Comprehensive Transportation Plan

Surry County

April 2012

Comprehensive Transportation Plan

Surry County

Prepared by: Hemal Shah, Project Engineer
Wayne Davis, PhD, PE, Triad Planning Group Supervisor
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Surry County
City of Mount Airy
Town of Dobson
Town of Pilot Mountain
Northwest Piedmont Rural Planning Organization

April 2012

NORTH CAROLINA PROFESSIONAL SEAL 031216 ENGINEER WAYNE C. DAVIS, PH.D.

Wayne C. Davis, PhD, PE
Triad Planning Group Supervisor

Table of Contents

Appendices

List of Figures

List of Tables

Executive Summary

In April of 2010, the Transportation Planning Branch of the North Carolina Department of Transportation (NCDOT) and Surry County initiated a study to cooperatively develop the Surry County Comprehensive Transportation Plan (CTP), which includes Mount Airy, Dobson and Pilot Mountain. This study is a long range multi-modal transportation plan that covers transportation needs through 2040. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover routine maintenance or minor operations issues. Refer to Appendix A for contact information on these types of issues.

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

HIGHWAY

- **US 52:** Upgrade to freeway standards from I-74 to Stokes County.
- **US 601:** Widen to a four-lane divided boulevard from south of I-74 to Atkins Street (SR 1100) near Dobson.
- **NC 89 (Sycamore Road):** Widen to a three-lane major thoroughfare from west of Tranquil Lane near Mount Airy to Maple Hollow Road (SR 1395).
- **NC 268 (Key Street)**: Widen to a three-lane major thoroughfare from Denny Street to US 52 Bypass (SR 1856) in Pilot Mountain.
- **South Main Street (US 52 Business):** Widen to a three-lane major thoroughfare from Renfro Street to Westfield Road (NC 89) in Mount Airy .

PUBLIC TRANSPORTATION & RAIL

The 2010 PART Regional Transit Development Plan recommends that fixed-route bus service route be developed. Two fixed bus routes are recommended to circulate throughout Mount Airy, Dobson and Elkin. These routes are featured on Sheet 3 of Figure 1.

BICYCLE

The 2005 Surry County Greenway Master Plan and 2004 Surry County Scenic Bikeway Plan identified existing and recommended greenways and bicycle routes throughout Surry County. These routes are featured on Sheet 4 of Figure 1.

PEDESTRIAN

Mount Airy, Dobson and Pilot Mountain have pedestrian recommendations. Pedestrian recommendations are depicted on Sheet 5 of Figure 1.

Adopted by:

City of Mount Airy
Date: January 19, 2012

Town of Dobson
Date: January 26, 2012

Town of Pilot Mountain
Date: December 19, 2011

Surry County
Date: February 20, 2012

NCDOT
Date: April 5, 2012

Endorsed by:

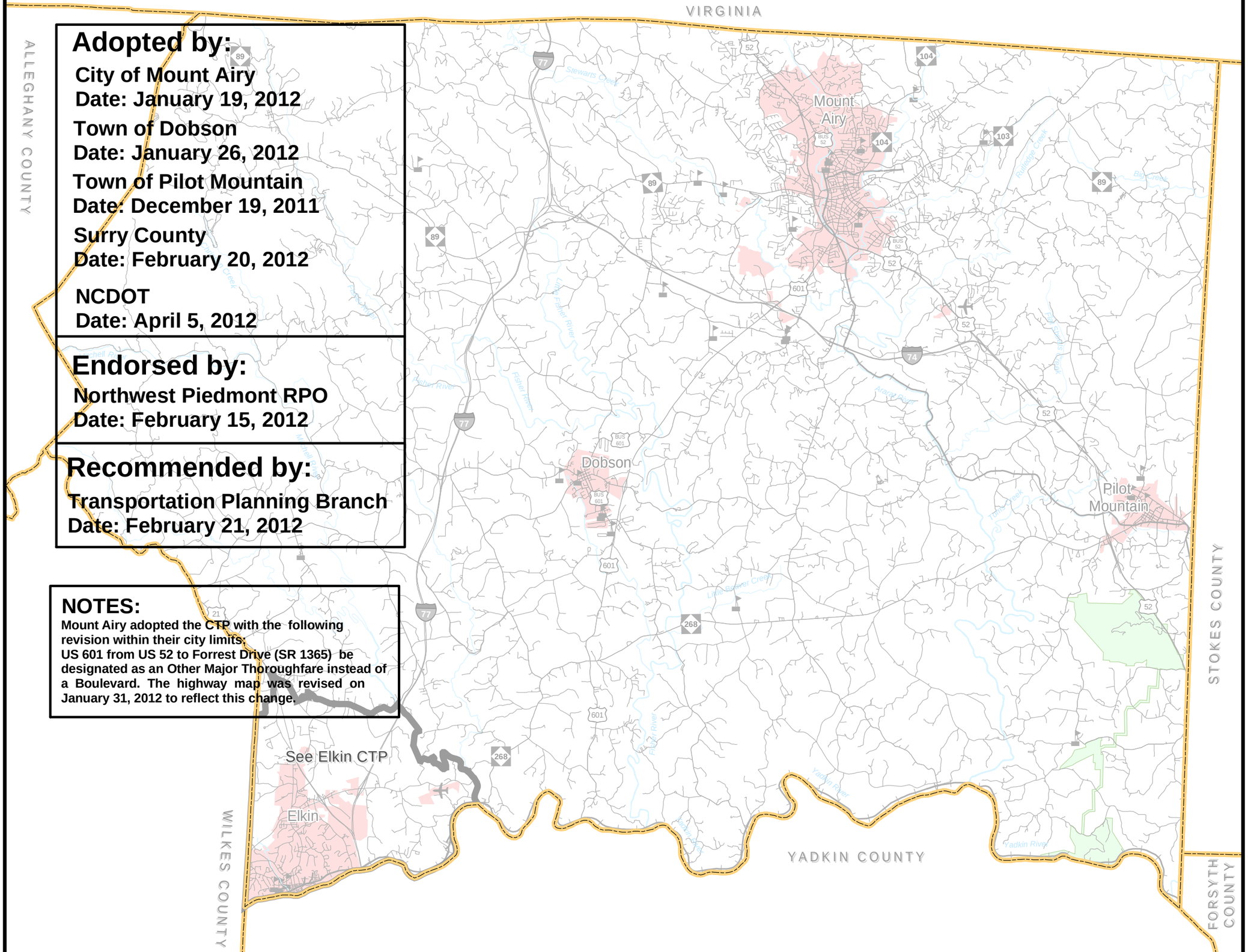
Northwest Piedmont RPO
Date: February 15, 2012

Recommended by:

Transportation Planning Branch
Date: February 21, 2012

NOTES:

Mount Airy adopted the CTP with the following revision within their city limits:
US 601 from US 52 to Forrest Drive (SR 1365) be designated as an Other Major Thoroughfare instead of a Boulevard. The highway map was revised on January 31, 2012 to reflect this change.



THE GREAT SEAL OF N C SURRY COUNTY 1770

Surry County North Carolina

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 2012

Legend

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

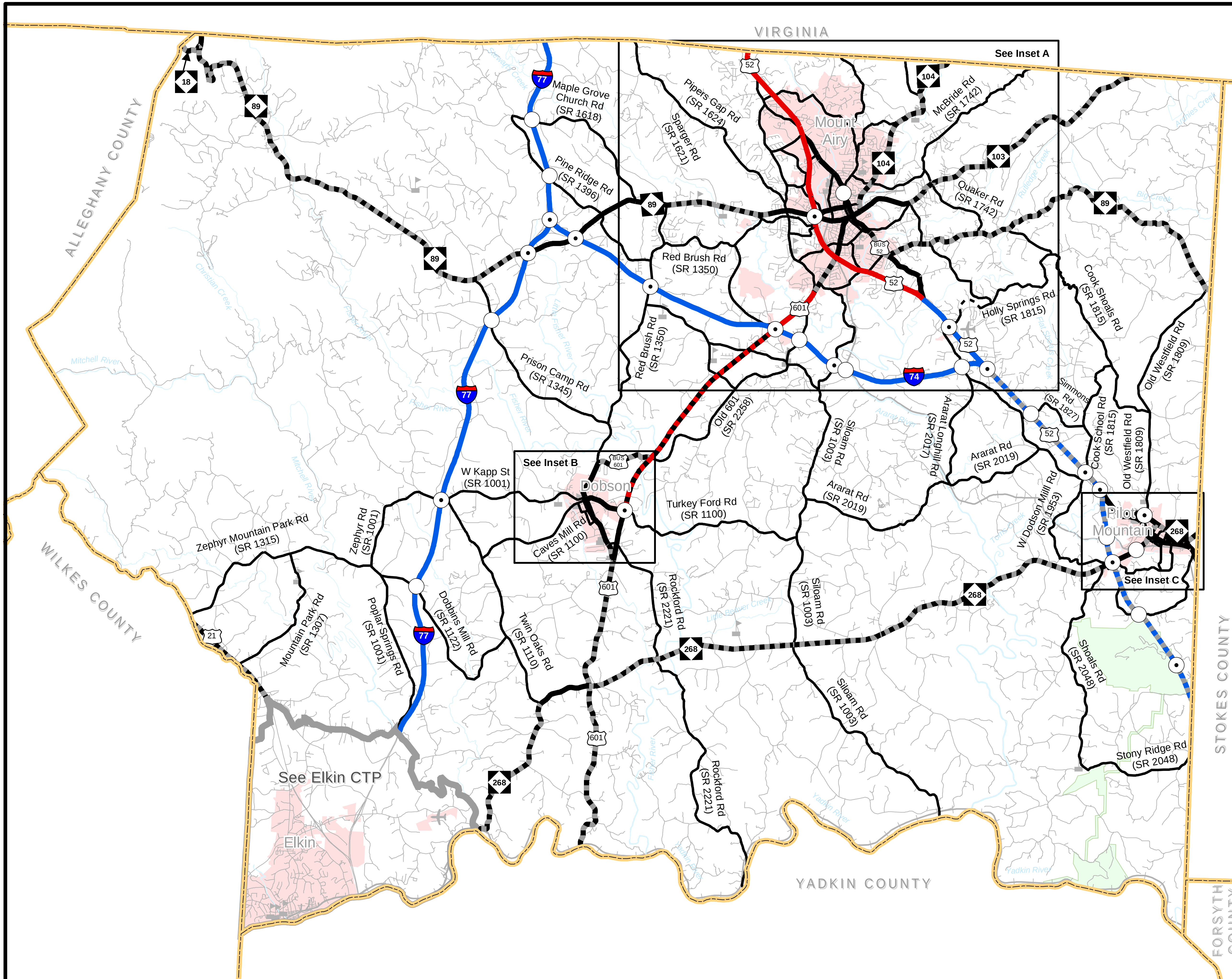
0 0.5 1 2 3 Miles

N W E S

Figure 1- Sheet 1 of 5

Base map date: April 14, 2011

Refer to CTP document for more details


VIRGINIA
See Inset A
ALLEGHANY COUNTY
WILKES COUNTY
STOKES COUNTY
YADKIN COUNTY
FORSYTH COUNTY
Mount Airy
Dobson
Pilot Mountain
Elkin
See Elkin CTP
See Inset B
See Inset C
Maple Grove Church Rd (SR 1618)
Pine Ridge Rd (SR 1396)
Pipers Gap Rd (SR 1624)
Sparger Rd (SR 1621)
McBride Rd (SR 1742)
Quaker Rd (SR 1742)
Red Brush Rd (SR 1350)
Holly Springs Rd (SR 1815)
Cook Shoals Rd (SR 1815)
Old Westfield Rd (SR 1809)
Prison Camp Rd (SR 1345)
Old 601 (SR 2258)
Siloam Rd (SR 1003)
Ararat Longhill Rd (SR 2017)
Ararat Rd (SR 2019)
Simmons Rd (SR 1827)
Cook School Rd (SR 1815)
W Kapp St (SR 1001)
Turkey Ford Rd (SR 1100)
W Dodson Mill Rd (SR 1953)
Zephyr Mountain Park Rd (SR 1315)
Zephyr Rd (SR 1001)
Caves Mill Rd (SR 1100)
Mountain Park Rd (SR 1307)
Poplar Springs Rd (SR 1001)
Dobbins Mill Rd (SR 1122)
Twin Oaks Rd (SR 1110)
Rockford Rd (SR 2221)
Shoals Rd (SR 2048)
Stony Ridge Rd (SR 2048)
Mitchell River
Fisher River
Ararat River
Yadkin River

Highway Map

Surry County

Comprehensive Transportation Plan

Plan date: December 21, 2011
Revised: January 31, 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

Miles: 0 0.5 1 2 3

Figure 1- Sheet 2 of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Highway Map
INSET A

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

0 0.25 0.5 1 Miles

N W E S

Figure 1- Sheet 2A of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Highway Map
INSET B

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

0 0.125 0.25 0.5 Miles

N W E S

Figure 1- Sheet 2B of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Dobson
Fisher River
Prison Camp Rd (SR 1345)
N Main St
BUS 601
Ridge Rd (SR 2219)
601
Old 601 (SR 2258)
W Kapp St (SR 1001)
Zephyr Rd (SR 1001)
S Crutchfield St
Cooper St
James St
S Main St
E Atkins St (SR 1100)
W Atkins St (SR 1100)
Adams St
Spoon St
Cody Creek
College Cir (SR 1201)
Turkey Ford Rd (SR 1100)
WR Gillespie Rd (SR 1102)
Caves Mill Rd (SR 1100)
Rockford Rd (SR 2221)

Highway Map
INSET C

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

0 0.125 0.25 0.5 Miles

N W E S

Figure 1-Sheet 2C of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Pilot Mountain
STOKES COUNTY
Toms Creek
Heatherly Creek
Old Westfield Rd (SR 1809)
Jacks Trl
W Main St (SR 1856)
W Main St (SR 1857)
W 52 BYP (SR 1856)
Lynchburg Rd
Dodson Mill Rd (SR 2049)
School St (SR 1809)
N Key St
Depot St
Smith Dr
S Academy St (SR 2050)
Carson St
E Main St (SR 1857)
E 52 BYP (SR 1855)
W Marion St
St Stephens St
W Pine St
Davis St
E Marion St
Pine St
Butler St
Dobson St
Denny St
S Key St
Academy St (SR 2050)
Nelson Rd (SR 2110)
Golf Course Rd (SR 2098)
Golf Course Rd (SR 2050)
Golf Course Rd (SR 2110)
Old Winston Rd (SR 2051)
Whitaker Chapel Rd (SR 2165)
Barney Venable Rd (SR 2099)
Lola Ln
Shoals Rd (SR 2048)
Black Mountain Rd (SR 2097)
52
268

Public Transportation and Rail Map

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 2012

Bus Routes
- Existing
- Needs Improvement
- Recommended

Fixed Guideway
- Existing
- Needs Improvement
- Recommended

Operational Strategies
- Existing
- Needs Improvement
- Recommended

Rail Corridor
- Active
- Inactive
- Recommended

High Speed Rail Corridor
- Existing
- Recommended

Rail Stops
- Existing
- Recommended

Intermodal Connector
- Existing
- Recommended

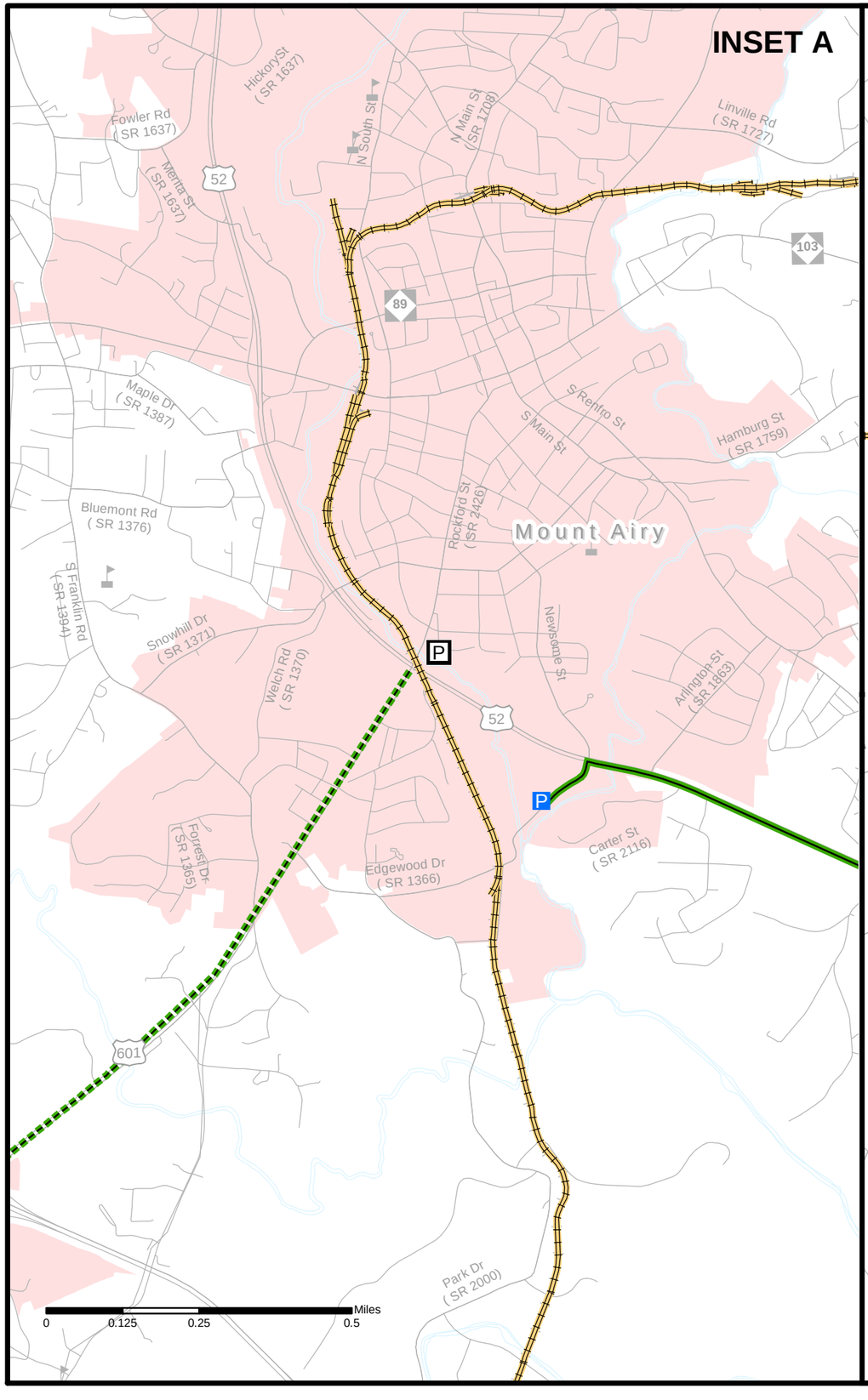
Park and Ride Lot
- Existing
- Recommended

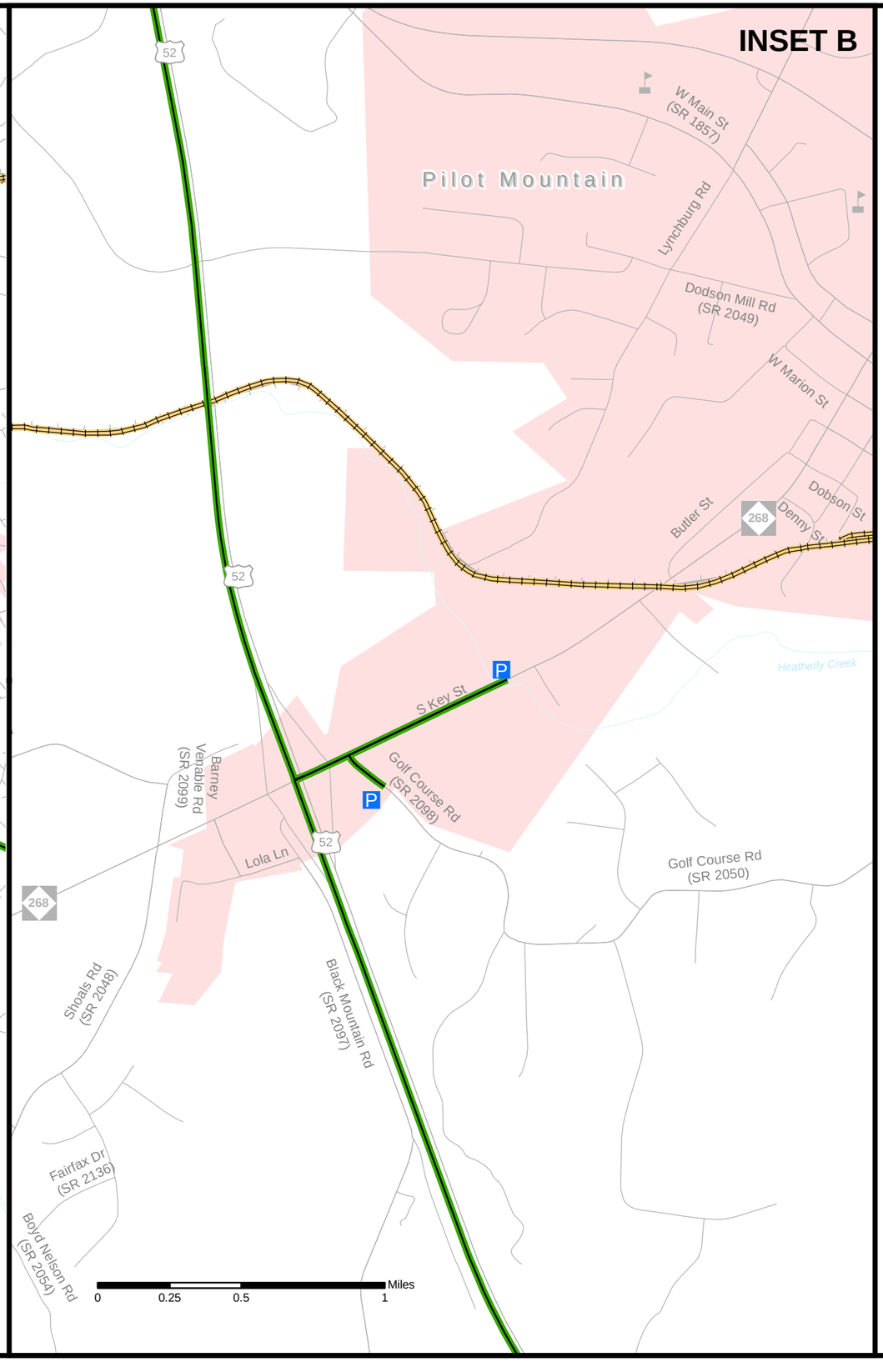
Miles
0 0.30.6 1.2 1.8

Figure 1- Sheet 3 of 5

Base map date: April 14, 2011

Refer to CTP document for more details





Public Transportation and Rail Map INSETS A & B

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 2012

Bus Routes
- Existing
- Needs Improvement
- Recommended

Fixed Guideway
- Existing
- Needs Improvement
- Recommended

Operational Strategies
- Existing
- Needs Improvement
- Recommended

Rail Corridor
- Active
- Inactive
- Recommended

High Speed Rail Corridor
- Existing
- Recommended

Rail Stops
- Existing
- Recommended

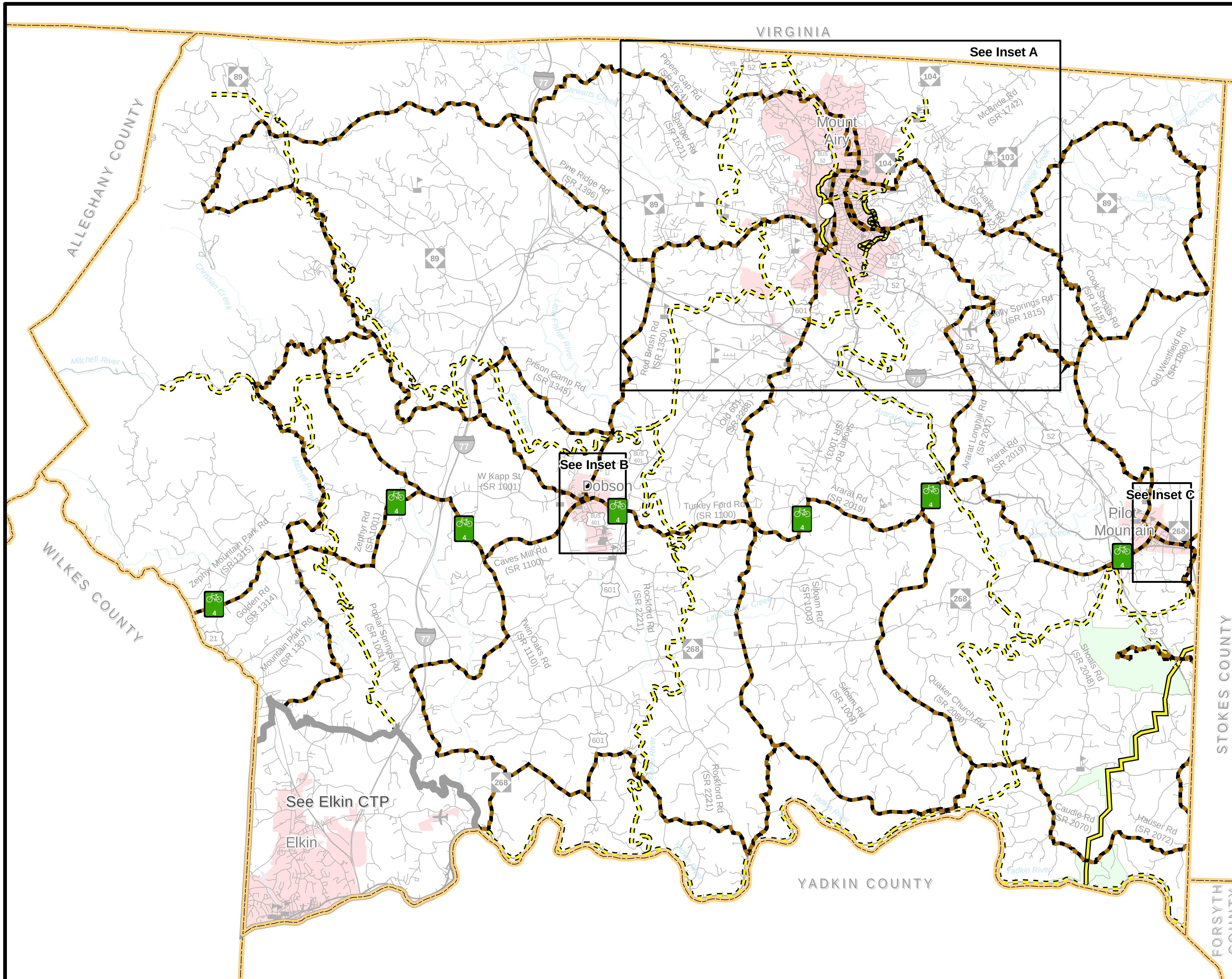
Intermodal Connector
- Existing
- Recommended

Park and Ride Lot
- Existing
- Recommended

Figure 1- Sheet 3A of 5

Base map date: April 14, 2011

Refer to CTP document for more details



VIRGINIA
See Inset A
See Inset B
See Inset C
Mount Airy
Dobson
Pilot Mountain
See Elkin CTP
Elkin
ALLEGHANY COUNTY
WILKES COUNTY
YADKIN COUNTY
STOKES COUNTY
FORSYTH COUNTY
Pipers Gap Rd (SR 1624)
Sparger Rd (SR 1621)
Pine Ridge Rd (SR 1396)
McBride Rd (SR 1742)
Holly Springs Rd (SR 1815)
Red Brush Rd (SR 1350)
Prison Camp Rd (SR 1345)
Siloam Rd (SR 1003)
Ararat Longhill Rd (SR 2017)
Ararat Rd (SR 2019)
W Kapp St (SR 1001)
Turkey Ford Rd (SR 1100)
Caves Mill Rd (SR 1100)
Zephyr Rd (SR 1001)
Zephyr Mountain Park Rd (SR 1315)
Golden Rd (SR 1314)
Mountain Park Rd (SR 1307)
Poplar Springs Rd (SR 1003)
Twin Oaks Rd (SR 1110)
Rockford Rd (SR 2221)
Quaker Church Rd (SR 2080)
Shoals Rd (SR 2048)
Caudle Rd (SR 2070)
Hauser Rd (SR 2072)
Mitchell River
Yadkin River

Bicycle Map

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 2012

On-road
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

Existing Grade Separation

Proposed Grade Separation

Miles
0 0.5 1 2 3

N W E S

Figure 1- Sheet 4 of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Bicycle Map
INSET A

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 2012

On-road
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.375 0.75 1.5 Miles

N W E S

Figure 1- Sheet 4A of 5

Base map date: April 14, 2011

Refer to CTP document for more details

INSET B

INSET C

Dobson

Pilot Mountain

Prison Camp Rd (SR 1345)
N Main St
Ridge Rd (SR 2219)
Leila Ln
Bluemont St
W Kapp St (SR 1001)
N Crutchfield St
Woltz St
E Kapp St
S White St
S Crutchfield St
Cooper St
James St
S Main St
E Atkins St (SR 1100)
W Atkins St (SR 1100)
Adams St
Cody Creek
Spoon St
College Cir (SR 1201)
College Place Ave
Cave Rd (SR 1101)
Rockford Rd (SR 2221)
BUS 601
601
Miles
0 0.125 0.25 0.5

Old Westfield Rd (SR 1809)
Jacks Trl
W Main St (SR 1857)
W 52 BYP (SR 1856)
Lynchburg Rd
Dodson Mill Rd (SR 2049)
N Key St
School St (SR 1809)
Depot St
Smith Dr
S Academy St (SR 2050)
W Marion St
Stephens St
W Pine St
Davis St
E Marion St
Pine St
Dobson St
Butler St
Denny St
E Main St (SR 1857)
Carson St
Heatherly Creek
Academy St (SR 2050)
Nelson Rd (SR 2110)
Golf Course Rd (SR 2050)
Golf Course Rd (SR 2110)
Old Winston Rd (SR 2081)
268
4
Miles
0 0.125 0.25 0.5

Bicycle Map
INSETS B & C

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 2012

On-road
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

N W E S

Figure 1- Sheet 4B of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Pedestrian Map

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

0 0.5 1 2 3 Miles

N W E S

Figure 1- Sheet 5 of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Pedestrian Map
INSET A

