Comprehensive Transportation Plan

Northampton County

September 2012

Comprehensive Transportation Plan

Northampton County

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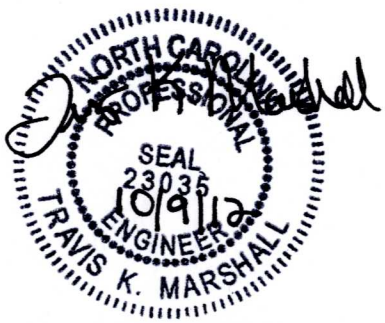
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Northampton County
Conway
Jackson
Lasker
Rich Square
Seaboard
Severn
Woodland
Peanut Belt Rural Planning Organization

September 2012



Travis K. Marshall, PE
Eastern Planning Unit Head

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Executive Summary

In December of 2007, the Transportation Planning Branch of the North Carolina Department of Transportation and Northampton County initiated a study to cooperatively develop the Northampton County Comprehensive Transportation Plan (CTP), which includes the towns of Conway, Jackson, Lasker, Rich Square, Seaboard, Severn, and Woodland. This is a long range multi-modal transportation plan that covers transportation needs through the year 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover standard bridge replacements, routine maintenance, or minor operations issues. Refer to Appendix A for contact information on these types of issues.

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

- **US 158 – (TIP No. R-2582):** Widen to multi-lanes with a bypass around the town of Jackson from US 158/NC 46 in Roanoke Rapids to Lynch Road (SR 1333).

- **US 158 – (TIP No. R-2584):** Widen to multi-lanes with a bypass around the town of Conway from Mount Caramel Church Road (SR 1333) east of Jackson to the Murfreesboro Bypass.

- **US 258 – (Local ID: NORT0001):** Widen to 24 feet with paved shoulders and turn lanes where necessary from the Halifax County Line to the Rich Square town limits.

- **NC 35 – (Local ID: NORT0002):** Widen to 24 feet with paved shoulders and include turn lanes at all major intersections. It is also recommended that sharp horizontal curves be modified in some areas.

- **NC 46 – (Local ID: NORT0003):** Widen to 24 feet with paved shoulders and include turn lanes at all major intersections. It is also recommended that sharp horizontal curves be modified in some areas.

- **NC 305 – (Local ID: NORT0004):** Widen to 24 feet with paved shoulders from Seaboard to the Hertford County Line and include turn lanes at all major intersections.

Adopted by:

Town of Conway
Date: 9-6-2011

Town of Jackson
Date: 9-14-2011

Town of Lasker
Date: 9-19-2011

Town of Rich Square
Date: 9-1-2011

Town of Seaboard
Date: 9-13-2011

Town of Severn
Date: 9-5-2011

Town of Woodland
Date: 9-8-2011

Northampton County
Date: 9-19-2011

NCDOT
Date: 1-5-2012

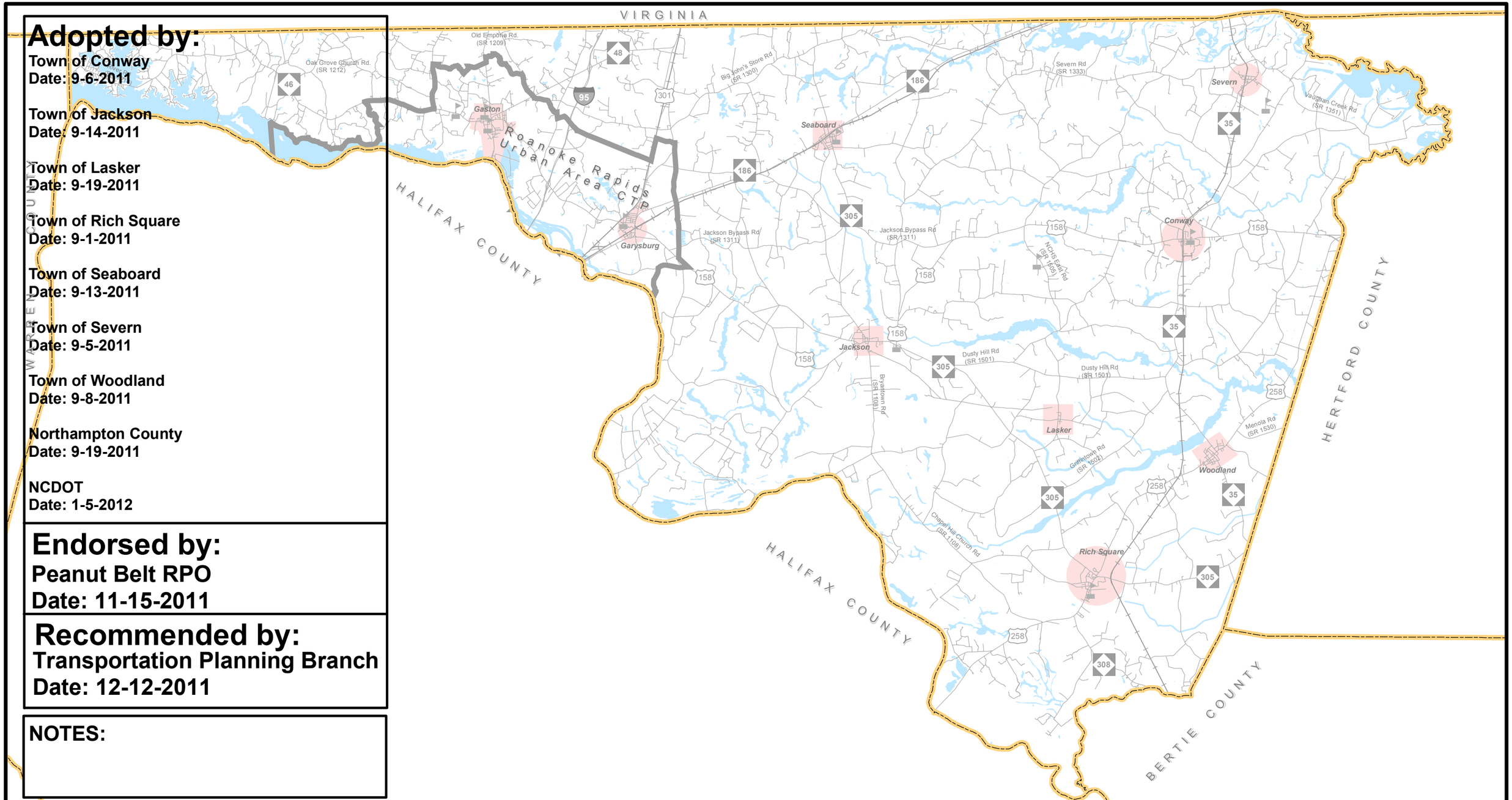
Endorsed by:

Peanut Belt RPO
Date: 11-15-2011

Recommended by:

Transportation Planning Branch
Date: 12-12-2011

NOTES:



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

County Boundary
Roanoke Rapids Boundary
Municipal Boundaries
Lakes
Schools
Roads
Railroads
Rivers and Streams

0 1 2 4 6 Miles

N W E S

Figure 1, Sheet 1 of 5

Base map date: June 2010

Refer to CTP document for more details

Northampton County

Comprehensive Transportation Plan

Plan date: 7-25-2011

VIRGINIA

WARREN COUNTY

HALIFAX COUNTY

HERTFORD COUNTY

BERTIE COUNTY

River Rd (SR 1214)

Oak Grove Church Rd (SR 1212)

Old Emporia Rd (SR 1209)

Gaston

Roanoke Rapids Urban Area CTP

Garysburg

Big John's Store Rd (SR 1300)

Seaboard

Severn Rd (SR 1333)

Severn

Vaughan Creek Rd (SR 1351)

See Inset A

Jackson Bypass Rd (SR 1311)

Conway

NCHS East Rd (SR 1505)

Jackson

Dusty Hill Rd (SR 1501)

Lasker

Lasker Rd (SR 1503)

Bryantown Rd (SR 1108)

Griffintown Rd (SR 1502)

Woodland

Menola Rd (SR 1530)

Chapel Hill Church Rd (SR 1109)

Rich Square

Inset A

R-2582

R-2584

46 48 301 95 186 305 158 35 258 561 308

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 1 2 4 6 Miles

N W E S

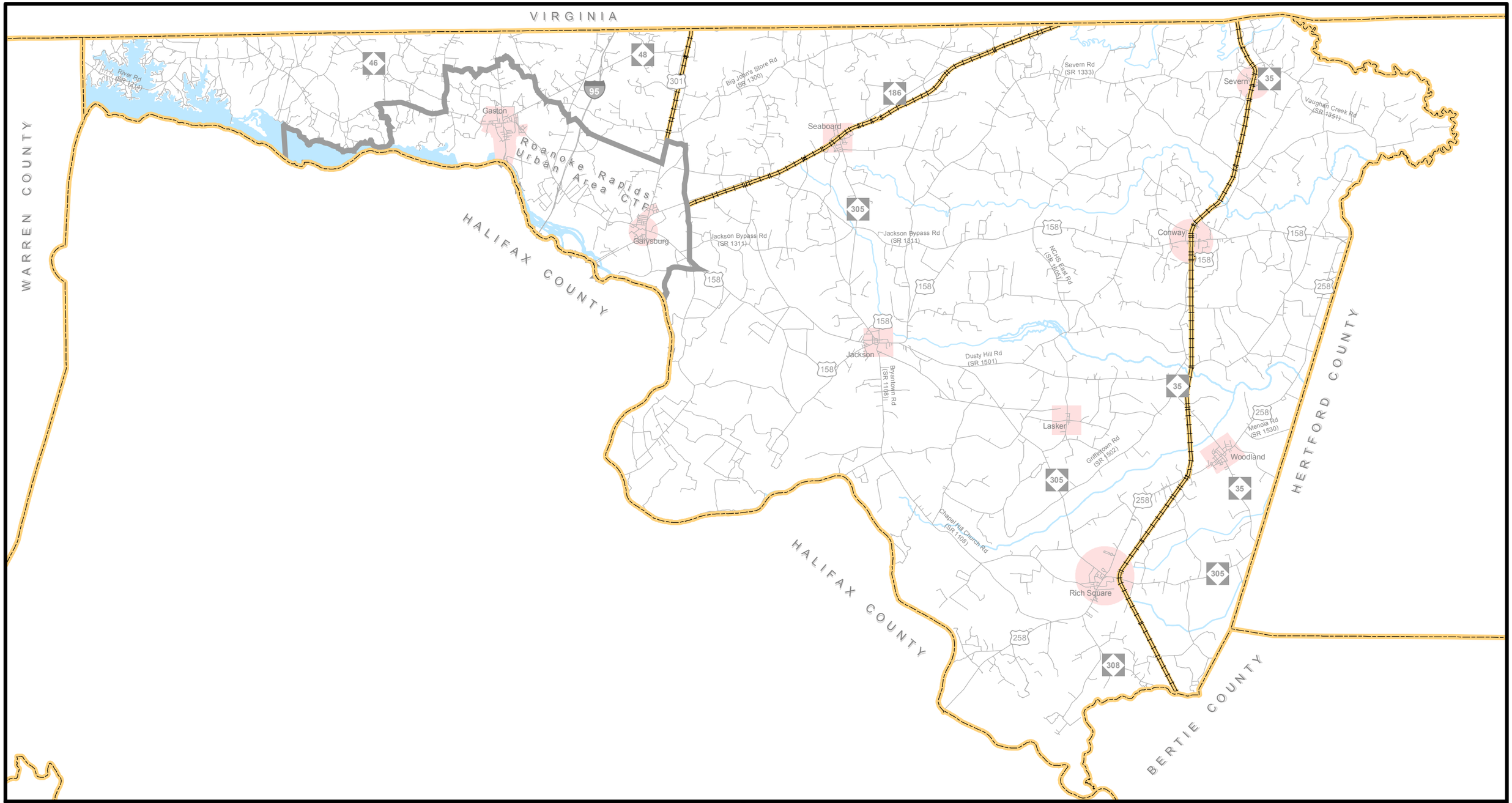
Figure 1, Sheet 2 of 5

Base map date: June 2010

Refer to CTP document for more details

Highway Map
Northampton County
Comprehensive Transportation Plan

Plan date: 7-25-2011



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

0 1 2 4 6 Miles

N W E S

Figure 1, Sheet 3 of 5

Base map date: June 2010

Refer to CTP document for more details

Public Transportation and Rail Map

Northampton County

Comprehensive Transportation Plan

Plan date: 7-25-2011

VIRGINIA

WARREN COUNTY

HALIFAX COUNTY

HERTFORD COUNTY

BERTIE COUNTY

River Rd (SR 1214)

Macon Price Rd (SR 1201)

Big John's Store Rd (SR 1300)

Peanut Market Rd (SR 1324)

Devil's Race Track (SR 1329)

Mt Carmel Rd (SR 1333)

Severn Rd (SR 1333)

Vaughan Creek Rd (SR 1351)

Calatia Rd (SR 1344)

NCHS East Rd (SR 1506)

Fire Tower Rd (SR 1500)

Dolittle Mill Rd (SR 1508)

Lasker Rd (SR 1503)

Braswell Rd (SR 1122)

Rehoboth Church Rd (SR 1123)

Bryantown Rd (SR 1108)

Chapel Hill Church Rd (SR 1106)

