane from Fairfield Road (SR 1807) to NC 801. This project also includes bicycle and pedestrian accommodations.

Additionally, during the most recent three year period, five intersections along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's average for the same period. Those intersections included: I-40, NC 801, Madison Road (SR 1301), Southwood Drive (SR 1835) and Cooper Creek Drive. Refer to Appendix F for more detailed information on these locations.

The CTP project proposal for US 601 would reduce congestion, provide efficiency and improve mobility and safety for through traffic by removing left turns from the through movement.

Linkages to Other Plans and Proposed Project History

The proposed improvements for US 601 directly connect to the proposed US 64 Bypass as well as the proposed improvements for existing US 64, US 158 and I-40.

The 1992 Mocksville Thoroughfare Plan recommended implementing the US 64 Bypass around the town to relieve the anticipated future congestion on US 601 through downtown Mocksville. The 2003 Davie County Thoroughfare Plan included recommendations to widen US 601 to a four lane facility north and south of Mocksville.

Land Use Patterns

Current land use along the US 601 corridor consists of a mixture of residential, industrial, government/public, institutional and pockets of commercial developments. From NC 801 to US 64 land use is primarily residential. The CBD starts from US 64 and ends at Sanford Avenue. From Sanford Avenue to Main Church Road (SR 1405), in addition to the existing residential industrial uses, there are also new commercial, industrial, and residential developments that have moved into the area in the recent past. From Main Church Road (SR 1405) to Liberty Church Road (SR 1002) land use is primarily residential. According to the 2005 Mocksville Land Use Plan and the 2005

Davie County Land Development Plan, significant future growth is anticipated in industrial, commercial, mixed use and residential developments.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, the proposed improvements to US 601 have the potential to impact the water supply watershed which lies west of the US 601 corridor, and national heritage elements located in the CBD area and in the vicinity of US 601/I-40 interchange. There is a water distribution system tank located in the vicinity of Deadmon Road (SR 1801) and there are water pipes along US 601. Several commercial and residential buildings with driveways on US 601 may also be impacted. Davidson County Community College and Davie County High School are located on US 601 near Southwood Drive in Mocksville. There is a hazardous waste facility located along US 601 near Sanford Avenue in Mocksville. The proposed project crosses Peeler Creek, Cody Creek and other wetlands. Additionally, NCDOT's Structures Management Unit rated bridge #9 over Southern Railroad as functionally obsolete.

Multi-modal Considerations

A multi-use path is recommended adjacent to US 601 from Deadmon Road (SR 1801) to Country Lane Road (SR 1461). A sidewalk is recommended on US 601 from Country Lane Road (SR 1461) to Madison Road (SR 1301). A proposed bus route will utilize US 601 from I-40 to a proposed park and ride lot at US 601 and Boyce Drive (SR 1513).

Public/ Stakeholder Involvement

Respondents to Mocksville CTP Goals and Objectives (G&O) Survey question that asked, "What roads would you most like to have improved access?" ranked US 601 at the top. The majority of commercial developments, some industrial enterprises, government, and recreational centers in the Mocksville area are located along the US 601 corridor. Improving US 601 will improve access to these activity centers. In response to the question, "Is truck traffic a problem in the area?", respondents identified several locations along US 601 as having a truck traffic problem. Some of the locations identified are at the following locations along US 601: Rollingwood Drive, US 64/US 158, Boyce Drive (Truck Stop). The US 64/US 158 intersection was identified most often.

In response to the question regarding safety or crash problems, respondents to the Davie County G&O survey identified several locations along US 601 as having safety or crash issues. Some of the locations identified included the intersections at Rollinwood Drive, US 64, Sanford Avenue, Cemetery Street, US 158 (Main Street), Madison Road (SR 1301), Maple Street, and near the entrance of Davie High School.

I-40, Local ID: DAVIE0001-H

I-40 is projected to be near capacity by 2035 from Iredell County to the Winston-Salem MPO planning area at Redland Road (SR 1442). Improvements are needed to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.

I-40 is currently a 4 lane interstate with 12 foot lanes from Iredell County to the Winston-Salem MPO planning area at Redland Road (SR 1442). I-40 is on the statewide tier of NCMIN and is designated as a freeway in NCDOT's SHC Vision Plan.

By 2035, this entire segment of I-40 is projected to be near capacity based on providing a LOS D. The AADT projections are as follows:

- Traffic from the Winston-Salem planning area at Redland Road (SR 1442) to Dutchman Creek is projected to increase in range from 36,500 to 39,800 vpd in 2010 to 58,000 to 60,000 vpd in 2035, compared to a LOS D capacity of 69,800;
- Traffic from Dutchman Creek to Hunting Creek is projected to increase in range from 32,700 to 36,500 vpd in 2009 to 51,200 to 57,000 vpd in 2035, compared to a LOS D capacity of 69,800 vpd; and
- Traffic from Hunting Creek to Iredell County is projected to increase from 33,600 vpd in 2010 to 51,500 vpd in 2035, compared to a LOS D capacity of 69,800 vpd.

Additionally, during the most recent three year period, three interchanges along this corridor were identified as having 10 or more crashes and/or had a severity index above the state's average for the same period. Those intersections included: US 64, US 601 and Farmington Road (SR 1410). Refer to Appendix F for more detailed information on these locations.

The CTP project proposal (Local ID DAVIE0001-H) is to widen I-40 from a 4 lane to a 6 lane freeway from Iredell County to the Winston-Salem MPO planning area at Redland Road (SR 1442). The proposed improvements would reduce congestion and provide efficient mobility for travel through the county.

Based on a planning level environmental assessment using available GIS data, portions of the proposed project goes through a water supply watershed area in western Davie County and crosses several wetland areas through the county. Additionally, the proposed project is in the vicinity of three natural heritage element occurrence areas, at the Rowan/Iredell county lines, near US 601 and near Farmington Road (SR 1410).

The 2003 Davie County Thoroughfare Plan and the 1992 Mocksville Thoroughfare Plan recommended widening I-40 to 6 lanes.

US 64, Local ID: R-3602A

US 64 is projected to be near capacity by 2035 from Cornatzer Road (SR 1606) to west of John Crotts Road (SR 1602). Additionally, US 64 does not meet the future mobility

needs in central North Carolina. Improvements are needed to relieve congestion and improve mobility on the existing facility such that a minimum of LOS D can be achieved.

US 64 is currently a 2 lane facility with 12 foot lanes from Davidson County to west of John Crotts Road (SR 1602). US 64 is functionally classified as a minor arterial and is part of the statewide tier of NCMIN. US 64 is designated as an expressway on NCDOT's SHC Vision Plan and is intended to provide mobility in Davie County and, ultimately, connectivity between Statesville and Raleigh.

By 2035, traffic on US 64 from Cornatzer Road (SR 1606) to west of John Crotts Road (SR 1602), is projected to range between 12,000 vpd and 14,200 vpd compared to a LOS D capacity of 15,800 vpd. From Cornatzer Road (SR 1606) to Davidson County, traffic is projected to range between 9,000 and 9,200 vpd compared to a LOS D capacity of 15,800 vpd.

The CTP project proposal (Local ID R-3602A) is to widen US 64 from a 2 lane facility to a 4 lane expressway from Davidson County to west of John Crotts Road (SR 1602). As development occurs along this corridor every effort should be made to limit access in order to maintain mobility and connectivity.

Based on a planning level environmental assessment using available GIS data, portions of the proposed project is adjacent to a water supply watershed area in eastern Davie County and crosses several wetland areas. Additionally, the proposed project is in the vicinity of a natural heritage element occurrence area at the Davidson County line. There are also water lines along the facility.

The 2003 Davie County Thoroughfare Plan also included this project.

Minor Widening Improvements

The following routes are recommended to be upgraded to two 12 foot lanes with paved shoulders to improve narrow lane widths and/or to accommodate bicycles.

- **DAVIE0003-H:** US 158, from the Winston-Salem MPO Planning Area Boundary (PAB) at Juney Beauchamp Road (SR 1632) to Dulin Road (SR 1636)
- **DAVIE0022-H:** NC 801, from US 601 to Farmington Road (SR 1410)
- **DAVIE0022-H:** NC 801, from the Winston-Salem MPO PAB at Peoples Creek Road (SR 1650) to US 601
- **DAVIE0023-H:** Angell Road (SR 1414/SR 1406/SR 1466), from Main Church Road (SR 1405) to Woodward Road (SR 1407) and from Woodward Road (SR 1407) to Liberty Church Road (SR 1002)
- **DAVIE0024-H:** Bobbitt Road (SR1444), from Farmington Road (SR 1410) to Rainbow Road (SR 1441)

- **DAVIE0025-H:** Cana Road (SR 1411), from Main Church Road (SR 1405) to NC 801
- **DAVIE0026-H:** Cherry Hill Road (SR 1819), from NC 801 to US 601
- **DAVIE0009-H:** Davie Academy (SR 1143/SR 1147), from US 64 to Jericho Church Road (SR 1147)
- **DAVIE0027-H:** Farmington Road (SR-1410), from Yadkin County to US 158
- **DAVIE0028-H:** Fork Bixby Road (SR 1611), from the Winston-Salem MPO PAB at Markland Road (SR 1618) to US 64
- **DAVIE0029-H:** Junction Road (SR 1139), Jericho Church Road (SR 1147) to Marginal Street (SR 1139)
- **DAVIE0030-H:** Juney Beauchamp Road (SR 1632), from US 158 to the Winston-Salem MPO PAB at Baltimore Road d (SR 1630)
- **DAVIE0031-H:** Liberty Church Road (SR 1002), from Yadkin County to US 601
- **DAVIE0032-H:** Marginal Street (SR 1139), from Junction Road (SR 1139) to NC 801
- **DAVIE0033-H:** Pinebrook Drive (SR 1437), from Farmington Road (SR 1410) to Pinebrook School Road (SR 1436)
- **DAVIE0034-H:** Pinebrook School Road (SR 1436), from Pinebrook Drive (SR 1437) to US158
- **DAVIE0035-H:** Pudding Ridge Road (SR 1435), from Farmington Road (SR 1410) to Cana Road (SR 1411)
- **DAVIE0036-H:** Rainbow Road (SR 1441), from Bobbitt (SR1444) Road to US 158
- **DAVIE0037-H:** Ridge Road (SR 1447), from Iredell County to Davie Academy Road (SR 1147)
- **DAVIE0018-H:** Sheffield Road (SR 1306), from Ijames Church Road (SR 1307) to Iredell County
- **DAVIE0038-H:** Will Boone Road (SR 1802) from Deadmon Road (SR 1801) to NC 801
- **DAVIE0039-H:** Williams Road (SR 1610), from Fork Bixby Road (SR 1611) to Cornatzer Road (SR 1606)
- **DAVIE0040-H:** Woodward Road (SR 1407), from Angell Road (SR 1466) to Angell Road (SR 1406)

Note: The Highway Map of the CTP incorrectly identifies Cornatzer Road (SR 1606), from the Winston-Salem MPO PAB to Milling Road (SR 1600) as needs improvement. This facility should be classified as an existing minor thoroughfare and will be corrected in the next update.

PUBLIC TRANSPORTATION & RAIL

There are no public transportation or rail improvements recommended in this CTP.