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

0 0.025 0.05 0.1 Miles

N W E S

Figure 1- Sheet 5A of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Mount Airy
W Oakdale St
E Oakdale St
Laurel St
Fairview Ave
Dogwood Rd
Five Oaks Trl
Wrenn Ave
Old Springs Rd (SR 1708)
Henri St
Grace St
N Park Ave
S Park Ave
Park Ave
Crescent Dr (SR 1708)
Marion St
Charles St
Howard St
Bray Ln
Olivia Ave
W Poplar St
Byerly St
Linville Rd (SR 1727)
Lindsay St
Leonard Rd
Granite Rd
E Poplar St
Allred Mill Rd (SR 1706)
Carroll St (SR 1637)
W Lebanon St
N South St
Council St
Mitchell St
Mayberry Ave
Orchard St
N Main St (SR 1708)
North St
E Lebanon St
Woodruff St
Frank St
Kyle St
Hunter Dr
Hay St
Taylor St
Brown St
Lewis Creek
BUS 52
104

Pedestrian Map
INSET B

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

0 0.025 0.05 0.1 Miles

N W E S

Figure 1- Sheet 5B of 5

Base map date: April 14, 2011

Refer to CTP document for more details

Mount Airy

Galloway St
E Elm St
W Elm St
Arch St
Brunswick Ln
Maple St
Merritt St
Pippin St
Porter St
Pacific Cir
N South St (SR 1669)
Willow St
N Renfro St
Junction St
Rawley Ave
Hines Ave (SR 2419)
E Independence Blvd (SR 1670)
W Independence Blvd
Nations St
Spaugh St
Riverside Dr (SR 1670)
Bottom St (SR 1731)
E Pine St
E Oak St
N Main St
Trinity St
Civic Hall St
N Gilmer St
Moore Ave
W Oak St
Virginia St
Johnson St
Lovill St
Market St
Franklin St
Dixie St
McCargo St
W Pine St (SR 2432)
E Pine St (SR 2432)
S Gilmer St
S Renfro St
Cherry St
S Main St (SR 2432)
Rockford St
Bitting Ave
Circle Dr
E Church St
E Wilson St
W Church St
Marshall St
Granite St
S South St
Roberts Rd
Price St
Mount Airy St
Derby St
Hadley St
Patterson Ave
Dunnans Aly
Broad St
Spring St
W Wilson St
Bank St
Worth St
Korner St
Hamburg St
Lovills Creek
Ararat River

89 104 103 BUS 52

Pedestrian Map
INSET C

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

Miles
0 0.025 0.05 0.1

N
W E
S

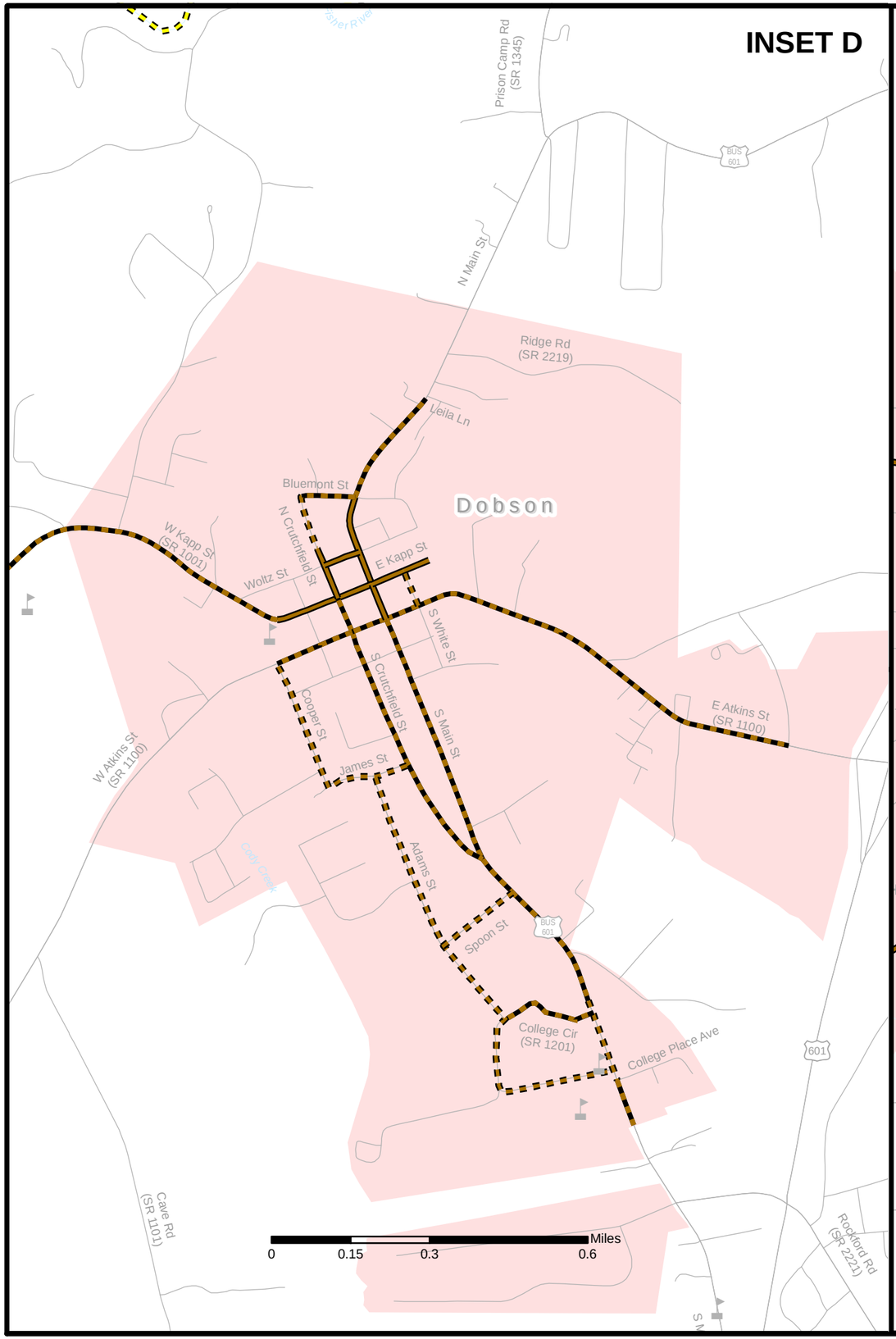
Figure 1- Sheet 5C of 5

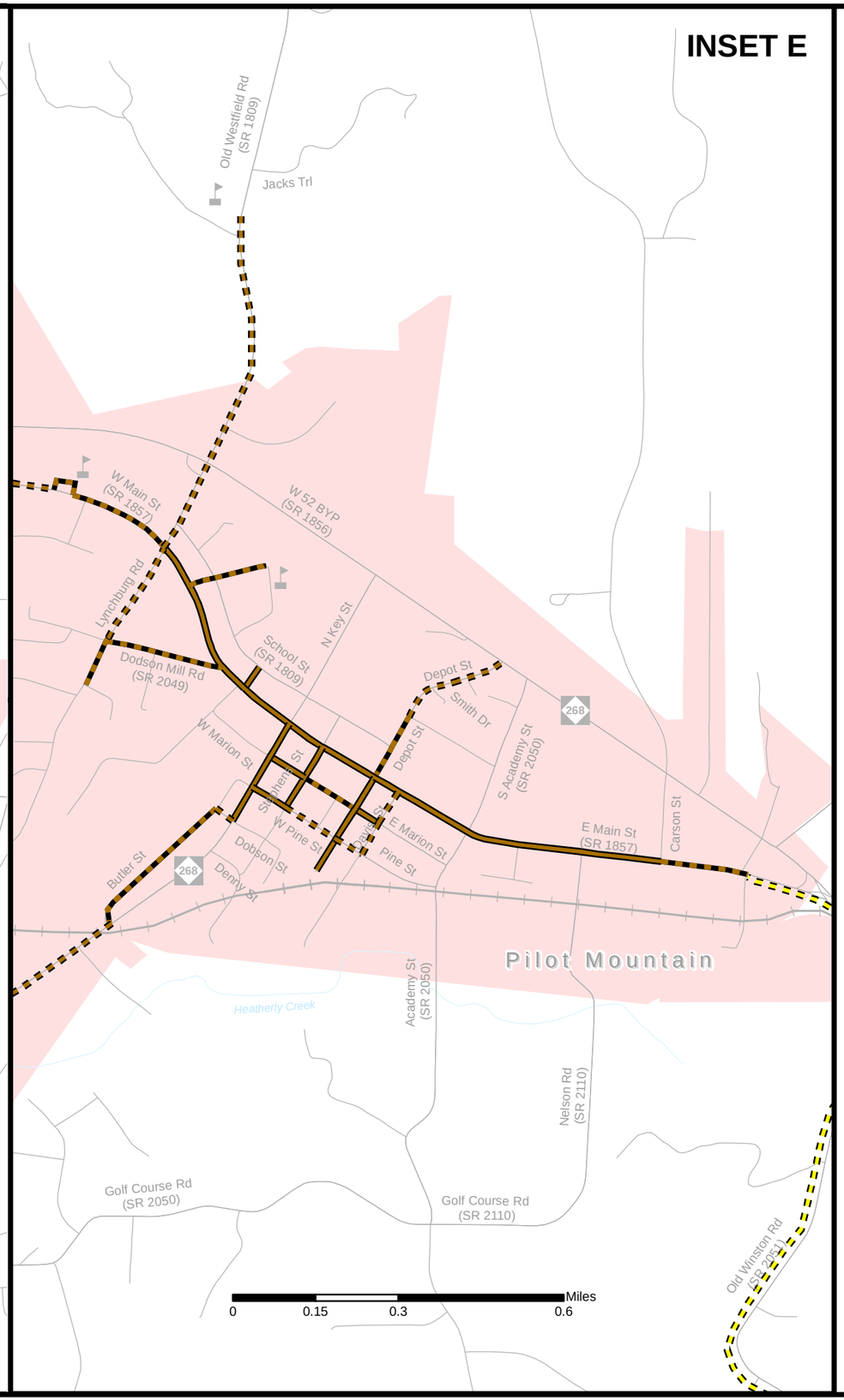
Base map date: April 14, 2011

Refer to CTP document for more details

Mount Airy

Hadley St
Durham St
S South St
Marshall St
Andrews St
Maiden Ln
Creed St
W Haymore St
E Haymore St
Houston St
Depot St
Factory St
Worth St (SR 1371)
Worth St
Rockford St (SR 2426)
Davis St
Penn St
Newsome St
Culbert St
Andover St
Spring St
Welch St
Bank St
Pender St
Hale St
Jessup St
Broad St
W Easter Dr
Church St
Woodland Dr (SR 1374)
Columbus St
Caudle Dr (SR 1372)
Welch Rd (SR 1370)
Lovills Creek
Sunset Dr
Banner St
Hillcrest Dr
Viewland Ave
Austin Dr
Jefferies St
Garden Ter
Reeves Dr
52
601





Pedestrian Map
INSETS D & E

Surry County

Comprehensive Transportation Plan

Plan date:December 21, 2011
Revised: January 31, 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

N W E S

Figure 1- Sheet 5D of 5

Base map date: April 14, 2011

Refer to CTP document for more details

I. Analysis of the Existing and Future Transportation System

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

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

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

Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

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

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

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

In the development of this plan, travel demand for areas outside the Mount Airy urban area was projected from 2010 to 2040 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2009. In the Mount Airy urban area travel demand was projected from 2010 to 2040 using a travel demand model. Travel demand models are developed to replicate travel patterns on the existing transportation system as well as to estimate travel patterns for 2040. 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 CTP Committee on April 19, 2011.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of a roadway exceeds the roadway's capacity. Roadways are considered near capacity when the traffic volume is at least eighty percent of the capacity. Refer to 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 North Carolina Level of Service (NCLOS) Program (version 2.1). 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 Surry County CTP for crashes occurring in the planning area between January 1, 2008 and December 31, 2010. During this period, a total of 18 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 Structure 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. There were 70 deficient bridges identified within the planning area and are illustrated in Figure 5. Refer to Appendix G for more detailed information.

FIGURE 2
2010
Volumes and Capacity Deficiencies

Surry County
Comprehensive
Transportation Plan

Legends

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

Miles
0 0.5 1 2 3

N W E S

Sheet 1 of 4

Base map date: April 14, 2011

VIRGINIA
ALLEGHANY COUNTY
WILKES COUNTY
YADKIN COUNTY
STOKES COUNTY
FORSYTH COUNTY
See Inset A
See Inset B
See Inset C
See Elkin CTP
Mount Airy
Dobson
Pilot Mountain
Elkin
Pipers Gap Rd (SR 1624)
Sparger Rd (SR 1621)
Ward's Gap Rd (SR 1717)
McBride Rd (SR 1742)
Quaker Rd (SR 1742)
Red Brush Rd (SR 1350)
Holly Springs Rd (SR 1815)
Cook Shoals Rd (SR 1815)
Old Westfield Rd (SR 1809)
Prison Camp Rd (SR 1345)
Old 601 (SR 2558)
Siloam Rd (SR 1003)
Ararat Rd (SR 2019)
W Kapp St (SR 1001)
Turkey Ford Rd (SR 1100)
Caves Mill Rd (SR 1100)
Zephyr Rd (SR 1001)
Mountain Park Rd (SR 1307)
Poplar Springs Rd (SR 1001)
Twin Oaks Rd (SR 1110)
Rockford Rd (SR 2221)
Quaker Church Rd (SR 2080)
Shoals Rd (SR 2048)
Perch Rd (SR 2048)
Caudle Rd (SR 2070)
Hauser Rd (SR 2072)

FIGURE 2
2010
Volumes and Capacity Deficiencies

INSET A

Surry County

Comprehensive

Transportation Plan

Legends

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

Miles

0 0.25 0.5 1

Sheet 2 of 4

Base map date: April 14, 2011

N W E S

VIRGINIA

Mount Airy

Pipers Gap Rd (SR 1624)
Pipers Gap Rd (SR 1621)
Pipers Gap Rd (SR 1624)
Pipers Gap Rd (SR 2413)
Greenhill Rd (SR 1700)
Fancy Gap Rd (SR 1640)
N Franklin Rd (SR 1394)
Galax Trl (SR 1648)
Fowler Rd (SR 1637)
Sparger Rd (SR 1621)
Maple Hollow Rd (SR 1395)
Red Brush Rd (SR 1350)
Toast Rd (SR 1387)
Maple Dr (SR 1387)
S Franklin Rd (SR 1394)
Bluemont Rd (SR 1376)
Snowhill Dr (SR 1371)
McKinney Rd (SR 1544)
McKinney Rd (SR 1429)
Red Brush Rd (SR 1350)
Cadle Knoll Ln (SR 1535)
Old Cadle Ford Rd (SR 1357)
Cadle Ford Rd (SR 1356)
Perry Taylor Rd (SR 1357)
Park Dr (SR 2000)
Edgewood Dr (SR 1366)
Carter St (SR 2116)
Arlington St (SR 1863)
Hamburg St (SR 1759)
Rockford St (SR 2426)
Pine St (SR 2432)
N South St
Springs Rd (SR 1708)
Springs Rd (SR 1708)
Wards Gap Rd (SR 1717)
Willis Gap Rd (SR 1724)
Mount View Dr (SR 1716)
McBride Rd (SR 1742)
Linville Rd (SR 1727)
Stanley Rd (SR 1738)
Lovers Ln (SR 1753)
Quaker Rd (SR 1742)
Indian Grove Church Rd (SR 1780)
Massey Rd (SR 1774)
Reeves Mill Rd (SR 1776)
Holly Springs Rd (SR 1815)
Old US-52 S (SR 2012)

1300 13800
9000 44800
9500 44800
1500 13800
2200 13800
2000 13800
2400 15800
2100 15300
10000 44800
2100 13800
3600 13800
8500 44800
2600 13800
10900 43500
4200 13800
2300 13800
1700 15800
5500 13800
8200 13800
11300 43500
13000 43500
3100 13800
19000 32400
17000 32400
15000 43500
4800 13800
6500 13800
12000 27500
8500 27500
1900 13800
2500 13800
1100 15800
2100 15800
3200 15800
1400 13800
7000 13800
6200 13800
1000 15300
2700 15800
2800 13800
5600 15800
7800 13800
7200 13800
6000 13800
7700 15800
11200 15300
13000 15300
9400 13800
13200 15300
1000 13800
6800 15800
3200 15300
10000 27500
1800 15800
9800 15800
1500 13800
12600 43500
8700 13800
7600 13800
3700 13800
11000 13800
6500 13800
5600 13800
2100 15800
4000 13800
1100 15800
900 15800
3000 15800
1100 15800
3600 15800
2200 15800
18000 61200
7100 13800
6700 13800
5000 13800
25000 32400
17000 43500
12000 27500
10000 13800
5600 13800
5500 13800
5000 13800
1100 15800
1300 15800
1600 15800
3400 13800
900 15800
21500 43500
16000 43500
4900 13800
21700 32400
3900 13800
14000 44800
17000 61200
5800 13800
1700 15800
2900 15800
1600 15800
15000 15800
17000 61200
1100 15800
1000 15800
12000 15800
600 15800
1400 15800
3800 15800
6000 15800
4400 15800
13500 61200
16000 61200
3000 15800
700 15800

FIGURE 2
2010
Volumes and Capacity Deficiencies
INSET B

Surry County
Comprehensive
Transportation Plan

Legends

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

Miles
0 0.125 0.25 0.5

Sheet 3 of 4
Base map date: April 14, 2011

N W E S

Dobson

Plantation Rd (SR 1343)
Pool St (SR 1500)
N Main St
Ridge Rd (SR 2219)
Lakeview Dr (SR 1507)
Royal Ln (SR 1521)
W Kapp St (SR 1001)
Zephyr Rd (SR 1001)
W Atkins St (SR 1100)
Cooper St
S Crutchfield St
S Main St (SR 0)
James St
Adams St
Spoon St
E Atkins St (SR 1100)
Clay Davis Rd (SR 2276)
WR Gillespie Rd (SR 1102)
Caves Mill Rd (SR 1100)
Cave Rd (SR 1101)
College Cir (SR 1201)
Rockford Rd (SR 2221)
Ashley Dr (SR 2259)
Arthur Haney Rd (SR 2249)
Forest Oaks Dr (SR 1196)
BUS 601
601

6900	13800	N Main St
9200	15800	601
8500	13800	
6800	13800	
4200	13800	
2000	13800	
2200	15800	
2900	13800	
6500	13800	
900	13800	
6500	15800	
9400	13800	
1700	13800	
800	13800	
4700	13800	
7000	15800	
2400	13800	
4000	15800	
6500	15800	

FIGURE 2
2010
Volumes and Capacity Deficiencies
INSET C

Surry County

Comprehensive

Transportation Plan

Legends

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

Miles: 0 — 0.125 — 0.25 — 0.5

N W E S

Sheet 4 of 4

Base map date: April 14, 2011

Pilot Mountain

STOKES COUNTY

W Main St (SR 1856)

Old Westfield Rd (SR 1809)

W Main St (SR 1857)

W 52 BYP (SR 1856)

Friends St

N Key St

School St (SR 1809)

Depot St

S Academy St (SR 2050)

E Main St (SR 1857)

E Main St (SR 1855)

E 52 BYP (SR 1855)

Stephens St

Davis St

E Marion St

Pine St

Academy St (SR 2050)

Nelson Rd (SR 2110)

S Key St

Golf Course Rd (SR 2098)

Golf Course Rd (SR 2050)

Golf Course Rd (SR 2110)

Old Winston Rd (SR 2051)

Whitaker Chapel Rd (SR 2165)

Barney Venable Rd (SR 2099)

Lola Ln

Shoals Rd (SR 2048)

Black Mountain Rd (SR 2097)

3400 / 15800	5200 / 15800	6400 / 15800
26000 / 61200	3000 / 13800	3300 / 13800
2500 / 13800	800 / 13800	4300 / 13800
5300 / 13800	2000 / 13800	2300 / 13800
5800 / 13800	10500 / 13800	10000 / 13800
12000 / 13800	1600 / 13800	1100 / 13800
1400 / 13800	1000 / 13800	1800 / 13800
1300 / 13800	4700 / 13800	3200 / 13800
2900 / 13800	5000 / 13800	4000 / 13800
2800 / 13800	2500 / 13800	1800 / 13800
4600 / 13800	3500 / 13800	5500 / 13800
4800 / 13800	12000 / 27500	5900 / 13800
500 / 15800	1500 / 13800	700 / 15800
3700 / 11900	4500 / 13800	700 / 13800
1500 / 15800		

52 · 268

FIGURE 3
2040
Volumes and Capacity Deficiencies

Surry County
Comprehensive
Transportation Plan

Legends

- Near Capacity
- Over Capacity
- #### / #### — 2040 Volumes (AADT) / 2010 Capacity
- Schools
- Airport
- Study Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Planning Boundary

0 0.5 1 2 3 Miles

N W E S

Sheet1 of 4

Base map date: April 14, 2011

VIRGINIA
ALLEGHANY COUNTY
WILKES COUNTY
YADKIN COUNTY
STOKES COUNTY
FORSYTH COUNTY
See Inset A
See Inset B
See Inset C
See Elkin CTP
Mount Airy
Dobson
Elkin
Pilot Mountain
Pipers Gap Rd (SR 1624)
Sparger Rd (SR 1621)
Ward's Gap Rd (SR 1717)
McBride Rd (SR 1742)
Quaker Rd (SR 1742)
Red Brush Rd (SR 1350)
Holly Springs Rd (SR 1815)
Cook Shoals Rd (SR 1815)
Old Westfield Rd (SR 1809)
Prison Camp Rd (SR 1345)
Old 601 (SR 2258)
Siloam Rd (SR 1003)
Ararat Rd (SR 2019)
W Kapp St (SR 1001)
Turkey Ford Rd (SR 1100)
Caves Mill Rd (SR 1100)
Zephyr Rd (SR 1001)
Mountain Park Rd (SR 1307)
Poplar Springs Rd (SR 1001)
Twin Oaks Rd (SR 1110)
Rockford Rd (SR 2221)
Quaker Church Rd (SR 2080)
Shoals Rd (SR 2048)
Perch Rd (SR 2048)
Caudle Rd (SR 2070)
Hauser Rd (SR 2072)

FIGURE 3
2040
Volumes and Capacity Deficiencies
INSET A

Surry County
Comprehensive
Transportation Plan

Legends

- Near Capacity
- Over Capacity
- #### / #### — 2040 Volumes (AADT) / 2010 Capacity
- Schools
- Airport
- Study Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Planning Boundary

0 0.25 0.5 1 Miles

Sheet 2 of 4

Base map date: April 14, 2011

N W E S

VIRGINIA

Mount Airy

Pipers Gap Rd (SR 1624)
Pipers Gap Rd (SR 1621)
Greenhill Rd (SR 1700)
Wards Gap Rd (SR 1717)
Willis Gap Rd (SR 1724)
Springs Rd (SR 1708)
Fancy Gap Rd (SR 1640)
Mount View Dr (SR 1716)
McBride Rd (SR 1742)
N Franklin Rd (SR 1394)
Galax Trl (SR 1648)
Fowler Rd (SR 1637)
Linville Rd (SR 1727)
Stanley Rd (SR 1738)
Sparger Rd (SR 1621)
Pipers Gap Rd (SR 2413)
N South St
Pine St (SR 2432)
Lovers Ln (SR 1753)
Quaker Rd (SR 1742)
Maple Hollow Rd (SR 1395)
Red Brush Rd (SR 1350)
Toast Rd (SR 1387)
Maple Dr (SR 1387)
S Franklin Rd (SR 1394)
Bluemont Rd (SR 1376)
Snowhill Dr (SR 1371)
Rockford St (SR 2426)
Hamburg St (SR 1759)
Indian Grove Church Rd (SR 1780)
McKinney Rd (SR 1544)
Arlington St (SR 1863)
Massey Rd (SR 1774)
Reeves Mill Rd (SR 1776)
Holly Springs Rd (SR 1815)
Edgewood Dr (SR 1366)
Carter St (SR 2116)
McKinney Rd (SR 1429)
Cadle Knoll Ln (SR 1535)
Old Cadle Ford Rd (SR 1357)
Perry Taylor Rd (SR 1357)
Cadle Ford Rd (SR 1356)
Park Dr (SR 2000)
Old US-52 S (SR 2012)

1500 13800
15300 44800
16500 44800
3400 13800
3300 15800
2200 13800
2800 13800
4600 15800
4000 15300
3800 13800
5600 15800
17500 44800
3200 13800
6700 13800
14700 44800
3700 15800
4700 13800
16500 43500
8400 13800
6200 13800
2600 13800
9400 13800
5700 13800
10800 13800
1900 15300
3800 13800
8300 13800
7900 13800
3700 13800
17000 43500
11000 15800
18900 43500
15200 27500
12500 15800
4100 13800
24300 32400
12900 27500
9900 13800
11000 13800
10500 13800
3200 15800
12500 15800
15100 15300
17000 15300
11000 13800
20800 32400
22700 43500
13600 27500
3700 15800
2200 15800
5200 13800
11400 15800
5200 15300
17500 15300
2500 13800
12500 15800
2900 13800
18500 43500
10900 13800
9500 13800
5900 13800
13000 13800
8700 13800
6700 13800
1500 15800
7200 15800
3000 15800
9000 13800
12400 13800
2400 15800
8700 13800
37000 32400
7800 13800
7100 13800
7500 15800
23700 43500
7800 13800
7600 13800
2600 15800
3600 15800
38000 61200
8100 13800
24000 43500
34200 43500
8000 13800
21700 44800
9000 13800
33000 43500
35000 32400
28900 61200
2600 15800
7500 13800
3000 15800
8300 15800
25000 15800
34000 61200
7400 15800
27800 61200
32000 61200
18000 15800
5600 15800
2500 15800
9600 15800
900 15800

FIGURE 3
2040
Volumes and Capacity Deficiencies
INSET B

Surry County
Comprehensive
Transportation Plan

Legends

- Near Capacity
- Over Capacity
- #### / #### — 2040 Volumes (AADT) / 2010 Capacity
- Schools
- Airport
- Study Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Planning Boundary

Miles
0 0.125 0.25 0.5

Sheet 3 of 4
Base map date: April 14, 2011

N W E S

Dobson

Plantation Rd (SR 1343)
Pool St (SR 1500)
N Main St
Ridge Rd (SR 2219)
Lakeview Dr (SR 1507)
Royal Ln (SR 1521)
W Kapp St (SR 1001)
Zephyr Rd (SR 1001)
W Atkins St (SR 1100)
Cooper St
James St
S Crutchfield St
S Main St (SR 0)
Adams St
Spoon St
E Atkins St (SR 1100)
Clay Davis Rd (SR 2276)
WR Gillespie Rd (SR 1102)
Caves Mill Rd (SR 1100)
Cave Rd (SR 1101)
College Cir (SR 1201)
Rockford Rd (SR 2221)
Ashley Dr (SR 2259)
Arthur Haney Rd (SR 2249)
S Main St
Forest Oaks Dr (SR 1196)

BUS 601
601

8800 13800
12400 15800
10500 13800
8400 13800
5200 13800
2500 13800
2700 15800
8000 15800
3600 13800
8000 13800
1100 13800
10917 13800
2000 13800
1000 13800
5800 13800
8600 15800
2800 13800
5200 15800
8200 15800

FIGURE 3
2040
Volumes and Capacity Deficiencies
INSET C

Surry County
Comprehensive
Transportation Plan

Legends

- Near Capacity
- Over Capacity
- #### / #### — 2040 Volumes (AADT) / 2010 Capacity
- Schools
- Airport
- Study Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Planning Boundary

0 0.125 0.25 0.5 Miles

N W E S

Sheet 4 of 4
Base map date: April 14, 2011

Pilot Mountain

STOKES COUNTY

Old Westfield Rd (SR 1809)
W Main St (SR 1856)
W Main St (SR 1857)
W 52 BYP (SR 1856)
E Main St (SR 1857)
E Main St (SR 1855)
E 52 BYP (SR 1855)
School St (SR 1809)
Friends St
N Key St
Depot St
Stephens St
Davis St
E Marion St
Pine St
S Academy St (SR 2050)
Academy St (SR 2050)
S Key St
Golf Course Rd (SR 2098)
Golf Course Rd (SR 2050)
Golf Course Rd (SR 2110)
Nelson Rd (SR 2110)
Old Winston Rd (SR 2051)
Whitaker Chapel Rd (SR 2165)
Barney Venable Rd (SR 2099)
Lola Ln
Shoals Rd (SR 2048)
Black Mountain Rd (SR 2097)

52 268

4000 15800
7000 15800
8400 15800
45500 61200
3700 13800
4100 13800
3100 13800
1000 13800
5600 13800
6500 13800
2500 13800
2800 13800
7200 13800
2200 13800
6400 13800
1600 13800
3600 13800
12900 13800
12300 13800
5800 13800
3900 13800
14800 13800
4900 13800
4300 13800
2000 13800
7000 13800
1400 13800
1700 13800
1200 13800
3500 13800
3100 13800
2200 13800
5300 13800
5900 13800
14800 27500
7000 13800
1900 13800
900 15800
4800 11900
6500 13800
900 13800
1800 15800