Gaston

Roanoke Rapids Area CTP

Garysburg

Seaboard

Severn

See Inset A

Conway

Jackson

Lasker

Woodland

Rich Square

Miles
0 0.1 0.2 0.4 0.6

Severn

Inset A

Miles
0 1 2 4 6

N
W E
S

Figure 1, Sheet 4 of 5

Base map date: June 2010

Refer to CTP document for more details

On Road
- Existing
- Needs Improvement
- Recommended

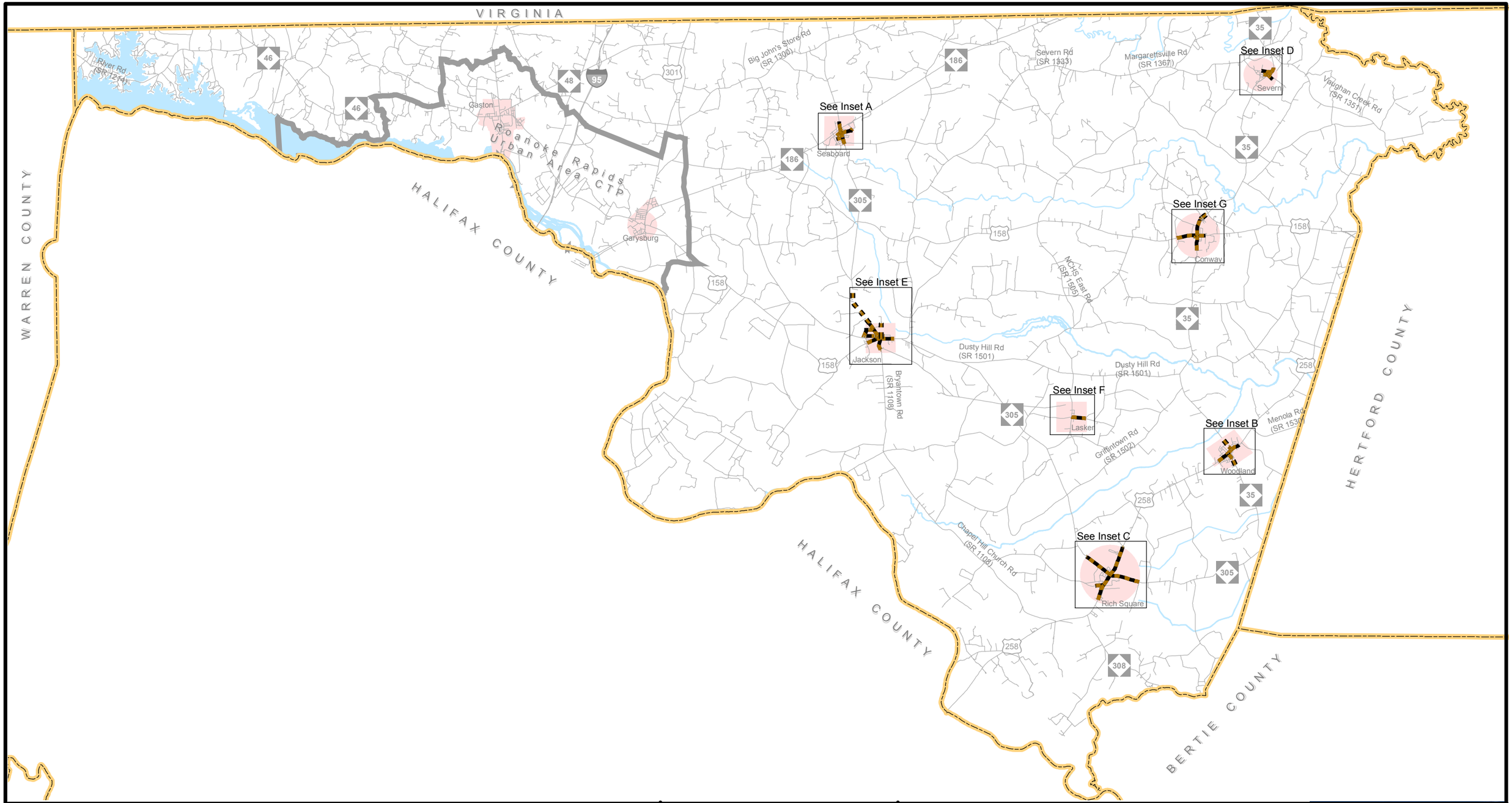
Off Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

Bicycle Map
Northampton County
Comprehensive Transportation Plan

Plan date: 7-25-2011



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 1 2 4 6 Miles

N W E S

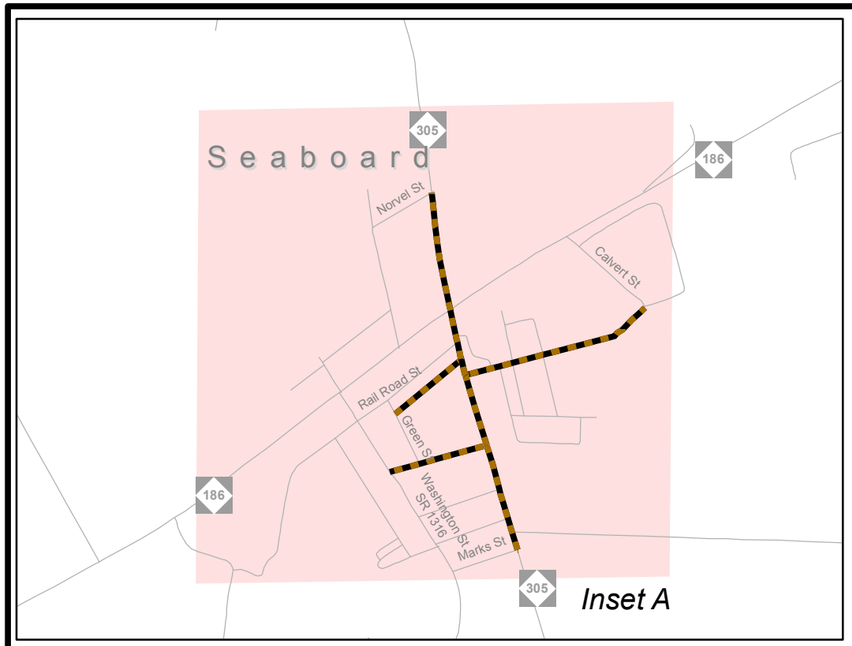
Figure 1, Sheet 5 of 5

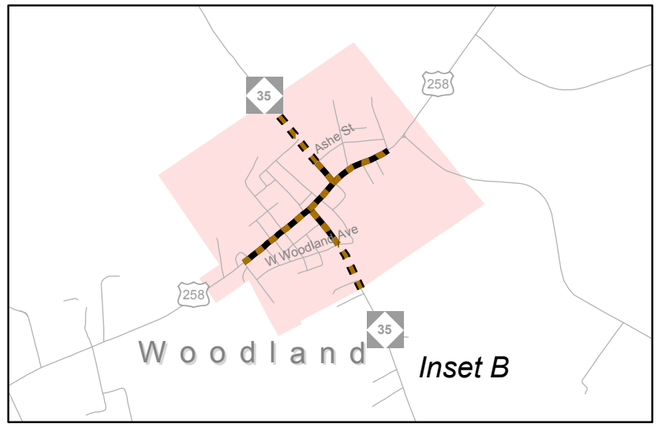
Base map date: June 2010

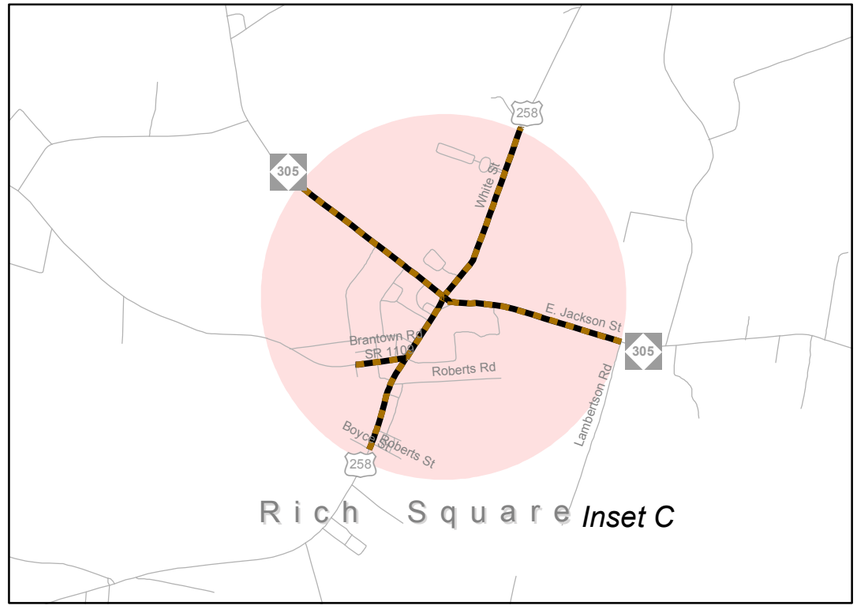
Refer to CTP document for more details

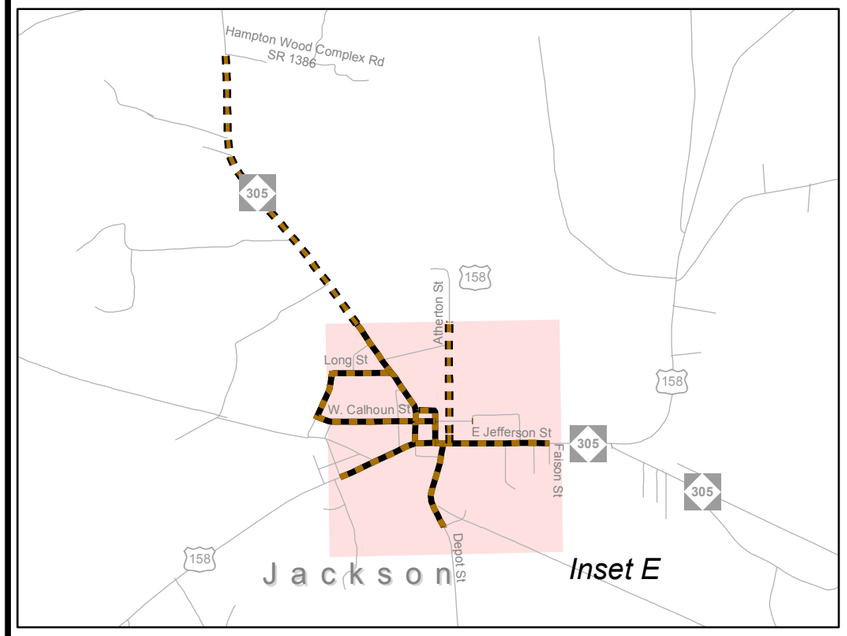
Pedestrian Map
Northampton County
Comprehensive Transportation Plan

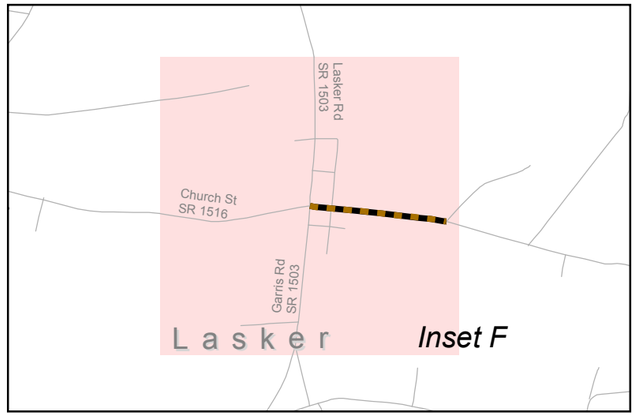
Plan date: 7-25-2011

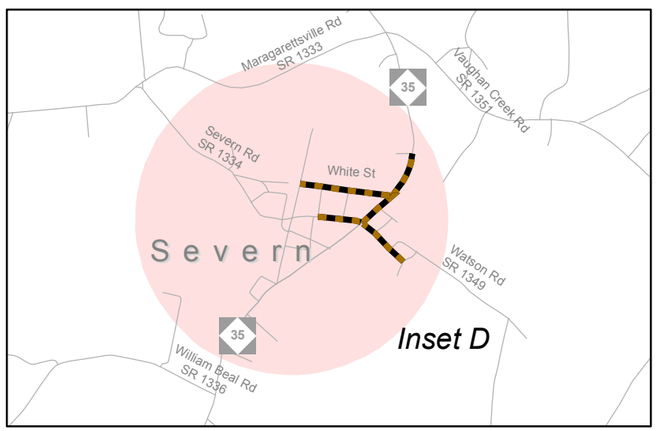


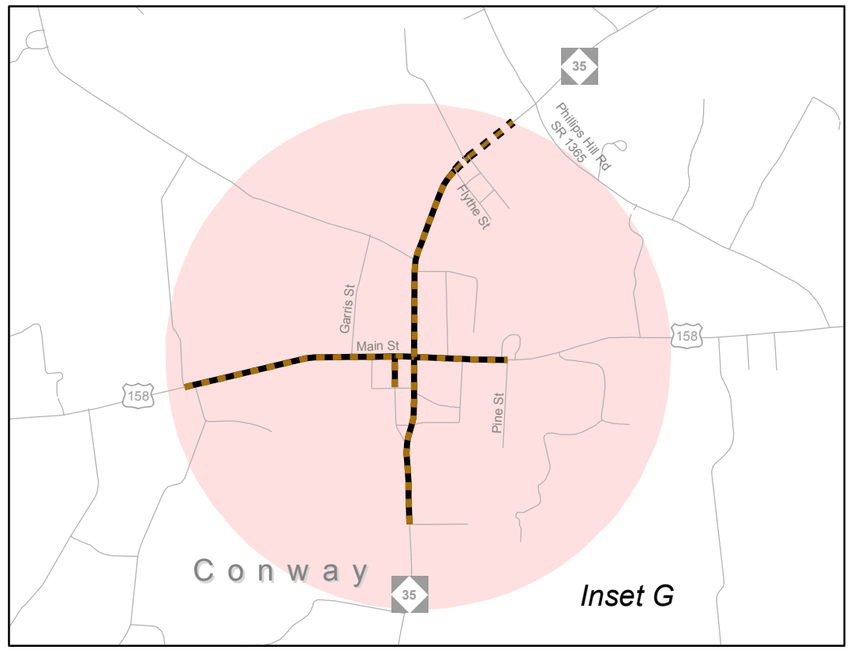












Sidewalks
- Existing
- Needs Improvement
- Recommended

Off Road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.15 0.3 0.6 0.9 Miles

N W E S

Figure 1, Sheet 5A

Base map date: June 2010

Refer to CTP document for more details

Pedestrian Map
Northampton County
Comprehensive Transportation Plan

Plan date: 7-25-2011

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 Comprehensive Transportation Plan 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 was projected from 2008 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1987 to 2008. 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 Northampton County CTP Committee on September 2, 2009.