BICYCLE

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

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

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

- **DAVIE0001-B:** US 64, from Calahaln Road (SR 1313) to Davie Academy Road (SR 1143)
- **DAVIE0003-H** US 158, from Redland Road (SR 1442) to Juney Beauchamp Road (SR 1632)
- **DAVIE0004-H:** US 601, from Fairfield Road (SR 1807) to Gladstone Road (SR 1121)
- **DAVIE0022-H:** NC 801, from Joe Road (SR 1808) to Will Boone Road (SR 1802) and from Fulton Road (SR 1612) to Peoples Creek Road (SR 1650)
- **DAVIE0002-B:** NC 901, from US 64 to County Line Road (SR 1336)
- **DAVIE0023-H:** Angell Road (SR 1414), from Liberty Church Road (SR 1002) to Cana Road (SR 1411)
- **DAVIE0003-B:** Baltimore Road (SR 1630), from Juney Beauchamp Road (SR 1632) to Cornatzer Road (SR 1616)
- **DAVIE0004-B:** Bear Creek Church Road (SR 1320), from Duke Whitaker Road (SR 1313) to Liberty Church Road (SR 1002)
- **DAVIE0024-H:** Bobbitt Road (SR1444), from Farmington Road (SR 1410) to Rainbow Road (SR1441)
- **DAVIE0005-B:** Boxwood Church Road (SR 1824), from Cherry Hill Road (SR 1819) to Pine Ridge Road (SR 1103)
- **DAVIE0006-B:** Calahaln Road (SR 1313), from Sheffield Road (SR 1306) to US 64
- **DAVIE0025-H:** Cana Road (SR 1411), from Pudding Ridge Road (SR 1435) to Main Church Road (SR 1405)
- **DAVIE0007-B:** Cedar Grove Church Road (SR 1811), from US 64 to Joe Road (SR 1808)

- **DAVIE0008-B:** Center Street (SR 1103), from Pine Ridge Road (SR 1103) to NC 801
- **DAVIE0009-B:** Cherry Hill Road (SR 1819), from NC 801 to Boxwood Church Road (SR 1824)
- **DAVIE0026-B:** Cornatzer Road (SR 1616), from Baltimore Road (SR 1630) to Fork Bixby Road (SR 1611)
- **DAVIE0010-B:** County Line Road (SR 1338), from Sheffield Road (SR 1306) to NC 901
- **DAVIE0011-B:** Cross Street, from Main Street to 290 feet west of Main Street
- **DAVIE0009-H:** Davie Academy Road (SR 1143/SR 1147), from US 64 to Hunting Creek
- **DAVIE0012-B:** Duke Whitaker Road (SR 1313), from Bear Creek Church Road (SR 1320) to Sheffield Road (SR 1306)
- **DAVIE0013-B:** Fairfield Road (SR 1807), from Will Boone Road (SR 1802) to US 601
- **DAVIE0027-H:** Farmington Road (SR 1410), from Pudding Ridge Road (SR 1435) to Bobbitt Road (SR 1444)
- **DAVIE0028-H:** Fork Bixby Road (SR 1611), from Cornatzer Road (SR 1616) to US 64
- **DAVIE0014-B:** Foster Road (SR 1159), from Ridge Road (SR 1147) to Rowan County
- **DAVIE0015-B:** Fulton Road (SR 1612), from Fork Bixby Road (SR 1611) NC 801
- **DAVIE0016-B:** Georgia Road (SR 1314), from Bear Creek Church Road (SR 1320) to Duke Whitaker Road (SR 1313)
- **DAVIE0017-B:** Gladstone Road (SR 1121), from US 601 to Nolley Road (SR 1125)
- **DAVIE0018-B:** Joe Road (SR 1808), from Cedar Grove Church Road (SR 1811) to NC 801
- **DAVIE0029-H:** Junction Road (SR 1139), from Jericho Church Road (SR 1147) to Marginal Street (SR 1139)
- **DAVIE0030-H:** Juney Beauchamp Road (SR 1632), from US 158 to Baltimore Road (SR 1630)
- **DAVIE0031-H:** Liberty Church Road (SR 1002), from Yadkin County to Angell Road (SR 1414)
- **DAVIE0019-B:** Main Street, from Marginal St (SR 1139) to NC 801
- **DAVIE0032-H:** Marginal Street (SR 1139), Junction Road (SR 1139) to NC 801
- **DAVIE0020-B:** Mr. Henry Road (SR 1143), from Davie Academy Road (SR 1147) to Rowan County
- **DAVIE0021-B:** Nolley Road (SR 1125), from Junction Road (SR 1139) to Gladstone Road (SR 1121)
- **DAVIE0035-H:** Pudding Ridge Road (SR 1435), from Cana Road (SR 1411) to Farmington Road (SR 1410)

- **DAVIE0022-B:** Pine Ridge Road (SR1103), from Center Street, (SR 1103) to Boxwood Church Road (SR 1824)
- **DAVIE0023-B:** Point Road (SR1822), from Cherry Hill Road (SR 1819) to dead end
- **DAVIE0036-H:** Rainbow Road (SR 1441), from Bobbitt Road (SR 1444) to Redland Road (SR 1442)
- **DAVIE0024-B:** Redland Road (SR 1442), from NC 801 to US 158
- **DAVIE0037-H:** Ridge Road (SR 1147), from Iredell County to Foster Road (SR 1159)
- **DAVIE0018-H:** Sheffield Road (SR 1306), from County Line Road (SR 1338) to Ijames Church Road (SR 1307)
- **DAVIE0025-B:** Stroud Mill Road (SR 1158), from NC 901 to Iredell County
- **DAVIE0038-H:** Will Boone Road (SR 1802), from Fairfield Road (SR 1807) to NC 801
- **DAVIE0039-H:** Williams Road (SR 1610), from the Mocksville PAB at No Creek Road (SR 1608) to Fork Bixby Road (SR 1611)

PEDESTRIAN

Sidewalks are proposed on the following roads in Cooleemee:

- **DAVIE0001-P:** Church Street, from Marginal Street to Cross Street
- **DAVIE0002-P:** Cross Street, from Main Street to 300 feet west of Main Street and from Church Street to Duke Street
- **DAVIE0003-P:** Duke Street, from Cross Street to Marginal Street
- **DAVIE0004-P:** Junction Road (SR 1139), from Main Street to the Cooleemee western town limits
- **DAVIE0005-P:** Main Street, from Davie Street to NC 801
- **DAVIE0006-P:** Marginal Street, from Duke Street to Church Street

The following greenway facilities are proposed in Cooleemee:

- **DAVIE0007-P:** From Main Street to Erwin Street
- **DAVIE0008-P:** Several off-road pedestrian facilities are recommended west of Main Street along the South Yadkin River
- **DAVIE0009-P:** From west of Main Street to east of the South Yadkin River

The following multi-use paths are proposed in the county:

- **DAVIE0004-H:** US 601, from Fairfield Road (SR 1807) to Deadmon Road (SR 1801)
- **DAVIE0001-M:** NC 801, from Center Street (SR 1103) to Marginal Street (SR 1139) in Cooleemee

APPENDICES

Appendix A Resources and Contacts

North Carolina Department of Transportation

Customer Service Office

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

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

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

Secretary of Transportation

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2800
<http://www.ncdot.org/about/leadership/secretary.html>

Board of Transportation

1501 Mail Service Center Raleigh, NC 27699-1501 (919) 707-2820
<http://www.ncdot.gov/about/board/>

Highway Division

375 Silas Creek Parkway Winston-Salem, NC 27127 (336) 703-6500
<http://www.ncdot.gov/doh/operations/division9/>

Contact the:

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

375 Silas Creek Parkway Winston-Salem, NC 27127 (336) 703-6600

Transportation Planning Branch (TPB)

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

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

Northwest Piedmont Rural Planning Organization (RPO)

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

400 W. Fourth St., Suite 400 Winston-Salem, NC 27101 (336) 761-2111
<http://www.nwpcog.dst.nc.us/planning/web.cfm?CID=95>

Strategic Planning Office

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

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

Project Development & Environmental Analysis (PDEA)

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

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

Secondary Roads Unit

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

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

Program Development Branch

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

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

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

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

Rail Division

Contact the Rail Division for rail information throughout the state.

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

Division of Bicycle and Pedestrian Transportation

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

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

Structures Management Unit

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

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

Roadway Design Unit

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

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

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

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

Appendix B

Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

- **Freeways**

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

- **Expressways**

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

- **Boulevards**

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

- **Other Major Thoroughfares**

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

- **Minor Thoroughfares**

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

- **Operational Strategies** – Plans geared toward the non-single occupant vehicle. This includes but is not limited to HOV lanes or express bus service.
- **Rail Corridor** – Locations of railroad tracks that are either active or inactive tracks. These tracks were used for either freight or passenger service.
 - Active – rail service is currently provided in the corridor; may include freight and/or passenger service
 - Inactive – right of way exists; however, there is no service currently provided; tracks may or may not exist
 - Recommended – It is desirable for future rail to be considered to serve an area.
- **High Speed Rail Corridor** – Corridor designated by the U.S. Department of Transportation as a potential high speed rail corridor.
 - Existing – Corridor where high speed rail service is provided (there are currently no existing high speed corridor in North Carolina).
 - Recommended – Proposed corridor for high speed rail service.
- **Rail Stop** – A railroad station or stop along the railroad tracks.
- **Intermodal Connector** – A location where more than one mode of transportation meet such as where light rail and a bus route come together in one location or a bus station.
- **Park and Ride Lot** – A strategically located parking lot that is free of charge to anyone who parks a vehicle and commutes by transit or in a carpool.
- **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 and information from NCDOT Division 9. 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 2012-2018 Transportation Improvement Program (TIP). The '2035 AADT with CTP' is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter I.
- **Proposed Cross-section:** The CTP recommended cross-sections are listed by code; for depiction of the cross-section, refer to Appendix D. An entry of 'ADQ' indicates the existing facility is adequate and there are no improvements recommended as part of the CTP.
- **CTP Classification:** The CTP classification is listed, as shown on the adopted CTP Maps (see Figure 1). Abbreviations are F= freeway, E= expressway, B= boulevard, Maj= other major thoroughfare, Min= minor thoroughfare.
- **Tier:** Tiers are defined as part of the North Carolina Multimodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.
- **Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H=highway, T= public transportation, R= rail, B= bicycle, and P= pedestrian).

Table 3 - CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY

Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2010 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes	
					Cross-Section (ft) lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)				
DAVIE0001-H	I-40	Winston-Salem MPO PAB (West) - Farmington Rd (SR 1410)	Davie County	4.2	48	4	200	70	69800	38900	60000	60000	98200	6A	300	F	Sta	T
DAVIE0001-H	I-40	Farmington Rd (SR 1410) - Dutchman Creek	Davie County	0.4	48	4	200	70	69800	36500	64980	98200	6A	300	F	Sta	T	
DAVIE0001-H	I-40	Hunting Creek - Iredell Co.	Davie County	3.8	48	4	200	70	69800	33600	51500	98200	6A	300	F	Sta		
R-3602A	US 64	Davidson Co. - NC 801	Davie County	3.4	28	2	60	55	15800	7600	9200	31400	4B	180	E	Sta		
R-3602A	US 64	NC 801 - Fork Bixby Rd (SR 1611)	Davie County	0.4	28	2	60	55	15800	7000	9000	31400	4B	180	E	Sta		
R-3602A	US 64	Fork Bixby Rd (SR 1611) - Joe Rd (SR 1808)	Davie County	1.8	28	2	60	55	15800	7000	9000	31400	4B	180	E	Sta		
	US 64	Beaver Creek - NC 901	Davie County	2.3	28	2	60	55	15800	2700	3900	ADQ	ADQ	ADQ	Maj	Sta	B	
	US 64	NC 901 - Iredell Co.	Davie County	2.1	28	2	60	55	15800	1500	2600	ADQ	ADQ	ADQ	Maj	Sta		
	US 158	Winston-Salem MPO PAB (West) - Juney Beauchamp Rd (SR 1632)	Davie County	0.7	24	2	120	55	15800	7300	11900	ADQ	ADQ	ADQ	Maj	Reg		
DAVIE0003-H	US 158	Juney Beauchamp Rd (SR 1632) - Dulin Rd (SR 1636)	Davie County	2.9	22	2	120	55	15800	7300	11900	15800	2A	ADQ	Maj	Reg		
	US 158	Dulin Rd (SR 1636) - Farmington Rd (SR 1410)	Davie County	1.3	24	2	120	55	15800	6300	10700	ADQ	ADQ	ADQ	Maj	Reg		
DAVIE0003-H	US 158	Farmington Rd (SR 1410) - Dutchman Creek	Davie County	0.5	24	2	120	55	15800	9300	15500	18800	3A	ADQ	Maj	Reg		
	US 601	Yadkin Co. - NC 801	Davie County	1.7	28	2	60	55	15800	4600	7700	ADQ	ADQ	ADQ	Maj	Reg		
	US 601	NC 801 - Angell Rd (SR 1414)	Davie County	3.4	28	2	60	55	15800	5200	8000	ADQ	ADQ	ADQ	Maj	Reg		
	US 601	Angell Rd (SR 1414) - Liberty Church Rd (SR 1002)	Davie County	0.2	28	2	60	55	15800	5200	8000	ADQ	ADQ	ADQ	Maj	Reg		
DAVIE0004-H	US 601	Liberty Church Rd (SR 1002) - Main Church Rd (S-1405)	Davie County	2.4	28	2	60	55	15800	8300	13100	18800	3A	80	Maj	Reg		
DAVIE0004-H	US 601	Main Church Rd (SR 1405) - Fairfield Rd (SR 1807)	Davie County	1.3	24, 26	2	60-70	45,55	15800	14400	21800	32400	5A	100	Maj	Reg		
DAVIE0004-H	US 601	Fairfield Rd (SR 1807) - NC 801	Davie County	1.2	24	2	60	55	15800	9900	13500	18800	3A	80	Maj	Reg	B	
	US 601	NC 801 - Cherry Hill Rd (SR 1819)	Davie County	3.1	24	2	70	55	15800	7100	9700	ADQ	ADQ	ADQ	Maj	Reg		