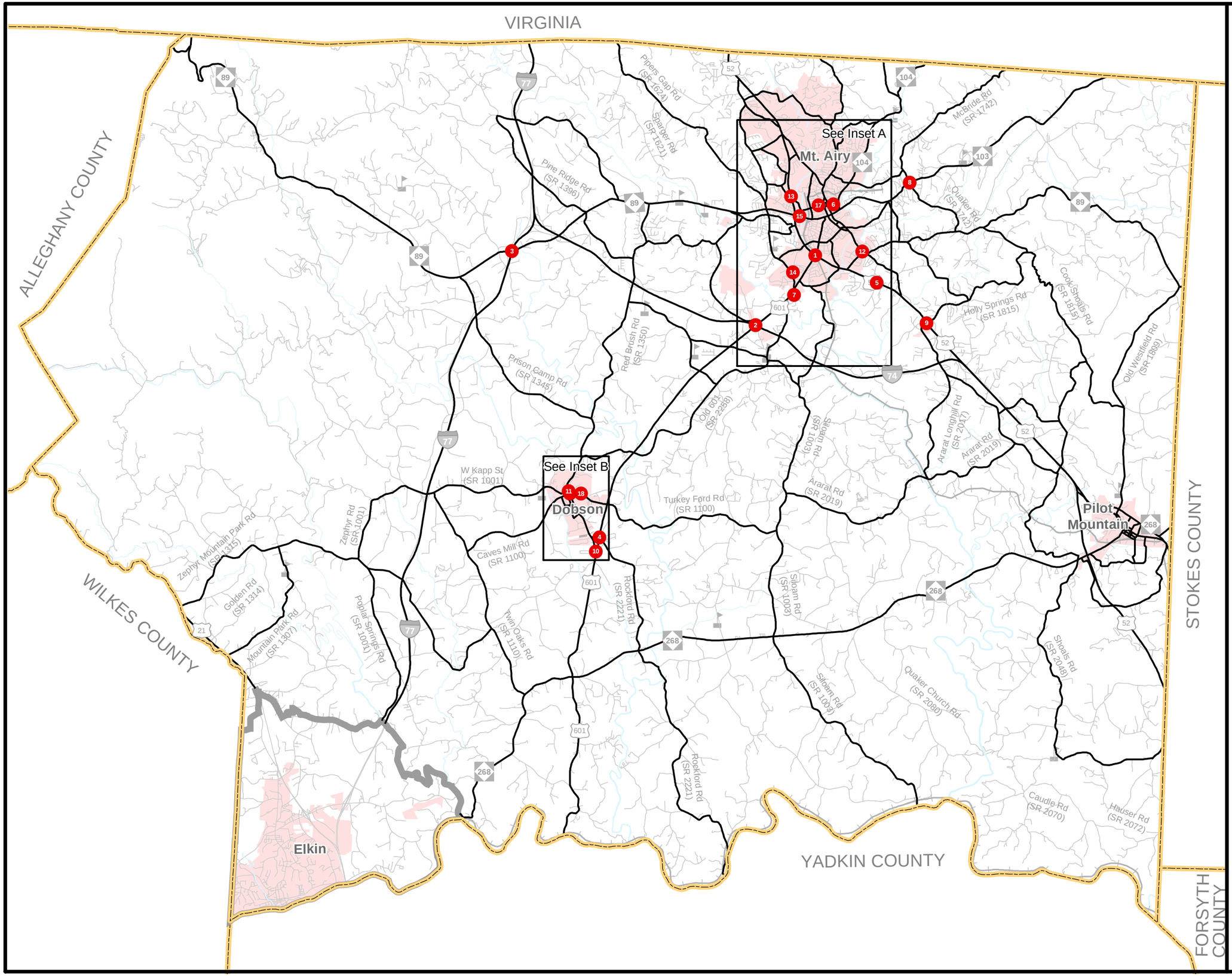


FIGURE 4

Crash Locations

Jan. 1, 2008 to Dec. 31, 2010

Surry County

Comprehensive

Transportation Plan

Legends

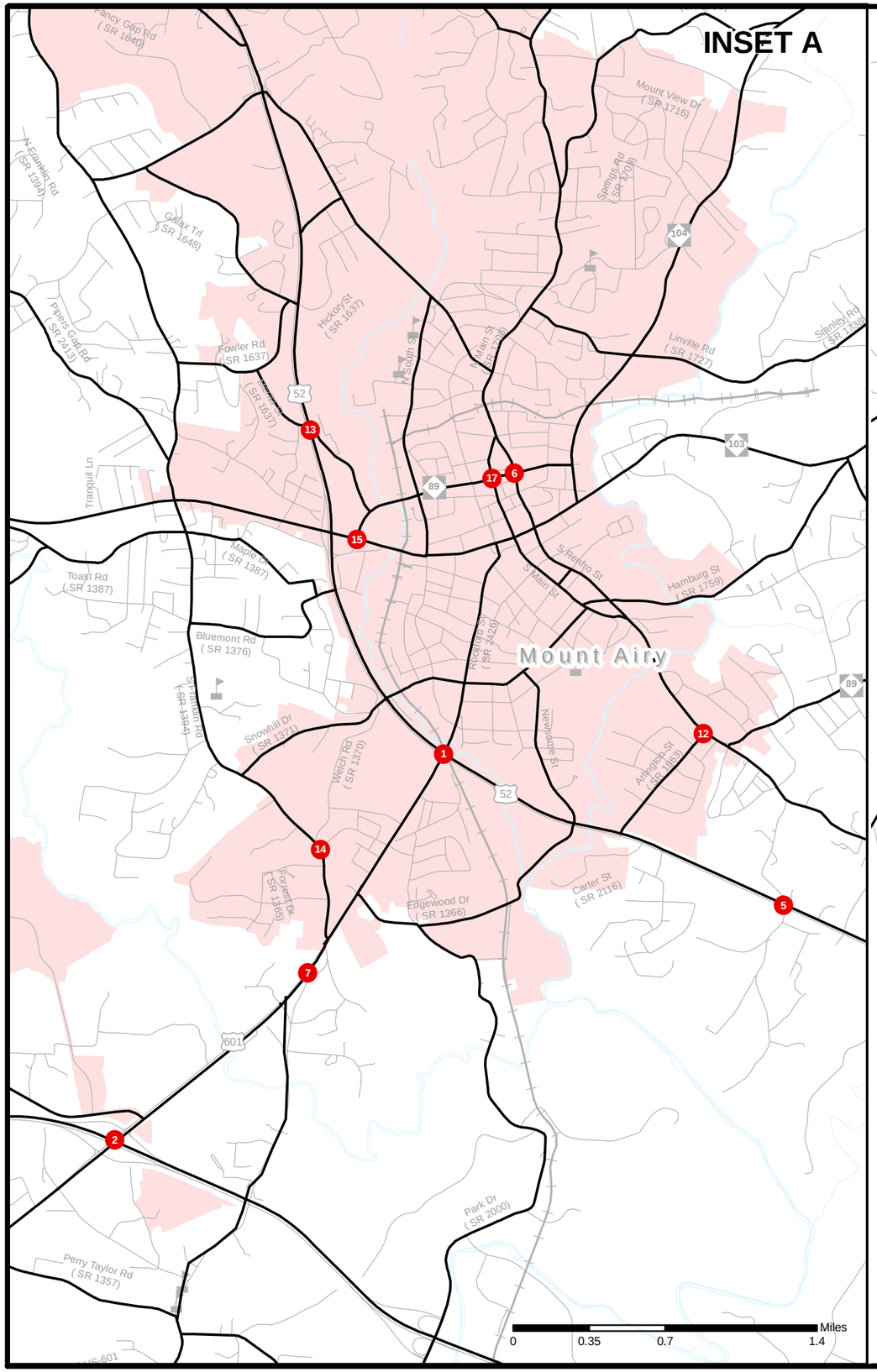
- Crash Locations (# Map Index)
- Schools
- Airport
- Study Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Planning Boundary

0 1 2 4 Miles

Sheet 1 of 2

Base map date: April 14, 2011

Refer toTable 4 in Appendix F for more details



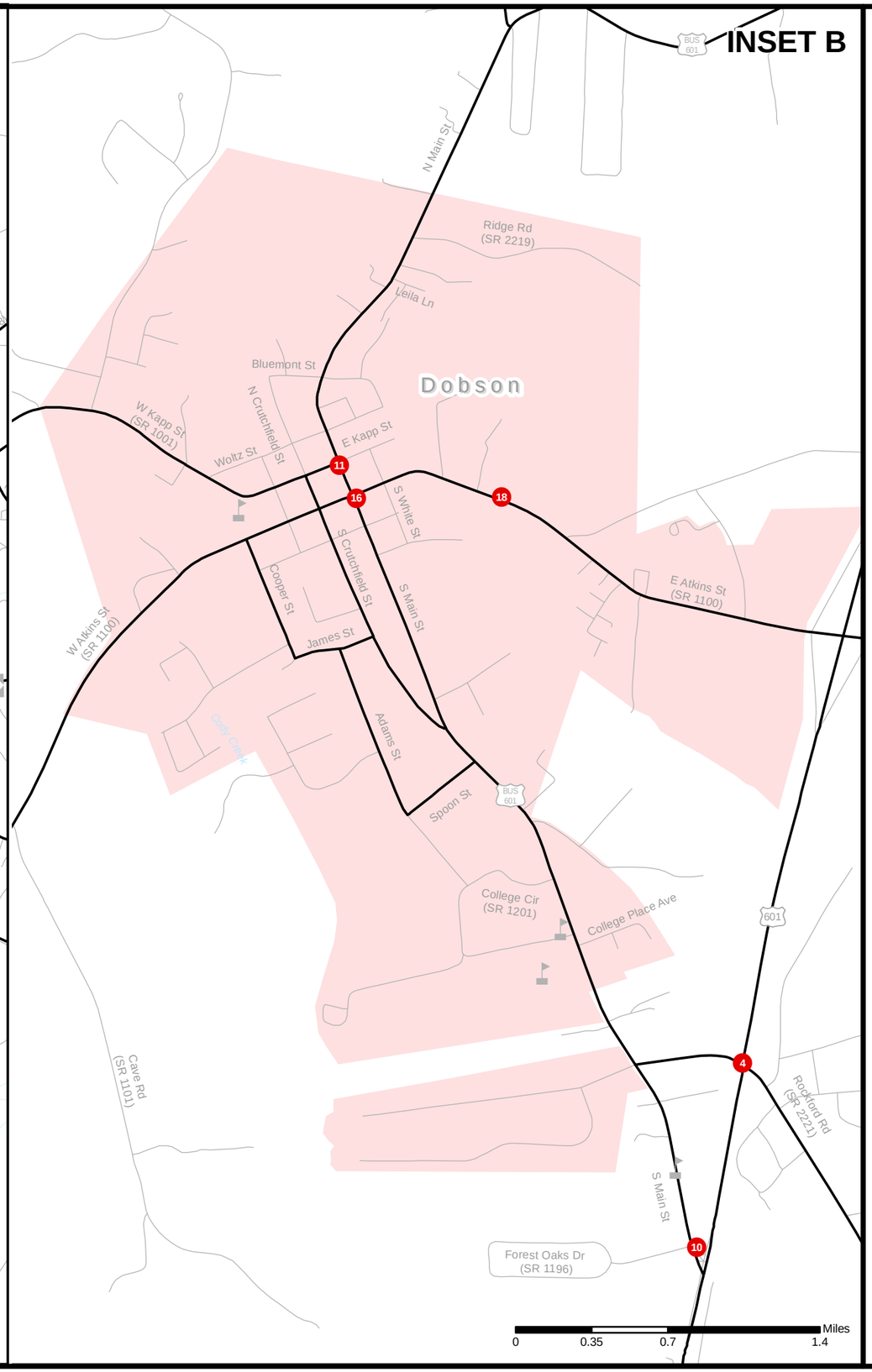


FIGURE 4
INSETS A & B
Crash Locations

Jan. 1, 2008 to Dec. 31, 2010

Surry County

Comprehensive

Transportation Plan

Legends

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

Sheet 2 of 2

N W E S

Base map date: April 14, 2011

Refer toTable 4 in Appendix F for more details

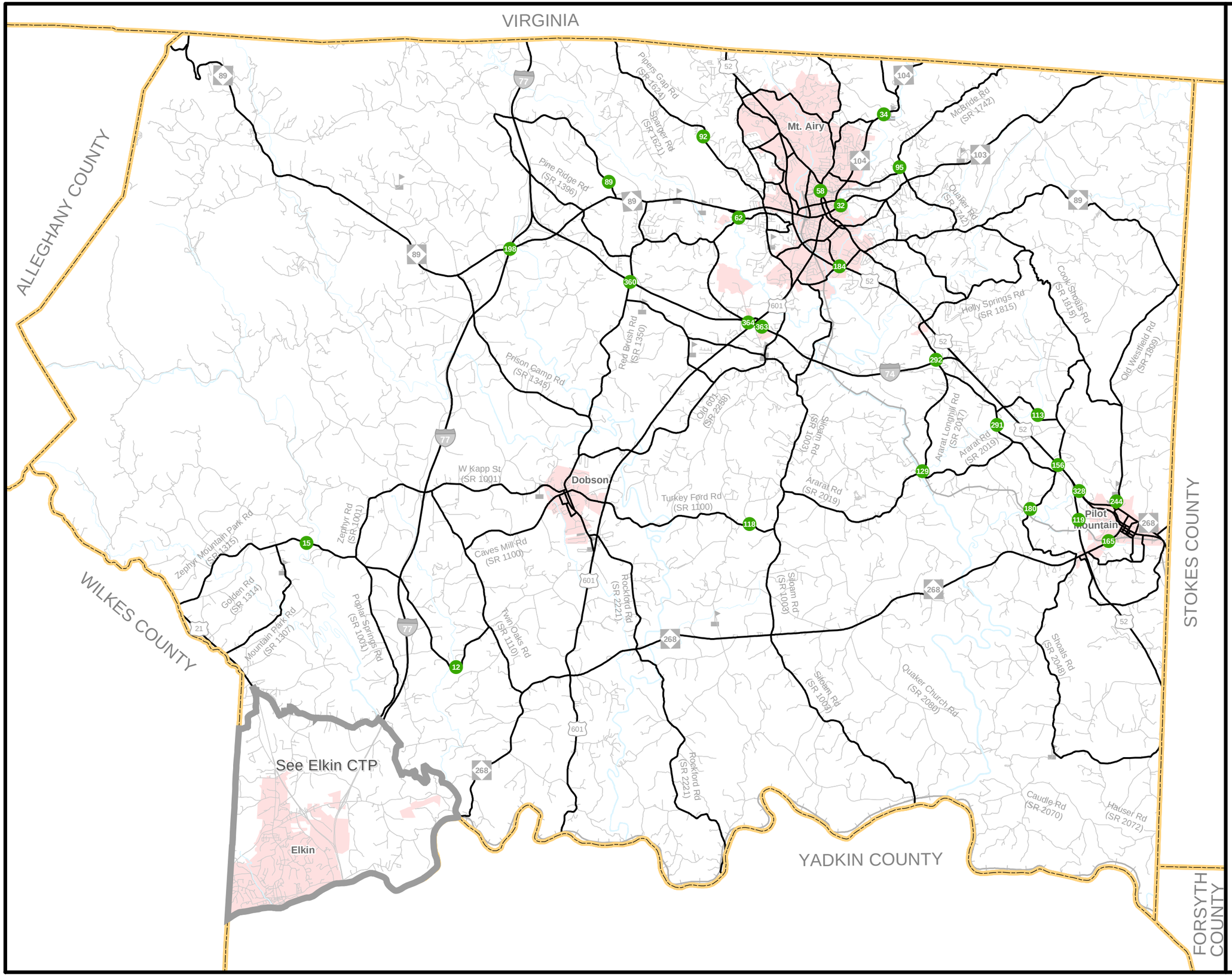


FIGURE 5

Deficient Bridges

Surry County
North Carolina

Comprehensive
Transportation Plan

Legends

- Deficinet Bridge (# Bridge Number)
- Schools
- Airport
- Study Roads
- Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- County Boundary
- Elkin Planning Boundary

0 0.5 1 2 3 Miles

N W E S

Base map date: April 14, 2011

Refer toTable 5 in Appendix G for more details

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. The Piedmont Authority for Regional Transportation (PART) currently operates a bus route into Mount Airy. The Surry County Express Route, which runs from Winston-Salem on US 52 to Mount Airy, has 2 stops and 2 Park-and-Ride Lots which are located on S. Key Street (NC 268) and Golf Course Road (SR 2098) behind Surrey Bank.

Yadkin Valley Public Transportation is a regional transportation system operated by Yadkin Valley Economic Development District, Inc. (YVEDDI). They provide on demand community and public transportation services in Davie, Stokes, Surry and Yadkin counties.

All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information.

Rail

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

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

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

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. The rail lines located in Surry County are owned by Norfolk Southern Railway (NS) and are leased to the Yadkin Valley Railroad (YVRR). The YVRR starts in northern Winston-Salem and heads northward to Rural Hall where one rail line continues to Mount Airy and another heads westward to North Wilkesboro following the Yadkin River along the Surry/Yadkin County line. YVRR's operations are headquartered in Rural Hall. YVRR trains operate at speeds up to 25 mph. Two to three trains per day may operate over the rail lines depending on rail traffic, customer needs, and whether in a town or rural area. No passenger trains currently operate over any of the tracks nor is any formal rail passenger or rail commuter service planned in the foreseeable future. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

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 2004 Surry County Scenic Bicycle Plan, the 2005 Surry County Greenway Master Plan and the 2000 Mount Airy Sidewalk Master Plan were utilized in the development of these elements of the CTP. NC Bicycle Route 4 (North Line Trace) is a statewide route that travels through central Surry County from Wilkes County to Stokes County. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information.

Land Use

G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2006 Surry County Land Use Plan 2015 was used to meet this requirement and is illustrated in Figures 6 and 7, respectively.

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

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

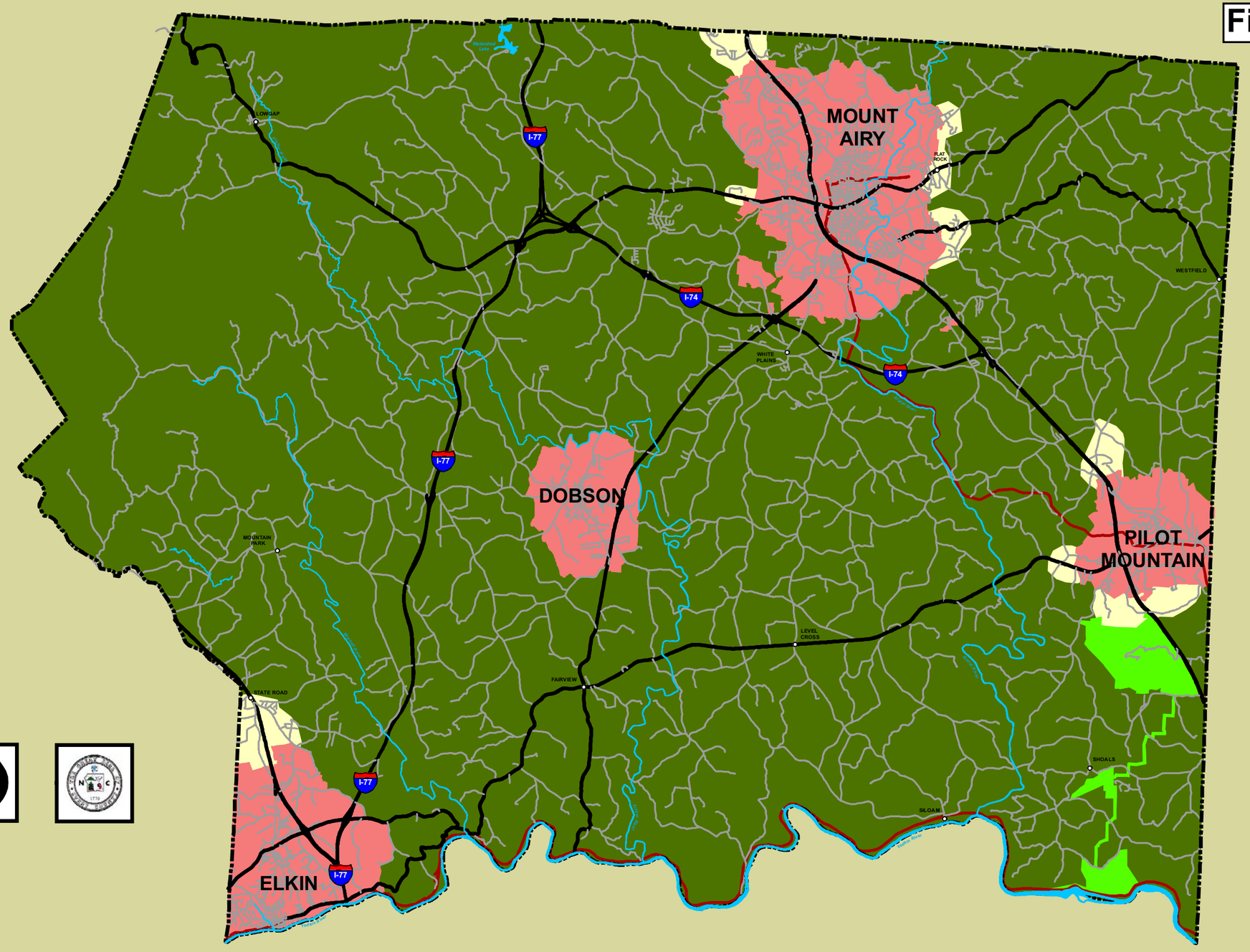
retail classifications. Special retail would include high-traffic establishments, such as fast food restaurants and service stations; all other commercial establishments would be considered retail.

- Industrial: Land devoted to the manufacturing, storage, warehousing, and transportation of products.
- Public: Land devoted to social, religious, educational, cultural, and political activities; this would include the office and service employment establishments.
- Agricultural: Land devoted to the use of buildings or structures for the raising of non-domestic animals and/or growing of plants for food and other production.
- Mixed Use: Land devoted to a combination of any of the categories above.

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

Surry County primarily anticipates that the residential development patterns that have occurred in the Mount Airy, Pilot, Shoals, and South Westfield Townships, will continue well into the future. The physical locations of these areas, which are around Mount Airy and along the US 52 (Future I-74) corridor, make them advantageous locations to live for those who work in the greater Triad area. Community commercial centers will be sprinkled across the county that provide services and shopping to their immediate communities. Heavy commercial areas will be clustered along major roadways and at appropriate interstate interchanges. Industrial areas will continue to be suited within or in close proximity to the municipalities based on the availability of the public services. Rural, conservation, and recreation areas will continue to flourish in Surry County.

Figure 6



EXISTING LAND USE MAP

SURRY COUNTY LAND USE PLAN 2015

EXISTING LAND USE CATEGORIES

Rural Areas | Urban and Suburban Areas | Rural Conservation Areas | Community Activity Centers | Historic Areas | Rural Growth Area

1 inch equals 3.4 miles

0 1 2 4 Miles

MAP INFRASTRUCTURE

County Boundary | Rivers | Watershed Lake | Interstate | United States Highway | North Carolina Highway | State Road | Municipal Street | Connectors | Railroads

Figure 7

Grayson County

Carroll County

Patrick County

Alleghany County

Stokes County

Wilkes County

Yadkin County

Forsyth County

King

Boonville

Jonesville

Tobaccoville

MOUNT AIRY

DOBSON

ELKIN

PILOT MOUNTAIN

LOWGAP

SALEM

WHITE SULPHUR SPRINGS

FLAT ROCK

PINE RIDGE

OAK GROVE

WESTFIELD

WHITE PLAINS

DEVOTION

ARARAT

ASH HILL

MOUNTAIN PARK

THURMOND

LEVEL CROSS

FAIRVIEW

STATE ROAD

STONY KNOLL

JENKINSTOWN

SHOALS

SILOAM

ROCKFORD

PILOT MOUNTAIN STATE PARK

Blue Ridge Parkway

Watershed Lake

Edwards-Franklin Historic Area

Kapps Mill Historic Area

Ararat River

Yadkin River

Big Elkin Creek

Little Fisher River

FUTURE LAND USE MAP

SURRY COUNTY LAND USE PLAN 2015

LAND USE CATEGORIES

Rural Areas | Urban and Suburban Areas | Rural Conservation Areas | Community Activity Centers | Historic Areas | Rural Growth Areas

1 inch equals 0.8 miles

0 1 2 4 Miles

MAP INFRASTRUCTURE

County Boundary | Municipalities | Rivers | Watershed Lake | Interstate | United States Highway | North Carolina Highway | State Road | Municipal Street | Connectors | Pilot Mountain State Park | Railroads

Consideration of Natural and Human Environment

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

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

Table 1 – Environmental Features

- **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
- National Heritage Element Occurrences
- **National Wetlands Inventory**
- North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)
- Paddle Trails – Coastal Plain
- **Railroads (1:24,000 scale)**
- Recreation Projects – Land and Water Conservation Fund
- **Sanitary Sewer Systems – Discharges, Land Application Areas, Pipes, Pumps and Treatment Plants**
- **Schools – Public and Non-Public**
- Shellfish Strata
- **Significant Natural Heritage Areas**
- **State Parks**
- Submersed Rooted Vasculars
- **Target Local Watersheds - EEP**
- Trout Streams (DWQ)
- Trout Waters (WRC)
- **Water Distribution Systems – Pipes, Pumps, Tanks, Treatment Plants, and Wells**
- **Water Supply Watersheds**
- Wild and Scenic Rivers

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

Table 2 – Restricted Environmental Features

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

Figure 8
Environmental Features Map

Surry County
North Carolina

Legend

- Schools
- Water Treatment Plants
- Water Tanks
- Water Pumps
- Water Pipes
- Railroads
- NC Bike Route
- Roads
- Rivers and Streams
- Water Bodies
- National Wetlands Inventory
- Water Supply Watershed
- State Parks
- Planning Boundary
- County Boundary
- Municipal Boundaries

N W E S

Sheet 1 of 2

0 0.5 1 2 3 Miles

Base map date: April 14, 2011

Figure 8
Environmental Features Map

Surry County North Carolina

Legend

- Hazardous Substance Disposal Sites
- Sanitary Sewer Systems- Discharges
- Sanitary Sewer Systems- Pumps
- Hospitals
- Sanitary Sewer Systems- Pipes
- Airport Boundaries
- Railroads
- Roads
- Rivers and Streams
- Water Bodies
- Target Local Watersheds
- Significant Natural Heritage Areas
- Planning Boundary
- County Boundary
- Municipal Boundaries

N W E S

Sheet 2 of 2

0 0.5 1 2 3 Miles

Base map date: April 14, 2011

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 Surry County Board of Commissioners in January 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 Surry County CTP Committee, which included representatives from municipalities, county staff, and the 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 three public drop-in sessions in Surry County to present the proposed CTP to the public and solicit comments. The first meeting was held on April 20, 2011 at the Mount Airy city hall from 5-7pm; the second meeting was held on April 21, 2011 at the Surry County Government center from 5-7pm; and the third meeting was held on October 13, 2011 at the Surry County Government Center from 4-6pm. Each session was publicized in the local newspaper. Three comments from the public were received during these meetings.

A public hearing was held on December 19, 2011 during the Pilot Mountain Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted at this meeting.

A public hearing was held on January 5, 2012 during the Mount Airy City Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was presented for adoption at January 19, 2012 city council meeting. The CTP was adopted at this meeting with the recommendation that US 601 from US 52 to Forrest Drive (SR 1365) be designated as an Other Major Thoroughfare instead of a Boulevard. The highway map was revised on January 31, 2012 to reflect this change.

A public hearing was held on January 17, 2012 during the Surry County Commissioners meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted at this meeting. Surry County Commissioners reaffirmed the adoption of the Surry County CTP as revised, on February 20, 2012.

A public hearing was held on January 26, 2012 during the Dobson Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted at this meeting.

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

II. Recommendations

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

Unaddressed Deficiencies

The following deficiency (see SURR0002-H) was identified during the development of the CTP, but remains unaddressed. US 601 is projected to be over capacity by 2040 from US 52 to Forrest Drive (SR 1365). The CTP project proposal for this project was to convert the existing five-lane major thoroughfare into a four-lane divided boulevard with a raised median and turn bays at major intersections. During the public hearing, citizens were opposed to the median on US 601 from US 52 to Forrest Drive (SR 1365). The Mount Airy Board of Commissioners adopted the Surry County CTP "with the amendment that the City recognizes the need for a review of the five-lane portion of Highway 601 from US 52 to Forrest Drive (SR 1365), but the design portion should be considered at a later date."

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 Act (NEPA) or the North Carolina (or State) Environmental Policy Act (SEPA). This CTP may be used to provide information in the NEPA/SEPA process. The following pages contain problem statements for each recommendation, organized by CTP modal element.

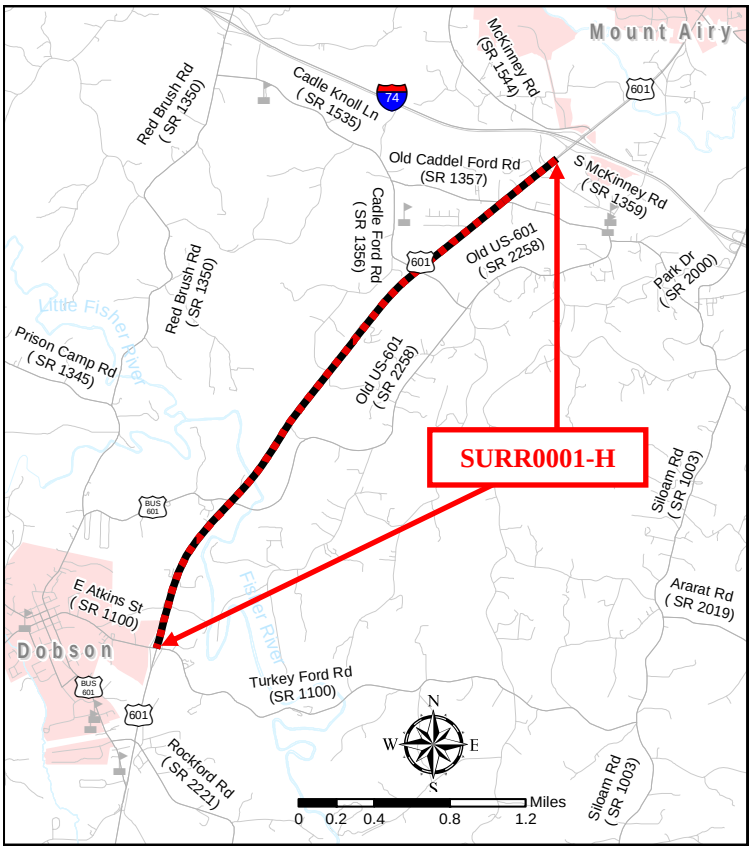
Problem Statements

HIGHWAY

US 601 Proposed improvements from south of I-74 to E Atkins Street (SR 1100)	**Local ID: SURR0001-H** **Last Updated: 1/31/2012**

Identified Problem

US 601 is projected to be near or over capacity by 2040 from south of I-74 to US 601 Business. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved.



Justification of Need

US 601 is a major north-south corridor in Surry County, connecting Mount Airy with rural areas in the county. US 601 is currently a four lane divided boulevard with 12-foot lanes for a short distance south of I-74, and a two-lane major thoroughfare with 12-foot lanes to East Atkins Street (SR 1100). It is part of the statewide tier of the NC Multimodal Investment Network (NCMIN)[1]. Facilities on the statewide tier serve long-distance trips, connect regional centers, have the highest usage, and mostly serve mobility as opposed to land access.

By 2040 the facility is projected to be near or over capacity from south of I-74 to the US 601 Business based on providing a LOS D. Annual Average Daily Traffic (AADT) is projected to increase in range from 10,000 to 15,000 vehicles per day (vpd) in 2010 to 14,000 to 25,000 vpd in 2040, compared to a LOS D capacity of 15,800 vpd.