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

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

- Geometry of the road (including number of lanes), horizontal and vertical alignment, and proximity of perceived obstructions to safe travel along the road;
- Typical users of the road, such as commuters, recreational travelers, and truck traffic;
- Access control, including streets and driveways, or lack thereof, along the roadway;
- Development along the road, including residential, commercial, agricultural, and industrial developments;
- 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 NC Level of Service (NCLOS) developed by the Institute of Transportation Research and Education (ITRE). 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 Northampton County CTP for crashes occurring in the planning area between January 1, 2008 and December 31, 2010. During this period, one intersection was 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. Eighteen deficient bridges were identified within the planning area and are illustrated in Figure 5. Refer to Appendix G for more detailed information.

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VIRGINIA

WARREN COUNTY

HALIFAX COUNTY

HERTFORD COUNTY

BERTIE COUNTY

Roanoke Rapids Urban Area CTP

Gaston

Garysburg

Seaboard

Jackson

Conway

Severn

Rich Square

Lasker

Woodland

Old Emporia Rd (SR 1209)

Oak Grove Church Rd (SR 1212)

River Rd (SR 1214)

Big John's Store Rd (SR 1300)

Jackson Bypass Rd (SR 1311)

Severn Rd (SR 1333)

Vaughan Creek Rd (SR 1351)

Nichols East Rd (SR 1358)

Dusty Hill Rd (SR 1501)

Bryantown Rd (SR 1168)

Griffintown Rd (SR 1538)

Menola Rd (SR 1530)

Chapel Hill Church Rd (SR 1200)

33,000
58,000

1,900
15,100

2,300
11,800

1,900
11,800

1,100
11,800

520
11,800

3,100
12,400

32,000
58,000

990
15,100

350
10,500

3,800
12,400

1,200
11,800

2,900
12,400

3,800
12,400

1,300
11,800

3,700
15,100

1,300
11,800

2,100
15,100

1,400
11,800

1,500
11,800

1,800
11,800

530
11,800

1,100
10,500

1,300
11,800

2,700
15,100

2700
15100

3,900
12,900

4,900
14,600

3,900
15,000

630
11,800

900
11,800

1,300
11,800

6,400
15,100

4,900
15,100

300
11,800

1,800
15,100

2,100
15,100

1,500
12,400

2,000
15,100

1,200
12,400

1,900
12,400

2,200
12,400

4,100
15,100

1,900
12,400

2,900
15,100

Legend

- County Boundary
- Roanoke Rapids Boundary
- Municipal Boundaries
- Lakes
- Railroads
- Rivers and Streams
- Roads
- Study Roads
- Near Capacity (0.8-0.99)
- Over Capacity (1.00-1.49)
- #### / #### 2008 Volumes (AADT) / 2008 Capacity

0 1 2 4 6 Miles

N W E S

Figure 2

Base map date: May 2009

2008 Volumes and Capacity Deficiencies
Northampton County
Comprehensive Transportation Plan

Plan date: 7-25-2011

VIRGINIA

WARREN COUNTY

HALIFAX COUNTY

HERTFORD COUNTY

BERTIE COUNTY

Roanoke Rapids Urban Area CTP

2,500
14,300

1,400
11,800

700
14,300

4,100
14,300

3,900
14,300

48,000
58,000

48,000
58,000

2,500
15,100

500
14300

1300
15,100

3,800
12,400

5,000
12,400

3,800
12,400

1,600
14,300

1,700
14,300

8,700
54,800

1,700
14,300

1,800
11,800

700
11,800

2,000
14,300

2,400
14,300

1400
14300

1,700
14,300

2,500
54,800

3,500
15,100

8,300
54,800

2,100
54,800

800
14,300

6,400
14,600

7,200
15,100

1,200
11,800

1,700
14,300

9,300
15,100

9,300
15,100

2,000
14,300

400
11,800

4,200
15,100

3,700
15,100

1,600
14,300

1,600
11,800

4,000
15,100

2,500
14,300

2,900
14,300

9,600
15,100

2,500
14,300

4,500
15,100

Gaston

Garysburg

Jackson

Conway

Lasker

Woodland

Rich Square

Seaboard

Old Emporia Rd. (SR 1209)

River Rd (SR 1214)

Oak Grove Church Rd (SR

Big John Rd (SR 1300)

Jackson Bypass Rd (SR 1311)

Jackson By (SR 131

NCNS Edwin Rd (SR 1855)

Dusty Hill Rd (SR 1501)

Bryantown Rd (SR 1100)

Griffletown Rd (SR 1503)

Chapel Hill Church Rd (SR 1410)

Vaughan Creek Rd (SR 1351)

Menola Rd (SR 1530)

(SR 1333)

46 48 95 301 186 305 158 35 258 561 308

County Boundary
Roanoke Rapids Boundary
Municipal Boundaries
Lakes
Railroads
Rivers and Streams
Roads
Study Roads
Near Capacity (0.8-0.99)
Over Capacity (1.00-1.49)
2035 Volumes (AADT)
2035 Capacity

0 1 2 4 6 Miles

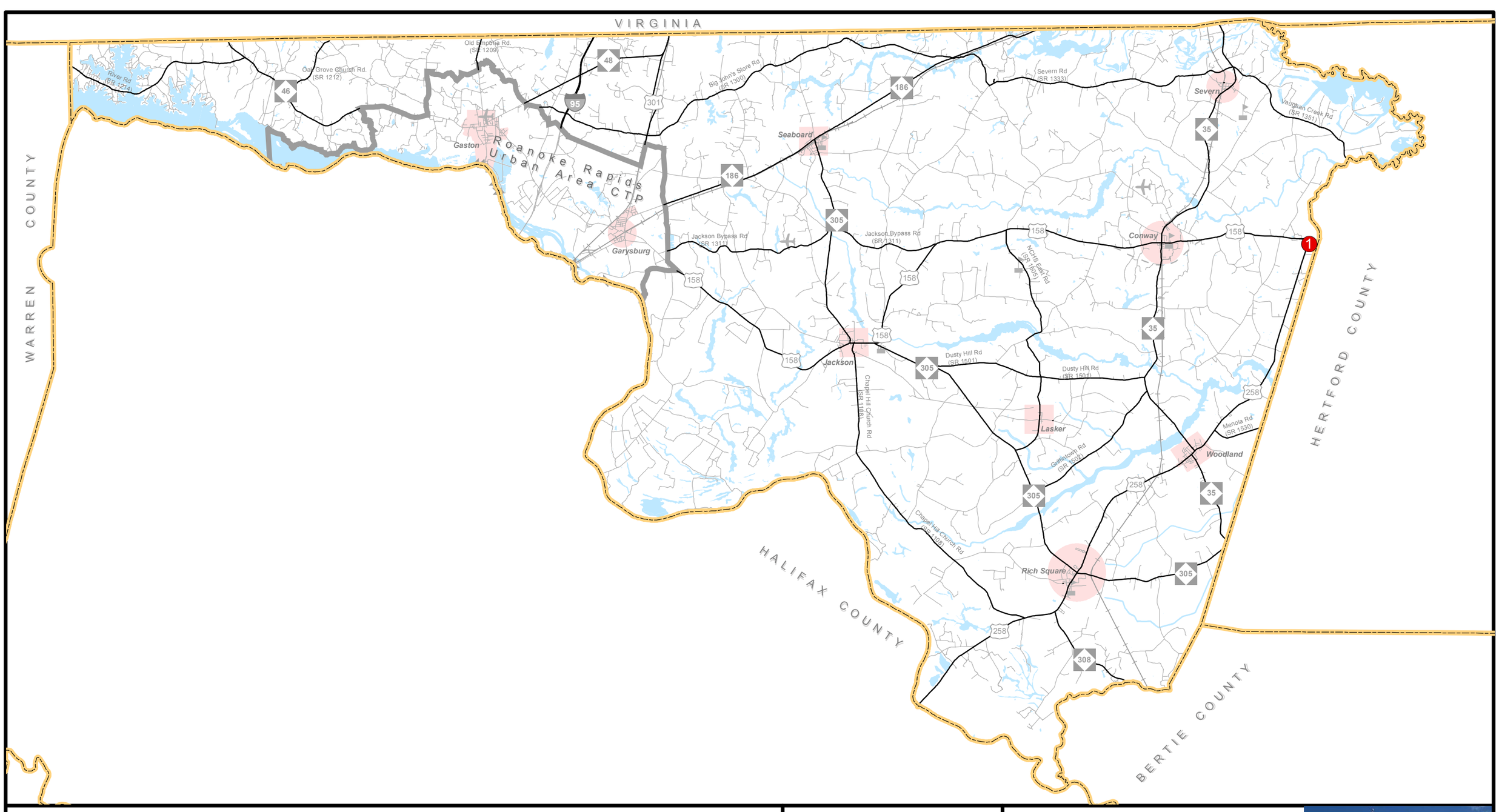
N W E S

Figure 3

Base map date: May 2009

2035 Volumes and Capacity Deficiencies
Northampton County
Comprehensive Transportation Plan

Plan date: 7-25-2011



Crash Locations
Lakes
Municipal Boundaries
Roads
Airports
County Boundary
Rivers and Streams
Schools
Railroads
Roanoke Rapids Urban Area

0 1 2 4 6 Miles

N W E S

Figure 4

Base map date: May 2009

Refer to Appendix F for more details

Crash Locations
January 1, 2008 to December 31, 2010
Northampton County
Comprehensive Transportation Plan

Plan date: 12-6-2011

VIRGINIA

WARREN COUNTY

HERTFORD COUNTY

HALIFAX COUNTY

BERTIE COUNTY

Roanoke Rapids Urban Area CTP

Gaston

Garysburg

Seaboard

Jackson

Conway

Severn

Lasker

Woodland

Rich Square

Old Emporia Rd. (SR 1209)

Oak Grove Church Rd. (SR 1212)

River Rd (SR 1...)

Big John's Store Rd (SR 1300)

Severn Rd (SR 1332)

Vaughan Creek Rd (SR 1351)

Jackson Bypass Rd (SR 1311)

Jackson Bypass Rd (SR 1311)

NCHS East Rd (SR 1555)

Dusty Hill Rd (SR 1501)

Dusty Hill Rd (SR 1501)

Chapel Hill Church Rd (SR 1166)

Menola Rd (SR 1530)

Griffintown Rd (SR 1503)

Chapel Hill Church Rd (SR 1008)

64 46 43 95 70 48 301 186 13 12 35 46 52 305 158 15 14 17 20 38 63 48 28 39 33 27 258 308

Deficient Bridges
Northampton County
Comprehensive Transportation Plan

Plan date: 12-6-2011

- Deficient Bridges
- Roads
- Rivers and Streams
- Railroads
- Lakes
- Airports
- Schools
- Roanoke Rapids Urban Area
- Municipal Boundaries
- County Boundary

0 1 2 4 6 Miles

N W E S

Figure 5

Base map date: May 2009

Refer to 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. Currently, no fixed route system exists in Northampton County. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information.

Rail

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

The North Carolina Department of Transportation sponsors two passenger trains, the Carolinian and Piedmont. The Carolinian runs between Charlotte and New York City, while the Piedmont train carries passengers from Raleigh to Charlotte and back 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. CSX operates between Weldon and Virginia, along US 301, carrying freight in a heavily used route between Weldon and Margarettesville, which is a small community along NC 186 near the Virginia boarders. North Carolina & Virginia Railroad (NCVA) operates along NC 35 from Bertie County to Virginia carrying freight only. An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. There are no recommendations for rail at this time. 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. State Bicycle Route #4 passes through the northern part of the county from Warren County to Hertford County. Bicyclists share the road with vehicles and do not have their own bicycle lanes on this route. Due to the increasing bicyclist activities, it is recommended that a paved shoulder is added to the entire route to accommodate for a bicycle lane and improve safety for the bicyclists. 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. Northampton County is currently in process of developing a Land Use Plan. The adopted 1994 Zoning Ordinance Map was used to fulfill the requirements for a CTP. None of the towns have independent land use plans. The zoning ordinance map was not included in this document since the county has only a very large map that can only be viewed by the public inside the county's building. Currently, a digital map is in process of production and will be provided in future updates.