HIGHWAY

Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2010 Existing System						2035 Proposed System						CTP Classification	Tier	Other Modes
					Cross-Section (ft)	Lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpc)	2010 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpc)	Cross-Section	ROW (ft)	CTP Classification			
	US 601	Cherry Hill Rd (SR 1819) - Rowan Co.	Davie County	1.3	24	2	60	55	15800	5600	7900	7900	ADQ	ADQ	Maj	Reg			
DAVIE0022-H	NC 801	US 601 - Cana Rd (SR 1411)	Davie County	3.1	20	2	60	55	13800	2100	2700	2700	2A	ADQ	Maj	Reg			
DAVIE0022-H	NC 801	Cana Rd (SR 1411) - Farmington Rd (SR 1410)	Davie County	2.7	20	2	60	55	13800	3100	4100	4100	2A	ADQ	Maj	Reg			
	NC 801	Farmington Rd (SR 1410) - Spillman Rd (SR 1458)	Davie County	2.0	24	5	60	55	15800	4200	6100	6100	ADQ	ADQ	Maj	Reg			
	NC 801	Spillman Rd (SR 1458) - Winston-Salem MPO PAB (West)	Davie County	1.2	24	2	60	55	15800	5200	7200	7200	ADQ	ADQ	Maj	Reg			
DAVIE0022-H	NC 801	Winston-Salem MPO PAB (South) - US 64	Davie County	4.8	20	2	60	55	13800	2900	4400	4400	2A	ADQ	Maj	Reg			
DAVIE0022-H	NC 801	US 64 - Cherry Hill Rd (SR 1819)	Davie County	4.9	20	2	60	55	13800	2700	3600	3600	2A	ADQ	Maj	Reg	B		
DAVIE0022-H	NC 801	Cherry Hill Rd (SR 1819) - Will Boone Rd (SR 1802)	Davie County	1.0	20	2	60	55	13800	2500	4200	4200	2A	ADQ	Maj	Reg	B		
DAVIE0022-H	NC 801	Will Boone Rd (SR 1802) - US 601	Davie County	1.4	20	2	60	55	13800	3200	4500	4500	2A	ADQ	Maj	Reg			
	NC 801	US 601 - Marginal St (SR 1139)	Davie County	1.5	24, 34	2	60	35-55	15800	6700	9000	9000	ADQ	ADQ	Maj	Reg			
	NC 801	Marginal St (SR 1139) - Rowan Co.	Davie County	0.9	24	2	60	35	15800	4600	5400	5400	ADQ	ADQ	Maj	Reg	P		
	NC 901	US 64 - Iredell Co.	Davie County	0.9	24	2	60	55	15800	2500	3200	3200	ADQ	ADQ	Maj	Reg			
DAVIE0023-H	Angell Road (SR 1414)	Liberty Church Rd (SR 1002) - Cana Rd (SR 1411)	Davie County	2.7	20	2	60	55	9000	700	1100	1100	2A	ADQ	Min	Sub	B		
DAVIE0023-H	Angell Road (SR 1406)	Cana Rd (SR 1411) - Woodward Rd (SR 1407)	Davie County	3.2	20	2	60	55	9000	100	200	200	2A	ADQ	Min	Sub			
DAVIE0023-H	Angell Road (SR 1466)	Woodward Rd (SR 1407) to Main Church Rd (SR 1405)	Davie County	0.5	20	2	60	55	9000	300	400	400	2A	ADQ	Min	Sub			
DAVIE0024-H	Bobbit Rd (SR 1444)	Farmington Rd (SR 1410) - Rainboe Rd (SR 1441)	Davie County	2.0	20	2	60	55	9000	500	600	600	2A	ADQ	Min	Sub			

HIGHWAY

Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2010 Existing System						2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft) Lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpc)	2010 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpc)	Cross-Section	ROW (ft)				
DAVIE0025-H	Cana Road (SR 1411)	NC 801 - Pudding Ridge Rd (SR 1435)	Davie County	3.4	22	2	60	55	10600	500	700	700	15100	2A	ADQ	Sub		
DAVIE0025-H	Cana Road (SR 1411)	Pudding Ridge Rd (SR 1435) - Angell Rd (SR 1406)	Davie County	1.2	22	2	60	55	10600	900	1500	1500	15100	2A	ADQ	Sub		
DAVIE0025-H	Cana Road (SR 1408)	Angell Rd (SR 1414) - Main Church Rd (SR 1405)	Davie County	2.0	22	2	60	55	10600	800	1300	1300	15100	2A	ADQ	Sub	B	
	Center St (SR 1103)	NC801 - Pine Ridge Rd (SR 1103)	Davie County	0.5	18	2	60	35	9700	800	1000	1000	ADQ	ADQ	Sub	B		
DAVIE0026-H	Cherry Hill Road (SR 1819)																	
DAVIE0026-H	Cherry Hill Road (SR 1819)	NC 801 - Bechtown Rd (SR 1826)	Davie County	3.9	20	2	60	55	10600	1100	1300	1300	15100	2A	ADQ	Sub		
DAVIE0026-H	Cherry Hill Road (SR 1819)	Bechtown Rd (SR 1826) - US 601	Davie County	2.7	18	2	60	55	10600	500	600	600	15100	2A	ADQ	Sub		
DAVIE0009-H	Davie Academy Rd (SR 1143)	US 64 - I-40	Davie County	1.7	22	2	60	55	10600	1000	1600	1600	15100	2A	ADQ	Sub	B	
DAVIE0009-H	Davie Academy Rd (SR 1143)	I-40 - Ridge Rd (SR 1147)	Davie County	2.2	22	2	60	55	10600	900	1800	1800	15100	2A	ADQ	Sub	B	
DAVIE0009-H	Davie Academy Rd (SR 1147)	Ridge Rd (SR 1147) - Hunting Creek	Davie County	1.1	20	2	60	55	9000	2400	4500	4500	15100	2A	ADQ	Sub	B	
DAVIE0027-H	Farmington Road (SR 1410)	Yadkin Co. - NC 801	Davie County	2.2	22	2	60	35,55	10600	1800	2200	2200	15100	2A	ADQ	Sub		
DAVIE0027-H	Farmington Road (SR 1410)	NC 801 - Pudding Ridge Rd (SR 1435)	Davie County	2.0	22	2	60	35,55	10600	2400	3000	3000	15100	2A	ADQ	Sub		
DAVIE0027-H	Farmington Road (SR 1410)	Pudding Ridge Rd (SR 1435) - I-40	Davie County	2.2	22-32	2	60-110	55	10600	4500	5800	5800	15100	2A	ADQ	Sub		
DAVIE0027-H	Farmington Road (SR 1410)	I-40 - US 158	Davie County	0.4	32	2	110	55	15800	8000	10000	10000	18800	3A	ADQ	Sub		
DAVIE0028-H	Fork Bixby Road (SR 1611)	Winston-Salem MPO PAB (South) - Williams Rd (SR 1610)	Davie County	2.6	22	2	60	55	10600	2700	3600	3600	15100	2A	ADQ	Sub		
DAVIE0028-H	Fork Bixby Road (SR 1611)	Williams Rd (SR 1610) - US 64	Davie County	1.8	22	2	60	55	10600	1400	1800	1800	15100	2A	ADQ	Sub	B	
DAVIE0029-H	Junction Road (SR 1139)	Jericho Church Rd (SR 1147) - Marginal St (SR 1139)	Davie County	5.0	22	2	60	35,55	10600	2100	3600	3600	15100	2A	ADQ	Sub	B	

HIGHWAY

Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2010 Existing System					2035 Proposed System					CTP Classification	Tier	Other Modes
					Cross-Section (ft) Lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)			
DAVIE0030-H	Juney Beauchamp Road (SR 1632)	US 158 - Winston-Salem MPO PAB (West)	Davie County	1.6	20	2	60	9000	800	1200	1200	15100	2A	ADQ	Min	Sub	
DAVIE0031-H	Liberty Church Road (SR 1002)	Yadkin Co. - Jack Booe Rd (SR 1330)	Davie County	3.4	22	2	60	10600	300	500	500	15100	2A	ADQ	Min	Sub	B
DAVIE0031-H	Liberty Church Road (SR 1002)	Jack Booe Rd (SR 1330) - US 601	Davie County	3.3	22	2	60	10600	1200	1500	1500	15100	2A	ADQ	Min	Sub	B
	Main St	Marginal St (SR 1139) - NC 801	Davie County	0.6	20	2	60	10600	900	1100	1100	ADQ	ADQ	ADQ	Min	Sub	B
DAVIE0032-H	Marginal St (SR 1139)	Junction Rd (SR 1139) - NC 801	Cooleemee	0.6	20	2	60	10600	1700	2400	2400	15100	2A	ADQ	Min	Sub	
DAVIE0033-H	Pinebrook Dr (SR 1437)	Farmington Rd (SR 1410) - Pinebrook School Rd (SR 1436)	Davie County	0.8	20	2	60	9000	700	1100	1100	15100	2A	ADQ	Min	Sub	
DAVIE0034-H	Pinebrook School Rd (SR 1436)	Pinebrook Dr (SR 1437) - I-40	Davie County	1.2	20	2	60	9000	1200	2000	2000	15100	2A	ADQ	Min	Sub	
DAVIE0034-H	Pinebrook School Rd (SR 1436)	I-40 - US 158	Davie County	0.8	20	2	60	9000	1200	2000	2000	15100	2A	ADQ	Min	Sub	
	Pine Ridge Rd (SR 1103)	Center St (SR-1103) - US 601	Davie County	2.5	20	2	60	10600	800	1000	1000	ADQ	ADQ	ADQ	Min	Sub	B
DAVIE0035-H	Pudding Ridge Road (SR 1435)	Cana Rd (SR 1411) - Farmington Rd (SR 1410)	Davie County	2.6	20	2	60	9000	1200	1700	1700	15100	2A	ADQ	Min	Sub	
DAVIE0018-H	Sheffield Road (SR 1306)	Iredell Co. - Calahaln Rd (SR 1313)	Davie County	2.5	22	2	60	9000	1300	1600	1600	15100	2A	ADQ	Min	Sub	B
DAVIE0018-H	Sheffield Road (SR 1306)	Calahaln Rd (SR 1313) - Mocksville PAB (North)	Davie County	2.0	22	2	60	9000	1800	1900	1900	15100	2A	ADQ	Min	Sub	B
DAVIE0036-H	Rainbow Rd (SR 1441)	Bobbit Rd (SR 1444) - I-40	Davie County	1.5	20	2	60	9000	500	800	800	15100	2A	ADQ	Min	Sub	
DAVIE0036-H	Rainbow Rd (SR 1441)	I-40 - US 158	Davie County	0.4	20	2	60	9000	500	800	800	15100	2A	ADQ	Min	Sub	

HIGHWAY

Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	2010 Existing System				2035 Proposed System				CTP Classification	Tier	Other Modes	
					Cross-Section (ft) Lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)				Cross-Section
DAVIE0037-H	Ridge Rd (SR 1447)	Iredell Co. - US 64	Davie County	0.2	20	2	60	9000	1100	2100	2100	2A	ADQ	Min	Sub	B
DAVIE0037-H	Ridge Rd (SR 1447)	US 64 - I-40	Davie County	0.7	20	2	60	9000	600	1000	1000	2A	ADQ	Min	Sub	B
DAVIE0037-H	Ridge Rd (SR 1447)	I-40 - Davie Academy Rd (SR 1143)	Davie County	3.8	20	2	60	9000	600	1000	1000	2A	ADQ	Min	Sub	B
DAVIE0038-H	Will Boone Road (SR 1802)	Deadmon Rd (SR 1801) - NC 801	Davie County	1.8	18	2	60	10600	1200	1600	1600	2A	ADQ	Min	Sub	
DAVIE0039-H	Williams Road (SR 1610)	Cornatzer Rd (SR 1606) - Fork Bixby Rd (SR 1611)	Davie County	2.8	20	2	60	9000	500	700	700	2A	ADQ	Min	Sub	B
DAVIE0040-H	Woodward Rd (SR 1407)	Angell Rd (SR 1406) - Angel Rd (SR 1466)	Davie County	0.6	20	2	60	9000	300	400	400	2A	ADQ	Min	Sub	

PUBLIC TRANSPORTATION AND RAIL

PUBLIC TRANSPORTATION ¹							
Local ID	Facility/ Route	Section (From - To)	Speed Limit (mph)	Existing System		Proposed System	
				Distance (mi)	Type	Type	Other Modes
	Greensboro - Mocksville Bus Route on I-40	Winston-Salem MPO PAB (East) - Hunting Creek	Varies	4.6	Bus	--	H

¹Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to Piedmont Triad Regional Transit Development Plan located at <http://www.partnc.org/rtdp.html>.