Community Vision and Problem History

The US 601 corridor is the primary connection between Mount Airy, the county's largest municipality, and Dobson, the county seat. As such, locals expect moderate growth into the future. In addition, the corridor provides access to the south central portion of rural Surry County. The 1998 Mount Airy Thoroughfare Plan first identified the deficiency along the corridor.

[1] *For more information on NCMIN, go to: http://www.ncdot.gov/performance/reform/NCMINmaps/*

CTP Project Proposal

Project Description & Overview

The proposed project (Local ID: SURR0001-H) is to widen US 601 from a two-lane facility to a four-lane boulevard from south of I-74 to East Atkins Street (SR 1100). The proposed improvements to US 601 will alleviate congestion between Mount Airy and Dobson. The CTP recommendation would provide a LOS D or better along this section of US 601.

Relationship to Land Use Plans

The 2006 Surry County Land Use Plan 2015 indicates this currently rural area will remain fairly rural in the nature, with the exception of anticipated commercial growth along US 601. Land use control along this corridor is split between Dobson and Surry County. The area along the corridor, between Mount Airy and Dobson has limited potential for commercial nodes at major intersections. Primarily residential development is expected to occur along this corridor.

Linkages to Other Plans and Proposed Project History

Surry County developed the I-74/US 601 Small Area Plan in 2003, which was also included in the 2006 Surry County Land Use Plan 2015. This plan proposed the expansion of this two-lane facility to a four-lane, divided, controlled access facility due to close proximity to existing and planned commercial and residential developments.

The 1998 Mount Airy Thoroughfare Plan first recommended the improvement of US 601 to a multi-lane facility.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, parts of the project are within the critical water supply watershed. The project also crosses the Fisher River.

Multimodal Considerations

There CTP includes recommendations for adding transit service along US 601 between Dobson and Mount Airy.

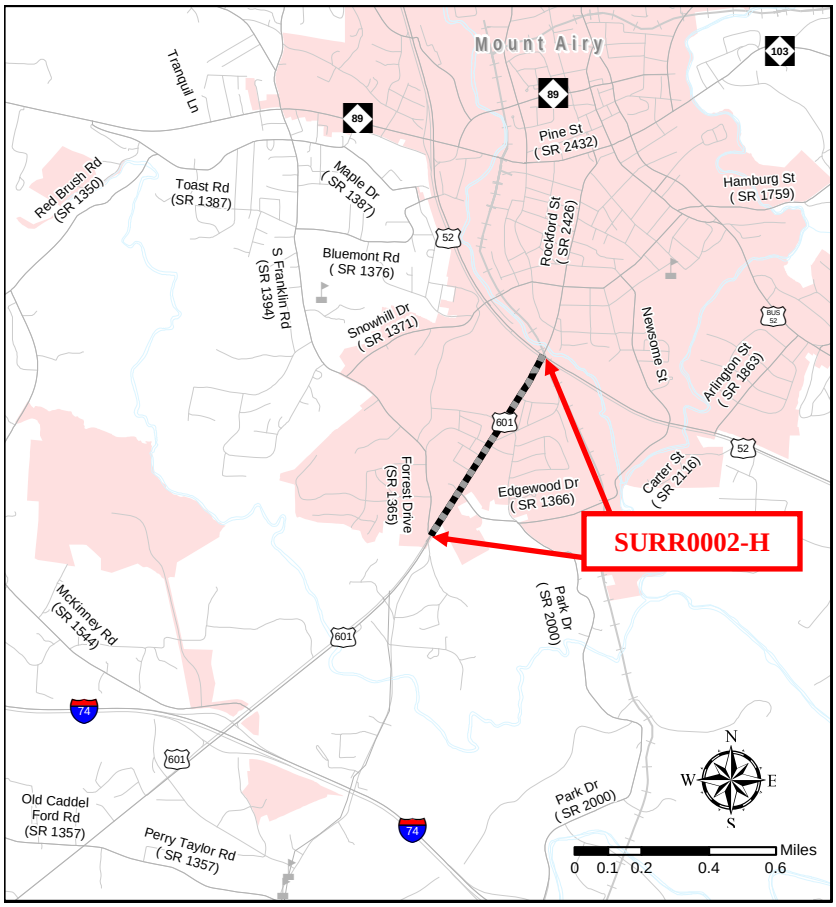
Public/ Stakeholder Involvement

US 601 was identified as a congested route in the goals and objective survey conducted for the CTP. Additionally 49% of respondents identified US 601 as a road on which they would like improved access.

US 601 from US 52 to Forrest Drive (SR 1365)	Local ID: SURR0002-H Last Updated: 1/31/2012

Identified Problem

US 601 is projected to be over capacity by 2040 from US 52 to Forrest Drive (SR 1365).



The primary purpose of this project is to accommodate projected traffic volumes between US 52 and Forrest Drive (SR 1365) in order to achieve a LOS D on the facility.

Justification of Need

US 601 is a major north-south corridor in Surry County, connecting Mount Airy with rural areas in the county. The facility is a vital connection in moving people and goods from US 52 in Mount Airy to I-74.

US 601 is currently a five-lane major thoroughfare with 12-foot lanes and a center left-turn lane from US 52 to Forrest Drive (SR 1365) and a four-lane divided boulevard with 12-foot lanes from Forrest Drive (SR 1365) to south of I-74. It is part of the regional tier of the NC Multimodal Investment Network (NCMIN). Regional tier facilities connect major population centers and have a mix of functions. Some regional tier facilities, including US 601, can be viewed as serving statewide transportation needs, but is equally important to a particular region of the state and also provide some land access.

US 601 from US 52 to Forrest Drive (SR 1365) is projected to be over capacity by 2040 based on providing a LOS D. Annual Average Daily Traffic (AADT) on US 601 is projected to increase from 25,000 vehicles per day (vpd) in 2010 to 37,000 vpd in 2040, compared to a LOS D capacity of 32,400 vpd.

Community Vision and Problem History

The US 601 corridor is the primary connection between Mount Airy, the county's largest municipality, and Dobson, the county seat. As such, locals expect moderate growth into the future. In addition, the corridor provides access to the south central portion of rural Surry

County. The 1998 Mount Airy Thoroughfare Plan first identified the deficiency along the corridor.

CTP Project Proposal

Project Description

The proposed project (Local ID: SURR0002-H) is to study alternative solutions to accommodate projected traffic volumes on US 601 from US 52 to Forrest Drive (SR 1365).

The original CTP recommendation to address this deficiency was to convert the existing five-lane major thoroughfare into a four-lane divided boulevard with a raised median and turn bays at major intersections. During the public involvement process, concerns arose in regard to the removal of the center turn lane from US 601. Ultimately, the Mount Airy Board of Commissioners recognized the identified deficiency on US 601, but adopted the CTP with this portion of US 601 remaining classified as major thoroughfare. The Board indicated that it would seek further study of this corridor through the Northwest Piedmont RPO.

Additionally, during the most recent three year period, the intersections of US 601/US 52 and US 601/Forrest Drive have each experienced twelve crashes. The average severity index at these locations was 15.48 and 4.70, respectively, and was above the state's 4.37 average for the same period. The predominant crash types at these locations were rear end and angle. Improvements along this facility are needed to relieve congestion and improve safety.

Relationship to Land Use Plans

Currently, land use along this section of US 601 is mainly commercial. Wal-Mart, an auto dealership, restaurants and other businesses are located along this section of US 601. The 2006 Surry County Land Use Plan 2015 indicates commercial growth will continue along this section of US 601.

Linkages to Other Plans and Proposed Project History

This deficiency was first identified in the 1998 Mount Airy Thoroughfare Plan. However, there was no improvement recommended in that plan. As such this is the first time any improvement has been proposed on a transportation plan.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, parts of the project are within the critical water supply watershed. Additionally, water and sewer pipes are located along this facility.

Multi-modal Considerations

The CTP includes recommendations for public transportation and pedestrian facilities in Surry County. There are recommendations for adding transit service along US 601 between Dobson and Mount Airy. There are recommended improvements for sidewalks on this segment of US 601 from Edgewood Drive (SR 1366) to Reeves Drive.

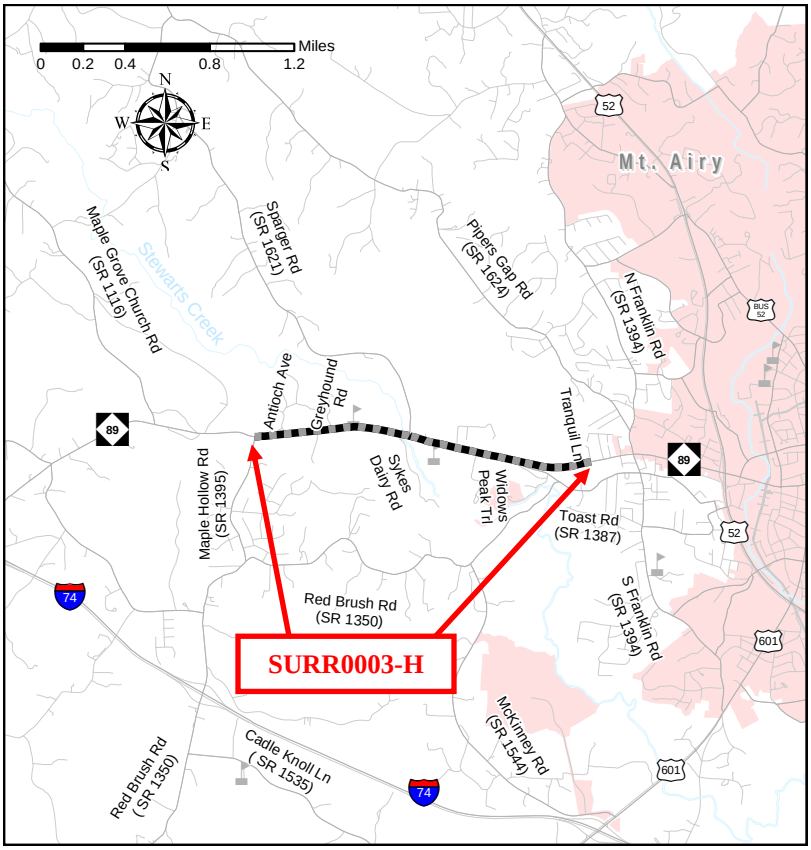
Public/ Stakeholder Involvement

US 601 was identified as a congested route in the goals and objective survey. During the public hearing for the CTP, two citizens spoke in opposition to the median on US 601 from US 52 to Forrest Drive (SR 1365). The citizens were concerned that the raised median would limit access to the businesses. The Mount Airy Board of Commissioners adopted the Surry County CTP "with the amendment that the City recognizes the need for a review of the five-lane portion of Highway 601 from US 52 to Forrest Drive (SR 1365), but the design portion should be considered at a later date."

NC 89 Proposed improvements from west of Tranquil Lane to Maple Hollow Road (SR 1395)	Local ID: SURR0003-H Last Updated: 1/31/2012

Identified Problem

NC 89 is projected to be near or over capacity by 2040 from west of Tranquil Lane to Maple Hollow Road (SR 1395). The primary purpose of this project is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.



Justification of Need

NC 89 is a major east-west corridor in Surry County, connecting Mount Airy with the rural areas in the county. NC 89 is a four-lane undivided major thoroughfare with 12-foot lanes from S Franklin Road (SR 1394) to west of Tranquil Lane. NC 89 is a two-lane major thoroughfare with 12-foot lanes from west of Tranquil Lane to Widow Peak Trail. This facility continues as a three-lane major thoroughfare with 12-foot lane from Widow Peak Trail to Greyhound Road, and two-lane major thoroughfare with 12-foot lane from Greyhound Road to Antioch Avenue. NC 89 is a three-lane major thoroughfare with 12-foot lane from Antioch Avenue to Maple Hollow Road (SR 1395). It is part of the regional tier of the NC Multimodal Investment Network (NCMIN). Regional tier facilities connect major population centers and have a mix of functions, including providing some land access.

By 2040 the facility is projected to be near or over capacity based on providing a LOS D. Annual Average Daily Traffic (AADT) on NC 89 is expected to increase in range from 11,200 to 13,200 vehicles per day (vpd) in 2010 to 15,100 to 17,500 vpd in 2040, compared to a LOS D capacity of 15,800 vpd.

Community Vision and Problem History

Due to the close proximity and direct connection of NC 89 to I-74 & I-77, locals expect moderate growth along this corridor into the future. In 2003 Surry County developed the I-77/ I-74/ NC 89 Small Area Plan, which recommended maintaining an attractive, safe, and welcoming atmosphere for the traveling public along the NC 89 corridor. The 1998 Mount Airy Thoroughfare Plan first identified the capacity deficiency along this corridor.

CTP Project Proposal

Project Description

The proposed project (Local ID: SURR0003-H) is to improve the existing two-lane facility to a three-lane major thoroughfare with a center left-turn lane from Tranquil Lane to Maple Hollow Road (SR 1395). The proposed improvements to NC 89 will help to reduce congestion and improve mobility into and within Mount Airy.

Relationship to Land Use Plans

Currently, land use along this section of NC 89 is mainly a mixture of commercial and residential developments. In addition, there are two schools along this section of NC 89. The 2006 Surry County Land Use Plan 2015 indicates commercial and residential growth to continue along NC 89. Numerous parcels within this area are currently zoned for industrial land uses.

Linkages to Other Plans and Proposed Project History

This deficiency was first identified in the 1998 Mount Airy Thoroughfare Plan. However, a different solution was proposed to address this problem. The 1998 thoroughfare plan recommended a loop system around the city. It is the first time this improvement has been proposed on a transportation plan.

Multimodal Considerations

There are no additional modes associated with the proposed project.

Natural & Human Environmental Context

Based on a planning level environmental assessment using available GIS data, the proposed project is within the critical water supply watershed and crosses Stewarts Creek. Additionally, there are two schools, North Surry High School and J Sam Gentry Middle School., located along this portion of NC 89.

Public/ Stakeholder Involvement

No significant issues associated with this project were identified during the public/stakeholder involvement process.

US 52 Upgrade, Local ID: SURR0004-H

US 52 (Future I-74), from I-74 south of Mount Airy to Stokes County, does not meet the future mobility and connectivity needs in central North Carolina.

This facility is intended to provide mobility in Surry County and, ultimately, connectivity within North Carolina and into Virginia via the I-73/74 corridor. US 52 is part of the Strategic Highway Corridor Vision (SHC) Plan[1] adopted by NCDOT on September 2, 2004. The existing four-lane divided facility is recommended to be upgraded to the freeway standards.

Based on a planning level environmental assessment using available GIS data, the proposed project is within the target local watershed and a small portion near Stokes County is within the water supply watershed area. Additionally, the Pilot Mountain State Park, which is a significant natural heritage area, is adjacent to US 52 and has direct access to US 52 via an interchange.

The 2002 Surry County Thoroughfare Plan did not include any recommendations for this facility.

NC 268 (Key Street) Widening Local ID: SURR0005-H

NC 268 (Key Street) from Denny Street to US 52 Bypass (SR 1856) is expected to be near or over capacity by 2040. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum Level of Service “D” can be achieved.

NC 268 (Key Street) provides access to downtown Pilot Mountain. This facility is a 2-lane major thoroughfare with 12 foot lanes and has many driveways, both residential and commercial. Annual Average Daily Traffic (AADT) on NC 268 (Key Street) is projected to increase in range from 10,500 to 12,000 vehicles per day (vpd) in 2010 to 12,900 to 14,800 vpd in 2040, compared to a LOS D capacity of 13,800 vpd.

The proposed project is to widen the existing two-lane major thoroughfare to a three-lane major thoroughfare with a center left-turn lane from Denny Street to US 52 Bypass (SR1856).

Based on a planning level environmental assessment using available GIS data, the proposed project is within the target local watershed and has water and sewer pipes along the facility.

The 1998 Pilot Mountain Thoroughfare Plan recommended widening this facility to a three to five lane facility.

Holly Springs Road (SR 1627) Relocation, TIP No: R-5309

Holly Springs Road (SR 1627) connects the Mount Airy-Surry County Airport to US 52. Holly Springs Road (SR 1627) is a two-lane minor thoroughfare with 12 foot lanes. The proposed project (TIP R-5309) is to relocate Holly Springs Road (SR 1627) north of its existing location from Janice Drive to Cottage Drive to accommodate a Mount Airy-Surry County Airport runway extension. Holly Springs Road (SR 1627) relocation is scheduled for construction in FY2012. For more information about this project, please contact the NCDOT Division 11 Engineer.

[1] *For more information on SHC, go to: http://www.ncdot.gov/doh/preconstruct/tpb/SHC/*

South Main St (US 52 Business) Widening Local ID: SURR0006-H

South Main Street (US 52 Business) from Renfro Street to Westfield Road (NC 89) is expected to be near capacity by 2040. The primary purpose of this project is to relieve congestion on the existing facility such that a minimum Level of Service "D" can be achieved.

South Main Street (US 52 Business) provides access to downtown Mount Airy. This facility is a two-lane major thoroughfare with 12 foot lanes and has many driveways, both residential and commercial. Annual Average Daily Traffic (AADT) on South Main Street (US 52 Business) is projected to increase from 11,000 vehicles per day (vpd) in 2010 to 12,400 vpd in 2040, compared to a LOS D capacity of 13,800 vpd.

The proposed project is to widen the existing two-lane major thoroughfare to a three-lane major thoroughfare with a center left-turn lane from Renfro Street to Westfield Road (NC 89).

Based on a planning level environmental assessment using available GIS data, the proposed project is within the target local watershed and has water and sewer pipes along portions of the proposed project. Additionally, the proposed project crosses the Ararat River.

The 1998 Mount Airy Thoroughfare Plan recommended widening this facility to three lanes.

Minor Widening Projects:

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.

- **SURR0007-H** US 21 from the Elkin Planning Area Boundary (PAB) to Wilkes County
- **SURR0008-H** US 601 from US 601 BUS (S Main Street) south of Dobson to Yadkin County
- **SURR0009-H** US 601 BUS (Old 601) north of Dobson from N Main Street to US 601
- **SURR0010-H** US 601 BUS (S Main Street) in Dobson from Rockford Road (SR 2221) to US 601
- **SURR0011-H** NC 18 from NC 89 to Alleghany County
- **SURR0012-H** NC 89 (Westfield Road) from US 52 BUS in Mt. Airy to Stokes County
- **SURR0013-H** NC 89 from I-77 to NC 18
- **SURR0014-H** NC 103 (E Pine Street) from Lovers Ln (SR 1753) to Virginia
- **SURR0015-H** NC 104 (Riverside Drive) from E Pine Street (NC 103) to Virginia
- **SURR0016-H** NC 268 from US 601 to Shoals Road (SR 2048)
- **SURR0017-H** NC 268 from N Key Street (NC 268) in Pilot Mountain to Stokes County
- **SURR0018-H** NC 268 from Twin Oaks Road (SR 1110) to Elkin PAB

PUBLIC TRANSPORTATION & RAIL

The 2010 PART Regional Transit Development Plan recommended that fixed-route bus services be developed. Two fixed bus routes were recommended to circulate throughout Mount Airy, Dobson and Elkin. The first route follows US 601 between Mount Airy and Dobson and will provide connection to Surry Community College. The route could serve as a circulator to PART's existing park and ride lot in Mount Airy, connecting to Route 6 – Surry County Express. The second route will connect Elkin and Dobson. The route would be a circulator to the proposed Elkin Park-and-Ride facility served by an extension of Route 13 – Yadkin County Express and the new Yadkin County NC-67 Express.

A transit center/ park-and-ride lot is recommended in Mount Airy that would serve as a hub for the Mount Airy- Dobson Circulator route, PART's express route, and Yadkin Valley community transit services.

BICYCLE

The 2005 Surry County Greenway Master Plan and 2004 Surry County Scenic Bikeway Plan identifies existing and recommended greenways and bicycle facilities throughout the county. On-road bicycle facilities that have been identified as needing improvements, as well as, recommended multi-use paths are shown on the Bicycle Map.

In accordance with the 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-ft bike lanes or 14-ft wide outside lanes.
- Shoulder sections require a minimum 4-ft paved shoulder.
- All bridges along roadways where bike facilities are recommended shall be equipped with 54" railings.

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

- **SURR0001-M** From Lola Lane (South of NC 268) along Black Mountain Road (SR 2097) to Pilot Mountain State Park.
- **SURR0002-M** From Hamlin Street along East Main Street (SR 1857) to Old Winston Road (SR 2051) to Black Mountain Road (SR 2097) Pilot Mountain State Park.

PEDESTRIAN

Mount Airy completed their Sidewalk Master Plan in 2000. These sidewalks are shown on the Pedestrian Map as existing sidewalks, sidewalks that need improvement or proposed sidewalks. Please refer to the 2000 Mount Airy Sidewalk Master Plan for additional information on these facilities. Additional facilities not included in the 2000 Mount Airy Sidewalk Master Plan that are recommended to have sidewalks for pedestrians are listed below:

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

- **SURR0015-H** NC 104 (Riverside Drive) from south of Kyle Street to Independence Boulevard (SR 1670)
- **SURR0001-P** Dogwood Road from Wrenn Avenue to Fairview Avenue
- **SURR0002-P** East Haymore Street from Maiden Lane to Worth Street (SR 1371)
- **SURR0003-P** East Poplar Street from 0.02 miles north of Woodruff Street to East Lebanon Street
- **SURR0004-P** Hale Street from Church Street to Worth Street (SR 1371)
- **SURR0005-P** Hay Street from North South Street to Orchard Street
- **SURR0006-P** Howard Street from US 52 Business (Lebanon Street) to Charles Street
- **SURR0007-P** Maple Street from Rawley Avenue to Merritt Street
- **SURR0013-P** McCargo Street from Franklin Street to Pine Street
- **SURR0008-P** Nations Street from Trinity Street to US 52 Business (Renfro Street)
- **SURR0009-P** North South Street (SR 1669) from Maple Street to Taylor Street
- **SURR0010-P** Orchard Street from Hay Street to 0.1 mile west of North South Street
- **SURR0011-P** Penn Street from 0.07 miles east of Rockford Street (SR 2426) to Newsome Street
- **SURR0012-P** Price Street from 0.05 miles east of Marshall Street to Rockford Street (SR 2426)

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

- **SURR0014-P** North Main Street from W Oakland Street to Grace Street
- **SURR0015-P** North South Street (SR 1669) from Franklin Street to Lovill Street (SR 2432)
- **SURR0016-P** North South Street (SR 1669) from W Independence Boulevard to Maple Street
- **SURR0017-P** North South Street (SR 1669) from Taylor Street to Orchard Street

The following facilities in Pilot Mountain are recommended to have sidewalks for pedestrians:

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

- **SURR0018-P** Davis Street from Main Street (SR 1857) to Pine Street
- **SURR0019-P** Dodson Street from NC 268 (Key Street) to Butler Street
- **SURR0020-P** Depot Street from NC 268 to Howard Street
- **SURR0021-P** Old Westfield Road (SR 1809) from West Main Street (SR 1857) to South of Jacks Trail
- **SURR0022-P** Pine Street from Stephens Street to Davis Street
- **SURR0023-P** Lynchburg Road from West Main Street (SR 1857) to Dodson Mill Road (SR 2049)
- **SURR0024-P** South Key Street from Butler Street to East of Barney Venable Road (SR 2099)
- **SURR0025-P** West Main Street (SR 1857) from East Surry High School Driveway to 0.3 miles east of Harris Farm Lane

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

- **SURR0026-P** Butler Street from Dodson Street to NC 268 (Key Street)
- **SURR0027-P** Depot Street from Howard Street to Main Street (SR 1857)
- **SURR0028-P** Dodson Mill Road (SR 2049) from Lynchburg Road to West Main Street (SR 1857)
- **SURR0029-P** Friends Street from Main Street (SR 1857) to 0.14 miles on Friends Street
- **SURR0030-P** East Main Street (SR 1857) from Carson Street (SR 1837) to Hamlin Street
- **SURR0031-P** West Main Street (SR 1857) from East Surry High School Driveway to 0.02 miles west of Old Westfield Road (SR 1809)
- **SURR0032-P** Marion Street from Stephens Street to Depot Street
- **SURR0033-P** Lynchburg Road from Dodson Mill Road (SR 2049) to Pine Street

The following facilities in Dobson are recommended to have sidewalks for pedestrians:

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

- **SURR0034-P** US 601 Business (Main Street) from north of College Circe (SR 1201) to south of College Place Avenue
- **SURR0035-P** Adams Street from College Circle Drive (SR 1201) to James Street

- **SURR0036-P** College Circle Drive (SR 1201) (South) from US 601 Business to Adams Street
- **SURR0037-P** Cooper Street from James Street to W Atkins Street (SR 1100)
- **SURR0038-P** Crutchfield Street from Bluemont Street to 0.04 miles north of Woltz Street
- **SURR0039-P** James Street from S Crutchfield Street to Cooper Street
- **SURR0040-P** Spoon Street from Adams Street to Us 601 Business
- **SURR0041-P** White Street from Kapp Street (SR 1001) to Atkins Street (SR 1100)

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

- **SURR0042-P** US 601 Business (North Main Street) from Lelia Lane to Bluemont Street
- **SURR0043-P** US 601Business (South Main Street) from E Atkins Street (SR 1100) to north of College Circle (SR 1201)
- **SURR0044-P** US 601 Business (South Main Street) from south of College Place Avenue to 0.1 mile south of College Place Avenue
- **SURR0045-P** Atkins Street (SR 1100) from Cooper Street to Hamby Road (SR 2248)
- **SURR0046-P** Bluemont Street from Crutchfield Street to US 601 Business (Main Street)
- **SURR0047-P** College Circle Drive (SR 1201) (North) from US 601 Business to Adams Street
- **SURR0048-P** Crutchfield Street from Kapp Street (SR 1001) to US 601 Business (Main Street)
- **SURR0049-P** Kapp Street (SR 1001) from 0.09 miles east of Royal Lane (SR 1521) to 0.06 miles west of Comer Street

The 2005 Surry County Greenway Master Plan identifies existing and recommended greenways for bicycles and pedestrians throughout the county. These facilities are shown on the Pedestrian Map as recommended multi-use paths. Additionally, the following multi-use paths were recommended during the development of the CTP:

- **SURR0001-M** From Lola Lane (South of NC 268) along Black Mountain Road (SR 2097) to Pilot Mountain State Park.
- **SURR0002-M** From Hamlin Street along East Main Street (SR 1857) to Old Winston Road (SR 2051) to Black Mountain Road (SR 2097) Pilot Mountain State Park.

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

801 Statesville Rd North Wilkesboro, NC 28659 (336) 903-9101
http://www.ncdot.gov/doh/operations/division11/

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.

  P.O. Box 558 Elkin, NC 28621 (336) 835-4241

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 NCDOT's Road Characteristics Layer. These right-of-way amounts are approximate and may vary.

- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using NCLOS Software 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 '2040 AADT E+C' is an estimate of the volume in 2040 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2012 - 2018 Transportation Improvement Program (TIP). The '2040 AADT with CTP' is an estimate of the volume in 2040 with all proposed CTP improvements assumed to be in place. The '2040 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 Mulitmodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.

- **Other Modes:** If there is an improvement recommended for another mode of transportation that relates to the given recommendation, it is indicated by an alphabetic code (H=highway, T= public transportation, R= rail, B= bicycle, and P= pedestrian).