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.

Northampton County anticipates some growth northeast of Gaston near the intersection of I-95 and NC 48. This growth is expected from an industrial park to be constructed in the area.

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 Northampton County are shown in Figure 6.

Table 1 – Environmental Features

- Bike Routes (NCDOT)
- Hazardous Substance Disposal Sites
- Hazardous Waste Facilities
- High Quality Water and Outstanding Resource Water Management Zones
- Hydrography (1:24,000 scale)
- National Heritage Element Occurrences
- National Wetlands Inventory
- Railroads (1:24,000 scale)
- Sanitary Sewer Systems – Discharges, Land Application Areas, Pipes, Pumps and Treatment Plants
- Schools – Public and Non-Public
- Significant Natural Heritage Areas
- State Parks
- Target Local Watersheds - EEP
- 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

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VIRGINIA

WARREN COUNTY

HALIFAX COUNTY

HERTFORD COUNTY

BERTIE COUNTY

Gaston

Roanoke Rapids Urban Area

Roanoke Rapids

Garysburg

Seaboard

Severn

Conway

Jackson

Lasker

Woodland

Rich Square

Old Dupont Rd (SR 1209)

Old Grove Church Rd (SR 1124)

Severn Rd (SR 1333)

Jackson Bypass Rd (SR 1311)

Dusty Hill Rd (SR 1501)

Menola Rd (SR 1330)

46 48 95 301 186 305 158 35 258 561 308

Significant Natural Heritage Area

National Wetland Inventory

Waste Water Watersheds

Roanoke Rapids Urban Area

Water Treatment Plants

Sanitary Sewer Systems

Hazardous Waste Sites

Airports

Schools

Municipal Boundaries

County Boundary

0 1 2 4 6 Miles

N W E S

Figure 6

Base map date: May 2009

Refer to appendix G for more details

Environmental Map
Northampton County
Comprehensive Transportation Plan

Plan date: 7-25-2011

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

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

The public involvement process included holding one public drop-in session in Jackson to present the proposed CTP to the public and solicit comments. This meeting was held on April 7, 2011 at the Jack Faison Administrative Building Auditorium. No comment forms were submitted during the session held on April 7, 2011.

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

- September 1, 2011 during the Rich Square Town Council Meeting
- September 5, 2011 during the Severn Town Council Meeting
- September 6, 2011 during the Conway Town Council Meeting
- September 8, 2011 during the Woodland Town Council Meeting
- September 13, 2011 during the Seaboard Town Council Meeting
- September 14, 2011 during the Jackson Town Council Meeting
- September 19, 2011 during the Lasker Town Council Meeting

A public hearing was held on September 19, 2011 during the Northampton 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 during this meeting.

The Peanut Belt RPO endorsed the CTP on November 15, 2011. The North Carolina Board of Transportation voted to mutually adopt the Northampton County CTP on January 5, 2012.

II. Recommendations

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

Unaddressed Deficiencies

Existing I-95 and US-301 are major north-south corridors through Northampton County. I-95 carries a high percentage of through traffic in the area, while US-301 carries a much lower percentage. I-95 and US-301 traverse the state connecting North Carolina to Virginia and South Carolina. I-95 is on the statewide tier of the North Carolina Multimodal Investment Network (NCMIN). Additionally, it is part of the Strategic Highway Corridor (SHC) Vision Plan.

A study is underway to evaluate the feasibility of the tolling of the entire I-95 corridor throughout the state of North Carolina, and widening several sections to 6-lanes. The primary purpose of this widening is improving mobility, connectivity, and continuity along the entire state. The proposed tolling of I-95 may result in an increase of the AADT on US-301, which runs parallel to I-95 in Northampton County and continues into the State of Virginia, and that may require additional attention to US-301 needs if these studies are implemented.

Implementation

Due to the declining Annual Average Daily Traffic (AADT) on most of the studied roads in Northampton County since 2008, a decision was made by the study committee to use a growth rate of one percent on the state routes and one and a half percent growth on highways starting from the year 2007. 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 transportation 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 Northampton 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 Peanut Belt 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.

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

Problem Statements

HIGHWAY

US 158, Local ID: R-2582

US 158 is an east-west connector within Northampton County and throughout northeastern North Carolina. This corridor connects the Triad area on the west end to the Outer Banks on the east end. Within the study area, it is heavily used by commuters to and from Roanoke Rapids. US 158 is currently a 2-lane facility from the Roanoke Rapids Urban Area (RRUA) Planning Area Boundary (PAB) to the Hertford County Line. As part of the Strategic Highway Corridor (SHC) initiative, the facility's main purpose is to safely improve regional and statewide mobility and connectivity.

The proposed CTP project (R-2582) is to upgrade the existing facility to a 4-lane expressway from Roanoke Rapids city limits to Barrows Mill Road (SR 1126) near the western town limits of Jackson, in addition to the construction of a 4-lane freeway on new location that bypasses Jackson to the north before connecting back to the existing US 158 at Mount Caramel Church Road (SR 1333). For additional information about this project, including the Purpose and Need, contact NCDOT Project Development and Environmental Analysis (PDEA).

US 158, Local ID: R-2584

US 158 is an east-west connector within Northampton County and throughout northeastern North Carolina. This corridor connects the Triad area on the west end to the Outer Banks on the east end. Within the study area, it is heavily used by commuters to and from Roanoke Rapids. US 158 is currently a 2-lane facility from the Roanoke Rapids Urban Area (RRUA) Planning Area Boundary (PAB) to Hertford County Line. As part of the Strategic Highway Corridor (SHC) initiative, the facility's main purpose is to safely improve regional and statewide mobility and connectivity.

The proposed CTP project (R-2584) is to upgrade the existing facility to a 4-lane expressway starting between Mount Caramel Road (SR 1333) and Fire Tower Rd (SR 1500) to the Hertford County Line including the construction of a freeway to bypass Conway. For additional information about this project, including the Purpose and Need, contact NCDOT Project Development and Environmental Analysis (PDEA).

US 258, Local ID: NORT0001-H

US 258 is currently a north-south connector that runs from Halifax County to Hertford County through Northampton County. This facility is currently a 2-lane major thoroughfare. It is recommended that this road be widened to 24 feet with paved shoulders and turn lanes where necessary from Halifax County Line to the Rich Square town limits. The primary purpose of this improvement is to provide continuity with the Halifax County Comprehensive Transportation Plan (CTP) regarding the US 258

improvements. In the 2011 Edgecombe County CTP, improvements to US 258 from NC 97 to the Halifax County line were recommended due to capacity deficiency. Although there are no capacity issues between the Halifax County line and Hertford County within Northampton County, improvements are recommended in order to provide continuity.

NC 35, Local ID: NORT0002-H

Existing NC 35 is a 2-lane major thoroughfare from Hertford County to Virginia State Line. The facility runs from north to south through the towns of Severn, Conway, and Woodland in Northampton County. As a major truck route in the area, the route experiences high truck percentage. It is recommended to upgrade the existing facility to 24 feet with paved shoulders, including turn lanes at all major intersections. It is also recommended that sharp horizontal curves be modified in some areas. The primary purpose of improving NC 35 is to improve mobility through the towns of Severn, Conway, and Woodland. Improving this segment of NC 35 will improve connectivity between the towns and other parts of the county.

NC 46, Local ID: NORT0003-H

Existing NC 46 is a 2-lane major thoroughfare from Virginia State Line to the town of Gaston. It is recommended to upgrade the existing facility to 24 feet with paved shoulders, this will accommodate for the bicycle lane recommended in the bicycle improvements section and provide safer maneuvering in a 12-foot lane for drivers. It is also recommended that sharp horizontal curves be modified in some areas.

NC 305, Local ID: NORT0004-H

Existing NC 305 is a 2-lane major thoroughfare from the town of Seaboard to Hertford County. The facility runs from north to south through the towns of Seaboard, Jackson, and Rich Square. It is recommended to upgrade the existing facility to 24 feet with paved shoulders from Seaboard to Jackson and from Rich Square to Hertford County. This improvement will accommodate for the bicycle recommendations and allow safer maneuvering for drivers. The primary purpose of improving NC 305 is to improve mobility through the section between Jackson and Rich Square. Improving these segments of NC 305 will improve connectivity between the towns and other parts of the county.

PUBLIC TRANSPORTATION AND RAIL

There are no Public Transportation and Rail recommendations at this time.

BICYCLE

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

- Curb and gutter sections require at minimum 4-ft bike lanes or 14-ft 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.

Identified Problem

Currently, there is a state designated bicycle route, the North Line Trace NC Bike Route 4, which runs from Warren County to Hertford County on River Road (SR 1214), NC 46, NC 48, Macon Price Road (SR 1201), Big John's Store Road (SR 1300), Tower Road (SR 1333), Severn Road (SR 1333), and Vaughan Creek Road (SR 1351). These existing facilities do not have paved designated bicycle lanes. The primary purpose of recommending additional bicycle route improvements is to better connect Warren County, Halifax County, and Hertford County with Northampton County through the existing bicycle route and the other recommended facilities, and maintaining connectivity with the city of Roanoke Rapids. According to a public survey done in the area and the committee members of this study, there was a need for bike routes that connect the towns together.

CTP Project Proposal

Project Description

The following on-road designated NC Bike Route 4, North Line Trace, has been identified as needing improvement by adding the 4-foot bike lanes to both sides of the following roads in the Northampton County CTP.

River Road (SR 1214), Local ID: NORT0001-B: from Warren County Line to NC 46 (Lawrenceville Road)

NC 46 (Lawrenceville Road), Local ID: NORT0002-B: from River Road (SR 1214) to Old Emporia Road (SR 1209)

NC 48 (Pleasant Hill Road), Local ID: NORT0003-B: from Old Emporia Road (SR 1209) to Macon Price Road (SR 1201)

Macon Price Road (SR 1201) Local ID: NORT0004-B: from NC 48 (Pleasant Hill Road) to US 301

Big John Store Road (SR 1300) Local ID: NORT0005-B: from US 301 to NC 186

Tower Road (SR 1341) Local ID: NORT0006-B: from NC 186 to Severn Road (SR 1333)

Severn Road (SR 1333) Local ID: NORT0007-B: from Tower Road (SR 1341) to NC 35

NC 35 Local ID: NORT0008-B: from Main Street (SR 1334) to Vaughan Creek Road (SR 1351)

Vaughan Creek Road (SR 1351) Local ID: NORT0009-B: from NC 35 to Hertford County Line

The following facilities have been recommended for on-road bicycle facilities by adding 4-foot bike lanes to both sides of the following roads in the Northampton County CTP.

Jackson By Pass Road (SR 1311), Local ID: NORT0010-B: from Roanoke Rapids Urban Area to NC 305

Devils Race Track Road (SR 1329), Local ID: NORT0011-B: from NC 305 in Jackson to Mount Caramel Church Road (SR 1333) in Seaboard

Mount Caramel Road (SR 1333), Local ID: NORT0012-B: from Devils Race Track Road (SR 1329) to Tower Road (SR 1341)

Peanut Market Road (SR 1324), Local ID: NORT0013-B: from Big John Store Road (SR 1300) to NC 186

NC 35, Local ID: NORT0002-H: from Main Street in Severn to Hertford County Line

NC 305, Local ID: NORT0004-H: from NC 186 to US 158 in Jackson

NC 305, Local ID: NORT0004-H: from Braswell Road (SR 1122) to Hertford County Line

W J Duke Service Road, Local ID: NORT0017-B: from Chapel Hill Church Road (SR 1108) to Braswell Road (SR 1122)

Chapel Hill Church Road (SR 1108), Local ID: NORT0018-B: from W J Duke Service Road to Bryantown Road (SR 1109)

Bryantown Road (SR 1109), Local ID: NORT0019-B: from Chapel Hill Church Road (SR 1108) to US 258/NC 561

Galatia Road (SR 1344), Local ID: NORT0020-B: from Maragarettsville Road (SR 1333) to US 158

NCHS East Road (SR 1505), Local ID: NORT0021-B: from US 158 to Creeksville Road (SR 1504)

Creeksville Road (SR 1504), Local ID: NORT0022-B: from NCHS Road (SR 1505) to Lasker Road (SR 1503)

Lasker Road (SR 1503), Local ID: NORT0023-B: from Creeksville Road (SR 1504) to Church Street (SR 1516)

Church Street (SR 1516), Local ID: NORT0024-B: from NC 305 to Lasker Road (SR 1503)

Fire Tower Road (SR 1500), Local ID: NORT0025-B: from US 158 to Zion Church Road (SR 1500)

East Jefferson Street (US 158), Local ID: NORT0004-H: from NC 305 (North Church Street) to Fire Tower Road (SR 1500) in Jackson

Zion Church Road (SR 1500), Local ID: NORT0027-B: from NCHS East Road (SR 1505) to Dolittle Mill Road (SR 1508)

Dolittle Mill Road (SR 1508), Local ID: NORT0028-B: from Zion Church Road (SR 1500) to NC 35

US 258, Local ID: NORT0001-H: from NC 305 in Rich Square to Halifax County Line

NC 308, Local ID: NORT0030-B: from US 258 to Bertie County Line

PEDESTRIAN

Identified Problem

Currently, there are a few limited pedestrian accommodations within the town limits of each municipality in Northampton County. These sidewalks are old or abandoned and do not adhere to the current design standards. The primary purpose of recommending new and improved pedestrian accommodations is to provide a safe alternative mode of transportation within each community in Northampton County.