RAIL												
Local ID	Facility/ Route	Section (From - To)	Class	Speed Limit (mph)	Distance (mi)	Existing System			Proposed System			
						Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	Other Modes
	Norfolk Southern Railroad	Winston-Salem MPO PAB - Rowan County Boundary	I	5-30	5	Freight	100	< 1	--	--	--	--

BICYCLE AND PEDESTRIAN

BICYCLE									
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes	
				Cross-Section (ft)	lanes	Type	Cross-Section		
DAVIE0001-B	US 64	Calahain Rd (SR 1313) - Davie Academy Rd (SR 1143)	2.0	28	2	Bicycle	2A	H	
DAVIE0001-H	US 158	Redland Rd (SR 1442) - Juney Beauchamp Rd (SR 1632)	0.1	Concurrent with US158 - see Highway Table				H	
DAVIE0004-H	US 601	Gladstone Rd (SR 1121) - Fairfield Rd (SR 1807)	0.1	Concurrent with US 601 - see Highway Table				H	
DAVIE0022-H	NC 801	Joe Rd (SR 1808) - Will Boone Rd (SR 1802)	3.5	Concurrent with NC 801 - see Highway Table				H	
DAVIE0022-H	NC 801	Fulton Rd (S 1612) - Peoples Creek Rd (SR 1650)	3.6	Concurrent with NC 801 - see Highway Table				H	
DAVIE0002-B	NC 901	US 64 - County Line Rd (SR 1336)	0.4	24	2	Bicycle	2A	H	
DAVIE0023-H	Angell Rd (SR 1414)	Liberty Church Rd (SR 1002) - Cana Rd (SR 1411)	2.8	Concurrent with Angell Rd - see Highway Table				H	
DAVIE0003-B	Baltimore Rd (SR 1630)	Juney Beauchamp Rd (SR 1632) - Cornatzer Rd (SR 1616)	2.5	24	2	Bicycle	2A	H	
DAVIE0004-B	Bear Creek Church Rd (SR 1320)	Duke Whitaker Rd (SR 1313) - Libert Church Rd (SR 1002)	0.7	18	2	Bicycle	2C	H	
DAVIE0024-H	Bobbit Rd (SR 1444)	Farmington Rd (SR 1410) - Rainbow Rd (SR 1441)	2.0	Concurrent with Bobbit Rd- see Highway Table				H	
DAVIE0005-B	Boxwood Church Rd (SR 1824)	Cherry Hill Rd (SR 1819) - Pine Ridge Rd (SR 1103)	0.7	20	2	Bicycle	2C	H	
DAVIE0006-B	Calahain Rd (SR 1313)	Sheffield Rd (SR 1306) - US 64	3.1	20	2	Bicycle	2C	H	
DAVIE0025-H	Cana Rd (SR 1408/SR 1411)	Pudding Ridge Rd (SR 1435) - Main Church Rd (SR 1405)	3.2	Concurrent with Cana Rd - see Highway Table				H	
DAVIE0007-B	Cedar Grove Church Rd (SR 1811)	US 64 - Joe Rd (SR 1808)	1.8	18	2	Bicycle	2C	H	
DAVIE0008-B	Center St (SR 1103)	Pine Ridge Rd (SR 1103) - NC 801	0.5	20	2	Bicycle	2C	H	
DAVIE0009-B	Cherry Hill Rd (SR 1819)	NC 801 - Boxwood Church Rd (SR 1824)	3.6	Concurrent with Cerry Hill Rd - see Highway Table				H	
DAVIE0005-H	Cornatzer Rd (SR 1616)	Baltimore Rd (SR 1630) - Fork Bixby Rd (SR 1611)	0.1	Concurrent with Cana Rd - see Highway Table				H	
DAVIE0010-B	County Line Rd (SR 1338)	Sheffield Rd (SR 1306) - NC 901	4.5	18	2	Bicycle	2C	H	

BICYCLE

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes	
				Cross-Section (ft)	lanes	Type	Cross-Section		
DAVIE0011-B	Cross St	Main St - West of Main St	0.1	20	2	Bicycle	2C	H	
DAVIE0009-H	Davie Academy Rd (SR 1143/SR 1147)	US 64 - Hunting Creek	3.9	18-20	2	Bicycle	2C	H	
DAVIE0012-B	Duke Whitaker Rd (SR 1313)	Bear Creek Church Rd (SR 1320) - Sheffield Rd (SR 1306)	2.5	20	2	Bicycle	2C	H	
DAVIE0013-B	Fairfield Rd (SR 1807)	US 601 - Will Boone Rd (SR 1802)	1.9	20	2	Bicycle	2C	H	
DAVIE0027-H	Farmington Rd (SR 1410)	Pudding Ridge Rd (SR 1435) - Bobbit Rd (SR 1444)	1.5	Concurrent with Farmington Rd - see Highway Table					H
DAVIE0028-H	Fork Bixby Rd (SR 1611)	Cornatzer Rd (SR 1616) - US 64	4.4	Concurrent with Fork Bixby Rd - see Highway Table					H
DAVIE0014-B	Foster Rd (SR 1159)	Ridge Rd (SR 1147) - Rowan Co.	1.1	20	2	Bicycle	2C	H	
DAVIE0015-B	Fulton Rd (SR 1612)	Fork Bixby (SR 1611) - NC 801	0.8	18	2	Bicycle	2C	H	
DAVIE0016-B	Georgia Rd (SR 1314)	Bear Creek Church Rd (Sr 1320) - Duke Whitaker (SR 1313)	2.4	20	2	Bicycle	2C	H	
DAVIE0017-B	Gladstone Rd (SR 1121)	US 601 - Nolley Rd (SR 1125)	1.6	20	2	Bicycle	2C	H	
DAVIE0018-B	Joe Rd (SR 1808)	Cedar Grove Church Rd (SR 1811) - NC 801	0.7	20	2	Bicycle	2C	H	
DAVIE0029-H	Junction Rd (SR 1139)	Jericho Church Rd (SR 1147) - Marginal Road (SR 1139)	3.9	Concurrent with Junction Rd - see Highway Table					H
DAVIE0030-H	Juney Beauchamp Rd (SR 1632)	US 158 - Baltimore Rd (SR 1630)	1.6	Concurrent with Juney Beauchamp Rd - see Highway Table					H
DAVIE0031-H	Liberty Church Rd (SR 1002)	Yadkin Co. - Angell Rd (SR 1414)	6.6	Concurrent with Liberty Church Rd - see Highway Table					H
DAVIE0019-B	Main St	Marginal St (SR 1139) - NC 801	0.7	20	2	Bicycle	2C	H	
DAVIE0032-H	Marginal St (SR 1139)	Junction Rd (SR 1139) - NC 801	0.9	Concurrent with Marginal Rd - see Highway Table					H
DAVIE0020-B	Mr. Henry Rd (SR 1143)	Davie Academy Rd (SR 1147) - Rowan Co.	2.2	22	2	Bicycle	2B	H	
DAVIE0021-B	Nolley Rd (SR 1125)	Junction Rd (SR 1139) - Gladstone Rd (SR 1121)	0.7	22	2	Bicycle	2B	H	

BICYCLE

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Cross-Section (ft)	lanes	Type	Cross-Section	
DAVIE0035-H	Pudding Ridge Rd (SR 1435)	Cana Rd (SR 1411) - Farmington Rd (SR 1410)	2.6					H
DAVIE0022-B	Pine Ridge Rd (SR 1103)	Center St (SR 1103) - Boxwood Church Rd (SR 1824)	2.5	20	2	Bicycle	2C	H
DAVIE0023-B	Point Rd (SR 1822)	Cherry Hill Rd (SR 1819) - Dead End	3.5	20	2	Bicycle	2C	H
DAVIE0036-H	Rainbow Rd (SR 1441)	Bobbit Rd (SR 1444) - Redland Rd (SR 1442)	1.5	18	2	Bicycle	2C	H
DAVIE0024-B	Redland Rd (SR 1442)	NC 801 - US 158	2.0	22	2	Bicycle	2B	H
DAVIE0037-H	Ridge Rd (SR 1147)	Iredell Co. - Foster Rd (SR 1159)	3.2	20	2	Bicycle	2C	H
DAVIE0018-H	Sheffield Rd (SR 1306)	County Line Rd (SR 1338) - James Church Rd (SR 1307)	3.6	Concurrent with Sheffield Rd - see Highway Table				H
DAVIE0025-B	Stroud Mill Rd (SR 1158)	NC 901 - Iredell Co.	1.0	20	2	Bicycle	2C	H
DAVIE0038-H	Will Boone Rd (SR 1802)	Fairfield Rd (SR 1807) - NC 801	0.1	Concurrent with Will Boone - see Highway Table				H
DAVIE0039-H	Williams Rd (SR 1610)	Mocksville PAB (East) - Fork Bixby Rd (SR 1611)	1.7	Concurrent with Williams Rd - see Highway Table				H

MULTI-USE PATH

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Side of Street	Cross-Section	Side of Street	Cross-Section	
DAVIE0004-H	US 601	Deadmon Rd (SR 1801) - Fairfield Rd (SR 1807)	1.3	--	--	West	MB	H
DAVIE0001-M	NC 801	Marginal St (SR 1139) - Main St	0.7	--	--	East	MB	H

PEDESTRIAN

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Type	Side of Street	Type	Side of Street	
	NC 801	Marginal St (SR 1139) - Neely Rd (SR 1128)	0.2	Sidewalks	West	---	---	H
DAVIE0001-P	Church St	Marginal St (SR 1139) - Cross Street	0.1	---	---	Sidewalks	East	H
DAVIE0002-P	Cross St	Main St - Dead end west of Main St	0.1	---	---	Sidewalks	North	H
DAVIE0002-P	Cross St	Church St - Duke St	0.1	---	---	Sidewalks	North	H
	Cross St	Walt St - Joyner St	0.1	Sidewalks	North	---	---	H
DAVIE0003-P	Duke St	Cross St - Marginal Street (SR 1139)	0.1	---	---	Sidewalks	West	H
DAVIE0004-P	Junction Rd (SR 1139)	Main St - Cooleemee western town limits	0.4	---	---	Sidewalks	North	H
	Main St	Marginal St (SR 1139) - Davie St	0.4	Sidewalks	West	---	---	H
DAVIE0005-P	Main St	Davie St - NC 801	0.3	---	---	Sidewalks	West	H
	Marginal St (SR 1139)	NC 801 - Main St	0.6	Sidewalks	North	---	---	H
DAVIE0006-P	Marginal St (SR 1139)	Duke St - Church St	0.1	---	---	Sidewalks	South	H
DAVIE0007-P	Greenway	Erwin St (Dead End) - Main St	0.3	---	---	Off Road	---	---
DAVIE0008-P	Greenway	Main St - South Yadkin River	0.2	---	---	Off Road	---	---
DAVIE0009-P	Greenway	West of Main St - East of South Yadkin River	3.8	---	---	Off Road	---	---

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:

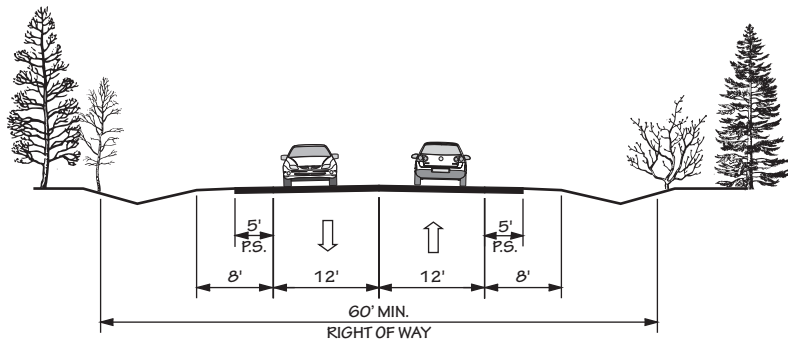
- roadways which may require widening after the current planning period,
- roadways which are borderline adequate and accelerated traffic growth could render them deficient, and
- roadways where an urban curb and gutter cross section may be locally desirable because of urban development or redevelopment.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