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																		
					2010 Existing System						2040 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	I-74	NC 89 to Red Brush Rd (SR 1350)	Surry Co	2.3	48	4	250	65	61200	17000	36000	36000	61200	ADQ	ADQ	F	Sta	
	I-74	Red Brush Rd (SR 1350) to US 601	Surry Co	3.3	48	4	250	65	61200	18000	38000	38000	61200	ADQ	ADQ	F	Sta	
	I-74	US 601 to Park Dr (SR 2000)	Surry Co	1.7	48	4	250	65	61200	17000	34000	34000	61200	ADQ	ADQ	F	Sta	
	I-74	Park Dr (SR 2000) to US 52	Surry Co	3.3	48	4	250	65	61200	16000	32000	32000	61200	ADQ	ADQ	F	Sta	
	I-77	Elkin PAB to Joe Layne Mill Rd (SR 1121)	Surry Co	1.1	48	4	180	65	61200	25000	45000	45000	61200	ADQ	ADQ	F	Sta	T
	I-77	Joe Layne Mill Rd (SR 1121) to Zephyr Rd (SR 1001)	Surry Co	5.0	48	4	180	65	61200	23000	33000	33000	61200	ADQ	ADQ	F	Sta	T
	I-77	Zephyr Rd (SR 1001) to Prison Camp Rd (SR 1345)	Surry Co	4.8	48	4	195	65	61200	19000	23000	23000	61200	ADQ	ADQ	F	Sta	
	I-77	Prison Camp Rd (SR 1345) to NC 89	Surry Co	1.9	48	4	195	70	61200	19000	23000	23000	61200	ADQ	ADQ	F	Sta	
	I-77	NC 89 to I-74	Surry Co	1.2	48	4	195	70	61200	19000	23000	23000	61200	ADQ	ADQ	F	Sta	
	I-77	I-74 to Pine Ridge Rd (SR 1396)	Surry Co	0.9	48	4	185	70	61200	29200	48000	48000	61200	ADQ	ADQ	F	Sta	
	I-77	Pine Ridge Rd (SR 1396) to Maple Grove Church Rd (	Surry Co	1.5	48	4	185	70	61200	29200	48000	48000	61200	ADQ	ADQ	F	Sta	
	I-77	Maple Grove Church Rd (SR 1618) to State Line	Surry Co	2.1	48	4	185	70	61200	29000	48000	48000	61200	ADQ	ADQ	F	Sta	
SURR0007-H	US 21	Elkin PAB to Wilkes County	Surry Co	1.6	22	2	-	55	15800	7900	9200	9200	15800	2 A	60	Maj	Reg	
SURR0004-H	US 52	I-74 to Cook Shoals Rd (SR 1815)	Surry Co	3.5	48	4	130	55	61200	30000	48000	48000	61200	4 A	180	F	Sta	
SURR0004-H	US 52	Cook School Rd (Sr 1815) to W 52 BYP (SR 1856)	Surry Co	0.5	48	4	130	55	61200	33000	48500	48500	61200	4 A	180	F	Sta	
SURR0004-H	US 52	W 52 BYP (SR 1856) to W Main St (SR 1856)	Surry Co	0.3	48	4	130	55	61200	26000	45500	45500	61200	4 A	180	F	Sta	
SURR0004-H	US 52	W Main St (SR 1856) to NC 268 (S Key St)	Surry Co	1.6	48	4	130	55	61200	26000	45500	45500	61200	4 A	180	F	Sta	
SURR0004-H	US 52	NC 268 (S Key St) to Black Mountian Rd (SR 2097)	Surry Co	1.5	48	4	130	55	61200	26500	46500	46500	61200	4 A	180	F	Sta	
SURR0004-H	US 52	Black Mountain Rd (Sr 2097) to Stokes County Line	Surry Co	2.6	48	4	130	55	61200	26500	46500	46500	61200	4 A	180	F	Sta	

HIGHWAY																		
					2010 Existing System						2040 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	US 52 (S Andy Griffith Pkwy)	Holly Springs Rd (SR 1815) to I-74	Surry Co	1.5	24	2	120	55	61200	13500	27800	27800	61200	ADQ	ADQ	F	Reg	
	US 52 (S Andy Griffith Pkwy)	Holly Springs Rd (SR 1815) to Charlie Norman Rd	Surry Co	1.0	24	2	120	55	61200	17000	28900	28900	61200	ADQ	ADQ	F	Reg	
	US 52 (S Andy Griffith Pkwy)	Charlie Norman Rd to Arlington St (SR 1863)	Surry Co	1.5	25	2	120	55	44800	14000	21700	21700	44800	ADQ	ADQ	B	Reg	
	US 52 (S Andy Griffith Pkwy)	Arlington St (SR 1863)to Carter St (SR 2164)	Mount Airy	0.2	24	2	130	45	43500	16000	24000	24000	43500	ADQ	ADQ	B	Reg	
	US 52 (S Andy Griffith Pkwy)	Carter St (SR 2164) to US 601	Mount Airy	0.7	42	2	130	45	43500	17000	23700	23700	43500	ADQ	ADQ	B	Reg	
	US 52 (S Andy Griffith Pkwy)	US 601 to Worth St (SR 1371)	Mount Airy	0.4	36	2	130	45	43500	21000	31000	31000	43500	ADQ	ADQ	B	Reg	
	US 52 (S Andy Griffith Pkwy)	Worth St (SR 1371) to Bluemont Rd (SR 1376)	Mount Airy	0.6	24	2	130	45	43500	12600	18500	18500	43500	ADQ	ADQ	B	Reg	
	US 52 (S Andy Griffith Pkwy)	Bluemont Rd (SR 1376) to NC 89	Mount Airy	0.3	24	2	130	45	43500	12700	17500	17500	43500	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	NC 89 to Merita St (SR 1637)	Mount Airy	0.5	24	2	130	45	43500	15000	22700	22700	43500	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Merita St (SR 1637) to Hickory St (SR 1637)	Mount Airy	0.6	24	2	130	45	43500	13000	18900	18900	43500	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Hickory St (SR 1637) to Starlite Rd	Mount Airy	0.3	24	2	130	45	43500	11300	17000	17000	43500	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Starlite Rd to Westlake Dr (SR 2406)	Mount Airy	0.7	20	2	-	35	43500	10900	16500	16500	43500	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Westlake Dr (SR 2406) to Fancy Gap Rd (SR 1640)	Mount Airy	0.2	24	2	130	55	44800	8500	14700	14700	44800	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Fancy Gap Rd (SR 1640) (South) to Green Hill Rd (SR 1640)	Mount Airy	1.0	24	2	130	55	44800	10000	17500	17500	44800	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Greenhill Rd (SR 1701) to Fancy Gap Rd (SR 1640) (North)	Surry Co	0.6	24	2	130	55	44800	9500	16500	16500	44800	ADQ	ADQ	B	Reg	
	US 52 (N Andy Griffith Pkwy)	Fancy Gap Rd (SR 1640) to State Line	Surry Co	0.7	24	2	130	55	44800	9000	15300	15300	44800	ADQ	ADQ	B	Reg	
	US 52 BUS (S Main St)	US 52 to NC 89	Surry Co	1.2	24	2	-	55	13800	5600	7800	7800	13800	ADQ	ADQ	Maj	Reg	
SURR0006-H	US 52 BUS (S Main St)	NC 89 to Arlington St (SR 1863)	Mount Airy	0.1	22	2	60	35	13800	11000	13000	13000	13800	3 A	80	Maj	Reg	
SURR0006-H	US 52 BUS (S Main St)	Arlington St (SR 1863) to S Renfro St	Mount Airy	0.6	22	2	60	35	13800	10000	12400	12400	13800	3 A	80	Maj	Reg	

HIGHWAY																		
					2010 Existing System						2040 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	US 52 Bus (S Renfro St)	S Main St to Hamburg St (SR 1756)	Mount Airy	0.1	52	4	80	35	27500	8800	11500	11500	27500	ADQ	ADQ	Maj	Reg	
	US 52 Bus (S Renfro St)	Hamburg St (SR 1756) to E Wilson St	Mount Airy	0.2	52	4	80	35	27500	9400	11800	11800	27500	ADQ	ADQ	Maj	Reg	
	US 52 Bus (S Renfro St)	E Wilson St to E Pine St (SR 2432)	Mount Airy	0.3	52	4	80	35	27500	9500	11300	11300	27500	ADQ	ADQ	Maj	Reg	
	US 52 BUS (N Renfro St)	E Pine St (SR 2432) to Independence Blvd	Mount Airy	0.3	52	4	60	35	13800	7700	10600	10600	13800	ADQ	ADQ	Maj	Reg	
	US 52 BUS (N Renfro St)	Independence Blvd to N Main St	Mount Airy	0.2	60	4	60	25	27500	8500	12900	12900	27500	ADQ	ADQ	Maj	Reg	
	US 52 BUS (W Lebanon St)	N Main St to N South St	Mount Airy	0.5	30	2	60	35	13800	3900	5500	5500	13800	ADQ	ADQ	Maj	Reg	
	US 52 BUS (W Lebanon St)	N South St to Hickory St (SR 1637)	Mount Airy	0.5	20	2	60	35	13800	8200	10800	10800	13800	ADQ	ADQ	Maj	Reg	
	US 52 BUS (W Lebanon St)	Hickory St (SR 1637) to Starlite Rd	Mount Airy	0.1	20	2	60	35	13800	5500	8400	8400	13800	ADQ	ADQ	Maj	Reg	
	US 52 BUS (W Lebanon St)	Starlite Rd to US 52	Mount Airy	0.6	20	2	60	35	13800	4500	7600	7600	13800	ADQ	ADQ	Maj	Reg	
SURR0008-H	US 601	Yadkin Co to NC 268	Surry Co	4.4	18	2	60	55	15300	4600	6100	6100	15300	2 A	60	Maj	Reg	
SURR0008-H	US 601	NC 268 to S. Main St Connector	Surry Co	3.3	18	2	60	45	15300	5400	6800	6800	15300	2 A	60	Maj	Reg	
	US 601	S. Main St Connector to Rockford St (SR 2221)	Surry Co	0.4	28	2	260	55	15800	6500	8200	8200	15800	ADQ	ADQ	Maj	Reg	T
	US 601	Rockford Rd (SR 2221) to E Atkins St (SR 1100)	Surry Co	0.9	28	2	260	55	15800	7000	8600	8600	15800	ADQ	ADQ	Maj	Reg	T
SURR0001-H	US 601 (Rockford St)	E Atkins St (SR 1100) to Old US 601 (SR 2258)	Surry Co	1.5	28	2	260	55	15800	9200	12400	12400	44800	4 B	260	B	Reg	T
SURR0001-H	US 601 (Rockford St)	Old US 601 (SR 2258) to Cadle Ford Rd (SR 1356)	Surry Co	2.7	25	2	260	55	15800	10000	14000	14000	44800	4 B	260	Maj	Reg	T
SURR0001-H	US 601 (Rockford St)	Cadle Ford Rd (SR 1356) to Perry Taylor Rd	Surry Co	1.0	25	2	260	55	15800	12000	18000	18000	44800	4 B	260	B	Reg	T
SURR0001-H	US 601 (Rockford St)	Perry Taylor Rd (SR 1357) to Divided US 601	Surry Co	0.6	24	2	270	55	15800	15000	25000	25000	44800	4 B	270	B	Reg	T
	US 601 (Rockford St)	Divided US 601 to I-74 to	Surry Co	0.2	48	4 D	135	55	15800	15000	33000	33000	15800	ADQ	ADQ	B	Reg	T
	US 601 (Rockford St)	I-74 to Mc Kinney Rd (SR 1350)	Surry Co	0.2	48	4 D	135	55	43500	15500	32500	32500	43500	ADQ	ADQ	B	Reg	T
	US 601 (Rockford St)	McKinney Rd (SR 1350) to Old US 601 (SR 2258)	Surry Co	0.8	48	4 D	150	55	43500	16000	33000	33000	43500	ADQ	ADQ	B	Reg	T

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	US 601 (Rockford St)	Old US 601 (SR 2258) to Forrest Dr (SR 1365)	Surry Co	0.4	48	4 D	135	55	43500	21500	34200	34200	43500	ADQ	ADQ	B	Reg	T
SURR0002-H	US 601 (Rockford St)	Forrest Dr (SR 1365) to Park Dr (SR 2000)	Mount Airy	0.2	60	4	100	45	32400	21700	35000	**35000**	32400	5 A	110	Maj	Reg	T
SURR0002-H	US 601 (Rockford St)	Park Dr (SR 2164) to US 52	Mount Airy	0.8	60	4	100	35	32400	25000	37000	**37000**	32400	5 A	110	Maj	Reg	T
SURR0009-H	US 601 BUS	US 601 to Prison Camp Rd (SR 1345)	Surry Co	1.4	20	2	60	55	15800	4500	5600	5600	15800	2 A	60	Maj	Reg	
	US 601 BUS (N Main St)	Prison Camp Rd (SR 1345) to W Kapp St (SR 1001)	Dobson	1.0	36	2	60	35	13800	6900	8800	8800	13800	ADQ	ADQ	Maj	Reg	
	US 601 BUS (N Main St)	W Kapp St (SR 1001) to W Atkins St (SR 1100)	Dobson	0.1	54	2	60	35	13800	8500	10500	10500	13800	ADQ	ADQ	Maj	Reg	T
	US 601 BUS (S Main St)	Atkins St (SR 1100) to Spoon St	Dobson	0.6	40	2	60	35	13800	6500	8000	8000	13800	ADQ	ADQ	Maj	Reg	T
	US 601 BUS (S Main St)	Spoon St to Rockford Rd (SR 2221)	Dobson	0.7	40	2	60	35	13800	4700	5800	5800	13800	ADQ	ADQ	Maj	Reg	T
SURR0010-H	US 601 BUS (S Main St)	Rockford Rd (SR 2221) to US 601	Dobson	0.4	20	2	60	55	15800	4000	5200	5200	15800	2 A	60	Maj	Reg	T
SURR0011-H	NC 18	NC 89 to Alleghany Co	Surry Co	0.6	20	2	100	55	15800	1300	2000	2000	15800	2 A	100	Maj	Reg	
	NC 89	State Line to NC 18	Surry Co	0.3	26	2	100	55	15800	2000	2600	2600	15800	ADQ	ADQ	Maj	Reg	
SURR0012-H	NC 89 (W Pine St)	NC 18 to Beulah Rd (SR 1345)	Surry Co	10.8	20	2	60	55	15800	2900	3500	3500	15800	2 A	60	Maj	Reg	
SURR0013-H	NC 89 (W Pine St)	Beulah Rd (SR 1345) to I-77	Surry Co	1.5	18	2	60	55	15800	6400	7400	7400	15800	2 A	60	Maj	Reg	
	NC 89	I-77 to I-74	Surry Co	1.3	24	2	110	55	15800	7000	10500	10500	15800	ADQ	ADQ	Maj	Reg	
	NC 89	I-74 to Pine Ridge Rd (SR 13960	Surry Co	0.9	24	2	110	55	15800	6700	11300	11300	15800	ADQ	ADQ	Maj	Reg	
	NC 89	Pine Ridge Rd (SR 1396) to Maple Grove Church Rd (	Surry Co	0.9	24	2	80	45	15800	6800	11400	11400	15800	ADQ	ADQ	Maj	Reg	
	NC 89	Maple Grove Church Rd (SR 1618) to Maple Hollow Rd	Surry Co	0.8	24	2	80	45	15800	7700	12500	12500	15800	ADQ	ADQ	Maj	Reg	
SURR0003-H	NC 89 (W Pine St)	Maple Hollow Rd (SR 1395) to Sparger Rd (SR 1621)	Surry Co	1.2	44	2	80	35	15300	11200	15100	15100	18200	3 A	80	Maj	Reg	
SURR0003-H	NC 89 (W Pine St)	Sparger Rd (SR 1621) to Toast Rd (SR 1387)	Surry Co	0.9	24	2	80	35	15300	13200	17500	17500	18200	3 A	80	Maj	Reg	
SURR0003-H	NC 89 (W Pine St)	Toast Rd (SR 1387) to S Franklin Rd (SR 1394)	Surry Co	0.6	24	2	80	55	15300	13000	17000	17000	18200	3 A	80	Maj	Reg	
	NC 89 (W Pine St)	Toast Rd (SR 1387) to S Franklin Rd (SR 1394)	Surry Co	0.3	24	2	80	55	15300	13000	17000	17000	15300	ADQ	ADQ	Maj	Reg	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	NC 89 (W Pine St)	S Franklin Rd (SR 1394) to US 52	Surry Co	0.7	64	4	100	35	32400	17000	20800	20800	32400	ADQ	ADQ	Maj	Reg	
	NC 89 (W Pine St)	US 52 to NC 89 (W Independence Blvd)	Mount Airy	0.1	64	4	100	35	32400	19000	24300	24300	32400	ADQ	ADQ	Maj	Reg	
	NC 89 (W Independence Blvd)	NC 89 to N South St (SR 1669)	Mount Airy	0.4	52	4	60	35	27500	8700	13600	13600	27500	ADQ	ADQ	Maj	Reg	
	NC 89 (W Independence Blvd)	N South St (SR 1669) to N Main St	Mount Airy	0.3	39	3	60	35	27500	7400	9600	9600	27500	ADQ	ADQ	Maj	Sub	
	NC 89 (W Independence Blvd)	N Main St to US 52 Bus (Renfro St)	Mount Airy	0.1	64	4	120	35	32400	15000	25500	25500	32400	ADQ	ADQ	Maj	Reg	
SURR0012-H	NC 89 (Westfield Rd)	US 52 Bus (S Main St) to Lovers Ln (SR 1753)	Mount Airy	0.9	18	2	60	35	13800	6500	8700	8700	13800	2 A	60	Maj	Reg	
SURR0012-H	NC 89 (Westfield Rd)	Lovers Ln (SR 1753) to Reeve Mill Rd (SR 1775)	Surry Co	0.2	18	2	60	35	13800	6000	8000	8000	13800	2 A	60	Maj	Reg	
SURR0012-H	NC 89 (Westfield Rd)	Reeves Mill Rd (SR 1775) to Quaker Rd (SR 1742)	Surry Co	1.3	19	2	60	35	13800	5600	6700	6700	13800	2 A	60	Maj	Reg	
SURR0012-H	NC 89 (Westfield Rd)	Quaker Rd (SR17 42) to Indian Grove Church Rd (SR 1780)	Surry Co	0.8	19	2	60	35	13800	4000	5200	5200	13800	2 A	60	Maj	Reg	
SURR0012-H	NC 89 (Westfield Rd)	Indian Grove Church rd (SR 1780) Old Westfield Rd (SR 1809)	Surry Co	6.7	19	2	60	55	15800	2100	3200	3200	15800	2 A	60	Maj	Reg	B
SURR0012-H	NC 89 (Westfield Rd)	Old Westfield Rd (SR 1809) to Stokes County	Surry Co	0.1	20	2	-	55	15800	2100	3200	3200	15800	2 A	60	Maj	Reg	B
	NC 103 (E Pine St)	S Renfro St to Riverside Dr (SR 1670)	Mount Airy	0.2	0	4	-	20	27500	10000	13600	13600	27500	ADQ	ADQ	Maj	Reg	
	NC 103 (E Pine St)	Riverside Dr (SR 1670) to Hamburg St (SR 1756)	Mount Airy	1.4	24	2	60	35	13800	7200	11000	11000	13800	ADQ	ADQ	Maj	Reg	
SURR0014-H	NC 103 (E Pine St)	Hamburg St (SR 1756) to Quaker Rd (SR 1742)	Surry Co	0.7	22	2	60	35	13800	6000	10500	10500	13800	2 A	60	Maj	Reg	
SURR0014-H	NC 103 (E Pine St)	Quaker Rd (SR 1742) to SR 1748	Surry Co	1.6	20	2	-	55	15800	5600	11000	11000	15800	2 A	60	Maj	Reg	
SURR0014-H	NC 103 (E Pine St)	SR 1748 to State Line	Surry Co	4.6	20	2	-	55	15800	3000	5600	5600	15800	2 A	60	Maj	Reg	
SURR0015-H	NC 104 (Riverside Dr)	State Line to Willis gap Rd (SR 1724)	Surry Co	1.2	20	2	60	55	15800	2100	3300	3300	15800	2 A	60	Maj	Reg	P
SURR0015-H	NC 104 (Riverside Dr)	Willis gap Rd (SR 1724) to Springs Rd (SR 1708)	Surry Co	1.1	20	2	100	55	15800	3200	5600	5600	15800	2 A	100	Maj	Reg	P
SURR0015-H	NC 104 (Riverside Dr)	Springs Rd (SR 1708) to Mount View Dr (SR 1716)	Surry Co	0.4	20	2	100	55	15800	3500	5800	5800	15800	2 A	100	Maj	Reg	P

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
SURR0015-H	NC 104 (Riverside Dr)	Mount View Dr (SR 1716) to Linville Rd (SR 1727)	Mount Airy	1.3	20	2	100	35	13800	7000	9400	9400	13800	2 A	100	Maj	Reg	P
SURR0015-H	NC 104 (Riverside Dr)	Linville Rd (SR 1727) to Independence Blvd	Mount Airy	0.6	20	2	100	35	13800	7800	9900	9900	13800	2 D	100	Maj	Reg	P
SURR0015-H	NC 104 (Riverside Dr)	Independence Blvd to NC 103 (E Pine St)	Mount Airy	0.2	20	2	100	35	13800	7800	9900	9900	13800	3 D	101	Maj	Reg	P
SURR0018-H	NC 268	Elkin PAB to Twin Oaks Rd (SR 1110)	Surry Co	4.1	22	2	60	45	11900	1800	2700	2700	15300	2 A	60	Maj	Reg	
	NC 268	Twin Oaks Rd (SR 1110) to US 601	Surry Co	1.3	24	2	60	45	11900	3500	5100	5100	15300	ADQ	ADQ	Maj	Reg	
SURR0016-H	NC 268	US 601 to Rockford Rd (SR 2221)	Surry Co	1.8	18	2	60	45	11900	2500	3400	3400	15300	2 A	60	Maj	Reg	
SURR0016-H	NC 268	Rockford Rd (SR 2221) to Siloam Rd (SR 1003)	Surry Co	3.5	18	2	60	45	11900	3900	4600	4600	15300	2 A	60	Maj	Reg	
SURR0016-H	NC 268	Siloam Rd (SR 1003) to Quaker Church Rd (SR 2080)	Surry Co	2.2	20	2	60	45	11900	3800	4500	4500	15300	2 A	60	Maj	Reg	
SURR0016-H	NC 268	Quaker Church Rd (SR 2080) to Shoals Rd (SR 2048)	Surry Co	6.2	20	2	60	45	11900	3700	4800	4800	15300	2 A	60	Maj	Reg	B
	NC 268 (S Key St)	Shoals Rd (SR 2048) to Black Mountain Rd (SR 2097	Surry Co	0.1	24	2	990	45	13800	4500	6500	6500	13800	ADQ	ADQ	Maj	Reg	
	NC 268 (S Key St)	Black Mountain Rd (SR 2097) to US 52	Pilot Mountain	0.2	24	2	990	35	13800	5900	7000	7000	13800	ADQ	ADQ	Maj	Reg	
	NC 268 (S Key St)	US 52 to Golf Course Rd (SR 2050)	Pilot Mountain	0.2	24	2	100	35	13800	5900	7000	7000	13800	ADQ	ADQ	Maj	Reg	
	NC 268 (S Key St)	Golf Course Rd (SR 2050) to Denny St (SR 2150)	Pilot Mountain	0.3	44	4	60	35	27500	12000	14800	14800	27500	ADQ	ADQ	Maj	Reg	
SURR0005-H	NC 268 (S Key St)	Denny St (SR 2051) to W Pine St	Pilot Mountain	0.1	22	2	60	35	13800	12000	14800	14800	13800	3 A	82	Maj	Reg	
SURR0005-H	NC 268 (S Key St)	W Pine St to Marion St	Pilot Mountain	0.1	32	2	60	35	13800	10000	12300	12300	13800	3 A	83	Maj	Reg	
SURR0005-H	NC 268 (S Key St)	Marion St to Main St (SR 1857)	Pilot Mountain	0.1	32	2	60	35	13800	10500	12900	12900	13800	3 A	81	Maj	Reg	
SURR0005-H	NC 268 (S Key St)	Main St (SR 1857) to School St (SR 1809)	Pilot Mountain	0.5	44	4	60	35	27500	12000	14800	14800	27500	3 A	80	Maj	Reg	
SURR0005-H	NC 268 (S Key St)	School St (SR 1809) to W 52 BYP (SR 1856)	Pilot Mountain	0.5	44	4	60	35	27500	12000	14800	14800	27500	4 A	81	Maj	Reg	
SURR0017-H	NC 268	N Key St to N Academy St	Pilot Mountain	0.1	22	2	100	35	13800	5000	6400	6400	13800	2 A	60	Maj	Reg	
SURR0017-H	NC 268	N Academy St to NC 268	Pilot Mountain	0.5	22	2	100	35	13800	5500	7000	7000	13800	2 A	60	Maj	Reg	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
SURR0017-H	NC 268	US 52 BYP (SR 1855) to Stokes Co	Pilot Mountain	0.5	20	2	60	55	13800	3500	4300	4300	15800	2 A	60	Maj	Reg	
	Academy St (SR 2050)	E Pine St to Golf Course Rd (SR 2050)	Pilot Mountain	0.6	20	2	-	55	13800	1500	1900	1900	13800	ADQ	ADQ	Min	Sub	
	Ararat Longhill Rd (SR 2017)	Ararat Rd (SR 2019) to Old US 52	Surry Co	3.0	20	2	60	55	15800	700	900	900	15800	ADQ	ADQ	Min	Sub	
	Ararat Rd (SR 2019)	Siloam Rd (SR 1003) to Old US 52	Surry Co	4.5	16	2	-	55	15800	1100	1500	1500	15800	ADQ	ADQ	Min	Sub	
	Ararat Rd (SR 2019)	Old US 52 (SR 2012) to Ararat Long Hill Rd (SR 201	Surry Co	2.7	16	2	-	55	15800	1200	1500	1500	15800	ADQ	ADQ	Min	Sub	
	Arlington St (SR 1863)	US 52 to S Main St	Mount Airy	0.6	20	2	-	35	13800	5500	7800	7800	13800	ADQ	ADQ	Min	Sub	
	Beulah Rd (SR 1345)	NC 89 to I-77	Surry Co	1.1	20	2	-	55	15800	2700	3100	3100	15800	ADQ	ADQ	Min	Sub	
	Black Mountain Rd (SR 2097)	US 52 to S Key St	Pilot Mountain	1.8	24	2	130	55	15800	1500	1900	1900	15800	ADQ	ADQ	Min	Sub	
	Black Mountain Rd (SR 2097)	E 52 BYP (SR 1855) to US 52	Surry Co	2.6	20	2	60	55	15800	700	900	900	15800	ADQ	ADQ	Min	Sub	
	Bluemont Rd (SR 1376)	Highland Dr (SR 1387) to S Franklin Rd (SR 1376)	Surry Co	0.8	16	2	-	35	13800	800	2200	2200	13800	ADQ	ADQ	Min	Sub	
	Bluemont Rd (SR 1376)	US 52 to Highland Dr (SR 1387)	Surry Co	0.1	16	2	-	35	13800	1500	3600	3600	13800	ADQ	ADQ	Min	Sub	
	Cadle Ford Rd (SR 1357)	US 601 to Old US 601 (SR 2258)	Surry Co	0.6	18	2	60	55	15800	1400	2500	2500	15800	ADQ	ADQ	Min	Sub	
	Cadle Ford Rd (SR 1357)	Cadle Knoll Ln (SR 1535) to US 601	Surry Co	0.9	18	2	60	55	15800	1100	2500	2500	15800	ADQ	ADQ	Min	Sub	
	Cadle Knoll Ln (SR 1535)	Red Brush Rd (SR 1350) to Cadle Ford Rd (SR 1356)	Surry Co	1.9	18	2	60	55	15800	1000	2300	2300	15800	ADQ	ADQ	Min	Sub	
	Carter St (SR2116)	Park Dr (SR 2000) to US 52	Mount Airy	0.9	24	2	60	35	13800	3900	8000	8000	13800	ADQ	ADQ	Min	Sub	
	Caves Mill Rd (SR 1100)	WR Gillespie Rd (SR 1102) to Cooper St	Dobson	1.7	20	2	-	55	15800	2200	2700	2700	15800	ADQ	ADQ	Min	Sub	T