CTP Project Proposal

Project Description

The following facilities are recommended to have new sidewalks for pedestrians.

Conway:

NC 35, Local ID: NORT0002-H: from Flythe Street to Phillips Hill Road (SR 1365)

Jackson:

Atherton Street (SR 1368), Local ID: NORT0004-P: from US 158 to West Anderton Street

NC 305 (N. Church Street), Local ID NORT0004-H: from the northern town limits to the Northampton County Recreational Center on Hampton Wood Complex Road (SR 1386)

Woodland:

NC 35 (Spruce Street), Local ID NORT0002-H: from West Woodland Avenue to southern Woodland town limits

North Linden Street, Local ID NORT0005-P: from Ashe Street to northern Woodland town limits

The following facilities are recommended to improve the existing sidewalks for pedestrians.

Conway:

US 158 (Main Street), Local ID NORT0006-P: from the western town limits to Pine Street

NC 35, Local ID NORT0002-H: from Martin Street to Ampac Road (SR 1549)

Maple Avenue, Local ID NOTH0008-P: from US 158 (Main Street) to White Street

Jackson:

NC 305 (N Church Street), Local ID NORT0004-H: from northern Jackson town limits to US 158

Depot Street (SR 1108), Local ID NORT0010-P: from US 158 to Duke Street

US 158, Local ID NORT0004-H: from the western town limits to the eastern town limits

West Calhoun Street, Local ID NORT0012-P: from Cemetery Street to NC 305

Cemetery Street, Local ID NORT0013-P: from West Calhoun Street to Long Street

Long Street, Local ID NORT0014-P: from Cemetery Street to NC 305

Thomas Bragg Drive, Local ID NORT0015-P: from NC 305 (West Jefferson Street) to NC 305 (North Church Street)

Lasker:

Church Street (SR 1516), Local ID NORT0016-P: from Garris Street (SR 1503) to Club Road

Rich Square:

US 258, Local ID NORT0001-H: from the northern town limits to the southern town limits

NC 305, Local ID NORT0004-H: from western town limits to the eastern town limits

Brayantown Road (SR 1109), Local ID NORT0019-P: from US 258/NC 561 to Boulton Street

Seaboard:

NC 305 (Main Street), Local ID NORT0004-H: from Norvell Street to Marks Street

Park Street (SR 1384), Local ID NORT0021-P: from NC 305 to Calvert Street (SR 1385) in Seaboard

Church Street (SR 1370), Local ID NORT0022-P: from Washington Street (SR 1316) to NC 305

Clay Street, Local ID NORT0023-P: from Green Street to NC 305

Severn:

NC 35, Local ID NORT0002-H: from Main Street (SR 1334) to Mills Street

Main Street (SR 1334), Local ID NORT0025-P: from Ford Street to Johnson Street

White Street, Local ID NORT0026-P: from Water Street to NC 35

Woodland:

North Linden Street, Local ID NORT0027-P: from Ashe Street to US 258 (Main Street)

US 258 (Main Street), Local ID NORT0001-H: from Powell Street (SR 1527) to Persimmon Street

Spruce Street, Local ID NORT0029-P: from US 258 (Main Street) to West Woodland Avenue

APPENDICES

Appendix A
Resources and Contacts

North Carolina Department of Transportation

Customer Service Office

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

1-877-DOT-4YOU
(1-877-368-4968)
https://apps.dot.state.nc.us/dot/directory/authenticated/ToC.aspx

Secretary of Transportation

1501 Mail Service Center
Raleigh, NC 27699-1501
(919) 733-2520
http://www.ncdot.org/about/leadership/secretary.html

Board of Transportation Member

1501 Mail Service Center
Raleigh, NC 27699-1501
919-707-2820
http://www.ncdot.gov/about/board/default.html

Highway Division Engineer

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

113 Airport Drive, Suite 100
Edenton, NC 27932
(252) 482-7977
http://www.ncdot.gov/doh/operations/division1/

Division Project Manager

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

113 Airport Drive, Suite 100
Edenton, NC 27932
(252) 482-7977

Division Construction Engineer

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

113 Airport Drive, Suite 100
Edenton, NC 27932
(252) 482-7977

Division Traffic Engineer

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

113 Airport Drive, Suite 100
Edenton, NC 27932
(252) 482-7977

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

113 Airport Drive, Suite 100
Edenton, NC 27932
(252) 482-7977

Division Maintenance Engineer

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

113 Airport Drive, Suite 100
Edenton, NC 27932
(252) 482-7977

District Engineer

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

230 NC 42 West
Ahoskie, 27910
(252) 332-4021

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) 733-4705
http://www.ncdot.gov/doh/preconstruct/tpb/

Peanut Belt Rural Planning Organization (RPO)

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

1385 John Small Avenue
Washington, NC 27889
(252) 974-1843

Strategic Planning Office

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

1501 Mail Service Center
Raleigh, NC 27699-1501
(919) 715-0951
https://apps.dot.state.nc.us/dot/directory/authenticated/UnitPage.aspx?id=11054

Project Development & Environmental Branch (PDEA)

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

1548 Mail Service Center
Raleigh, NC 27699-1548
(919) 733-3141
http://www.ncdot.gov/doh/preconstruct/pe/

Secondary Roads Office

Contact the Secondary Roads Office 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) 733-3250
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) 733-2039
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) 733-4713
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) 733-7245
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) 807-0777
http://www.ncdot.gov/transit/bicycle/

Structure Management Unit

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

1565 Mail Service Center
Raleigh, NC 27699-1565
(919) 733-4362
http://www.ncdot.gov/doh/operations/dp_chief_eng/maintenance/bridge/

Highway Design Branch

The Highway Design Branch consists of the Roadway Design, Structure Design, Photogrammetry, Location & Surveys, Geotechnical, and Hydraulics Units. Contact the Highway Design Branch for information regarding design plans and proposals for road and bridge projects throughout the state.

1584 Mail Service Center
Raleigh, NC 27699-1584
(919) 250-4001
http://www.ncdot.gov/doh/preconstruct/highway/

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

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

Appendix B
Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

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

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

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

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

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

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

Bicycle Map

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

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

Pedestrian Map

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

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

Appendix C
CTP Inventory and Recommendations

Assumptions/ Notes:

- **Local ID:** This Local ID is the same as the one used for the Prioritization Project Submittal Tool. If a TIP project number exists it is listed as the ID. Otherwise, the following system is used to create a code for each recommended improvement: the first 4 letters of the county name is combined with a 4 digit unique numerical code followed by '-H' for highway, '-T' for public transportation, '-R' for rail, '-B' for bicycle, '-M' for multi-use paths, or '-P' for pedestrian modes. If a different code is used along a route it indicates separate projects will probably be requested. Also, upper case alphabetic characters (i.e. 'A', 'B', or 'C') are included after the numeric portion of the code if it is anticipated that project segmentation or phasing will be recommended.

- **Jurisdiction:** Jurisdictions listed are based on municipal limits, county boundaries, and MPO Metropolitan Planning Area Boundaries (MAB), as applicable.

- **Existing Cross-Section:** Listed under '(ft)' is the approximate width of the roadway from edge of pavement to edge of pavement. Listed under 'lanes' is the total number of lanes, with the letter 'D' if the facility is divided.

- **Existing ROW:** The estimated existing right-of-way is based on Road Characteristics shapefile. These right-of-way amounts are approximate and may vary.

- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using NCLOS Program, as documented in Chapter I.

- Existing and Proposed AADT (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The '2035 AADT E+C' is an estimate of the volume in 2035 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the Transportation Improvement Program (TIP). The '2035 AADT with CTP' is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. The '2035 AADT with CTP' is shown in bold if it exceeds the proposed capacity, indicating an unmet need. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter II.

- 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).

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TABLE 3 - CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																			
					2008 Existing System						2035 Proposed System								
ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2008 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Rec. Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	I-95	VA Line - Exit 180	Northampton	1.49	48	4D	330	65	58,000	33,000	48,000	48,000	58,000	ADQ	ADQ	Maj	Sta	
	I-95	Exit 180 - Exit 176	Northampton	4.12	48	4D	330	65	58,000	32,000	48,000	48,000	58,000	ADQ	ADQ	Maj	Sta	
R-2582	**US 158**	Occoneche Nck Rd (SR 1128) - St John Church Rd (SR 1312)	Northampton	2.21	24	2	100	55	15,100	3,700	7,200	8,700	54,800	4B	150	Maj	Sta	
R-2582	**US 158**	St John Church Rd (SR 1312) - Barrow's Mill Rd (SR 1126)	Northampton	4.36	24	2	100	55	15,100	3,700	7,200	8,700	54,800	4B	150	Maj	Sta	
R-2582	**US 158 Bypass**	Jackson Bypass	Jackson	2.50	48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	58,000	4B	150	Maj	Sta	
	US 158	Barrow'S Mill Rd (SR 1126) - WCL Jackson	Northampton	1.11	24	2	100	55	15,100	4,900	9,300	9,300	15,100	ADQ	100	Maj	Sta	
	US 158	WCL Jackson - NC 305	Northampton	0.34	44	2	100	55	15,100	4,900	9,300	9,300	15,100	ADQ	100	Maj	Sta	
	US 158	NC 305 - Morris Mill Rd (SR 1368)	Northampton	0.15	46	2	100	55	15,100	6,400	9,300	9,300	15,100	ADQ	100	Maj	Sta	
	US 158	Morris Mill Rd (SR 1368) - ECL Jackson	Northampton	0.47	40	2	100	55	15,100	6,400	9,300	9,300	15,100	ADQ	100	Maj	Sta	
	US 158	ECL Jackson - Mt Caramel Church Rd (SR 1333)	Northampton	0.22	24	2	100	55	15,100	5,600	7,300	7,300	15,100	ADQ	100	Maj	Sta	
R-2582	**US 158**	Mt Caramel Church Rd (SR 1333) - NCHS East Rd (SR 1505)	Northampton	5.63	24	2	100	55	15,100	1,600	2,100	2,100	54,800	4B	150	Maj	Sta	
R-2582	**US 158**	NCHS East Rd (SR 1505) - Zion Church Rd (SR 1500)	Northampton	4.33	24	2	100	55	15,100	2,700	3,500	3,500	54,800	4B	150	Maj	Sta	
	US 158	Zion Church Rd (SR 1500) - ECL Conway	Northampton	1.89	36	3	100	55	14,600	2,700	3,500	3,500	14,600	ADQ	100	Maj	Sta	
R-2584	**US 158**	Conway Bypass	Conway	3.90	48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	58,000	4B	150	Maj	Sta	
R-2584	**US 158**	Gilmer Ricks Rd (SR 1543) - Herford County	Northampton	4.50	24	2	100	45	14,600	4,100	7,100	7,100	54,800	4B	150	Maj	Sta	
NORT0001-H	**US 258/NC 561**	Halifax County - Benthall Cook Rd (SR 1107)	Northampton	3.28	24	2	100	55	15,100	2,900	4,500	4,500	15,100	2E	100	Maj	Sta	B
NORT0001-H	**US 258**	Benthall Cook Rd (SR 1107) - SCL Rich Square	Northampton	3.16	24	2	100	55	15,100	2,900	4,500	4,500	15,100	2E	100	Maj	Sta	B
	US 258	SCL Rich Square to NCL Rich Square	Rich Square	2.00	38	2	60	35	12,300	4,800	8,000	8,000	12,300	ADQ	60	Maj	Sta	B/P
	US 258	NCL Rich Square - NC 35 S	Northampton	4.94	24	2	100	55	15,100	2,000	4,000	4,000	15,100	ADQ	100	Maj	Sta	
	US 258	NC 35 S - ECL Woodland	Woodland	0.68	40	2	60	25	12,400	3,900	7,600	7,600	12,400	ADQ	60	Maj	Sta	B/P
	US 258	ECL Woodland - Parker Rd (SR 1538)	Northampton	6.26	24	2	100	55	15,100	1,800	3,700	3,700	15,100	ADQ	100	Maj	Sta	
	US 301	NCL Garysburg - Big John'S Store Rd (SR 1300)	Northampton	2.55	24	2	100	55	15,100	1,200	1,600	1,600	15,100	ADQ	100	Maj	Sta	