FIGURE 8

TYPICAL HIGHWAY CROSS SECTIONS 2 LANES

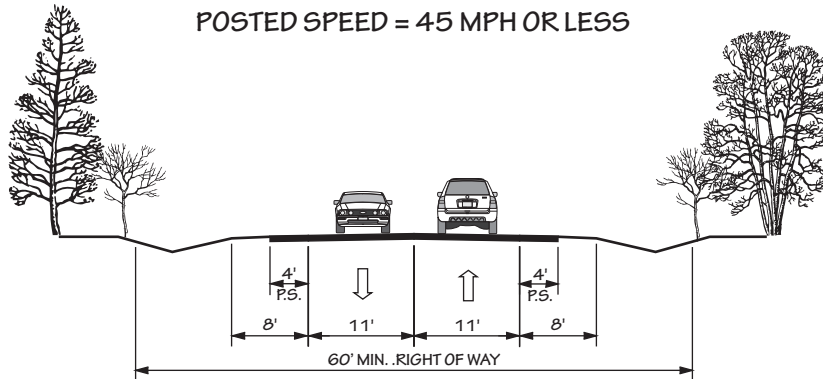
2 A

WIDE PAVED SHOULDERS
POSTED SPEED = 55 MPH



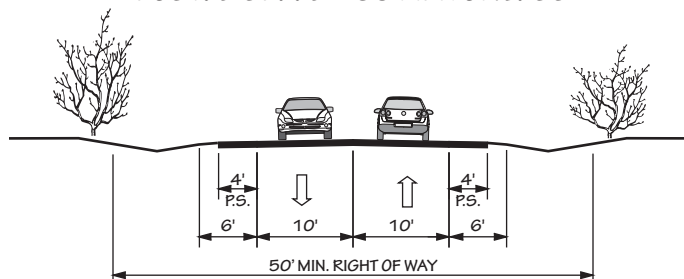
2 B

WIDE PAVED SHOULDERS
POSTED SPEED = 45 MPH OR LESS



2 C

WIDE PAVED SHOULDERS
POSTED SPEED = 35 MPH OR LESS

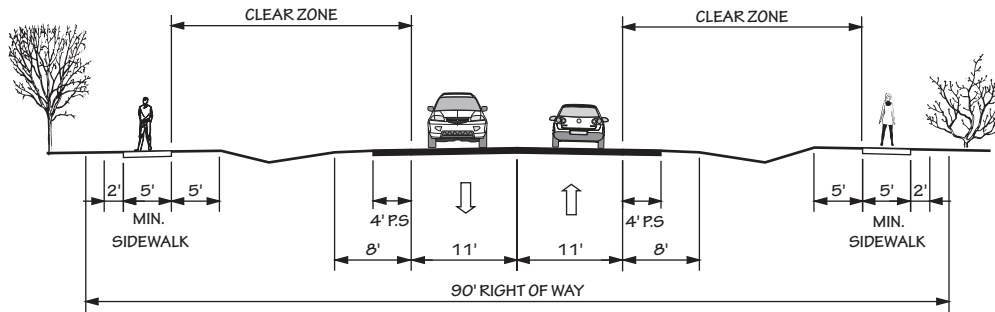


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

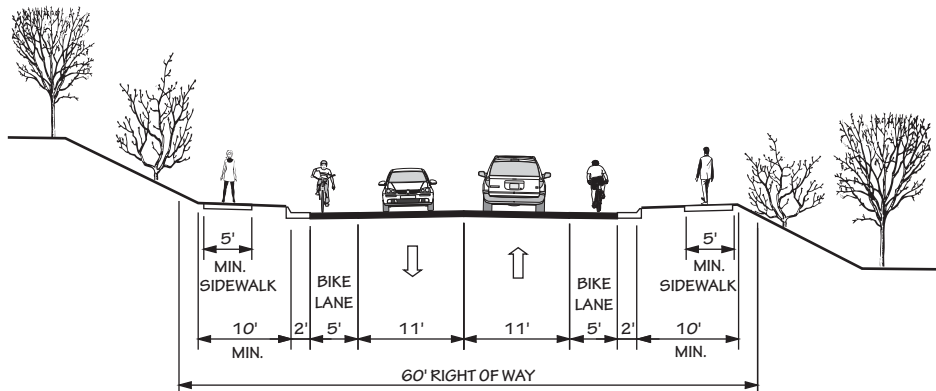
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



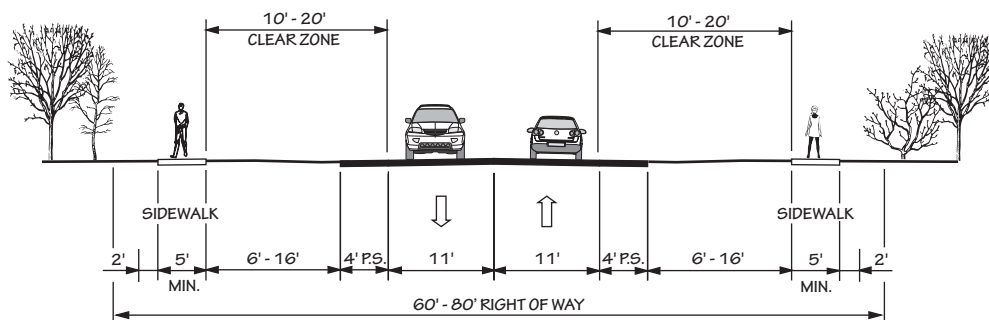
2 E

CURB AND GUTTER WITH BIKE LANES AND SIDEWALKS



2 F

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

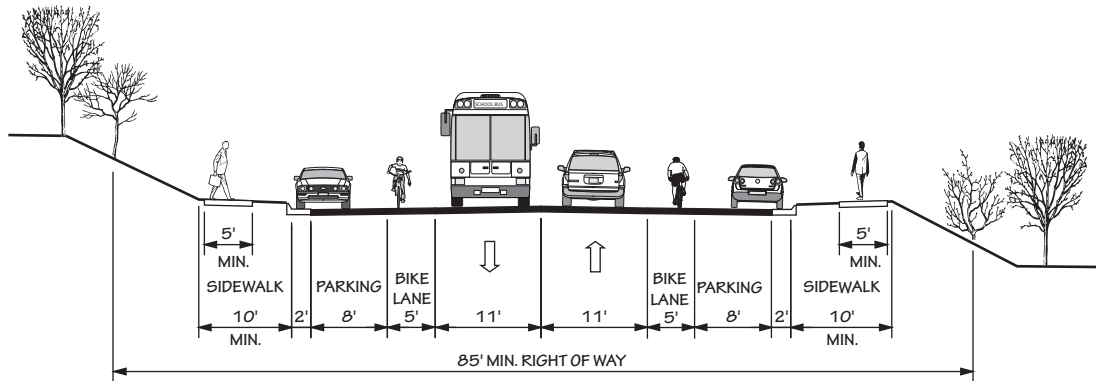


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

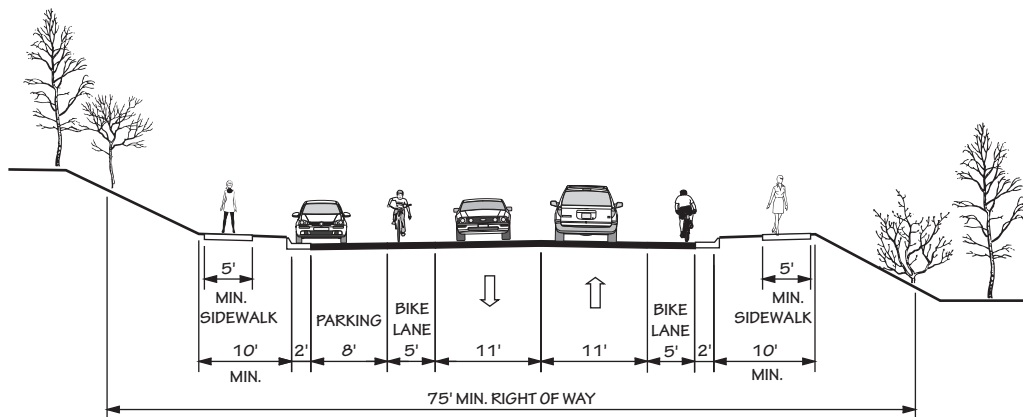
2 G

CURB & GUTTER - PARKING ON EACH SIDE



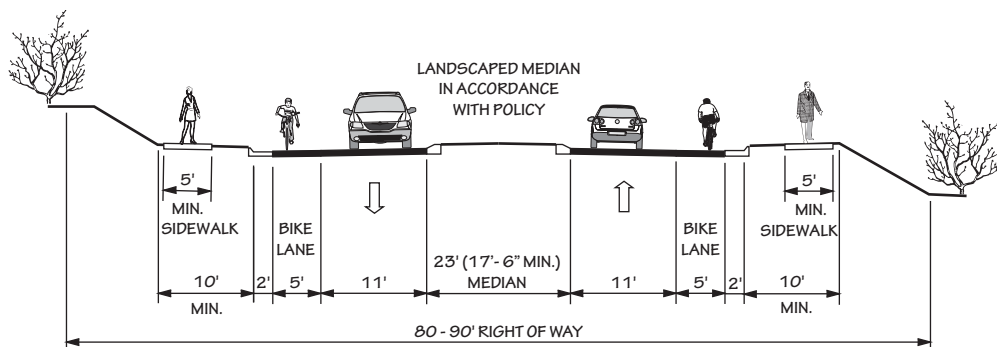
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER