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Caves Mill Rd (SR 1100)	Twin Oaks Rd (SR 1110) to WR Gillespie Rd (SR 1102	Surry Co	1.4	20	2	-	55	15800	1300	1600	1600	15800	ADQ	ADQ	Min	Sub	T
	Cook School Rd (SR 1815)	US 52 to Old US 52 (SR 2012)	Surry Co	0.2	18	2	60	55	15800	2000	2800	2800	15800	ADQ	ADQ	Min	Sub	
	Cook School Rd (SR 1815)	US 52 to Jessup Church Rd (SR 1812)	Surry Co	3.2	18	2	50	55	15800	2000	2800	2800	15800	ADQ	ADQ	Min	Sub	
	Cooper St	Caves Mill Rd (SR 1100) to Spoon St	Dobson	0.3	20	2	-	35	13800	800	1000	1000	13800	ADQ	ADQ	Min	Sub	
	E 52 BYP (SR 1856)	E Main St (SR 1855) to NC 268	Pilot Mountain	0.2	22	2	-	35	13800	5500	7000	7000	13800	ADQ	ADQ	Min	Sub	
	E 52 BYP (SR 1855)	E Main St (SR 1855) to Black Mountain Rd (SR 2118)	Surry Co	0.1	22	2	-	55	13800	5000	6200	6200	13800	ADQ	ADQ	Min	Sub	
	E 52 BYP (SR 1855)	Black Mountain Rd (SR 2097) to County Line	Surry Co	0.3	20	2	-	55	13800	4800	5900	5900	13800	ADQ	ADQ	Min	Sub	
	E Atkins St (SR 1100)	S Main St to US 601	Dobson	1.0	44	2	60	35	13800	9400	10917	10917	13800	ADQ	ADQ	Min	Sub	T
	E Independence Blvd (SR 1670)	N Main St to BUS 52 (N Renfro St)	Mount Airy	0.1	40	4	60	35	13800	3500	5400	5400	23500	ADQ	ADQ	Maj	Reg	
	E Independence Blvd (SR 1670)	BUS 52 (N Renfro St) to NC 104	Mount Airy	0.3	52	4	60	35	13800	2000	3900	3900	23500	ADQ	ADQ	Min	Sub	
	E Main St (SR 1857)	E 52 BYP (SR 1855) to Nelson Rd (SR 2110)	Pilot Mountain	0.2	22	2	-	35	13800	4600	5300	5300	13800	ADQ	ADQ	Min	Sub	
	E Main St (SR 1857)	S Academt St (SR 2050) to Nelson Rd (SR 2110)	Pilot Mountain	0.2	44	2	60	20	13800	4000	4900	4900	13800	ADQ	ADQ	Min	Sub	
	E Main St (SR 1857)	S Davis St to S Academy St (SR 2050)	Pilot Mountain	0.1	44	2	60	20	13800	4500	5500	5500	13800	ADQ	ADQ	Min	Sub	
	E Main St (SR 1857)	S Davis St to S Depot St	Pilot Mountain	0.1	44	2	60	20	13800	4700	5800	5800	13800	ADQ	ADQ	Min	Sub	
	E Marion St	S Davis St to S Academy St (SR 2050)	Pilot Mountain	0.1	20	2	-	35	13800	1000	1200	1200	13800	ADQ	ADQ	Min	Sub	
	E Marion St	S Davis St to S Depot St	Pilot Mountain	0.0	20	2	-	35	13800	1200	1500	1500	13800	ADQ	ADQ	Min	Sub	
	E Pine St (SR 2432)	S Renfro St to S Main St	Mount Airy	0.1	35	3	60	20	15800	9800	12500	12500	15800	ADQ	ADQ	Maj	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Other Modes
	E Pine St (SR 2432)	S Davis St to S Academy St (SR 2050)	Pilot Mountain	0.2	20	2	-	35	13800	1100	1400	1400	13800	ADQ	ADQ	Min	Sub	
	E Pine St (SR 2432)	S Davis St to S Depot St	Pilot Mountain	0.1	20	2	-	35	13800	1400	1700	1700	13800	ADQ	ADQ	Min	Sub	
	E Wilson St	S Renfro St to S Main St	Mount Airy	0.1	20	2	-	35	13800	400	1000	1000	13800	ADQ	ADQ	Min	Reg	
	Fancy Gap Rd (SR 1640)	N Franklin Rd (SR 1394) to US 52	Mount Airy	1.1	20	2	-	35	13800	2000	2800	2800	13800	ADQ	ADQ	Min	Sub	
	Fancy Gap Rd (SR 1640)	W Greenhill Rd (SR 16486) to N Franklin Rd (SR 164	Surry Co	0.1	20	2	-	35	13800	2200	2800	2800	13800	ADQ	ADQ	Min	Sub	
	Fancy Gap Rd (SR 1640)	US 52 to W Greenhill Rd (SR 1686)	Surry Co	0.6	20	2	-	35	13800	1500	2200	2200	13800	ADQ	ADQ	Min	Sub	
	Forrest Dr (SR 1365)	US 601 to S Frnaklin St (SR 1394)	Mount Airy	0.5	18	2	60	55	13800	5000	8100	8100	13800	ADQ	ADQ	Min	Sub	
	Fowler Rd (SR 1637)	Galax Trl (SR 1648) to Merita St (SR 1637)	Mount Airy	0.4	20	2	60	35	13800	2300	3700	3700	13800	ADQ	ADQ	Min	Sub	
	Fowler Rd (SR 1637)	N Franklin Rd (SR 1394) to Merita St (SR 1637	Surry Co	0.4	20	2	60	35	13800	3100	4100	4100	13800	ADQ	ADQ	Min	Sub	
	Fredrick St (SR 1871)	US 52 to NC 89	Mount Airy	0.5	20	2	60	35	13800	5000	6300	6300	13800	ADQ	ADQ	Min	Sub	
	Galax Trl (SR 1648)	Fowler Rd (SR 1637) to Westlake Dr (SR 2406)	Mount Airy	1.0	18	2	60	55	13800	1800	3200	3200	13800	ADQ	ADQ	Min	Sub	
	Galax Trl (SR 1648)	Fowler Rd (SR 1637) to US 52	Mount Airy	0.0	19	2	60	35	13800	2400	3800	3800	13800	ADQ	ADQ	Min	Sub	
	Golf Course Rd (SR 2110)	NC 268 to Nelson Rd (SR 2110)	Pilot Mountain	1.4	20	2	60	35	13800	700	900	900	13800	ADQ	ADQ	Min	Sub	
	Greenhill Rd (SR 1700)	Parker Rd (SR 1702) to US 52	Mount Airy	1.5	18	2	60	55	15800	2400	4600	4600	15800	ADQ	ADQ	Min	Sub	
	Greenhill Rd (SR 1701)	Wards Gap Rd (SR 1717) to Parker Rd (SR 1702)	Mount Airy	1.1	18	2	-	45	15300	2100	4000	4000	15300	ADQ	ADQ	Min	Sub	
	Hamburg St (SR 1759)	S Renfro St to S Main St	Mount Airy	0.1	20	2	-	35	13800	1500	1500	1500	13800	ADQ	ADQ	Min	Reg	
	Hamburg St (SR 1759)	S Refro St to Lovers ln (SR 1753)	Mount Airy	1.4	18	2	60	55	15800	1800	3700	3700	15800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Highland Dr (SR 1375)	S Franklin Rd (SR 1376) to Bluemont Rd (SR 1376)	Surry Co	0.7	18	2	60	35	13800	700	2300	2300	13800	ADQ	ADQ	Min	Sub	
	Holly Springs Rd (SR 1815)	US 52 to I-74	Mount Airy	1.2	22	2	60	55	15800	4400	7400	7400	15800	ADQ	ADQ	Min	Sub	
	Holly Springs Rd (SR 1815)	Reeve Mill Rd (SR 1774) to Indian Grove Church Rd	Surry Co	2.6	20	2	60	55	13800	3400	7100	7100	13800	ADQ	ADQ	Min	Sub	
	Holly Springs Rd (SR 1815)	US 52 to Reeves Mill Rd (SR 1774)	Surry Co	0.7	20	2	60	35	13800	5800	7500	7500	13800	ADQ	ADQ	Min	Sub	
R-5309	Holly Springs Relocation	Janice Dr to Cottage Drive	Surry Co	0.9	-	-	-	-	-	-	7500	7500	15800	2 A	60	Min	Sub	
	Indian Grove Church Rd (Sr 1780)	NC 89 to Holly Sprins Rd (SR 1815)	Surry Co	1.3	16	2	-	55	15800	900	1500	1500	15800	ADQ	ADQ	Min	Sub	
	James St	S Crutchfield St to Cooper St	Dobson	0.3	20	2	-	35	13800	900	1100	1100	13800	ADQ	ADQ	Min	Reg	
	Jessup Grove Church Rd (SR 1812)	Cook Shoals Rd (SR 1815) to Old Westfield Rd (SR 1890)	Surry Co	2.0	20	2	60	55	15800	1800	2100	2100	15800	ADQ	ADQ	Min	Sub	
	Jessup Grove Church Rd (SR 1812)	Holly Springs Rd (SR 1815) to Cook School Rd (SR 1	Surry Co	3.7	18	2	50	55	15800	2400	2800	2800	15800	ADQ	ADQ	Min	Sub	
	Jessup Grove Church Rd (SR 1812)	Old Westfiled Rd (SR 1809) to County Line	Surry Co	0.0	20	2	-	55	13800	1500	2800	2800	13800	ADQ	ADQ	Min	Sub	
	Linville Rd (SR 1727)	N Main St to Sltare Rd (SR 1740)	Mount Airy	0.5	20	2	-	35	13800	1800	2600	2600	13800	ADQ	ADQ	Min	Sub	
	Lovers Ln (SR 1753)	NC 89 to Hamburg St (SR 1756)	Surry Co	1.1	20	2	-	35	13800	1500	2900	2900	13800	ADQ	ADQ	Min	Sub	
	Maple Grove Church Rd (SR 1618)	I-77 to NC 89	Surry Co	3.9	20	2	60	55	15800	1500	1900	1900	15800	ADQ	ADQ	Min	Sub	
	Maple Grove Church Rd (SR 1618)	Pine Ridge Rd (SR 1396) to I-77	Surry Co	0.5	20	2	60	55	13800	1000	1500	1500	13800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Maple Hollow Rd (SR 1395)	NC 89 to Red Brush Rd (SR 1350)	Surry Co	1.0	20	2	60	45	15300	3200	5200	5200	15300	ADQ	ADQ	Min	Sub	
	McBride Rd (SR 1742)	Stanley Rd (SR 1738) to NC 103	Surry Co	0.4	20	2	-	35	13800	2800	3800	3800	13800	ADQ	ADQ	Min	Sub	
	McBride Rd (SR 1742)	Satnley Rd (SR 1738) to State Line	Surry Co	4.2	0	2	-	55	15800	2700	3700	3700	15800	ADQ	ADQ	Min	Sub	
	McKinney Rd (SR 1544/ 1429)	Red Brush Rd (SR 1350) to US 601	Surry Co	2.9	18	2	-	55	15800	1700	2600	2600	15800	ADQ	ADQ	Min	Sub	
	Merita St (SR 1637)	Fowler Rd (SR 1637) US 52	Mount Airy	0.4	18	2	60	35	13800	1600	2600	2600	13800	ADQ	ADQ	Min	Sub	
	Mountain Park Rd (SR 1307)	US 21 to Zephyr Mountain Park (SR 1315)	Surry Co	3.8	20	2	-	55	15800	1000	1300	1300	15800	ADQ	ADQ	Min	Sub	
	N Academy St (SR 2050)	NC 268 to E Main St (SR 1857)	Pilot Mountain	0.3	20	2	-	35	13800	3200	3900	3900	13800	ADQ	ADQ	Min	Reg	
	N Crutchfield St	W Atkins St (SR 1100) to W Kapp St (SR 1001)	Dobson	0.1	20	2	-	35	13800	2000	2500	2500	13800	ADQ	ADQ	Min	Sub	
	N Depot St	W Main St (SR 1857) to School St	Pilot Mountain	0.1	0	2	-	35	13800	2500	3100	3100	13800	ADQ	ADQ	Min	Sub	
	N Depot St	School St to NC 268	Pilot Mountain	0.3	0	2	-	35	13800	2900	3600	3600	13800	ADQ	ADQ	Min	Reg	
	N Franklin Rd (SR 1394)	Pipers gap Rd (SR 1621) to NC 89	Surry Co	0.2	18	2	-	35	13800	9400	11000	11000	13800	ADQ	ADQ	Min	Sub	
	N Franklin Rd (SR 1394)	Westlake Dr (SR 2406) to Fowler Rd (SR 1637)	Surry Co	0.9	18	2	-	35	13800	4200	5700	5700	13800	ADQ	ADQ	Min	Sub	
	N Franklin Rd (SR 1394)	Fancy Gap Rd (SR 1640) to Westlake Dr (SR 2406)	Surry Co	1.3	18	2	-	45	13800	2100	3200	3200	13800	ADQ	ADQ	Min	Sub	
	N Franklin Rd (SR 1394)	Pipers gap Rd (SR 1621) to Fowler Rd (SR 1637)	Surry Co	0.5	18	2	-	35	13800	5400	8000	8000	13800	ADQ	ADQ	Min	Sub	
	N Main St	W Lebanon St to N Renfro St	Mount Airy	0.3	60	4	60	25	27500	12000	15200	15200	27500	ADQ	ADQ	Maj	Reg	
	N Main St	E independence Blvd to E Pine St (SR 2432)	Mount Airy	0.3	20	2	-	35	13800	3800	4500	4500	13800	ADQ	ADQ	Min	Reg	
	N Main St	N Refro St to Independence Blvd	Mount Airy	0.2	20	2	-		13800	4200	5000	5000	13800	ADQ	ADQ	Min	Reg	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	N Main St (SR 1708)	W Lebanon St to Linville Rd (SR 1727)	Mount Airy	0.4	36	2	-	35	13800	6500	8300	8300	13800	ADQ	ADQ	Min	Sub	
	N Main St (SR 1701)	Springs Rd (SR 1708) to Linville Rd (SR 1727)	Mount Airy	0.6	40	2	-	35	13800	6200	7900	7900	13800	ADQ	ADQ	Min	Sub	
	N Main St	Greenhill Rd (SR 1701) to Springs Rd (SR 1708)	Mount Airy	0.7	40	2	60	35	13800	4800	6200	6200	13800	ADQ	ADQ	Min	Sub	
	N South St (SR 1669)	W independence Blvd to W Pine St (SR 2432)	Mount Airy	0.3	52	2	60	35	13800	4200	5900	5900	13800	ADQ	ADQ	Min	Sub	
	N South St (SR 1669)	W Lebanon St to W Independence Blvd	Mount Airy	0.9	20	2	-	35	13800	6200	7800	7800	13800	ADQ	ADQ	Min	Sub	
	N Stephens St	W Main St (SR 1857) to School St	Pilot Mountain	0.1	20	2	-	35	13800	2000	2500	2500	13800	ADQ	ADQ	Min	Sub	
	Nelson Rd (SR 2110)	Golf Course Rd (SR 2050) to E Main St (SR 1855)	Pilot Mountain	0.9	20	2	60	55	13800	1800	2200	2200	13800	ADQ	ADQ	Min	Sub	
	Newsome St	US 52 to Worth St (SR 2426)	Mount Airy	0.8	20	2	0	35	13800	2600	5000	5000	13800	ADQ	ADQ	Min	Reg	
	Old 601 (SR 2258)	Siloam Rd (SR 1003) to US 601	Surry Co	3.3	18	2	60	45	15300	1500	1800	1800	15300	ADQ	ADQ	Min	Sub	
	Old 601 (SR 2258)	Perry Tylor Rd (SR 1357) to Cadle Ford Rd (SR 1356	Surry Co	1.6	18	2	60	45	15300	1500	2200	2200	15300	ADQ	ADQ	Min	Sub	
	Old Cadle Ford Rd (SR 1357)	Cadle Knoll Ln (SR 1535) to US 601	Surry Co	1.0	20	2	-	55	15800	1000	1800	1800	15800	ADQ	ADQ	Min	Sub	
	Old US-52 S (SR 2012)	Arart Rd (SR 2019) to W Dodson Mill Rd (SR 1953)	Surry Co	1.4	22	2	-	55	15800	2800	3500	3500	15800	ADQ	ADQ	Min	Sub	
	Old US-52 S (SR 2012)	Ararat Rd (SR 2019) to Ararat Longhill Rd (SR 2017	Surry Co	2.7	22	2	-	55	15800	1700	2200	2200	15800	ADQ	ADQ	Min	Sub	
	Old US-52 S (SR 2012)	Ararat Longhill Rd (SR 2017) to I-74	Surry Co	0.3	22	2	60	55	15800	3000	5600	5600	15800	ADQ	ADQ	Min	Sub	
	Old Westfield Rd (SR 1809)	W 52 BPY (SR 1856) to Jessup Grove Church Rd (SR 1	Pilot Mountain	2.6	20	2	-	55	15800	3400	4000	4000	15800	ADQ	ADQ	Min	Sub	
	Old Westfield Rd (SR 1809)	W 52 BYP (SR 1856) to School St (SR 1809)	Pilot Mountain	0.1	20	2	-	35	13800	3300	4100	4100	13800	ADQ	ADQ	Min	Sub	
	Old Westfield Rd (SR 1809)	W Main St (SR 1857) to School St (SR 1809)	Pilot Mountain	0.0	20	2	-	35	13800	3000	3700	3700	13800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Other Modes
	Old Westfield Rd (SR 1809)	Jessup Grove Shurd Rd (SR 1812) to NC 89	Surry Co	3.8	20	2	-	55	15800	2200	2600	2600	15800	ADQ	ADQ	Min	Sub	
	Park Dr (SR 2000)	US 601 to Carter St (SR 2164)	Mount Airy	0.3	18	2	-	55	13800	4900	9000	9000	13800	ADQ	ADQ	Min	Sub	
	Park Dr (SR 2000)	I-74 to Siloam Rd (SR 1003)	Surry Co	0.8	20	2	60	55	15800	6000	9600	9600	15800	ADQ	ADQ	Min	Sub	
	Park Dr (SR 2000)	I-74 to Carter St (SR 2164)	Surry Co	2.5	20	2	60	55	15800	2900	8300	8300	15800	ADQ	ADQ	Min	Sub	
	Perry Taylor Rd (Sr 1357)	US 601 to Siloam Rd (SR 1003)	Surry Co	1.1	20	2	-	55	15800	600	1500	1500	15800	ADQ	ADQ	Min	Sub	
	Pine Ridge Rd (SR 1396)	Maple Grove Church Rd (SR 1602) to I -77	Surry Co	1.9	20	2	60	55	13800	1000	1500	1500	13800	ADQ	ADQ	Min	Sub	
	Pine Ridge Rd (SR 1396)	I-77 to NC 89	Surry Co	1.7	20	2	60	35	13800	2500	3000	3000	13800	ADQ	ADQ	Min	Sub	
	Pine Ridge Rd (SR 1396)	NC 89 to Red Brush Rd (SR 1350)	Surry Co	2.0	20	2	60	55	15800	900	1200	1200	15800	ADQ	ADQ	Min	Sub	
	Pipers Gap Rd (SR 1624)	Sparger Rd (SR 1621) to State Line	Surry Co	0.9	20	2	60	55	13800	1300	1500	1500	13800	ADQ	ADQ	Min	Sub	
	Pipers Gap Rd (SR 1613)	Sparger Rd (SR 1621) to N Frnaklin Rd (SR 1394)	Surry Co	5.2	20	2	60	55	15800	1700	2000	2000	15800	ADQ	ADQ	Min	Sub	
	Poplar Springs Rd (SR 1001)	Zephyr Mountain Park Rd (SR 1315) to Joe Layne Mil	Surry Co	3.3	16	2	60	55	15800	1000	1300	1300	15800	ADQ	ADQ	Min	Sub	
	Poplar Springs Rd (SR 1001)	Joe Layne Mill Rd (SR 1121) to County Line	Surry Co	1.2	22	2	60	65	15800	2400	2800	2800	15800	ADQ	ADQ	Min	Sub	
	Prison Camp Rd (SR 1345)	Red Brush Rd (SR 1350) to Old US 601	Surry Co	1.1	24	2	110	55	15800	1800	2600	2600	15800	ADQ	ADQ	Min	Sub	
	Prison Camp Rd (SR 1345)	I-77 to Prison camp Rd (SR 1345)	Surry Co	4.3	20	2	-	55	15800	1200	1400	1400	15800	ADQ	ADQ	Min	Sub	
	Quaker Rd (SR 1742)	NC 103 to NC 89	Surry Co	2.0	20	2	-	55	15800	1100	2200	2200	15800	ADQ	ADQ	Min	Sub	
	Red Brush Rd (SR 1350)	Prison camp Rd (SR 1345) to Cadle Knoll Ln (SR 153	Surry Co	3.5	20	2	50	55	15800	1600	3000	3000	15800	ADQ	ADQ	Min	Sub	
	Red Brush Rd (SR 1350)	I-74 to Cadl;e Knoll Ln (SR 1535)	Surry Co	0.5	20	2	50	55	15800	2200	3600	3600	15800	ADQ	ADQ	Min	Sub	
	Red Brush Rd (SR 1350)	I-74 to Pine Ridge Rd (SR 1396)	Surry Co	0.6	20	2	-	55	15800	3600	7500	7500	15800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Red Brush Rd (SR 1350)	Maple Hollow Rd (SR 1395) to Pine Ridge Rd (SR 139	Surry Co	0.6	20	2	-	55	15800	3000	7200	7200	15800	ADQ	ADQ	Min	Sub	
	Red Brush Rd (SR 1350)	McKinney Rd (SR 1350) to Toast Rd (SR 1387)	Surry Co	1.0	20	2	-	55	15800	1700	3400	3400	15800	ADQ	ADQ	Min	Sub	
	Red Brush Rd (SR 1350)	Maple Hollow Rd (SR 1395) to McKinney Rd (SR 1350)	Surry Co	2.1	20	2	-	55	15800	1100	3000	3000	15800	ADQ	ADQ	Min	Sub	
	Reeves Mill Rd (SR 1776)	Massey Rd (SR 1774) to Holly Springs Rd (SR 1815)	Surry Co	1.6	20	2	50	55	15800	1600	2600	2600	15800	ADQ	ADQ	Min	Sub	
	Reeves Mill Rd (SR 1776)	NC 89 to Massey Rd (SR 1774)	Surry Co	0.9	18	2	60	55	15800	1300	2400	2400	15800	ADQ	ADQ	Min	Sub	
	Rockford Rd (SR 2221)	US 601 to Connector	Surry Co	0.2	22	2	-	55	13800	2400	2800	2800	13800	ADQ	ADQ	Min	Sub	
	Rockford Rd (SR 2221)	NC 268 to County Line	Surry Co	7.4	16	2	-	55	15800	800	1100	1100	15800	ADQ	ADQ	Min	Sub	
	Rockford Rd (SR 2221)	US 601 to NC 268	Surry Co	3.5	22	2	-	55	15800	1900	2200	2200	15800	ADQ	ADQ	Min	Sub	
	Rockford St (SR 2426)	Worth St (SR 1371) to US 52	Mount Airy	0.3	56	4	60	35	27500	12000	20000	20000	27500	ADQ	ADQ	Min	Sub	
	Rockford St (SR 2426)	E Haymore St (SR 2426) to Worth St (SR 1371)	Mount Airy	0.1	24	2	60	35	13800	8800	11000	11000	13800	ADQ	ADQ	Min	Sub	
	Rockford St (SR 2426)	Pine St (SR 2432) to E Haymore St (SR 2426)	Mount Airy	0.6	24	2	60	35	13800	8700	10900	10900	13800	ADQ	ADQ	Min	Sub	
	S Academy St (SR 2050)	E Marion St to E Pine St	Pilot Mountain	0.0	25	2	50	35	13800	2500	3100	3100	13800	ADQ	ADQ	Min	Sub	
	S Academy St (SR 2050)	E Marion St to E Main St (SR 1857)	Pilot Mountain	0.1	25	2	-	35	13800	2800	3500	3500	13800	ADQ	ADQ	Min	Sub	
	S Davis St	E Marion St to E Pine St	Pilot Mountain	0.1	18	2	-	35	13800	1000	1200	1200	13800	ADQ	ADQ	Min	Sub	
	S Davis St	E Main St (SR 1857) to E Marion St	Pilot Mountain	0.1	18	2	-	35	13800	1200	1500	1500	13800	ADQ	ADQ	Min	Sub	
	S Depot St	E Main St (SR 1857) to E Marion St	Pilot Mountain	0.1	18	2	-	35	13800	2100	2600	2600	13800	ADQ	ADQ	Min	Sub	
	S Depot St	E Marion St to E Pine St	Pilot Mountain	0.1	18	2	-	35	13800	1500	1800	1800	13800	ADQ	ADQ	Min	Sub	
	S Franklin Rd (SR 1394)	Welch Rd (SR 1370) to Snowhill Dr (SR 1371)	Mount Airy	0.5	16	2	-	35	13800	6700	8700	8700	13800	ADQ	ADQ	Min	Sub	
	S Franklin Rd (SR 1394)	Snowhill Dr (SR 1371) to Bluemont Rd (SR 1376)	Surry Co	0.8	16	2	-	35	13800	7100	9000	9000	13800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	S Franklin Rd (SR 1394)	NC 89 to Toast Rd (SR 1387)	Surry Co	0.2	18	2	-	35	13800	8400	10000	10000	13800	ADQ	ADQ	Min	Sub	
	S Franklin Rd (SR 1394)	Highland Dr (SR 1387) to Bluemont Rd (SR 1376)	Surry Co	0.4	16	2	-	35	13800	7600	9500	9500	13800	ADQ	ADQ	Min	Sub	
	S Main St	NC89 to Massey Rd (SR 1774)	Mount Airy	0.9	22	2	60	35	13800	5600	7800	7800	13800	ADQ	ADQ	Maj	Reg	
	S Main St	Hamburg St to Worth St (SR 1371)	Mount Airy	0.0	20	2	-	35	13800	2800	4000	4000	13800	ADQ	ADQ	Min	Reg	
	S Main St	Hamburg St to E Wilson St	Mount Airy	0.1	20	2	-	35	13800	2100	2900	2900	13800	ADQ	ADQ	Min	Reg	
	S Main St	E Wilson St to E pine St (SR 2432)	Mount Airy	0.3	20	2	-	35	13800	3000	3600	3600	13800	ADQ	ADQ	Min	Reg	
	S Main St	Renfro St to Worth St (SR 1371)	Mount Airy	0.2	20	2	-	35	13800	3000	4300	4300	13800	ADQ	ADQ	Min	Reg	
	S Stephens St	E Marion St to E Pine St	Pilot Mountain	0.1	20	2	-	35	13800	1600	2000	2000	13800	ADQ	ADQ	Min	Reg	
	S Stephens St	E Main St (SR 1857) to E Marion St	Pilot Mountain	0.1	20	2	-	35	13800	1800	2200	2200	13800	ADQ	ADQ	Min	Sub	
	School St (SR 1809)	Friends St (West) to Friends St (East)	Pilot Mountain	0.1	20	2	-	35	13800	2300	2800	2800	13800	ADQ	ADQ	Min	Sub	
	School St (SR 1809)	Friends St to School St	Pilot Mountain	0.2	20	2	-	35	13800	2000	2500	2500	13800	ADQ	ADQ	Min	Sub	
	School St (SR 1809)	NC 268 to N Stephens St	Pilot Mountain	0.1	20	2	-	35	13800	1500	1800	1800	13800	ADQ	ADQ	Min	Reg	
	School St (SR 1809)	N Stephens St to N Depot St	Pilot Mountain	0.1	20	2	-	35	13800	1300	1600	1600	13800	ADQ	ADQ	Min	Sub	
	School St (SR 1809)	Friends St to Old Westfield Rd (SR 1809)	Pilot Mountain	0.1	20	2	-	35	13800	2500	3100	3100	13800	ADQ	ADQ	Min	Sub	
	Shoals Rd (SR 2048)	John Scott Rd (SrR2079) to Caudle Rd (SR 2070)	Surry Co	0.3	18	2	-	55	15800	500	700	700	15800	ADQ	ADQ	Min	Sub	
	Shoals Rd (SR 2048)	Ellis Hardy Rd (SR 2094) to Stony Ridge Rd (SR 204	Surry Co	0.5	18	2	-	55	15800	800	1100	1100	15800	ADQ	ADQ	Min	Sub	
	Shoals Rd (SR 2048)	Ellis Hardy Rd (SR 2094) to Caudle Rd (SR 2070)	Surry Co	0.8	18	2	-	55	15800	400	700	700	15800	ADQ	ADQ	Min	Sub	
	Shoals Rd (SR 2048)	Stony Ridge Rd (SR 2048) to Quaker Church Rd (SR 2	Surry Co	0.7	18	2	-	55	15800	1200	1600	1600	15800	ADQ	ADQ	Min	Sub	
	Shoals Rd (SR 2048)	NC 268 to Quaker Church Rd (SR 2080)	Surry Co	5.0	23	2	-	55	15800	1500	1800	1800	15800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Siloam Rd (SR 1003)	NC 268 to County Line	Surry Co	6.2	20	2	60	55	15800	1900	2500	2500	15800	ADQ	ADQ	Min	Sub	
	Siloam Rd (SR 1003)	Ararat Rd (SR 2019) to Turkey ford Rd (SR 1100)	Surry Co	1.0	20	2	60	55	15800	3000	3800	3800	15800	ADQ	ADQ	Min	Sub	
	Siloam Rd (SR 1003)	Turkey Ford Rd (SR 1100) to NC 268	Surry Co	2.8	20	2	60	55	15800	2700	3400	3400	15800	ADQ	ADQ	Min	Sub	
	Siloam Rd (SR 1003)	Park Dr (SR 2000) to Arart Rd (SR 2019)	Surry Co	3.0	20	2	60	55	15800	3400	4400	4400	15800	ADQ	ADQ	Min	Sub	
	Siloam Rd (SR 1003)	Perry Tyler Rd (SR 1357) to Pard Dr (SR 2000)	Surry Co	1.1	20	2	60	55	15800	3800	5400	5400	15800	ADQ	ADQ	Min	Sub	
	Snowhill Dr (SR 1371)	S Franklin Rd (SR 1394) to Welch Rd (Sr 1370)	Mount Airy	0.7	18	2	-	55	13800	2000	4200	4200	13800	ADQ	ADQ	Min	Sub	
	Snowhill Dr (SR 1371)	Welch rd (Sr 1371) to US 52	Mount Airy	0.1	18	2	-	35	13800	3200	4800	4800	13800	ADQ	ADQ	Min	Sub	
	Spoon St	James St to S Main St	Dobson	0.5	20	2	-	35	13800	800	1000	1000	13800	ADQ	ADQ	Min	Reg	
	Stanley Rd (SR 1738)	McBride Rd (SR 1742) to NC 104	Mount Airy	1.5	18	2	-	35	15300	1000	1900	1900	15300	ADQ	ADQ	Min	Sub	
	Starlite Rd	US 52 to W Lebanon St	Mount Airy	0.3	20	2	-	35	13800	2300	3500	3500	13800	ADQ	ADQ	Min	Reg	
	Stony Ridge Rd (SR 2048)	Shoals Rd (SR 2069) to County Line	Surry Co	3.1	18	2	-	55	15800	2000	2500	2500	15800	ADQ	ADQ	Min	Sub	
	Toast Rd (SR 1387)	NC 89 to Red Brush Rd (SR 1350)	Surry Co	0.4	18	2	-	35	13800	1000	2500	2500	13800	ADQ	ADQ	Min	Sub	
	Toast Rd (SR 1387)	Red Brush Rd (SR 1350) to S Franklin Rd (SR 1376)	Surry Co	0.7	18	2	60	35	13800	2000	4600	4600	13800	ADQ	ADQ	Min	Sub	
	Turkey Ford Rd (SR 1100)	US 601 to Siloam Rd (SR 1003)	Surry Co	4.9	22	2	-	55	13800	1700	2000	2000	13800	ADQ	ADQ	Min	Sub	
	Twin Oaks Rd (SR 1110)	Caves Mill Rd (SR 1100) to NC 268	Surry Co	4.1	20	2	-	55	15800	1300	1500	1500	15800	ADQ	ADQ	Min	Sub	
	Twin Oaks Rd	Zephyr Rd (SR 1001) to Caves Mill Rd (SR 1100)	Surry Co	1.8	20	2	-	55	15800	1800	2200	2200	15800	ADQ	ADQ	Min	Sub	
	W 52 BYP (SR 1856)	US 52 to Old Westfield Rd (SR 1809)	Pilot Mountain	1.4	22	2	100	35	15800	5200	7000	7000	15800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Other Modes
	W 52 BYP (SR 1856)	NC 268 to Old Westfield Rd (SR 1829)	Pilot Mountain	0.4	22	2	100	35	13800	4300	5600	5600	13800	ADQ	ADQ	Min	Sub	
	W Atkins St (SR 1100)	Cooper St to n Crutchfield St (SR 1001)	Dobson	0.2	20	2	-	35	13800	2900	3600	3600	13800	ADQ	ADQ	Min	Sub	T
	W Atkins St)SR 1100)	N Crutchfield St (SR 1001) to N Main St	Dobson	0.1	20	2	-	35	13800	4200	5200	5200	13800	ADQ	ADQ	Min	Sub	T
	W Dodson Mill Rd (SR 1953)	Cook School Rd (SR 2012) to NC 268	Surry Co	3.8	20	2	-	55	15800	500	800	800	15800	ADQ	ADQ	Min	Sub	
	W Greenhill Rd (SR 1700)	Fancy Gap Rd (SR 1640) to US 52	Surry Co	0.3	20	2	60	55	15800	800	1400	1400	15800	ADQ	ADQ	Min	Sub	
	W Kapp St (SR 1001)	N Crutchfield St (SR 1001) to N Main St	Dobson	0.1	48	2	60	35	13800	6800	8400	8400	13800	ADQ	ADQ	Min	Sub	
	W Kapp St (SR 1001)	WR Gillespie Rd (SR 1102) to N Crutchfield St (SR	Dobson	2.2	22	2	60	55	15800	6500	8000	8000	15800	ADQ	ADQ	Min	Sub	
	W Main St (SR 1857)	US 52 to Old Westfield Rd (SR 1809)	Pilot Mountain	1.2	22	2	-	35	15800	6400	8400	8400	15800	ADQ	ADQ	Min	Sub	
	W Main St (SR 1857)	NC 268 to Friends St	Pilot Mountain	0.3	36	2	-	35	13800	5800	7200	7200	13800	ADQ	ADQ	Min	Sub	
	W Main St (SR 1857)	S Stephens St to S Depot St	Pilot Mountain	0.1	44	2	60	20	13800	5100	6300	6300	13800	ADQ	ADQ	Min	Sub	
	W Main St (SR 1857)	NC 268 to S Stephens St	Pilot Mountain	0.1	39	2	60	20	13800	5500	6800	6800	13800	ADQ	ADQ	Min	Sub	
	W Main St (SR 1857)	Old Westfield Rd (SR 1809) to Friends St	Pilot Mountain	0.1	36	2	-	35	13800	5300	6500	6500	13800	ADQ	ADQ	Min	Sub	
	W Marion St	NC 268 to S Stephens St	Pilot Mountain	0.1	20	2	-	35	13800	1300	1600	1600	13800	ADQ	ADQ	Min	Reg	
	W Marion St	S Stephens St to S Depot St	Pilot Mountain	0.1	20	2	-	35	13800	1100	1400	1400	13800	ADQ	ADQ	Min	Sub	
	W Pine St	NC 268 to S Stephens St	Pilot Mountain	0.1	20	2	-	35	13800	2000	2500	2500	13800	ADQ	ADQ	Min	Reg	
	W Pine St	S Stephens St to S Depot St	Pilot Mountain	0.1	20	2	-	35	13800	1500	1800	1800	13800	ADQ	ADQ	Min	Sub	
	Wards Gap Rd (SR 1717)	N Main St (SR 1701) to Mount View Dr (SR 1717)	Surry Co	0.5	18	2	-	35	13800	2500	3800	3800	13800	ADQ	ADQ	Min	Sub	
	Wards Gap Rd (SR 1717)	Mount View Rd (SR 1717) to State Line	Surry Co	1.6	18	2	-	35	13800	1900	3400	3400	13800	ADQ	ADQ	Min	Sub	

HIGHWAY																			
					2010 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2010 AADT	2040 AADT E+C	2040 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Westlake Dr (SR 2406)	Galax Trl (SR 1648) to US 52	Mount Airy	0.6	24	2	100	35	13800	3600	6700	6700	13800	ADQ	ADQ	Min	Sub	
	Westlake Dr (SR 2406)	N Franklin Rd (SR 1394) to Galax Trl (SR 1648)	Surry Co	0.3	24	2	80	55	13800	2600	4700	4700	13800	ADQ	ADQ	Min	Sub	
	Willis Gap Rd (SR 1724)	NC 104 to State Line	Surry Co	1.1	20	2	-	55	15800	1100	1800	1800	15800	ADQ	ADQ	Min	Sub	
	Worth St (SR 2426)	Rockford St (SR 2426) to Newsome St	Mount Airy	0.3	20	2	-	35	13800	3500	6900	6900	13800	ADQ	ADQ	Min	Sub	
	Worth St (SR 2426)	US 52 to Rockford St (SR 2426)	Mount Airy	0.4	20	2	-	35	13800	3200	4400	4400	13800	ADQ	ADQ	Min	Sub	
	Worth St (SR 2426)	S Main St to Newsome St	Mount Airy	0.4	20	2	-	35	13800	3700	5900	5900	13800	ADQ	ADQ	Min	Reg	
	Zephyr Mountain Park Rd (SR 1315)	Golden Rd (SR 1314) to County Line	Surry Co	0.5	18	2	-	55	15800	1500	1700	1700	15800	ADQ	ADQ	Min	Sub	
	Zephyr Mountain Park Rd (SR 1315)	Mountain Park Rd (SR 1307) to Zephyr Rd (SR 1001)	Surry Co	2.2	18	2	-	55	15800	1500	1700	1700	15800	ADQ	ADQ	Min	Sub	
	Zephyr Mountain Park Rd (SR 1315)	Golden Rd (SR 1314) to Mountain Park Rd (SR 1307)	Surry Co	0.7	18	2	-	55	15800	1200	1400	1400	15800	ADQ	ADQ	Min	Sub	
	Zephyr Mountain Park Rd (SR 1315)	Golden Rd (SR 1314) to Zephyr Mountain Park (SR 13	Surry Co	2.1	18	2	-	55	15800	1300	1500	1500	15800	ADQ	ADQ	Min	Sub	
	Zephyr Rd (SR 1001)	Poplar Springs Rd (SR 1001) to I-77	Surry Co	3.1	20	2	60	55	15800	800	1200	1200	15800	ADQ	ADQ	Min	Sub	
	Zephyr Rd (SR 1001)	I-77 to Twin Oaks Rd (SR 1110)	Surry Co	0.2	22	2	60	55	15800	4700	5800	5800	15800	ADQ	ADQ	Min	Sub	
	Zephyr Rd (SR 1001)	I-77 to Dobson west city limits	Surry Co	1.5	24	2	60	55	15800	4700	5800	5800	15800	ADQ	ADQ	Min	Sub	

PUBLIC TRANSPORTATION AND RAIL

PUBLIC TRANSPORTATION[1]							
					Existing System	Proposed System	
Local ID	Facility/ Route	Section (From - To)	Speed Limit (mph)	Distance (mi)	Type	Type	Other Modes
	Surry Express	Downtown Mt. Airy - Stokes Co. Line (to Winston-Salem)	20-55		Bus		H
	Mount Airy- Dobson Circulator	Mt. Airy - Dobson	20-55			Bus	H
	Dobson - Elkin Circulator	Dobson- Elkin	20-55			Bus	

[1] Only major public transportation routes and proposals are shown here. For further documentation of the public transportation system, refer to 2010 PART Regional Transit Development Plan.