HIGHWAY																			
					2008 Existing System						2035 Proposed System								
ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2008 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Rec. Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	US 301	Big John'S Store Rd (SR 1300) - NC 48	Northampton	2.96	24	2	100	55	15,100	990	1,300	1,300	15,100	ADQ	100	Maj	Sta	
	US 301	NC 48 to VA SL	Northampton	0.70	24	2	100	55	15,100	1,900	2,500	2,500	15,100	ADQ	100	Maj	Sta	
NORT0002-H	**NC 35**	Hertford County - SCL Woodland	Northampton	2.88	22	2	60	55	12,400	1,200	1,600	1,600	14,300	2E	60	Maj	Reg	B
NORT0002-H	**NC 35**	SCL Woodland - NCL Woodland	Woodland	0.88	40	2	60	35	11,000	1,000	1,300	1,300	14,300	2E	60	Maj	Reg	B/P
NORT0002-H	**NC 35**	NCL Woodland - Ashley's Grove Rd (SR 1536)	Northampton	3.27	20	2	60	55	11,800	1,900	2,500	2,500	14,300	2E	60	Maj	Reg	B/P
NORT0002-H	**NC 35**	Ashley'S Grove Rd (SR 1536) - Chervle DR	Northampton	4.06	20	2	60	55	11,800	1,300	1,700	1,700	14,300	2E	60	Maj	Reg	B
NORT0002-H	**NC 35**	Chervle DR - NCL Conway	Conway	1.03	33	2	60	35	12,400	2,000	2,600	2,600	14,300	2E	60	Maj	Reg	BP
NORT0002-H	**NC 35**	NCL Conway - SCL Severn	Northampton	4.97	20	2	60	55	11,800	1,300	1,700	1,700	14,300	2E	60	Maj	Reg	B/P
NORT0002-H	**NC 35**	SCL Severn - VA SL	Severn	3.11	20	2	60	35	11,800	1,500	2,000	2,000	14,300	2E	60	Maj	Reg	B/P
NORT0003-H	**NC 46**	Cherry Tree Rd (SR 1211) - Old Gaston Rd (SR 1213)	Northampton	3.36	24	2	60	55	12,400	3,100	3,600	4,100	14,300	2E	60	Maj	Reg	B
NORT0003-H	**NC 46**	Old Gaston Rd (SR 1213) - VA SL	Northampton	2.86	20	2	60	55	11,800	1,100	1,400	1,400	14,300	2E	60	Maj	Reg	B
	NC 48	Roanoke Rapids Municipal Limits - I-95	Northampton	1.90	22	2	60	55	12,400	2,900	3,800	4,000	12,400	ADQ	60	Maj	Reg	
	NC 48	I-95 - US 301	Northampton	3.02	22	2	60	55	12,400	2,800	3,700	3,900	12,400	ADQ	60	Maj	Reg	
	NC 186	Cornwallis Rd (SR 1301) - Bethel Church (SR 1317)	Northampton	3.04	24	2	60	55	12,400	3,800	4,800	5,000	12,400	ADQ	60	Maj	Reg	
	NC 186	Bethel Church (SR 1317) - NC 305	Northampton	2.64	24	2	60	55	12,400	2,900	3,600	3,800	12,400	ADQ	60	Maj	Reg	
	NC 186	NC 305 - ECL Seaboard	Seaboard	0.53	40	2	60	35	12,400	3,100	3,900	4,100	12,400	2-A	60	Maj	Reg	
	NC 186	ECL Seaboard - Lonnie Goode Rd (SR 1327)	Northampton	3.83	20	2	60	35	11,800	2,000	2,500	2,600	11,800	ADQ	60	Maj	Reg	
	NC 186	Lonnie Goode Rd (SR 1327) to Big John'S Store Rd (SR 1300)	Northampton	1.13	20	2	60	35	11,800	1,800	2,300	2,400	11,800	ADQ	60	Maj	Reg	
	NC 186	Big John'S Store Rd (SR 1300) - VA SL	Northampton	3.26	20	2	60	55	11,800	1,400	1,800	1,800	11,800	ADQ	60	Maj	Reg	
NORT0004-H	**NC 305-561**	Hertford County - US 258	Northampton	5.45	24	2	60	55	12,400	1,900	2,500	2,500	14,300	2E	60	Maj	Reg	B
NORT0004-H	**NC 305**	US 258 - Lasker Rd (SR 1503)	Rich Square	4.86	38	2	60	55	12,400	2,900	3,800	3,800	14,300	2E	60	Maj	Reg	B/P
NORT0004-H	**NC 305**	Lasker Rd (SR 1503) - Dusty Hill Rd (SR 1501)	Northampton	4.13	24	2	60	55	12,400	1,500	2,000	2,000	14,300	ADQ	60	Maj	Reg	
NORT0004-H	**NC 305**	Dusty Hill Rd (SR 1501) - US 158	Northampton	2.18	20	2	60	55	11,800	2,300	3,000	3,000	14,300	ADQ	60	Maj	Reg	
	NC 305	US 158 to NCL Jackson	Jackson	0.56	28	2	100	55	12,400	5,600	7,300	7,300	14,300	2E	60	Maj	Reg	B/P

HIGHWAY																			
					2008 Existing System						2035 Proposed System							
ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2008 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Rec. Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
NORT0004-H	**NC 305**	NCL Jackson - Jackson By Pass Rd (SR 1311)	Northampton	3.63	20	2	60	35	11,800	2,900	3,800	3,800	14,300	2E	60	Maj	Reg	BP
NORT0004-H	**NC 305**	Jackson By Pass Rd (SR 1311) - SCL Seaboard	Northampton	2.61	20	2	60	55	11,800	1,200	1,600	1,600	14,300	2E	60	Maj	Reg	B
NORT0004-H	**NC 305**	SCL Seaboard - NC 186	Seaboard	0.61	34	2	60	55	11,800	2,100	2,700	2,700	14,300	2E	60	Maj	Reg	B
	NC 308	Bertie County - Heart Swamp Rd (SR 1106)	Northampton	2.39	24	2	60	20	12,400	1,900	2,500	2,500	14,300	ADQ	60	Maj	Reg	B
	NC 308	Heart Swamp Rd (SR 1106) to US 258	Northampton	1.29	24	2	60	55	12,400	2,400	3,100	3,100	14,300	ADQ	60	Maj	Reg	B
	Bryantown Rd (SR 1108)	US 158 - Rehoboth Church Rd (SR 1123)	Northampton	7.10	28	2	60	55	11,800	1,700	2,200	2,200	11,800	ADQ	60	Min	Sub	B
	Chapel Hill Church Rd (SR 1108)	Rehoboth Church Rd (SR 1123) - US 258	Northampton	8.10	18	2	60	55	10,500	830	1,100	1,100	10,500	ADQ	60	Min	Sub	B
	Macon Price Rd (SR 1201)	NC 48 to I-95	Northampton	1.40	20	2	60	55	11,800	100	200	200	14,300	ADQ	60	Min	Sub	
	Macon Price Rd (SR 1201)	I-95 to US 301	Northampton	2.90	20	2	60	55	11,800	810	1,100	1,100	14,300	ADQ	60	Min	Sub	
	Old Emporia Rd (SR 1209)	NC 48 - Roanoke Rapids city limits	Northampton	2.33	20	2	60	35	11,800	2,300	3,900	3,900	14,300	ADQ	60	Min	Sub	
	Oak Grove Church Rd (SR 1212)	Cherry Tree Rd (SR 1211) - NC 46	Northampton	2.50	20	2	60	35	11,800	520	700	700	14,300	ADQ	60	Min	Sub	
	River Rd (SR 1214)	Pine Tree Rd (SR 1230) - Warren County	Northampton	3.54	24	2	60	55	12,400	2,100	2,700	2,700	14,300	ADQ	60	Min	Sub	B
	Big John's Store Rd (SR 1300)	US 301 - Peanut Market (SR 1324)	Northampton	6.34	18	2	60	55	10,500	740	1,000	1,000	14,300	ADQ	60	Min	Sub	B
	Big John's Store Rd (SR 1300)	Peanut Market (SR 1324) - NC 186	Northampton	5.52	18	2	60	55	10,500	320	400	400	14,300	ADQ	60	Min	Sub	B
	Jackson Bypass Rd (SR 1311)	US 158 - Pleasant Grove Rd (SR 1314)	Northampton	4.81	20	2	60	55	11,800	1,300	1,700	1,700	14,300	ADQ	60	Min	Sub	B
	Jackson Bypass Rd (SR 1311)	Pleasant Grove Rd (SR 1314) - US 158	Northampton	5.76	20	2	60	55	11,800	1,300	1,700	1,700	11,800	ADQ	60	Min	Sub	B

HIGHWAY																			
					2008 Existing System						2035 Proposed System								
ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2008 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Rec. Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Severn Rd (SR 1333)	US 158 - Bynum Rd (SR 1347)	Northampton	5.91	20	2	60	55	11,800	300	400	400	14,300	ADQ	60	Min	Sub	B
	Severn Rd (SR 1333)	Bynum Rd (SR 1347) - Tower Rd (SR 1341)	Northampton	3.59	18	2	60	55	10,500	180	200	200	14,300	ADQ	60	Min	Sub	B
	Severn Rd (SR 1333)	Tower Rd (SR 1341) - Galatia Rd (SR 1344)	Northampton	5.44	20	2	60	55	11,800	180	200	200	14,300	ADQ	60	Min	Sub	B
	Severn Rd (SR 1333)	Galatia Rd (SR 1344) - NC 35	Northampton	3.33	20	2	60	55	11,800	530	700	700	14,300	ADQ	60	Min	Sub	B
	Vaughan Creek Rd (SR 1351)	Boone'S Bridge (SR 1355) - White'S Ave (SR 1361)	Northampton	1.59	18	2	60	55	10,500	1,000	1,300	1,300	14,300	ADQ	60	Min	Sub	B
	Vaughan Creek Rd (SR 1351)	White'S Ave (SR 1361) - Stanley Barnes Rd (SR 1354)	Northampton	1.80	18	2	60	55	10,500	1,100	1,400	1,400	14,300	ADQ	60	Min	Sub	B
	Vaughan Creek Rd (SR 1351)	Stanley Barnes Rd (SR 1354) - Hertford County	Northampton	0.81	18	2	60	55	10,500	1,100	1,400	1,400	14,300	ADQ	60	Min	Sub	B
	Dusty Hill Rd (SR 1501)	NC 305 - Lasker Rd (SR 1503)	Northampton	3.81	19	2	60	55	10,500	1,000	1,300	1,300	10,500	ADQ	60	Min	Sub	
	Dusty Hill Rd (SR 1501)	Lasker Rd (SR 1503) - NC 35	Northampton	3.58	20	2	60	55	11,800	900	1,200	1,200	11,800	ADQ	60	Min	Sub	
	Griffintown Rd (SR 1502)	NC 35 - Griffin Rd (SR 1513)	Northampton	2.42	20	2	60	55	11,800	800	1,000	1,000	11,800	ADQ	60	Min	Sub	
	Griffintown Rd (SR 1502)	Griffin Rd (SR 1513) - NC 305	Northampton	2.93	20	2	60	55	11,800	300	400	400	11,800	ADQ	60	Min	Sub	
	Lasker Rd (SR 1503)	NC 305 - Dusty Hill Rd (SR 1501)	Northampton	2.97	18	2	60	55	10,500	580	800	800	14,300	ADQ	60	Min	Sub	
	Lasker Rd (SR 1503)	Dusty Hill Rd (SR 1501) - Creeksville Rd (SR 1504)	Northampton	1.41	20	2	60	55	11,800	500	700	700	14,300	ADQ	60	Min	Sub	
	Creeksville Rd (SR 1504)	SR 1503 - NCHS East Rd (SR 1505)	Northampton	0.60	20	2	60	55	11,800	320	400	400	14,300	ADQ	60	Min	Sub	
	NCHS East Rd (SR 1505)	Zion Church Rd (SR 1500) - Creeksville Rd (SR 1504)	Northampton	1.00	20	2	60	55	11,800	630	800	800	14,300	ADQ	60	Min	Sub	
	NCHS East Rd (SR 1505)	US 158 - Zion Church Rd (SR 1500)	Northampton	2.70	20	2	60	55	11,800	630	800	800	14,300	ADQ	60	Min	Sub	
	Menola Rd (SR 1530)	US 258 - Hertford County	Northampton	1.76	18	2	60	55	10,500	750	600	1,000	10,500	ADQ	60	Min	Sub	

PUBLIC TRANSPORTATION AND RAIL

RAIL												
				Speed		Existing System			Proposed System			
ID	Facility/ Route	Section (From - To)	Class	Limit (mph)	Distance (mi)	Type	ROW (ft)	Trains per day	Type	ROW (ft)	Trains per day	Other Modes
	CSXT	Weldon to Maragarettsville	I	45	15	Freight	160	6	Freight	N/A	--	--
	CSX A Line	Weldon to VA	I	79	8	Freight	160	36	Freight	N/A	--	--
	North Carolina Virginia Railroad (NCVA)	CSX from Boykins to Tunis NC	III	25	54	Freight	25	2	Freight	N/A	N/A	N/A

BICYCLE AND PEDESTRIAN [1]