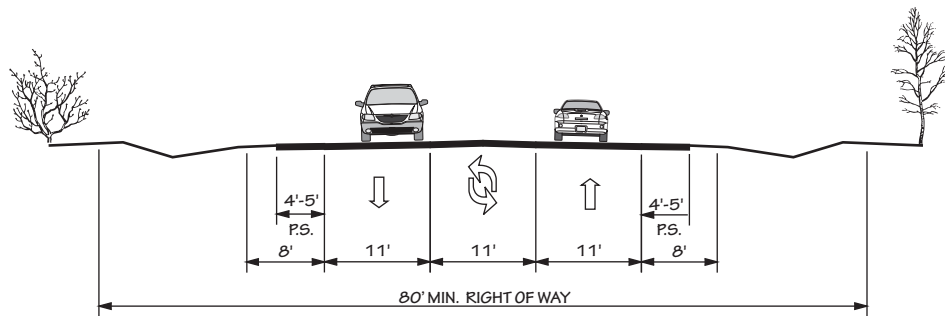


TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

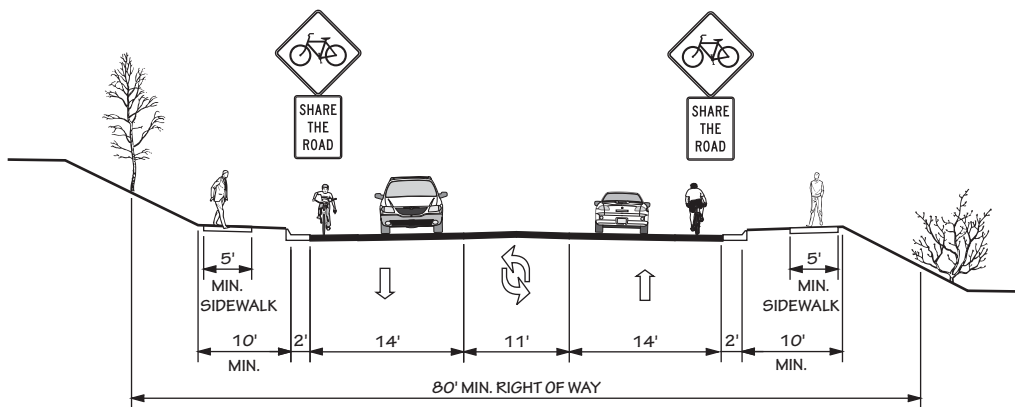
3 A

WIDE PAVED SHOULDERS



3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS

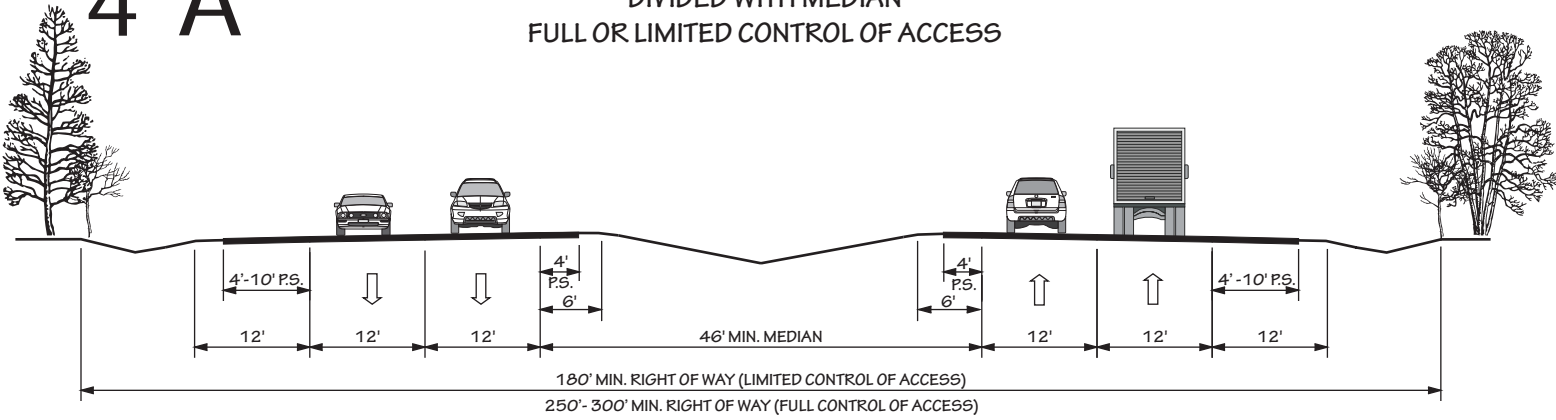


TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

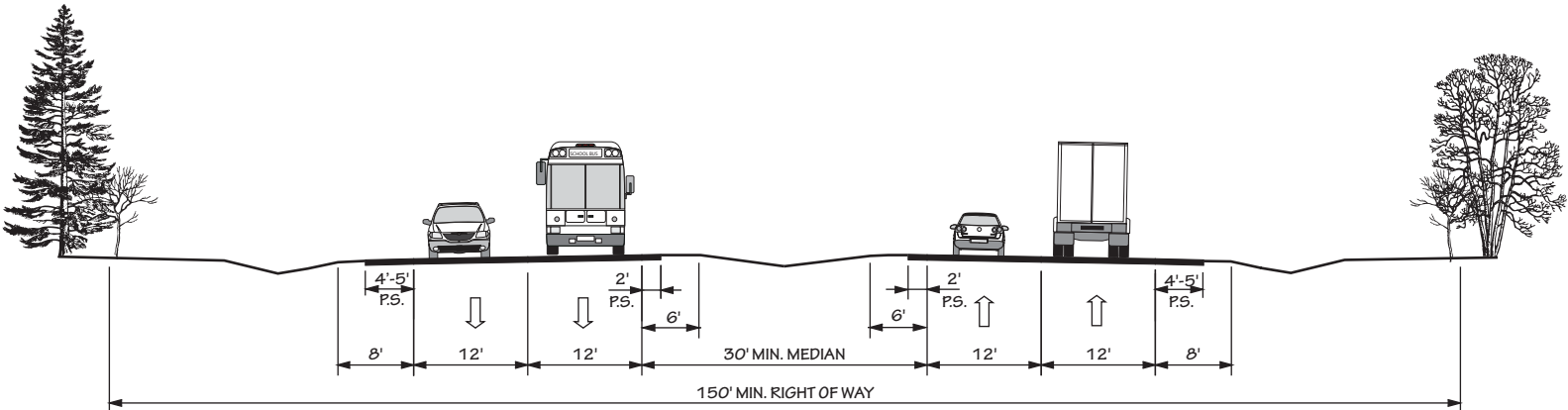
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



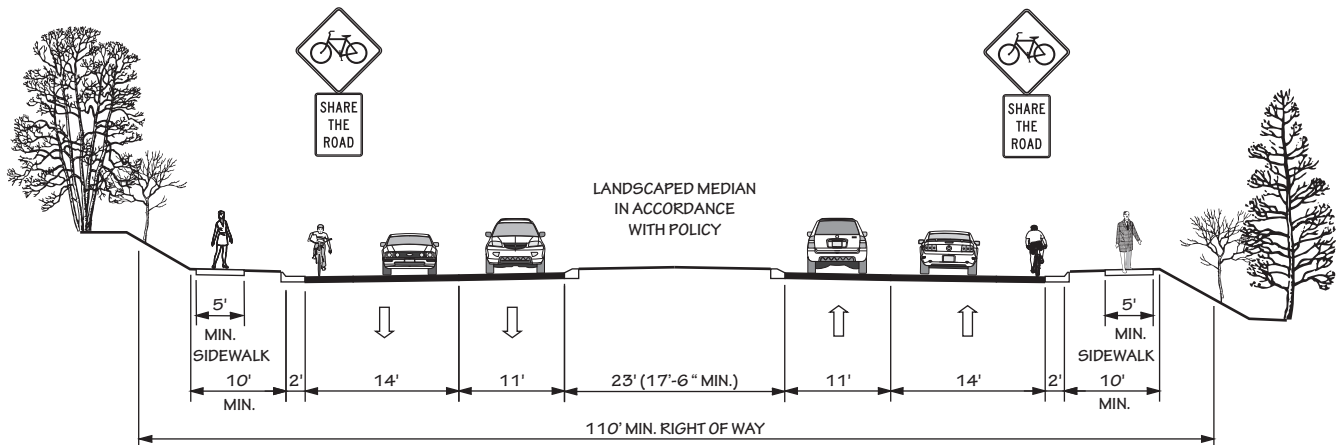
4 B

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



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS

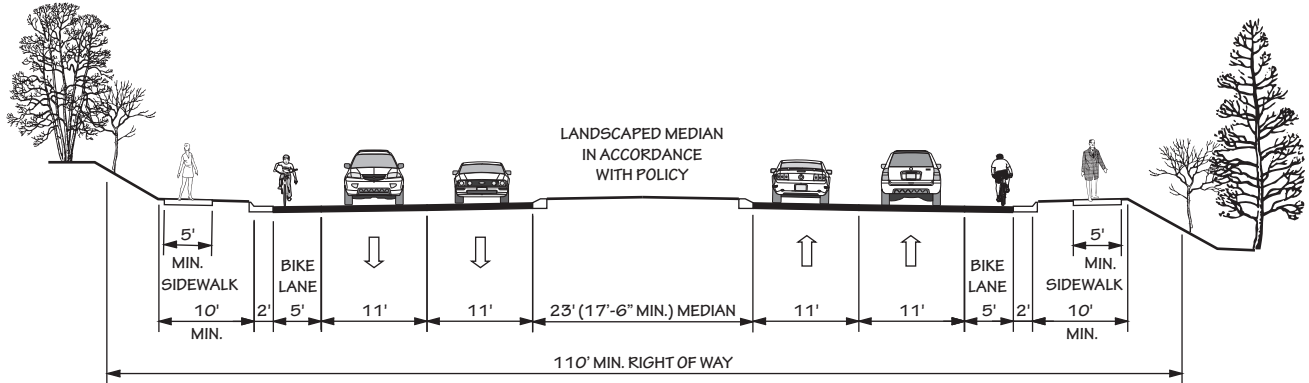


TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

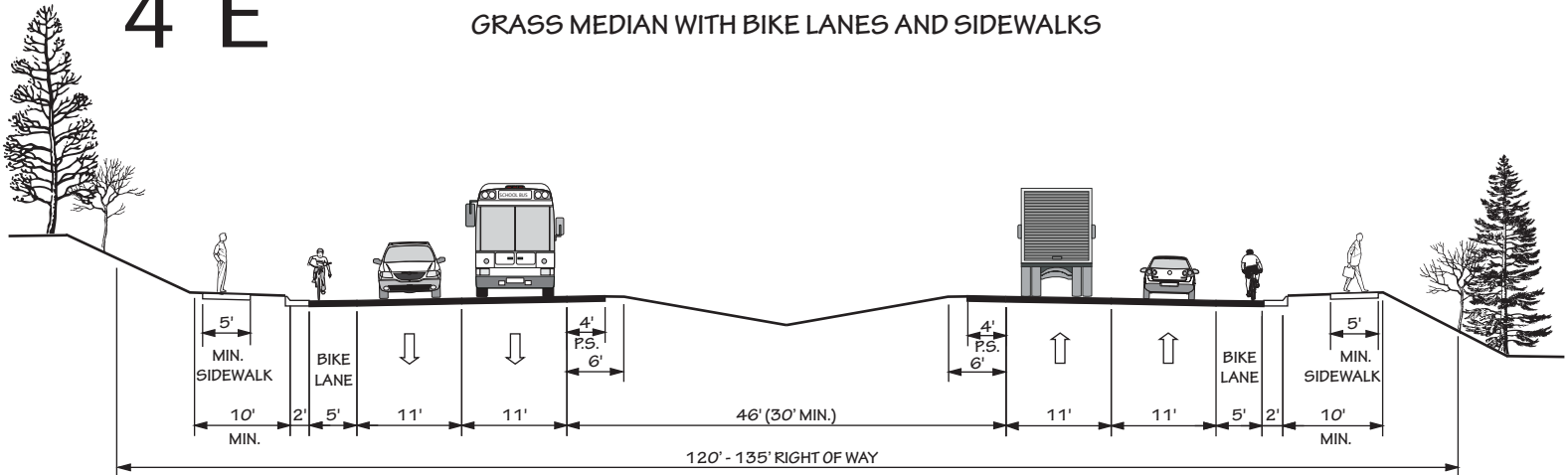
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

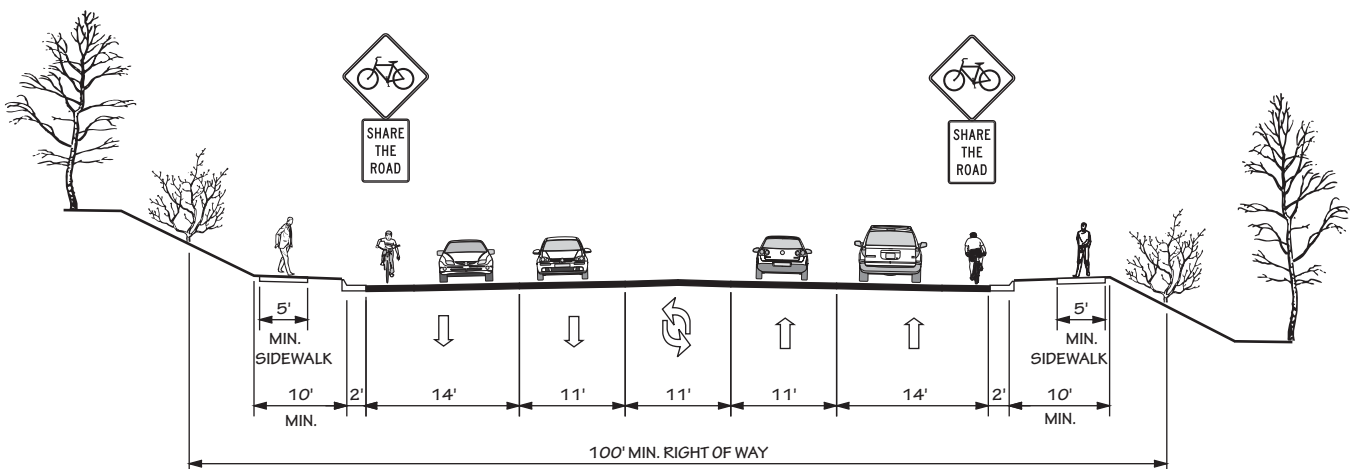
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES

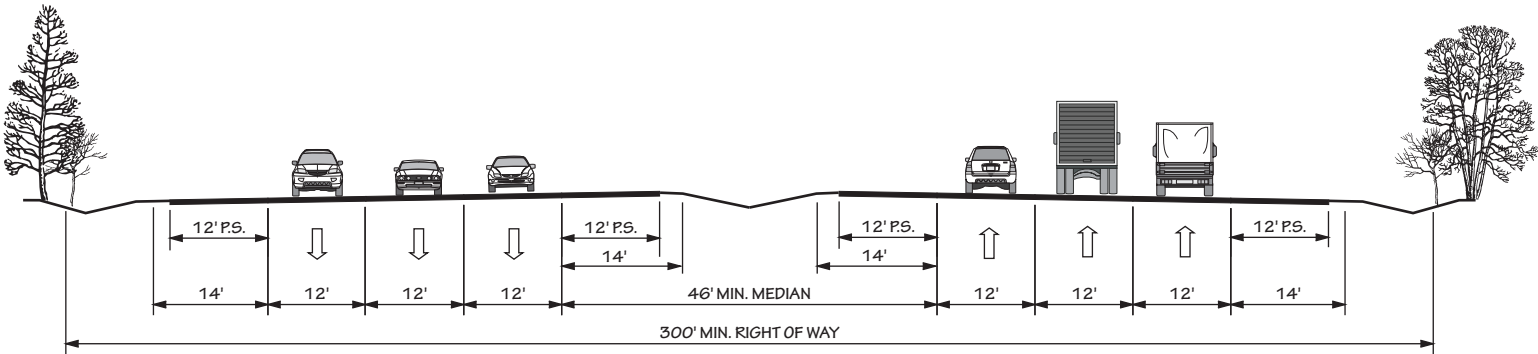


TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

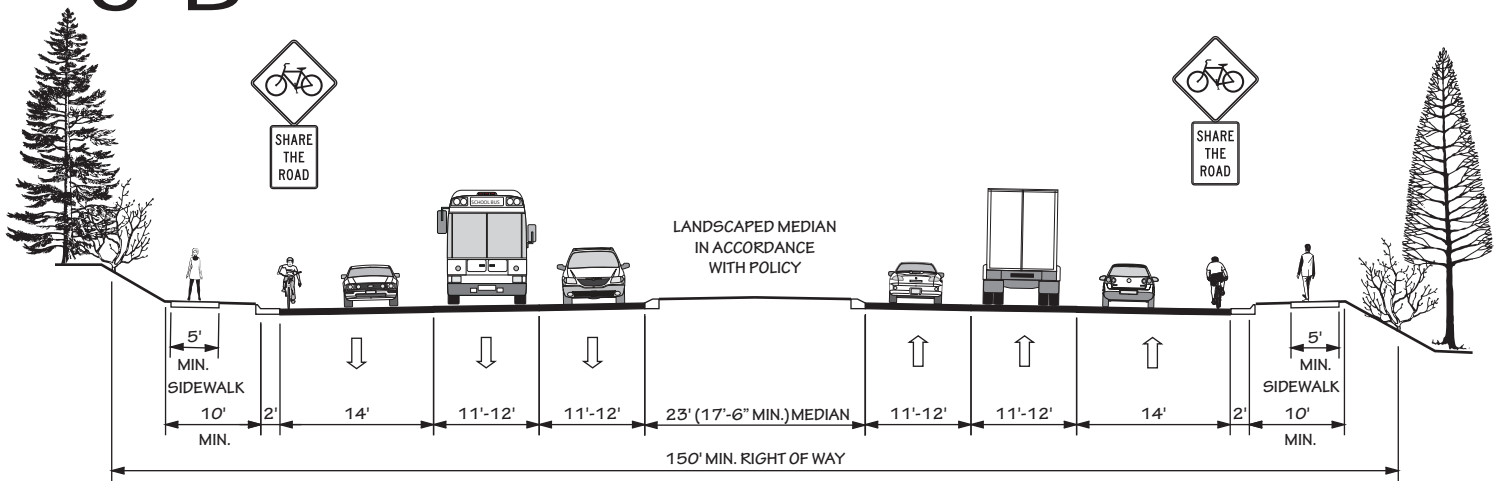
6 A

DIVIDED WITH GRASS MEDIAN



6 B

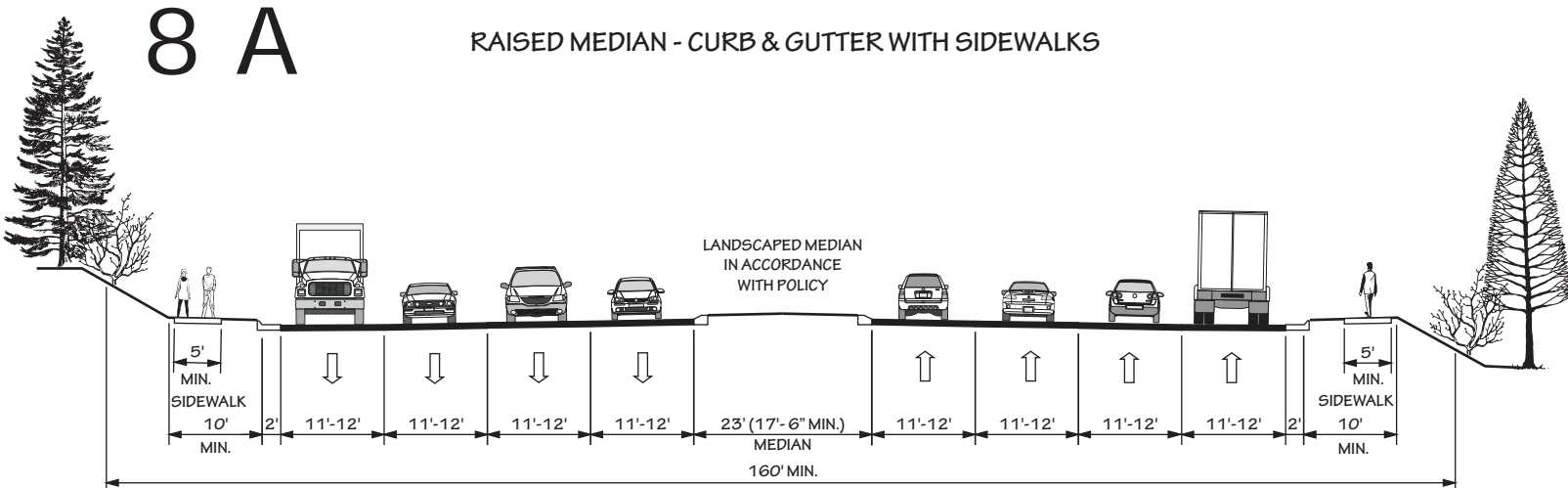
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

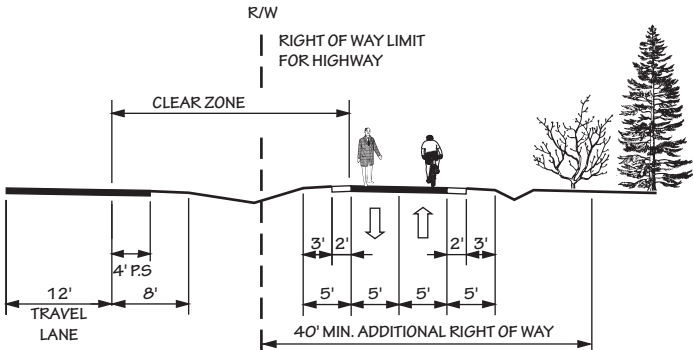
RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS



TYPICAL MULTI - USE PATH

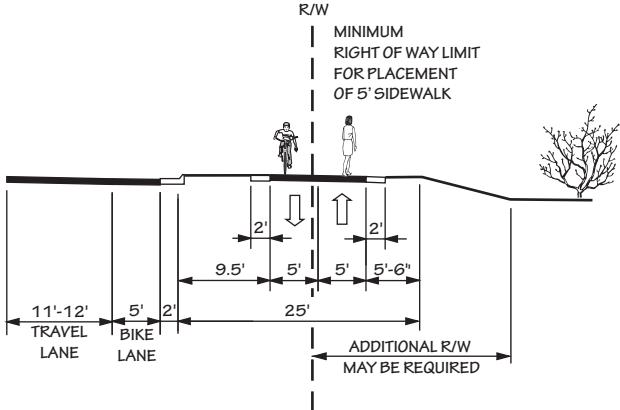
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Appendix E

Level of Service Definitions

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

Design requirements for roadways vary according to the desired capacity and level of service. LOS D indicates “practical capacity” of a roadway, or the capacity at which the public begins to express dissatisfaction. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C on new facilities. The six levels of service are described below and illustrated in Figure 9.

- **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 9- Level of Service Illustrations



Source: 2000 Highway Capacity Manual

Appendix F Traffic Crash Analysis

A crash analysis performed for the Davie 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 NCDOT. These factors define a fatal or incapacitating crash as 47.7 times more severe than one involving only property damage and a crash resulting in minor injury is 11.8 times more severe than one with only property damage. In general, a higher severity index indicates more severe accidents. Listed below are levels of severity for various severity index ranges.

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

Table 4 depicts a summary of the crashes occurring in the planning area between January 1, 2008 and December 31, 2010. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's 4.37 index. The "Total" column indicates the total number of crashes reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 4 - Crash Locations

Map Index	Intersection	Average Severity	Total Crashes
1	I-40 and US 601	5.99	30
2	US 601 and NC 801	3.96	15
3	Lexington Rd and Main St	3.96	10
4	I-40 and US 64	3.31	16
5	I-40 and SR 1410	3.02	11
6	US 601 and SR 1301	2.97	15
7	US 601 and SR 1835	2.48	10
8	US 601 and Cooper Crk Dr	1.74	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 4, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in Appendix A.

Appendix G

Bridge Deficiency Assessment

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

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

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

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

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

Table 5 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
9	US 601	SOUTHERN RAILROAD	Functionally Obsolete	DAVIE0004-H
10	US 158	DUTCHMAN'S CREEK	Functionally Obsolete	DAVIE0003-H
13	NC 801	DUTCHMANS CREEK	Functionally Obsolete	DAVIE0022-H
20	US 601	I-40	Functionally Obsolete	DAVIE0004-H
34	US 64	BEAR CREEK	Functionally Obsolete	
36	US 601	DUTCHMAN'S CREEK	Functionally Obsolete	
38	NC 801	CEDAR CREEK	Structurally Deficient	DAVIE0022-H
50	SR 1411	DUTCHMANS CREEK	Structurally Deficient	DAVIE0025-H
53	SR 1406	FROST MILL CREEK	Structurally Deficient	DAVIE0023-H
60	SR 1802	PEELER CREEK	Structurally Deficient	DAVIE0038-H
69	SR 1410	I-40	Structurally Deficient	DAVIE0027-H
76	SR 1436	I-40	Structurally Deficient	DAVIE0034-H
107	SR 1606	ELLSWORTH CREEK	Functionally Obsolete	DAVIE0005-H

Appendix H Public Involvement

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

List of CTP Steering Committee Members

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

- John Chandler – Cooleemee Town Clerk
- Andrew Meadwell – Davie County Development Services
- Marc Allred – Northwest Piedmont Rural Planning Organization Coordinator

CTP Vision, Goals, Objectives and MOEs

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

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

Purpose: To work with Davie County to analyze all forms of transportation utilized within the area and develop a Comprehensive Transportation Plan to act as a guide for all future modal travel needs and recommendations.

Vision: Enhance the connectivity within the county through the development of a transportation network which promotes and supports economic development compatible with the existing and future environmental and land use patterns.

Provide safe, reliable, affordable, and convenient transportation choices to the residents of Davie County as well as public awareness of those choices. Develop a regional

transportation network that improves Davie county residents' quality of life and surrounding environment.

Goals:

1. Insure the integrity of the existing Transportation system by encouraging planned and strategic development.
2. Encourage right of way preservation to ensure expansion of the existing system and future roadway projects.
3. Coordinate transportation and improvement needs between multiple jurisdictions.
4. Provide means to identifying and prioritizing transportation system needs on a local and regional scale.
5. Enhance and expand services for alternative needs of transportation including but not limited to transit, walking and bicycling through increased funding and cooperative regional planning.
6. Acknowledge ways to improve safety and congestion as well as programs to educate the public on traffic safety.
7. Recognize a sustainable transportation infrastructure linking Davie County with surrounding counties and metropolitan areas including Winston Salem, Greensboro, and other areas.
8. Educate the public on general transportation issues as well as alternative forms of transportation.