RAIL												
						Existing System			Proposed System			
Local ID	Facility/ Route	Section (From - To)	Class	Speed Limit (mph)	Distance (mi)	Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	Other Modes
	Yadkin Valley Railroad (YVRR)	Mt. Airy - Stokes Co. Line (to Rural Hall)	3	5-30		Freight	25-100	< 1	Freight	25-100	< 1	--
	Yadkin Valley Railroad (YVRR)	Elkin PAB - Forsyth Co. Line (to North Wilksboro)	3	5-30		Freight	25-100	< 1	Freight	25-100	< 1	--

BICYCLE AND PEDESTRIAN [1]

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
Mount Airy								
SURR0015-H	NC 104 (Riverside Dr)	South of Kyle St to Independence Blvd (SR 1670)	0.5	--	--	Sidewalks	Both	H
SURR0001-P	Dogwood Rd	Wrenn Ave to Fairview Ave	0.1	--	--	Sidewalks	Both	--
SURR0002-P	EastHaymore Street	0.07 miles east of Rockford St (SR 2426) to Worth St (SR 1371)	0.2	--	--	Sidewalks	Both	--
SURR0003-P	East Poplar Street	0.02 miles north of Woodruff St to East Lebanon St	0.2	--	--	Sidewalks	Both	--
SURR0004-P	Hale Street	Church St to Worth St (SR 1371)	0.2	--	--	Sidewalks	Both	--
SURR0005-P	Hay Street	North South St to Orchard St	0.1	--	--	Sidewalks	Both	--
SURR0006-P	Howard Street	US 52 Bus (Lebanon St) to Charles St	0.2	--	--	Sidewalks	Both	--
SURR0007-P	Maple Street	Rawley Ave to Merritt St.	0.1	--	--	Sidewalks	Both	--
SURR0013-P	McCargo Street	Franklin St to 0.04 miles south of Franklin St	0.1	Sidewalks	West	Sidewalks	East	--
SURR0008-P	Nations Street	Trinity St to US 52 Bus (Renfro St)	0.1	--	--	Sidewalks	Both	--
SURR0009-P	N South Street (SR 1669)	Maple St to Taylor St	0.2	--	--	Sidewalks	Both	--
SURR0014-P	N Main Street	W Oakland St to Grace St	0.3	Sidewalks	West	Sidewalks	East	--
SURR0015-P	N South Street (SR 1669)	Franklin St to Lovill St (SR 2432)	0.1	Sidewalks	West	Sidewalks	East	--
SURR0016-P	N South Street (SR 1669)	W Independence Blvd to Maple St	0.2	Sidewalks	East	Sidewalks	West	--
SURR0017-P	N South Street (SR 1669)	Taylor St to Orchard St	0.3	Sidewalks	East	Sidewalks	West	--
SURR0010-P	Orchard Street	Hay St to 0.1 mile west of N South St	0.1	--	--	Sidewalks	Both	--
SURR0011-P	Penn Street	0.07 miles east of Rockford St (SR 2426) to Newsome St	0.3	--	--	Sidewalks	Both	--
SURR0012-P	Price Street	0.05 miles east of Marshall St to Rockford St (SR 2426)	0.1	--	--	Sidewalks	Both	--
Pilot Mountain								
SURR0025-P	Butler Street	Dodson St to NC 268 (Key St)	0.3	Sidewalks	West	Sidewalks	East	--
SURR0018-P	Davis Street	Main St (SR 1857) to Pine St	0.1	--	--	Sidewalks	Both	--
SURR0020-P	Depot Street	NC 268 to Howard St						
SURR0026-P	Depot Street	0.10 miles south of West 52 Bypass (SR 1856) to north of Howard St	0.1	Sidewalks	West	Sidewalks	East	--
SURR0027-P	Depot Street	North of Howard St to Main St (SR 1857)	0.1	Sidewalks	East	Sidewalks	West	--
SURR0028-P	Dodson Mill Rd (SR 2049)	Lynchburg Rd to WeStreet Main Street (SR 1857)	0.2	Sidewalks	South	Sidewalks	North	--
SURR0019-P	Dodson Street	NC 268 (Key Street) to Butler Street	0.1	--	--	Sidewalks	Both	--

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
SURR0021-P	Old Westfield Rd (SR 1809)	West Main St (SR 1857) to South of Jacks Trail	0.4	--	--	Sidewalks	Both	--
SURR0030-P	East Main Street (SR 1857)	Carson Rd (SR 1837) to 0.10 miles east of Carson Rd (SR 1837)	0.1	Sidewalks	South	Sidewalks	North	--
SURR0029-P	Friends Street	Main Street (SR 1857) to 0.14 miles on Friends Street	0.1	Sidewalks	East	Sidewalks	West	--
SURR0023-P	Lynchburg Rd	West Main St (SR 1857) to Dodson Mill Rd (SR 2049)	0.2	--	--	Sidewalks	Both	--
SURR0033-P	Lynchburg Rd	Dodson Mill Rd (SR 2049) to Pine Street	0.1	Sidewalks	East	Sidewalks	West	--
SURR0032-P	Marion Street	Streetephens Street to Depot Street	0.1	Sidewalks	North	Sidewalks	South	--
SURR0022-P	Pine Street	Streetephens Street to Davis Street	0.2	--	--	Sidewalks	Both	--
SURR0024-P	West Main Street (SR 1857)	East Surry High School Driveway to 0.3 miles east of Harris Farm Lane	0.3	--	--	Sidewalks	Both	--
SURR0031-P	West Main St (SR 1857)	East Surry High School Driveway to 0.02 miles west of Old Westfield Rd (SR 1809)	0.2	Sidewalks	North	Sidewalks	South	--
Dobson								
SURR0034-P	US 601 (Main Street)	North of College Circe (SR 1201) to south of College Place Ave	0.2	--	--	Sidewalks	Both	--
SURR0042-P	US 601 (N Main Street)	Lelia Ln to Bluemont Street	0.2	Sidewalks	West	Sidewalks	East	--
SURR0043-P	US 601 (S Main Street)	E Atkins St (SR 1100) to north of College Circle (SR 1201)	0.8	Sidewalks	West	Sidewalks	East	--
SURR0044-P	US 601 (S Main Street)	south of College Place Ave to 0.1 Mile South of College Place Ave.	0.1	Sidewalks	West	Sidewalks	East	--
SURR0035-P	Adams Street	College Circle Drive (SR 1201) to James St	0.5	--	--	Sidewalks	Both	--
SURR0045-P	Atkins Street (SR 1100)	Cooper St to Hamby Rd (SR 2248)	1.1	Sidewalks	North	Sidewalks	South	--
SURR0046-P	Bluemont Street	Crutchfield St to US 601 (Main St)	0.1	Sidewalks	North	Sidewalks	South	--
SURR0036-P	College Circle Drive (SR 1201) (South)	US 601 Business to Adams St	0.4	--	--	Sidewalks	Both	--
SURR0047-P	College Circle Drive (SR 1201) (North)	US 601 Business to Adams St	0.2	Sidewalks	North	Sidewalks	South	--
SURR0037-P	Cooper Street	James Street to W Atkins Street (SR 1100)	0.3	--	--	Sidewalks	Both	--
SURR0038-P	Crutchfield Street	Bluemont Street to 0.04 miles north of Woltz Street	0.1	--	--	Sidewalks	Both	--
SURR0048-P	Crutchfield Street	Kapp Street (SR 1001) to US 601 (Main Street)	0.6	Sidewalks	West	Sidewalks	East	--
SURR0039-P	James Street	South Crutchfield Street to Cooper Street	0.2	--	--	Sidewalks	Both	--

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
SURR0049-P	Kapp Street (SR 1001)	0.09 miles East of Royal Ln (SR 1521) to 0.06 miles West of Comer Street	0.6	Sidewalks	North	Sidewalks	South	--
SURR0040-P	Spoon Street	Adams Street to US 601 Business	0.2	--	--	Sidewalks	Both	--
SURR0041-P	White Street	Kapp Street (SR 1001) to Atkins Street (SR 1100)	0.1	--	--	Sidewalks	Both	--

MULTI-USE PATH								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Side of Street	Cross-Section	Side of Street	Cross-Section	Modes
SURR0001-M	Multi-Use Path	From Lola Lane (South of NC 268) along Black Mountain Road (SR 2097) to Pilot Mountain State Park.	3.4	--	--	--	M B	--
SURR0002-M	Multi-Use Path	From Hamlin Street along East Main Street (SR 1857) to Old Winston Road (SR 2051) to Black Mountain Road (SR 2097) Pilot Mountain State Park.	3.1	--	--	--	M B	--

1 Only major routes and proposals are shown here. For further documentation of the bicycle and pedestrian facilities and proposals refer to 2004 Surry County Scenic Bikeway Plan, 2000 Mount Airy Sidewalk Master Plan and 2005 Surry County Greenway Master Plan.

Appendix D
Typical Cross Sections

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

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

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

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

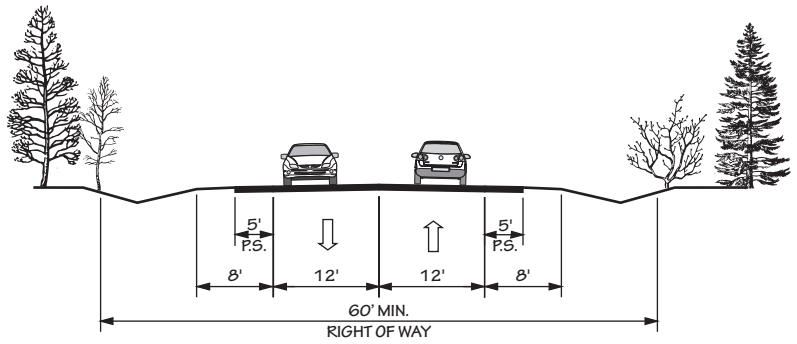
FIGURE 9

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

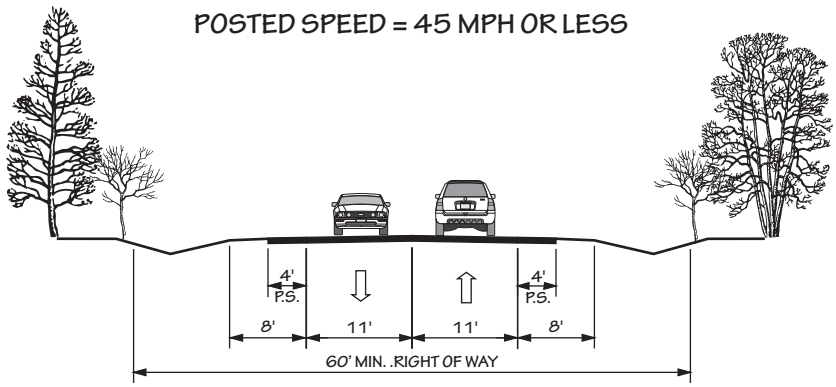
2 A

WIDE PAVED SHOULDERS
POSTED SPEED = 55 MPH



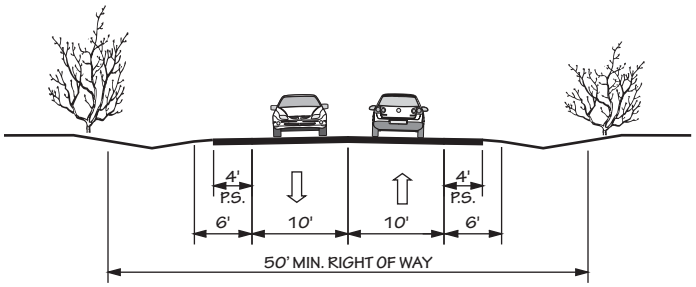
2 B

WIDE PAVED SHOULDERS
POSTED SPEED = 45 MPH OR LESS



2 C

WIDE PAVED SHOULDERS
POSTED SPEED = 35 MPH OR LESS



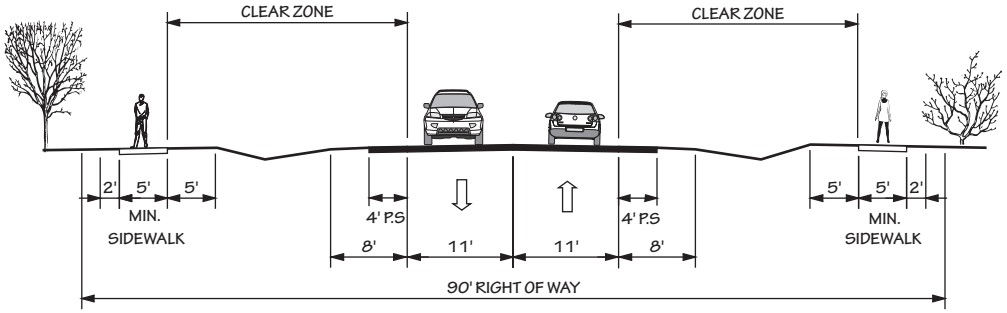
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

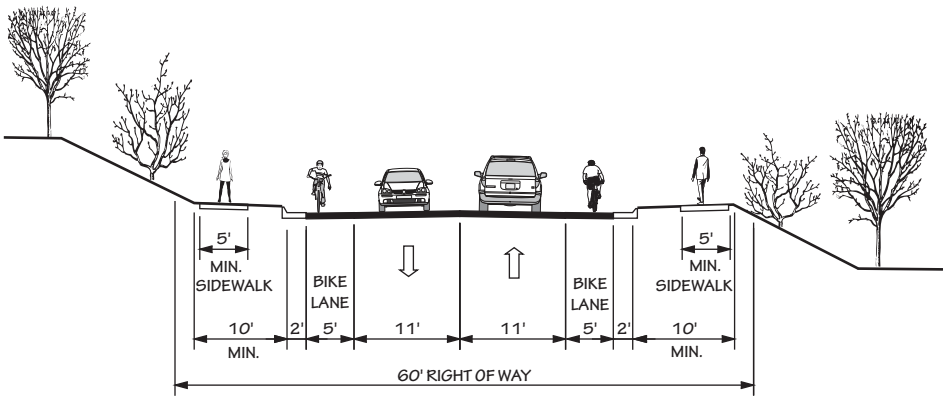
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



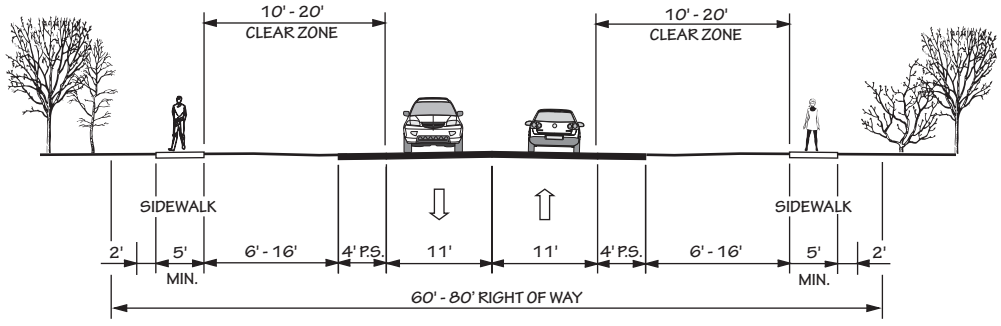
2 E

CURB AND GUTTER
WITH BIKE LANES AND SIDEWALKS



2 F

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



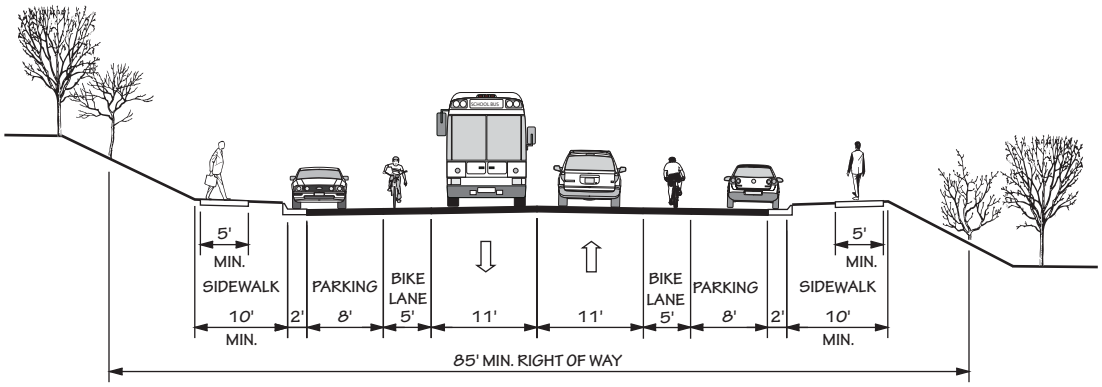
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

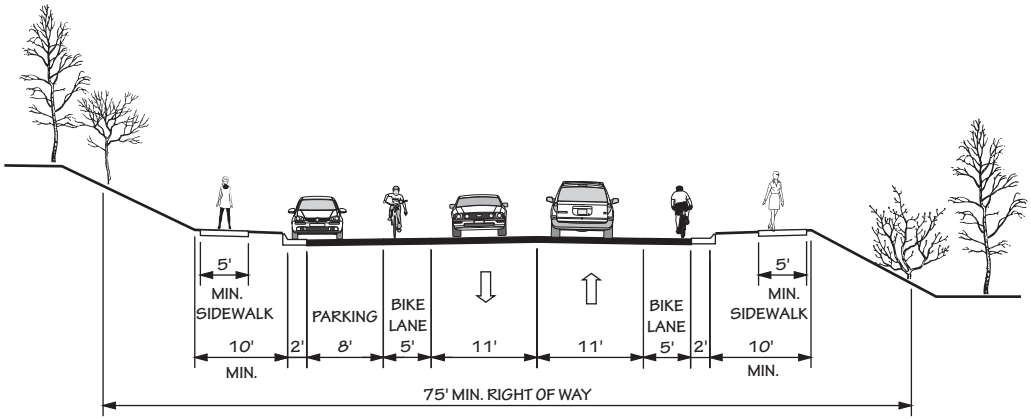
2 G

CURB & GUTTER - PARKING ON EACH SIDE



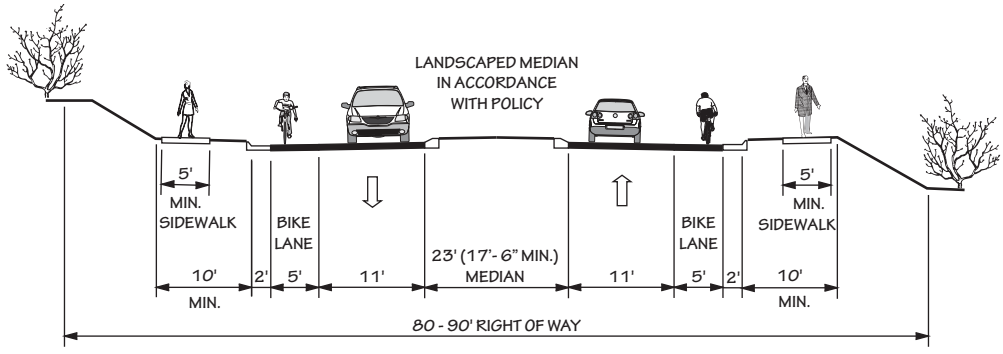
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER



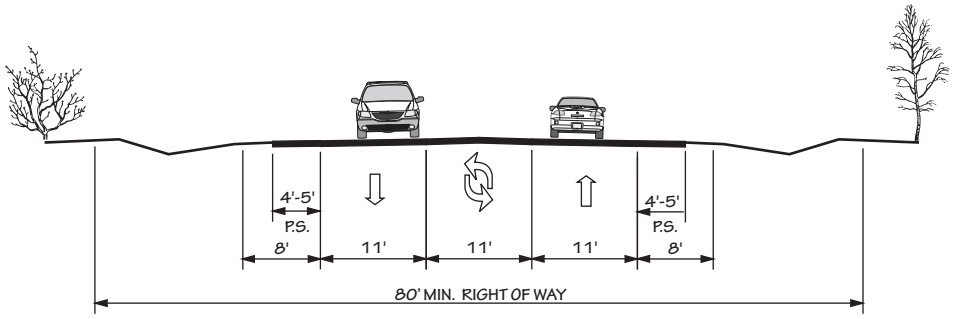
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

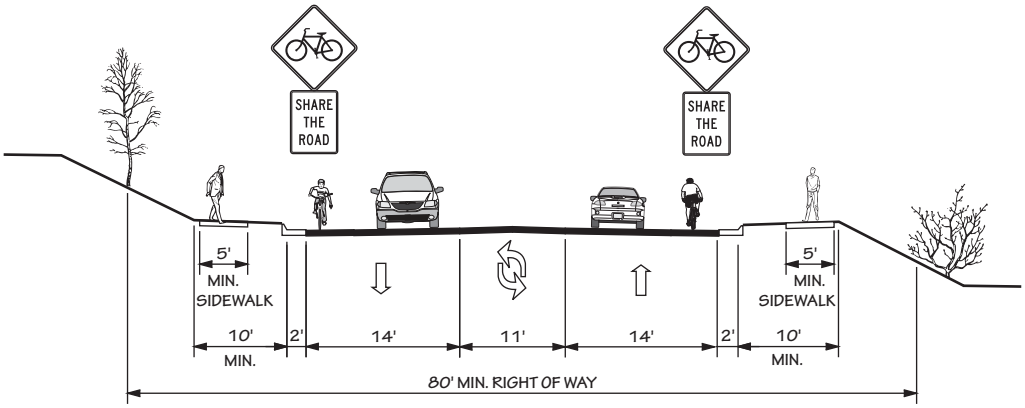
3 A

WIDE PAVED SHOULDERS



3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



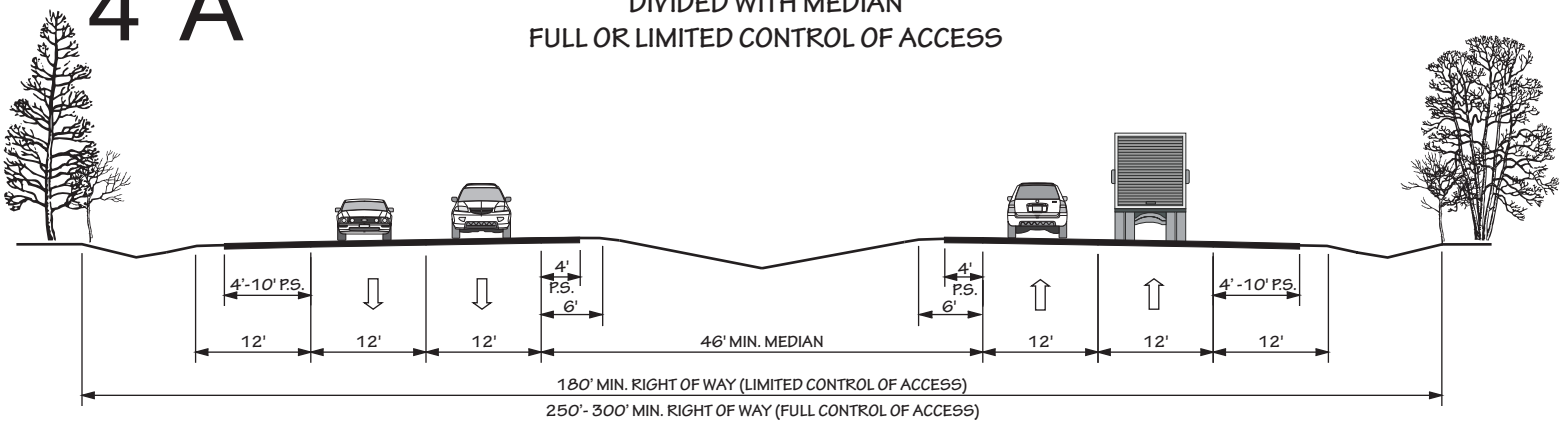
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

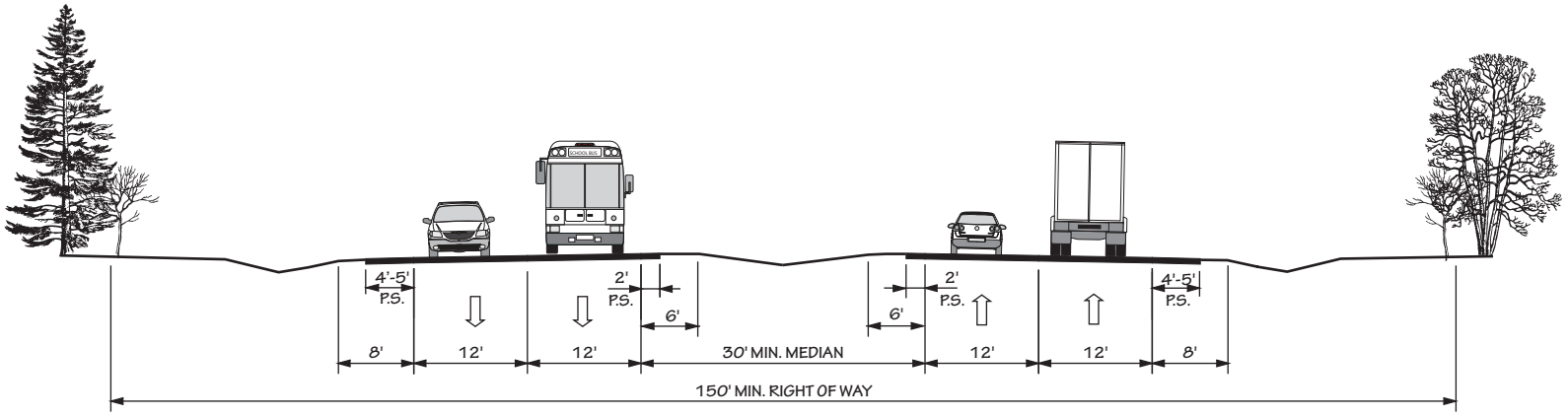
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