BICYCLE								
				Existing System		Proposed System		
ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Other Modes
NORT0001-B	State Bicycle Route 4 - River Rd (SR 1214)	Warren County Line - NC 46 (Lawrenceville Rd)	6.50	Concurrent with River Rd (SR 1214) - see Highway Table				
NORT0002-B	State Bicycle Route 4 - NC 46 (Lawrenceville Rd)	River Rd (SR 1214) - Old Emporia Rd (SR	9.00	Concurrent with Lawrenceville Rd - see Highway Table				
NORT0003-B	State Bicycle Route 4 - NC 48 (Pleasant Hill Rd)	Old Emporia Rd (SR 1209) - Macon Price Rd (SR 1201)	1.60	Concurrent with Pleasant Hill Rd - see Highway Table				
NORT0004-B	State Bicycle Route 4 - Macon Price Rd (SR 1201)	NC 48 (Pleasant Hill Rd) - US 301	4.30	Concurrent with Macon Price Rd (SR 1201) - see Highway Tabl				
NORT0005-B	State Bicycle Route 4 - Big John Store Rd (SR 1300)	US 301 - NC 186	12.80	Concurrent with Big John Store Rd (SR 1300) - see Highway Table				
NORT0006-B	State Bicycle Route 4 - Tower Rd (SR 1341)	NC 186 - Severn Rd (SR 1333)	1.60	Concurrent with Tower Rd (SR 1341) - see Highway Table				
NORT0007-B	State Bicycle Route 4 - Severn Rd (SR 1333)	Tower Rd (SR 1341) - NC 35	7.80	Concurrent with NC 48 - see Highway Table				
NORT0008-B	State Bicycle Route 4 - NC 35	Main Street (SR 1334) - Vaughan Creek Rd (SR 1351)	0.90	Concurrent with NC 35 - see Highway Table				
NORT0009-B	State Bicycle Route 4 - Vaughan Creek Rd (SR 1351)	NC 35 - Hertford County Line	4.50	Concurrent with Vaughan Creek Rd (SR 1351) - see Highway Table				
NORT0010-B	Jackson By Pass Rd (SR 1311)	Roanoke Rapids Municipal Limits - NC 305	5.80	Concurrent with Jackson By Pass Rd (SR 1311)				
NORT0011-B	Devils Race Track Rd. (SR 1329)	NC 305 in Jackson - Mt. Caramel Church Rd (SR 1333)	3.70	Concurrent with Devils Race Track Rd. (SR 1329)				
NORT0012-B	Mt Caramel Rd (SR 1333)	Devils Race Track Rd. (SR 1329) - Tower Rd (SR 1341)	4.00	Concurrent with Mt Caramel Rd (SR 1333)				
NORT0013-B	Peanut Market Road (SR 1324)	Big John Store Rd (SR 1300) - NC 186	3.00	Concurrent with Peanut Market Road (SR 1324)				
NORT0002-H	NC 35	Main St in Severn - Hertford County Line	17.50	Concurrent with NC 35				H
NORT0004-H	NC 305	NC 186 - US 158	6.80	Concurrent with NC 305				H
NORT0004-H	NC 305	Braswell Rd (SR 1122) - Hertford County Line	11.00	Concurrent with NC 305				H
NORT0017-B	W J Duke Service Rd	Chapel Hill Church Rd (SR 1108) - Braswell Rd (SR 1122)	2.80	Concurrent with W J Duke Service Rd				
NORT0018-B	Chapel Hill Church Rd (SR 1108)	Rehoboth Church Rd (SR 1123) - Bryantown Rd (SR 1109)	5.00	Concurrent with Chapel Hill Church Rd (SR 1108)				
NORT0019-B	Bryantown Rd (SR 1109)	Chapel Hill Church Rd (SR 1108) - US 258/NC 561	4.00	Concurrent with Bryantown Rd (SR 1109)				
NORT0020-B	Galatia Rd (SR 1344)	Maragarettsville Rd (SR 1333) - US 158	7.00	Concurrent with Galatia Rd (SR 1344)				
NORT0021-B	NCHS East Rd (SR 1505)	US 158 - Creeksville Rd (SR 1504)	3.80	Concurrent with NCHS East Rd (SR 1505)				
NORT0022-B	Creeksville Rd (SR 1504)	NCHS Rd (SR 1505) - Lasker Rd (SR 1503)	0.80	Concurrent with Creeksville Rd (SR 1504)				
NORT0023-B	Lasker Rd (SR 1503)	Creeksville Rd (SR 1504) - Church St (SR 1516)	1.40	Concurrent with Lasker Rd (SR 1503)				
NORT0024-B	Church St (SR 1516)	NC 305 - Lasker Rd (SR 1503)	1.80	Concurrent with Church St (SR 1516)				
NORT0025-B	Fire Tower Rd (SR 1500)	US 158 - Zion Church Rd (SR 1500)	5.00	Concurrent with Fire Tower Rd (SR 1500)				
NORT0004-H	East Jefferson St. (US 158)	NC 305 (N Church St) - Fire Tower Rd (SR 1500)	1.80	Concurrent with East Jefferson St. (US 158)				H
NORT0027-B	Zion Church Rd (SR 1500)	NCHS East Rd (SR 1505) - Dolittle Mill Rd (SR 1508)	2.30	Concurrent with Zion Church Rd (SR 1500)				
NORT0028-B	Dolittle Mill Rd (SR 1508)	Zion Church Rd (SR 1500) to NC 35	3.20	Concurrent with Dolittle Mill Rd (SR 1508)				
NORT0001-H	US 258	NC 305 - Halifax County Line	7.20	Concurrent with US 258				H
NORT0030-B	NC 308	US 258 - Bertie County Line	3.50	Concurrent with 308				

PEDESTRIAN								
				Existing System		Proposed System		Other
ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
Town of Conway								
NORT0002-H	NC 35	Flythe St - Phillips Hill Rd (SR 1365)	0.35	N/A	N/A	Sidewalks	West	H
NORT0006-P	US 158 (Main St)	Western town limits - Pine St	0.25	Sidewalks	North	Sidewalks	North	
NORT0002-H	NC 35	Martin St - Ampac Rd (SR 1549)	1.30	Sidewalks	West	Sidewalks	West	H
NORT0008-P	Maple Avenue	US 158 (Main St) - White St	0.12	N/A	N/A	Sidewalks	East-West	
Town of Jackson								
NORT0004-P	Atherton St (SR 1368)	US 158 - W Anderton St	0.40	N/A		Sidewalks	West	
NORT0004-H	NC 305 (N. Church St)	Northern town limits - Northampton County Recreational Center on Hampton Wood Complex Rd (SR 1386)	1.30			Sidewalks	East	H/B
NORT0004-H	NC 305 (N Church St.)	Northern town limits - US 158	0.50	Sidewalks	East-West	Sidewalks	East-West	H
NORT0010-P	Depot St (SR 1108)	US 158 - Duke St	0.40	Sidewalks	East-West	Sidewalks	East-West	
NORT0004-H	US 158	Western town limits - Eastern town limits	0.90	Sidewalks	North-South	Sidewalks	North-South	H
NORT0012-P	W Calhoun St	Cemetery St - NC 305	0.40	Sidewalks	South	Sidewalks	South	
NORT0013-P	Cemetery St	W Calhoun St - Long St	0.20	Sidewalks	East	Sidewalks	East	
NORT0014-P	Long St	Cemetery St - NC 305	0.20	Sidewalks	North	Sidewalks	North	
NORT0015-P	Thomas Bragg Dr in Jackson	NC 305 (W Jefferson St) - NC 305 (N. Church	0.10	Sidewalks	North	Sidewalks	North	
Town of Lasker								
NORT0016-P	Church St (SR 1516)	Garris St (SR 1503) - Club Rd	0.60	Sidewalks	North	Sidewalks	North	
Town of Rich Square								
NORT0001-H	US 258	Northern town limits - Southern town limits	1.80	Sidewalks	West	Sidewalks	West	H
NORT0004-H	NC 305	Western town limits - Eastern town limits	1.90	Sidewalks	East	Sidewalks	East	H/B
NORT0019-P	Brayantown Rd (SR 1109)	US 258/NC 561 - Boulton St	0.20	Sidewalks	East	Sidewalks	East	
Town of Seaboard								
NORT0004-H	NC 305 (Main St)	Norvell St - Marks St	1.60	Sidewalks	East-West	Sidewalks	East-West	H/B
NORT0021-P	Park St (SR 1384)	NC 305 - Calvert St (SR 1385)	0.80	Sidewalks	South	Sidewalks	South	
NORT0022-P	Church St (SR 1370)	Washington St (SR 1316) - NC 305	0.40	Sidewalks	North	Sidewalks	North	
NORT0023-P	Clay St	Green St - NC 305	0.35	Sidewalks	North	Sidewalks	North	
Town of Severn								
NORT0002-H	NC 35	Main St (SR 1334) - Mills St	0.40	Sidewalks	East	Sidewalks	East	H/B
NORT0025-P	Main St (SR 1334)	Ford St - Johnson St	0.40	Sidewalks	North-South	Sidewalks	North-South	
NORT0026-P	White St from	Water St - NC 35	0.40	Sidewalks	North-South	Sidewalks	North-South	
Town of Woodland								
NORT0002-H	NC 35 (Spruce St)	W Woodland Ave - Southern town limits	0.20	N/A		Sidewalks	East-West	H/B
NORT0005-P	North Linden St	Ashe St - Sorthern town limits	0.30			Sidewalks	East-West	
NORT0027-P	North Linden St	Ashe St - US 258 (Main St)	0.17	Sidewalks	East-West	Sidewalks	East-West	
NORT0001-H	US 258 (Main St)	Powell St (SR 1527) - Persimmon St	0.75	Sidewalks	East-West	Sidewalks	East-West	H/B
NORT0029-P	Spruce St	US 258 (Main St.) - W Woodland Ave	0.20	Sidewalks	East-West	Sidewalks	East-West	

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 rights-of-way (ROW). 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 rights-of-way, special cross sections should be developed that meet the needs of the project.

The typical cross sections, illustrated in Figure 7, 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.

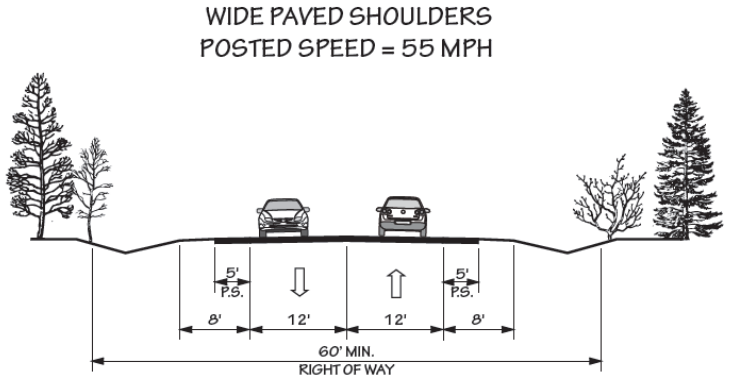
On all existing and proposed roadways delineated on the CTP, adequate rights-of-way should be protected or acquired for the recommended cross sections. In addition to cross section and right-of-way recommendations for improvements, Appendix C may recommend ultimate needed rights-of-way for the following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

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

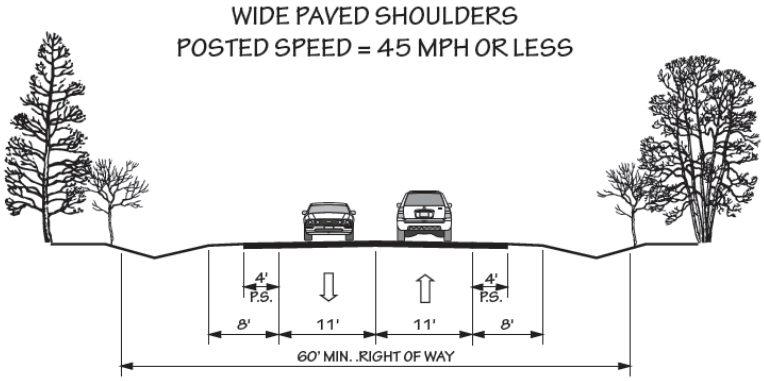
Figure 7 – Typical Cross Sections

2 LANES

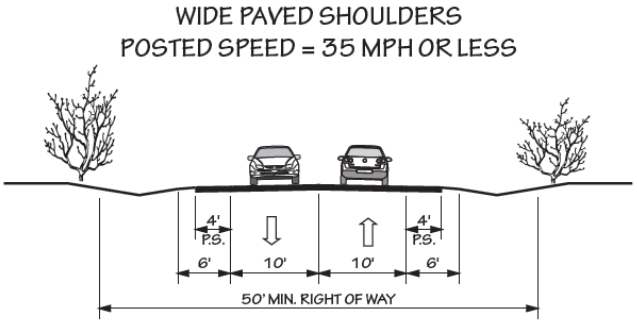
2 A



2 B



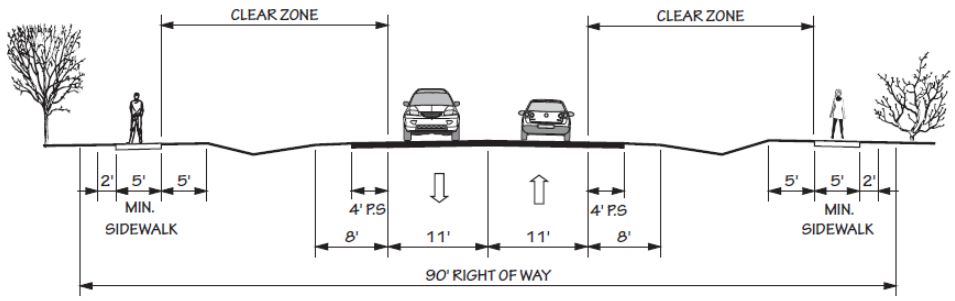
2 C



2 LANES

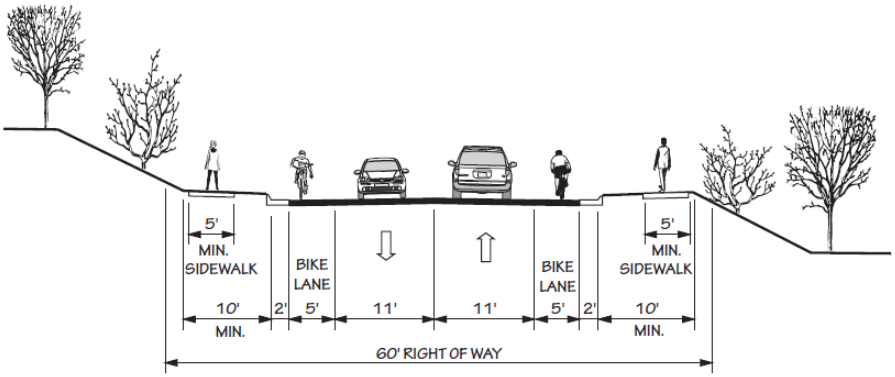
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