Goals and Objectives Survey

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

Davie County Transportation Survey				
1. How important are the following transportation goals?				
Answer Options	Not Important	Important	Very Important	Response Count
Increase Public Transportation Options	35	41	17	93
Faster Automobile Travel Times	7	46	40	93
Preserve Community and Rural Character	2	35	58	95
Protect the Environment	5	34	54	93
Support Economic Growth	8	45	41	94
Improve Services for Special Needs	17	48	25	90

Increased Transportation Mode Choices. (More and/or safer opportunities to bike or walk to destinations instead of driving)	25	39	28	92
<i>answered question</i>				97
<i>skipped question</i>				1

2. Please select which of the following methods you agree with, for increasing a road's efficiency.			
Answer Options	Agree	Disagree	Response Count
Building additional travel lanes	67	25	92
Making improvements to intersection such as better traffic signal timing, adding guard rails, creating roundabouts	84	9	93
Controlling the frequency and locations of driveways and cross streets that access the road	55	37	92
<i>answered question</i>			95
<i>skipped question</i>			3

3. Are you concerned with safety or crash problems at any specific locations?		
Answer Options	Response Percent	Response Count
No	48.4%	46
Yes, Please describe the location, including the road name or intersection	51.6%	49
<i>answered question</i>		95
<i>skipped question</i>		3
Highway 601 from I-40 to Hwy 64		
Yadkinville, Sanford, Wilkesboro. 601 Hwy 64 & Main intersections. Valley Rd & Yadkinville Rd intersections		
By Davie High School, C/s/ Davie Furniture Bridge, Hwy 601/ Yadkinville Road from Walnut to Sonic different times of day dangerous need lanes.		
Milling Rd. & North Main St on 158. 64 & 601 & 158		
Farmington Rd at I-40, Hwy 158		

4. Is truck traffic a problem in the area?		
Answer Options	Response Percent	Response Count
No	71.7%	66
Yes. Please describe the location, including the road name or intersection.	28.3%	26
<i>answered question</i>		92
<i>skipped question</i>		6
At the I-40 and 601 intersection		
Downtown Mocksville intersection 601& 64.		
601 & 64 highway at school first light in city limits (tight turns)		
Hwy 64 through Mocksville to I-40		
Entering and exiting Horn's Truck stop.		

5. When traveling in your area, do you find that you often have to go out of your way to get to your destination because: A direct route does not exist?		
Answer Options	Response Percent	Response Count
No	92.6%	87

Yes, Please give examples	7.4%	7
<i>answered question</i>		94
<i>skipped question</i>		4
Number	Response Date	Yes, Please give examples
Mr Henry to Davie Academy to Greenhill to Hwy 64 to I-40		
Sometimes have to use Hwy 158 to get to I-40 to Hwy 601/Yadkinville Rd. When HS & factory's let out around 3:00 very congested.		
Redland Rd. Main Church Rd. Ridge Rd.		

6. When traveling in your area, do you find that you often have to go out of your way to get to your destination because: The most direct route is too congested?		
Answer Options	Response Percent	Response Count
No	79.1%	68
Yes, Please give examples	20.9%	18
<i>answered question</i>		86
<i>skipped question</i>		12
Again 601N from I-40 to Wal-Mart stoplight needs a center turn lane. People from I-40 going into Blaige Church or Citgo will stop one lane of traffic causing numerous accidents.		
Mocksville: intersections of 601/64 with Main St & Salisbury St.		
Hwy 601S between Mocksville and Davie High		
Hwy 801 between Yadkin Valley Rd & Oak Valley McVeloement		

7. What are the transportation issues facing Davie County?	
Answer Options	Response Count
	22
<i>answered question</i>	22
<i>skipped question</i>	76
Hwy 601 needs to be widened bike lanes need to be incorporated. Bypass of 64/601 needs to be assessed.	
Lack of public transportation & need to commute.	
Bike roads & public transit	
Transfer truck traffic in town (64 & 601 intersections) traffic jams from High School to downtown.	

8. Rank the following reasons why new roads should be planned						
1 is the most important, 5 is the least important						
Answer Options	1	2	3	4	5	Response Count
To urbanize the rural land outside municipal limits	5	11	12	10	26	64
To increase the tax base	2	7	6	11	36	62
To control growth	36	8	7	8	5	64
To revitalize existing developed areas	11	15	22	9	7	64
To limit land acquisition cost for future projects	9	18	15	9	13	64
						Question Totals
<i>answered question</i>						67
<i>skipped question</i>						31

9. To what areas would you like to have improved access?		
Answer Options	Response Percent	Response Count

Winston-Salem	32.7%	18
Greensboro	12.7%	7
Charlotte	20.0%	11
Statesville	14.5%	8
Yadkinville	12.7%	7
Lexington	23.6%	13
Other	52.7%	29
<i>answered question</i>		55
<i>skipped question</i>		43
Salisbury		
Mocksville		
Salisbury		
I 77 a real problem		

10. What roads would you most like to have improved access		
Answer Options	Response Percent	Response Count
I-40	30.0%	18
US 601	43.3%	26
US 64	41.7%	25
NC 801	25.0%	15
US 158	33.3%	20
NC 901	3.3%	2
Other (please specify)	13.3%	8
<i>answered question</i>		60
<i>skipped question</i>		38
Cornatzer Rd. at Shady Grove Elementary School.		
I-40 needs special designated entrance & exit for the 18 wheeler trucks at exit 170 Horns truck stop in Mocksville.		
Redland Road, Advance		

11. Are there areas where you would like to see sidewalks constructed or improved?		
Answer Options	Response Percent	Response Count
No	78.1%	57
Yes. Please describe where.	21.9%	16
<i>answered question</i>		73
<i>skipped question</i>		25
All through downtown Mocksville area to 601. Other area's to consider starting from 601/64 to Food Lion, Food Lion to I-40. Hwy 158 on Country Lane Millville Rd to. From High School 601 to downtown Mocksville		
North Main St. Mocksville		
Sidewalks both side from High school for the students to walk or run track on instead the road in and out of traffic.		
Milling Rd, S Main St, Yadkinville Rd		
Rich Park Mocksville		

12. Would you use off-road trails or greenways for walking or bicycling?		
Answer Options	Response Percent	Response Count
No.	49.4%	39
Yes. Please describe where.	50.6%	40
<i>answered question</i>		79

<i>skipped question</i>	19
Mocksville, outside Mocksville- West Davie County.	
Advance, Farmington (Bobbitt Rd., Advance) there are lots of bike riders and walkers on this road.	
Near School to help improve students running in traffic zone	
Yadkin River Walk	
Parks	

13. Davie County is looking at having designated bike routes. These routes will be used to help keep the bicycling community on certain roads and make drivers understand that certain roads will have a higher likelihood of bicyclists riding it. Do you think Davie County should have designate bike routes?		
Answer Options	Response Percent	Response Count
No.	21.0%	17
Yes. Please describe where.	79.0%	64
<i>answered question</i>		81
<i>skipped question</i>		17
Hwy 158 - Hwy 601 Hwy 64		
Greater Farmington ie Cana Rd., Farmington Rd., Pudding Ridge Road		
All downtown & routes to Elem school to S D Middle, to Davie High		
Near high school students are walking to 601 instead of buses or cars.		
Baltimore Rd., Redland Rd.		

14. Would you use bicycle facilities such as bike lanes or wide shoulders?		
Answer Options	Response Percent	Response Count
yes	33.8%	26
no	66.2%	51
<i>answered question</i>		77
<i>skipped question</i>		21

15. Is there certain roads you would like to make sure are not designated bike routes?	
Answer Options	Response Count
	36
<i>answered question</i>	36
<i>skipped question</i>	62
US 158, US 601, US 64, NC 801 any primary road should have a ban on bicycles	
Cana Road, Pudding Ridge Road.	
Milling, Cornatzer	
All public roads. Bikes should be on private roads.	
Greenhill, Davie Academy & Jericho	

16. Are there certain roads that need bike lanes or wider shoulders to accommodate existing bikers?		
Answer Options	Response Percent	Response Count
No	100.0%	15
Yes: Please list desired location		42
<i>answered question</i>		15
<i>skipped question</i>		83
Hwy 64 Sheffield Rd. Hwy 801, Hwy 158, Hwy 601 Farmington Rd. Hwy 901		
Farmington Rd north/801 toward Hillsdale, toward Huntsville		

Country Home Rd. Davie Academy Rd. out of Mocksville
Gladstone Rd. Mocksville
Courtney/Huntsville area

17. Are more park-and-ride lots needed in Davie County? (A park-and-ride lot is a parking area where you can leave your car and take public transportation or carpool to your destination.)		
Answer Options	Response Percent	Response Count
No	100.0%	48
Yes		35
<i>answered question</i>		48
<i>skipped question</i>		50
Hillsdale or Kinderton Area		
Close to I-40 @ 801		
Boone Park where PeeBees is located, Old Food Lion building lot.		
North End of Davie County Near Intersection of 801 North & 601 North Farmington		
64 & 601		

18. Please answer 'yes' or 'no' if you would use each service listed below			
Answer Options	Yes	No	Response Count
Bus Service to Statesville	16	70	86
More bus options to Winston-Salem	27	65	92
Bus Service to Greensboro	15	74	89
Bus Service to Charlotte	14	73	87
<i>answered question</i>			94
<i>skipped question</i>			4

19. Would you use Bus Service to another location		
Answer Options	Response Percent	Response Count
Yes	9.0%	7
No	91.0%	71
If yes, please list desired locations for service:		13
<i>answered question</i>		78
<i>skipped question</i>		20
Charlotte, Cooleemee, Yadkinville		
Advance, Hillsdale, Mocksville, Clemmons		
Lexington & Salisbury		

20. What is your Zip Code?			
Answer Options	Answer Options	Response Percent	Response Count
27006	27006	12.4%	12
27028	27028	85.6%	83
28634	28634	2.1%	2
Other (please specify)	Other (please specify)	0.0%	0
<i>answered question</i>		97	97
<i>skipped question</i>		1	1

Public Meetings

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

Public Workshop # 1 at the Davie County Administration Building

The first public drop-in workshop took place in Mocksville, at the Davie County Administration Building on October 25, 2011 from 3:00 pm to 5:00 pm, followed by a formal presentation during the County Board of Commissioners meeting at 6:00 pm. The presentation detailed the draft recommendations of the Davie County CTP. One member of the public in addition to the county commissioners attended the workshop. Three additional members of the public, who are part of the bicycle community in Davie County, submitted their comments on November 25, 2012. Their comments centered around adding bicycle routes recommendation on certain roads and how to connect the proposed Davie County bicycle network to that of the adjacent Winston-Salem MPO. As a result of the feedback, additional bicycle route recommendations were added on the following routes: Point Road (SR 1822), Boxwood Church Road (SR 1824), Pine Ridge Road (SR 1103), and Cherry Hill Road (SR 1819). Recommendations on Cana Road (SR 1411), Pudding Ridge Road (SR 1435), Farmington Road (SR 1410), Bobbitt Road (SR 1444), Rainbow Road (SR 1441), Redland Road (SR 1442), Juney Beauchamp Road (SR 1632), Baltimore Road (SR 1630), and Fulton Road (SR 1612) were added to provide connectivity to the Winston-Salem MPO bike plan.

Public Workshop # 2 at the Cooleemee Town Hall

The second public drop-in workshop took place at the Cooleemee Town Hall on November 21, 2011 from 3:30 pm to 5:30 pm, followed by a formal presentation during the Board of Commissioners meeting at 6:00 pm. The presentation detailed the draft recommendations of the Davie County CTP. Six citizens attended the workshop. The public used the opportunity to look through the recommendations and give additional feedback on things that needed to be added, changed or removed. The discussion revolved around adding bicycle and removing sidewalk recommendations on several streets within the town limits. Based on feedback from the public workshop as well as the Board of Commissioners, bicycle routes were recommended on Junction Road (SR 1139), Marginal Street (SR 1139), Main Street, and Center Street (SR 1103); and a multi-use path on NC 801. Recommended sidewalks were removed on Joyner Street, Erwin Street and parts of Cross Street.

Public Hearings

- Cooleemee Board of Commissioners Meeting – January 16, 2012
- Davie County Board of Commissioners Meeting – February 6, 2012
- Mocksville Board of Commissioners Meeting – February 7, 2012

The purpose of these meetings was to present the recommendations and to solicit input from the public. The CTP was adopted at each of these meetings.