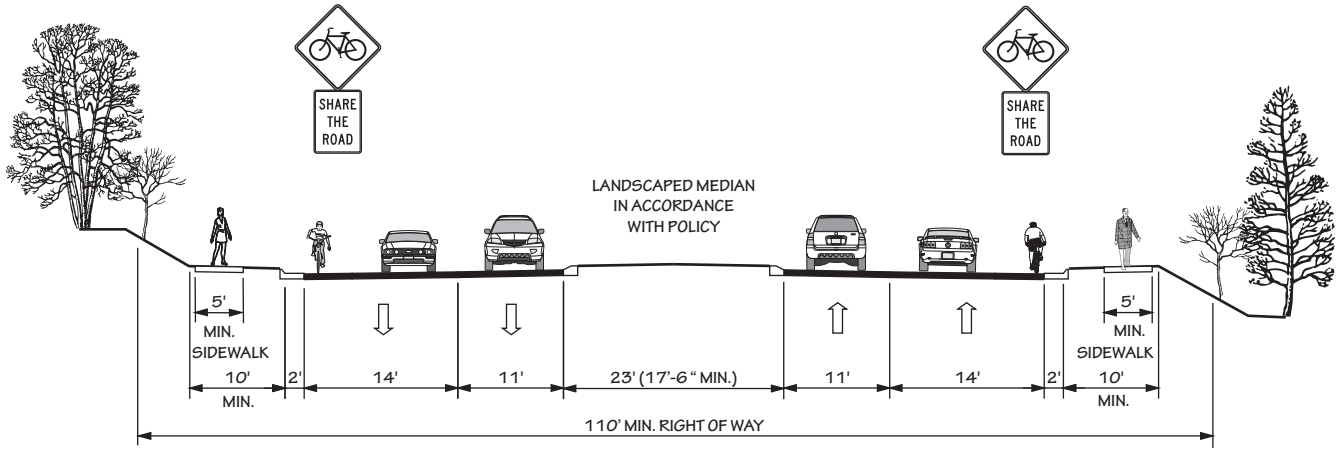
4 B

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



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS



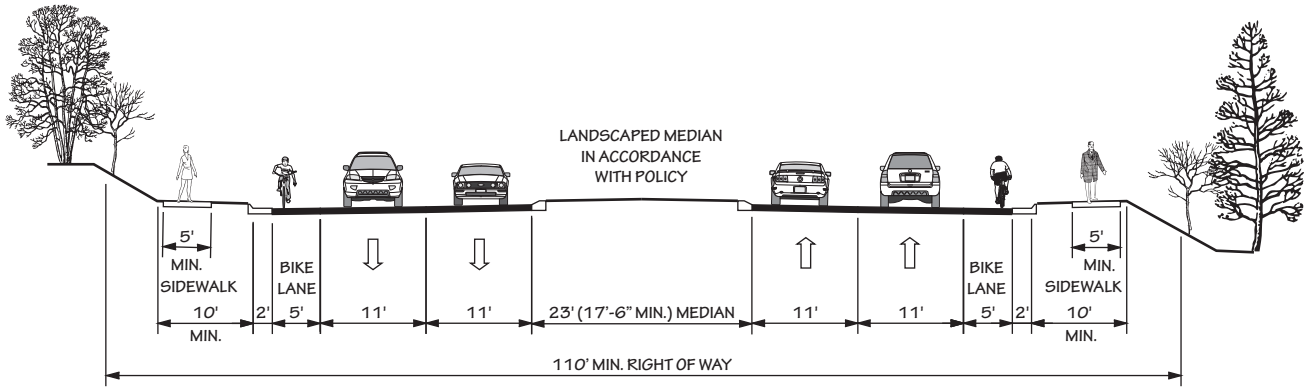
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

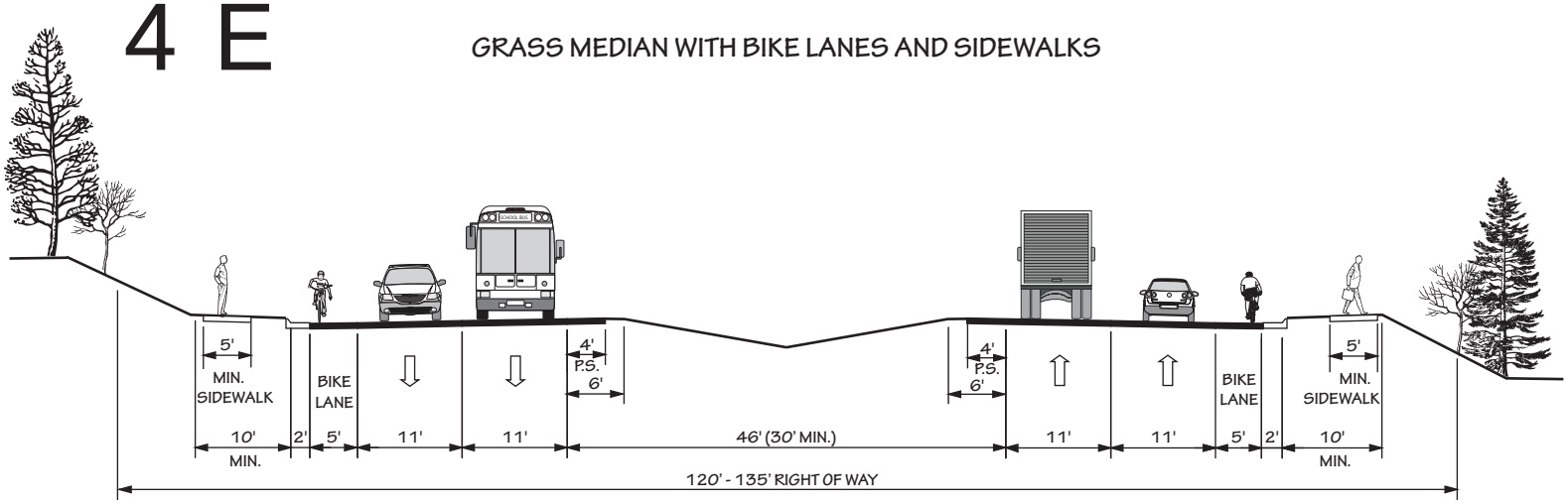
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

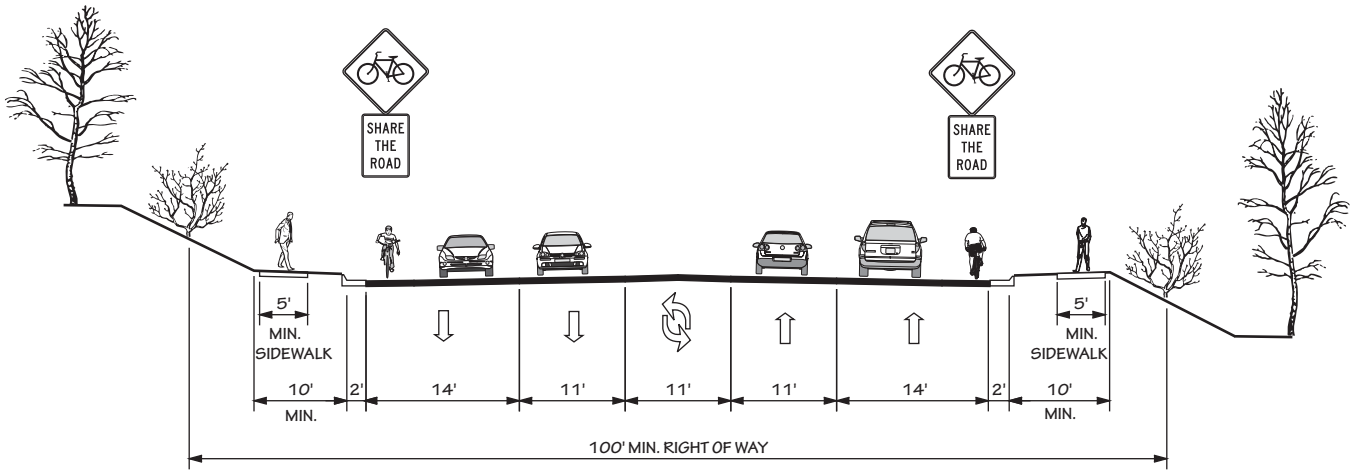
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES



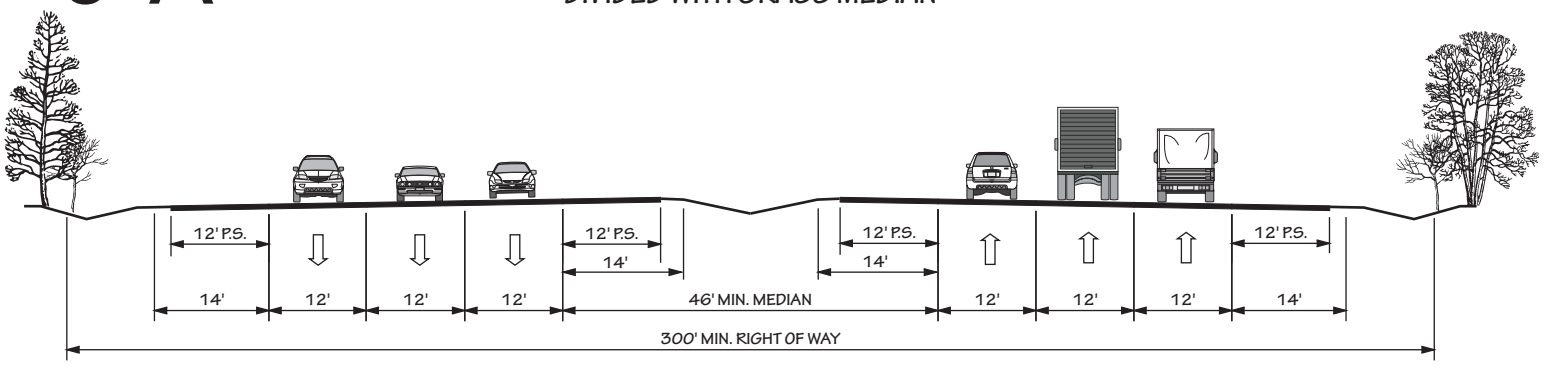
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

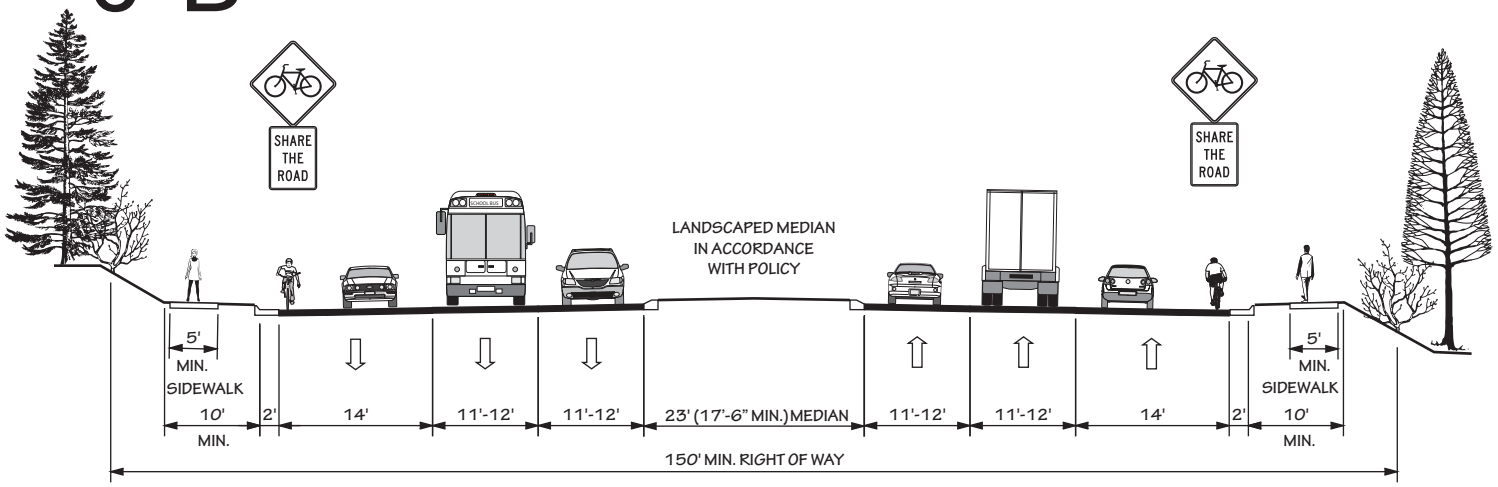
6 A

DIVIDED WITH GRASS MEDIAN



6 B

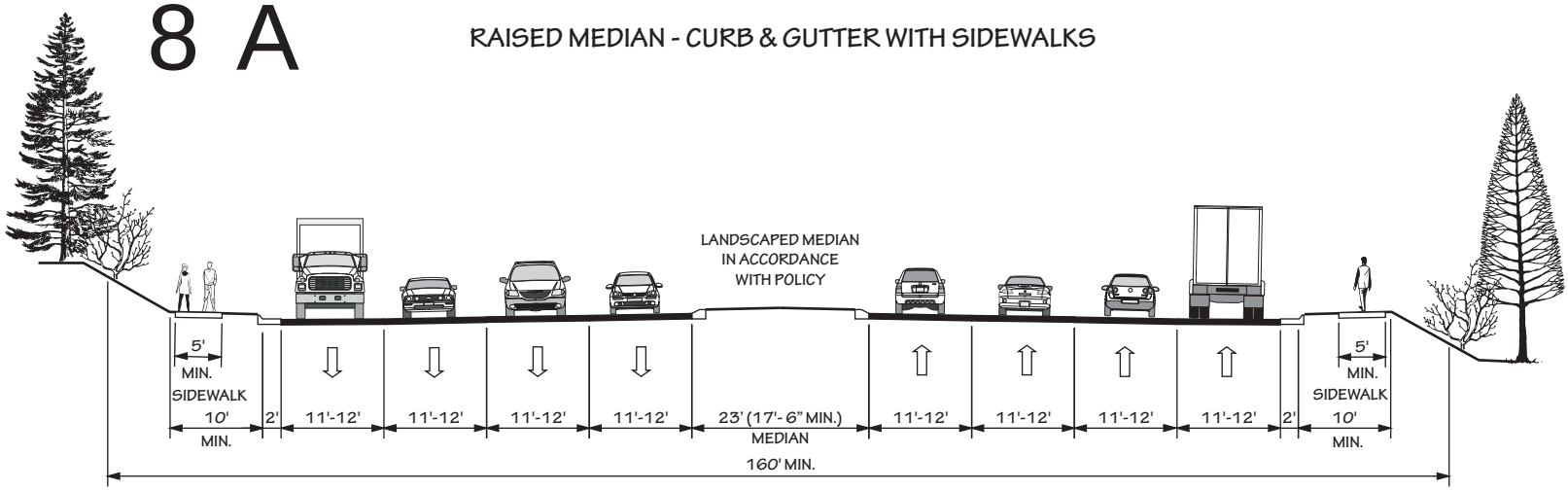
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS

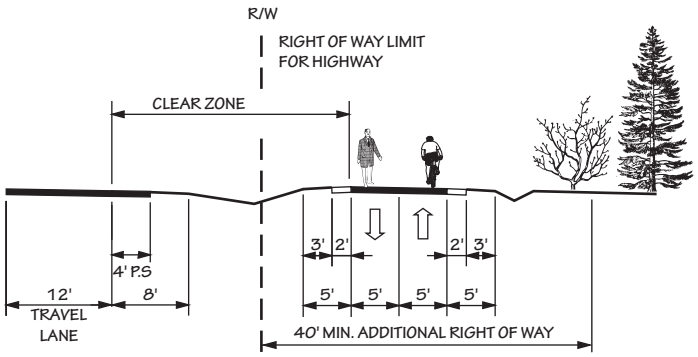


Revised 12/07/2010

TYPICAL MULTI - USE PATH

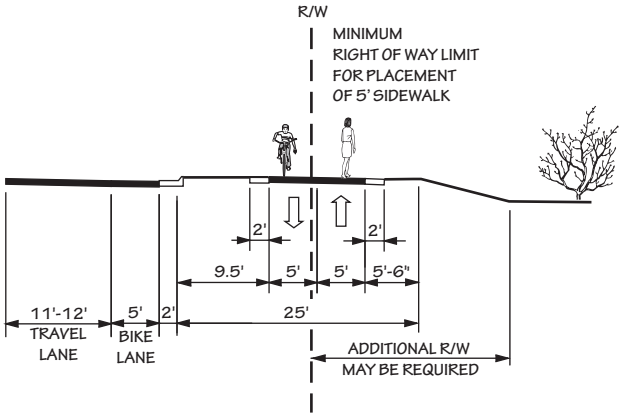
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Revised 12/07/2010

Appendix E
Level of Service Definitions

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

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

- **LOS A**: Describes primarily free flow conditions. The motorist experiences a high level of physical and psychological comfort. The effects of minor incidents of breakdown are easily absorbed. Even at the maximum density, the average spacing between vehicles is about 528 ft, or 26 car lengths.

- **LOS B**: Represents reasonably free flow conditions. The ability to maneuver within the traffic stream is only slightly restricted. The lowest average spacing between vehicles is about 330 ft, or 18 car lengths.

- **LOS C**: Provides for stable operations, but flows approach the range in which small increases will cause substantial deterioration in service. Freedom to maneuver is noticeably restricted. Minor incidents may still be absorbed, but the local decline in service will be great. Queues may be expected to form behind any significant blockage. Minimum average spacing is in the range of 220 ft, or 11 car lengths.

- **LOS D**: Borders on unstable flow. Density begins to deteriorate somewhat more quickly with increasing flow. Small increases in flow can cause substantial deterioration in service. Freedom to maneuver is severely limited, and the driver experiences drastically reduced comfort levels. Minor incidents can be expected to create substantial queuing. At the limit, vehicles are spaced at about 165 ft, or 9 car lengths.

- **LOS E**: Describes operation at capacity. Operations at this level are extremely unstable, because there are virtually no usable gaps in the traffic stream. Any disruption to the traffic stream, such as a vehicle entering from a ramp, or changing lanes, requires the following vehicles to give way to admit the vehicle. This can establish a disruption wave that propagates through the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate any disruption. Any incident can be expected to produce a serious breakdown with extensive queuing. Vehicles are spaced at approximately 6 car lengths, leaving little room to maneuver.

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

Figure 10 - Level of Service Illustrations

Level of Service A

Driver Comfort: High

Maximum Density:

12 passenger cars per mile per lane

Level of Service B

Driver Comfort: High

Maximum Density:

20 passenger cars per mile per lane

Level of Service C

Driver Comfort: Some Tension

Maximum Density:

30 passenger cars per mile per lane

Level of Service D

Driver Comfort: Poor

Maximum Density:

42 passenger cars per mile per lane

Level of Service E

Driver Comfort: Extremely Poor

Maximum Density:

67 passenger cars per mile per lane

Level of Service F

Driver Comfort: The lowest

Maximum Density:

More than 67 passenger cars per mile per lane

Source: 2000 Highway Capacity Manual

Appendix F
Traffic Crash Analysis

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

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

Severity	Severity Index
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 Collisions
1	US 52 & US 601	15.48	12
2	I 74 & US 601	12.28	10
3	I 77 & NC 89	6.55	12
4	US 601 & SR 2221	5.44	10
5	US 52 & SR 1772	5.11	18
6	Independence Blvd & Renfro St	5.04	11
7	US 601 & SR 2258	4.98	13
8	NC 103 & SR 1742	4.98	13
9	US 52 & SR 1815	4.7	12

Map Index	Intersection	Average Severity	Total Collisions
10	US 601 & Forest Dr	4.7	12
11	W Kapp St & Main St	4.54	23
12	US 52 & Arlington St	4.42	13
13	US 52 & Fredrick St	4.03	22
14	Forest Dr & Franklin St	3.73	19
15	NC 89 & Independence Blvd	3.61	17
16	Atkins St & Main St	3.47	12
17	Independence Blvd & Main St	3.22	10
18	Atkins St & McDonalds Restaurant	1	11

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 10, 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 Structure 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 quality 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
12	SR 1122	Snow Creek	Structurally Deficient	
15	SR 1315	Mitchell River	Structurally Deficient	
32	NC 103	Ararat River	Functionally Obsolete	
34	NC 104	Johnson Creek	Structurally Deficient	SURR0015-H
58	US 52 BUS	Southern RR	Functionally Obsolete	
62	SR 1350	Stewarts Creek	Structurally Deficient	
89	SR 1618	Creek	Structurally Deficient	
92	SR 1624	Pauls Creek	Structurally Deficient	
95	SR 1742	Creek	Functionally Obsolete	
113	SR 1827	Flat Shoal Creek	Functionally Obsolete	
118	SR 1100	Beaver Creek	Functionally Obsolete	
119	SR 2049	US 52	Structurally Deficient	
129	SR 2017	Flat Shoal Creek	Structurally Deficient	
156	SR 1815	US 52	Functionally Obsolete	
165	NC 268	Southern RR	Functionally Obsolete	
180	SR 1953	Toms Creek	Functionally Obsolete	
184	US 52 NBL BYPASS	Ararat River	Functionally Obsolete	
198	I-77 NBL	NC 89	Structurally Deficient	
244	SR 1809	SR 1856	Structurally Deficient	
291	SR 2012	Flat Shoal Creek	Functionally Obsolete	
292	SR 2012	Stony Creek	Functionally Obsolete	
328	SR 1856	Toms Creek	Functionally Obsolete	
360	SR 1350	I-74	Functionally Obsolete	
363	I-74 WBL	US601	Functionally Obsolete	
364	I-74 EBL	US601	Functionally Obsolete	

Appendix H
Public Involvement

This appendix includes a listing of CTP committee members; CTP vision statement; the goals and objectives survey results; and a summary of public involvement opportunities including public workshops and hearings.

CTP Committee Members

Steve Yokeley – Mount Airy Commissioner
Kim Bates – Surry County Planning Director
Josh Smith – Dobson Town Manager
Martin Collins – Mount Airy Community Development Coordinator
Marc Allred – Northwest Piedmont Rural Planning Organization Coordinator

CTP Vision Statement

Purpose: To work with Surry County, Mount Airy, Pilot Mountain and Dobson to analyze all forms of transportation utilized within these areas and develop a Comprehensive Transportation Plan to act as a guide for all future modal travel needs and recommendations.

Vision: Enhance the connectivity of Surry 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 Surry County as well as public awareness of those choices. Develop a regional transportation network that improves Surry 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 modes 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 Surry County with surrounding metropolitan areas including Greensboro, Winston Salem, and other areas.
8. Educate the public on general transportation issues as well as alternative forms of transportation.

Goals and Objectives Survey/ Results:

The Transportation Planning Branch of the North Carolina Department of Transportation, in cooperation with Surry County and Northwest Piedmont Rural Planning Organization, is developing a Comprehensive Transportation Plan for the county. Comprehensive Transportation plan is a long-range plan that identifies major transportation improvements. Your participation is essential in identifying transportation needs for the Surry County.

Transportation Goals and Objectives

1. How important are the following transportation goals?

	Not Important	*Important*	Very Important	Response Count
Increase Public Transportation Options	24.9% (48)	48.2% (93)	26.9% (52)	193
Congested Areas	18.2% (35)	49.5% (95)	26.9% (52)	192
Preserve Community and Rural Character	7.3% (14)	48.7% (93)	44.0% (84)	191
Protect the Environment	10.9% (21)	37.8% (73)	51.3% (99)	193
Support Economic Growth	3.6% (7)	35.2% (68)	61.1% (118)	193
Improve Services for Special Needs	15.3% (29)	48.9% (93)	35.8% (68)	190
Increased Transportation Mode Choices. *(More and/or safer opportunities to bike or walk to destinations instead of driving)*	18.2% (34)	50.3% (94)	31.6% (59)	187

2. Please select which of the following methods you agree with, for increasing a road's efficiency:

	Agree	Disagree	Response Count
Building additional travel lanes	73.2% (139)	26.8% (51)	190
Making improvements to intersection such as better traffic signal timing, adding guard rails, creating roundabouts	88.4% (168)	11.6% (22)	190
Controlling the frequency and locations of driveways and cross streets that access the road	75.0% (141)	25.0% (47)	188

3. Are you concerned with safety or crash problems at any specific locations?

Yes	53.1% (102)
No	46.9% (90)

Rank	Top 3 locations of specific safety concerns	Responses
1	Intersection off North Main - Country Club, Grace, Lebanon, and N South Street	5
2	Intersection of US52 and US 601	4
3	Intersection of 601 and Rockford	3

4. Is truck traffic a problem in the area?

Yes	74.5% (140)
No	25.5% (48)

Rank	Top 2 examples of truck traffic problems in Surry County	Responses
1	NC 268	6
2	Pine Street	5

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) A direct route does not exist?

Yes	89.9% (170)
No	10.1% (19)

Top example of connectivity problems in Surry County was mentioned as one way Main Street with two (2) responses.

B) The most direct route is too congested?

Yes	79.3% (138)
No	20.7% (36)

Rank	Top 3 examples of congestion problems in Surry County	Responses
1	The intersection of US 601 and US 52	9
2	US 601	6
3	Downtown Mt. Airy	2

6. Rank the following reasons why new roads should be planned:
(1 is the most important, 5 is the least important)

	1	2	3	4	5
To urbanize the rural land outside municipal limits	7.9% (13)	16.4% (27)	17.6% (29)	16.4% (27)	41.8% (xx)
To increase the tax base	11.0% (18)	15.9% (26)	16.5% (27)	20.7% (34)	36.0%
To control growth	27.4% (45)	15.2% (25)	25.0% (41)	11.0% (18)	21.3%
To revitalize existing developed areas	29.7% (49)	17.0% (28)	23.0% (38)	12.7% (21)	17.6%
To limit land acquisition cost for future projects.	14.7% 924)	17.8% (29)	25.8% (42)	21.5% (35)	20.2%

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

	Response
Winston-Salem	52.9% (82)
Greensboro	25.2% (39)
Galax, VA	32.3% (50)
Statesville/Charlotte	14.8% (23)
Boone, NC	21.3% (33)
Other	21.3% (33)

Rank	Top 3 examples of improved access in Surry County	Responses
1	Mt. Airy	6
2	Dobson	5
3	Triangle	4

8. What Roads would you like to have improved access (please check all that apply)?

	Response
I-77	18.8% (27)
I-74	11.8% (17)
US 52	34.7% (50)
US 601	49.3% (71)
NC 89	45.1% (65)
NC 268	23.6% (34)
NC 103	12.5% (18)
NC 104	4.2% (6)
Bus 601 (Dobson)	25.0% (36)
Bus 52 (Mt Airy)	27.1% (39)
Bus 52 (Pilot Mountain)	9.0% (13)
Other	7.6% (11)

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

Yes	37.7% (66)
No	62.3% (109)

Rank	Top 3 location for sidewalks in Surry County	Responses
1	Downtown Mt. Airy	10
2	Renfro Street	8
3	North Main Street	6

10. Would you use off-road Trails or Greenways for walking and bicycling?

Yes	56.7% (102)
No	43.3% (78)

Top example of off-road trails or greenway was connecting existing greenways in Mt. Airy with two (2) responses.

11. Would you use on-road bicycle facilities such as bicycle lanes and wide shoulders?

Yes	47.3% (80)
No	52.7% (89)

All Bike Routes should be equipped with bike lanes for the safety of car and cyclists was mentioned in thirteen (13) responses.

12. Would you use park-and-ride lots*? (A park-and-ride lot is a parking area where you can leave your car and take pubic transportation or carpool to your destination.)*

Yes	57.1% (80)
No	42.9% (60)

13. *Please answer 'yes' or 'no' if you would use each service listed below*

	Yes	No
Bus Service to the Triangle (Raleigh)	30.7% (51)	69.3% (115)
Bus Service to the Winston-Salem	60.6% (106)	39.4% (69)
Bus Service to the Greensboro	34.0% (55)	66.0% (107)
Bus Service to the Charlotte	37.2% (61)	62.8% (103)

14. Would you use Bus Service to another location?

Yes	15.8% (24)
No	84.2% (128)

15. What is your Zip Code?

	Response
27007	3.7% (7)
27024	2.1% (4)
27041	5.9% (11)
27047	0.0% (0)
27017	9.0% (17)
27030	67.0% (126)
27043	3.2% (6)
28621	3.7% (7)
28676	3.2% (6)
28683	0.0% (0)
Other	2.1% (4)

Public Meetings:

Public Workshop #1 at the City of Mount Airy City Hall:

The first public workshop took place at the Mount Airy City Hall on April 20, 2011 from 5:00-7:00 pm. This workshop introduced the CTP process as well as what could be expected of the final plan. Draft CTP highway maps and deficiency maps were presented. Seven citizens were in attendance. They were given the opportunity to look through the recommendations and give additional feedback if anything needed to be added, removed, or changed. The only comment received regarding highway projects during the workshop was not to add Independence and McKinney Ext. to the map.

Public Workshop #2 at Surry County Government Center building:

The second public workshop took place at Surry County Government Center on April 21, 2011 from 5:00-7:00 pm. This workshop introduced the CTP process as well as what could be expected of the final plan. Draft CTP highway maps and deficiency maps were presented. Three citizens were in attendance. They were given the opportunity to look through the recommendations and give additional feedback if anything needed to be added, removed, or changed. The only comment received regarding highway projects during the workshop was to multi-lane US 601 to the southern interchange with Bus 601.

Comments regarding bicycle and pedestrian mode were:

- Wide outside lane/ bike lane for NC 268/ W 52 Bypass; Needs improvement for N Main St, Dobson, where no on-street parking;
- Connect existing sidewalk on NC 268 to transit stop in Pilot Mountain.

Public Workshop #3 at Surry County Government Center building:

The third public workshop took place at the Surry County Government Center on October 13, 2011 from 4:00-6:00 pm. Draft CTP Maps were presented. Two citizens were in attendance. They were given the opportunity to look through the recommendations and give additional feedback if anything needed to be added, removed, or changed. As a result of the feedback from this public workshop, new pedestrian facilities were added in Dobson and a multi-use path was added in Pilot Mountain.

Public Hearings:

A public hearing was held on December 19, 2011 during the Pilot Mountain Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted at this meeting.

A public hearing was held on January 5, 2012 during the Mount Airy City Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was presented for adoption at January 19, 2012 city council meeting. The CTP was adopted at this meeting with the recommendation that US 601 from US 52 to Forrest Drive (SR 1365) be designated as an Other Major Thoroughfare instead of a Boulevard. The highway map was revised on January 31, 2012 to reflect this change.

A public hearing was held on January 17, 2012 during the Surry County Commissioners meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted at this meeting. Surry County Commissioners reaffirmed the adoption of the Surry County CTP as revised, on February 20, 2012.

A public hearing was held on January 26, 2012 during the Dobson Town Council meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted at this meeting.