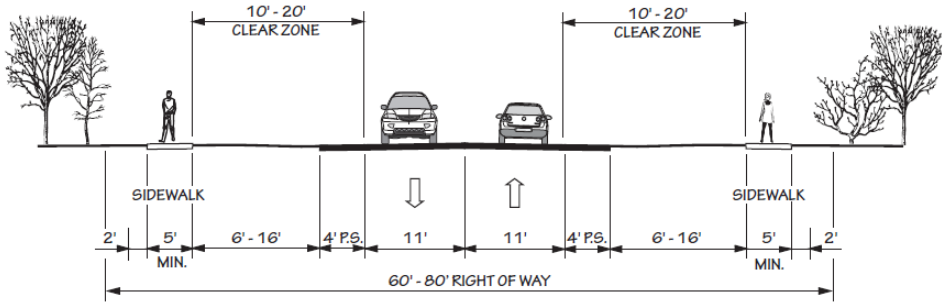
2 E

CURB AND GUTTER
WITH BIKE LANES AND SIDEWALKS



2 F

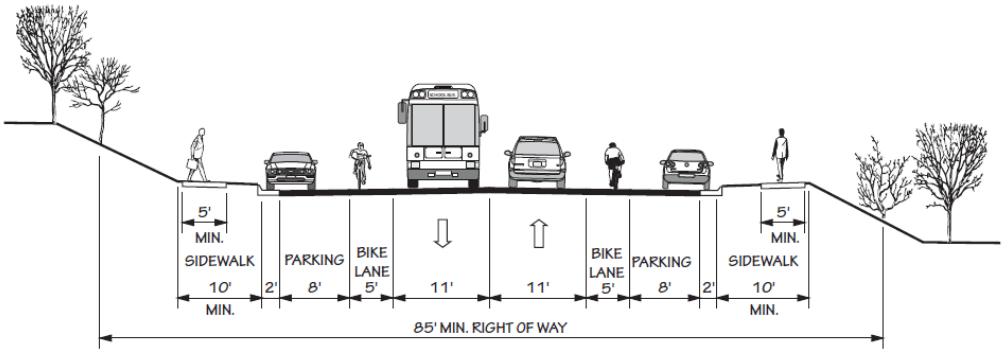
BUFFERS AND SIDEWALKS WITHOUT A ROADWAY DITCH
(20 MPH TO 45 MPH)
(TYPICALLY COASTAL AREA MANAGEMENT ACT COUNTIES)



2 LANES

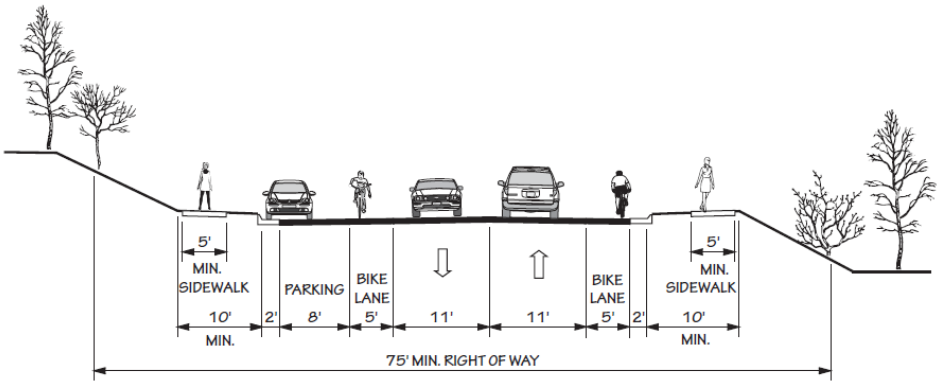
2 G

CURB & GUTTER - PARKING ON EACH SIDE



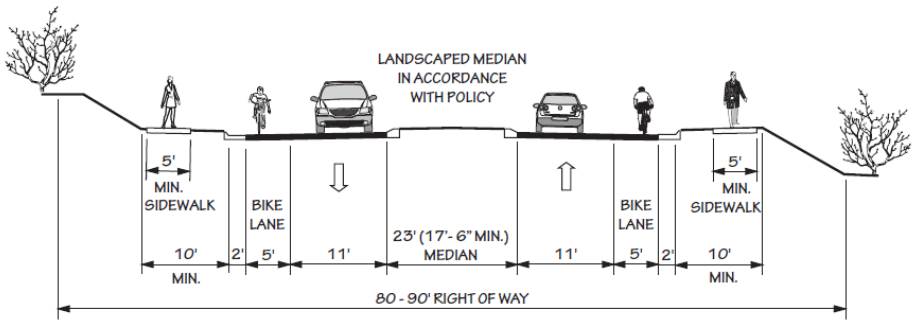
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

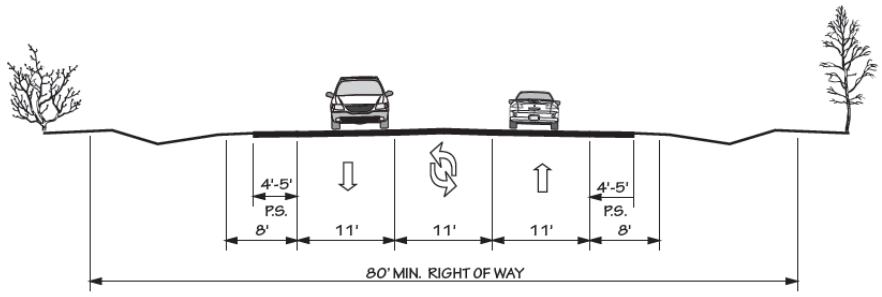
RAISED MEDIAN WITH CURB & GUTTER



3 LANES

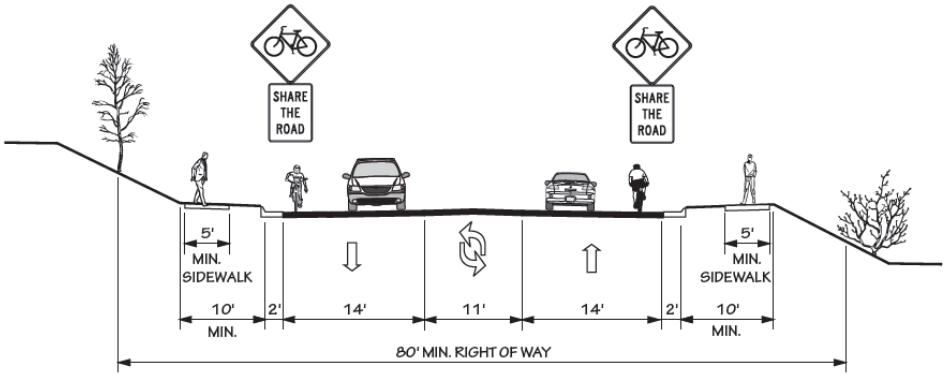
3 A

WIDE PAVED SHOULDERS



3 B

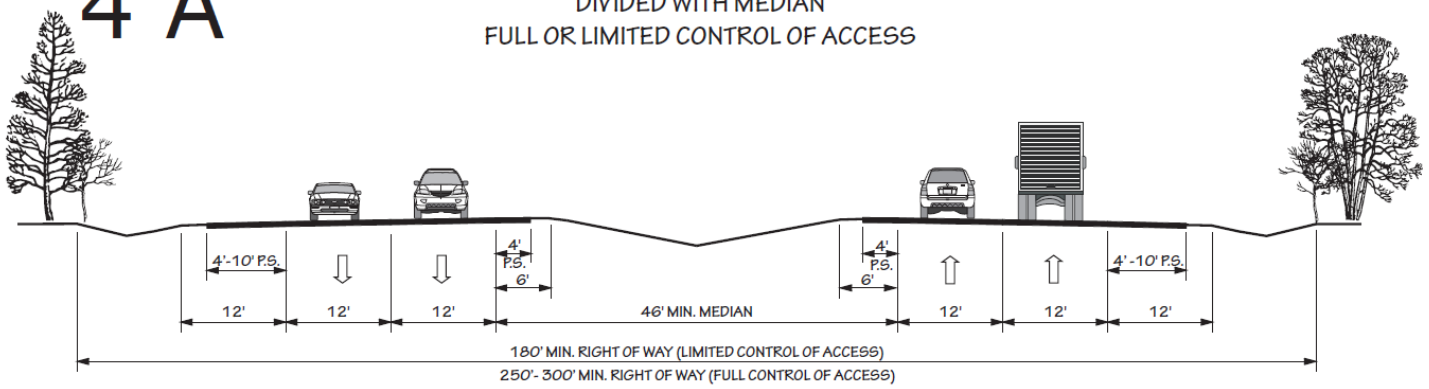
CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



4 LANES

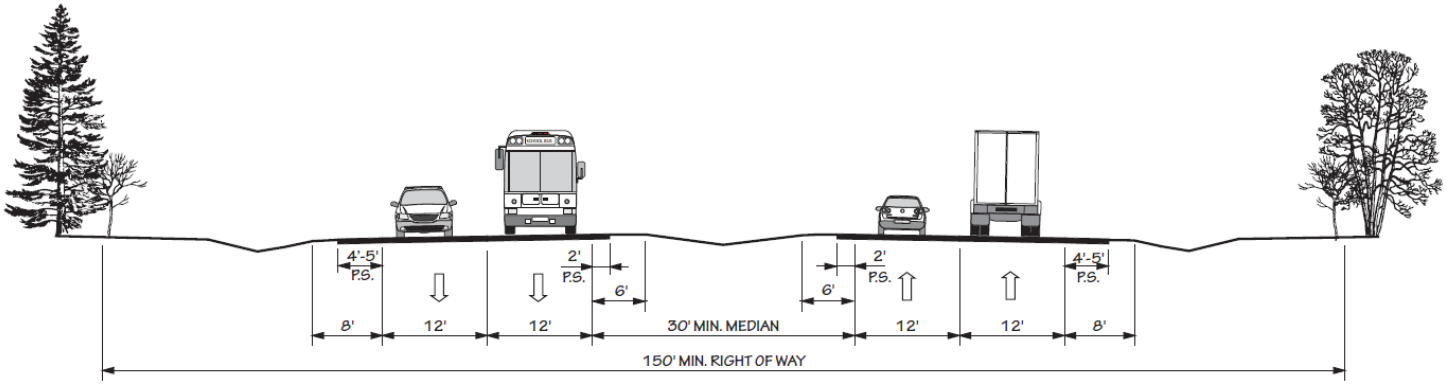
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



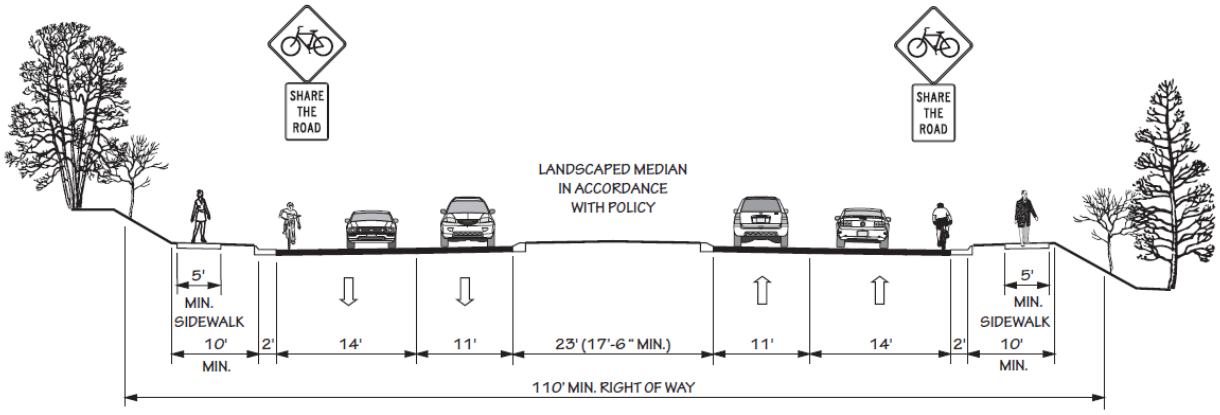
4 B

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



4 C

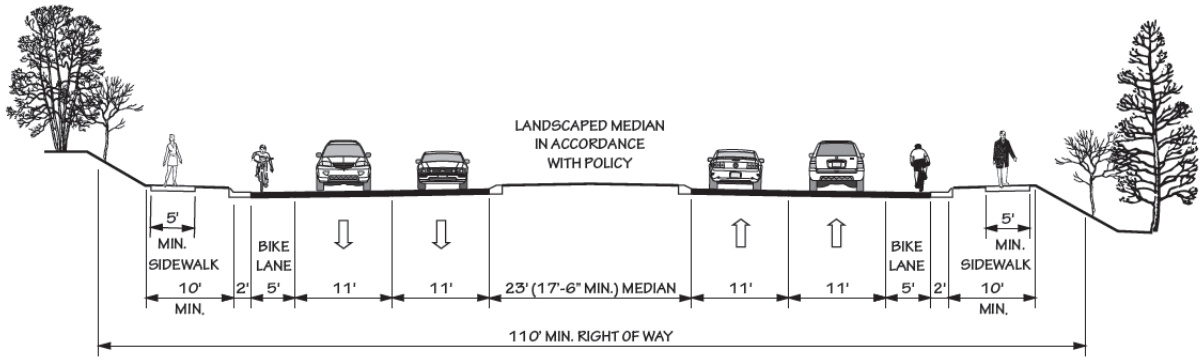
RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS



4 LANES

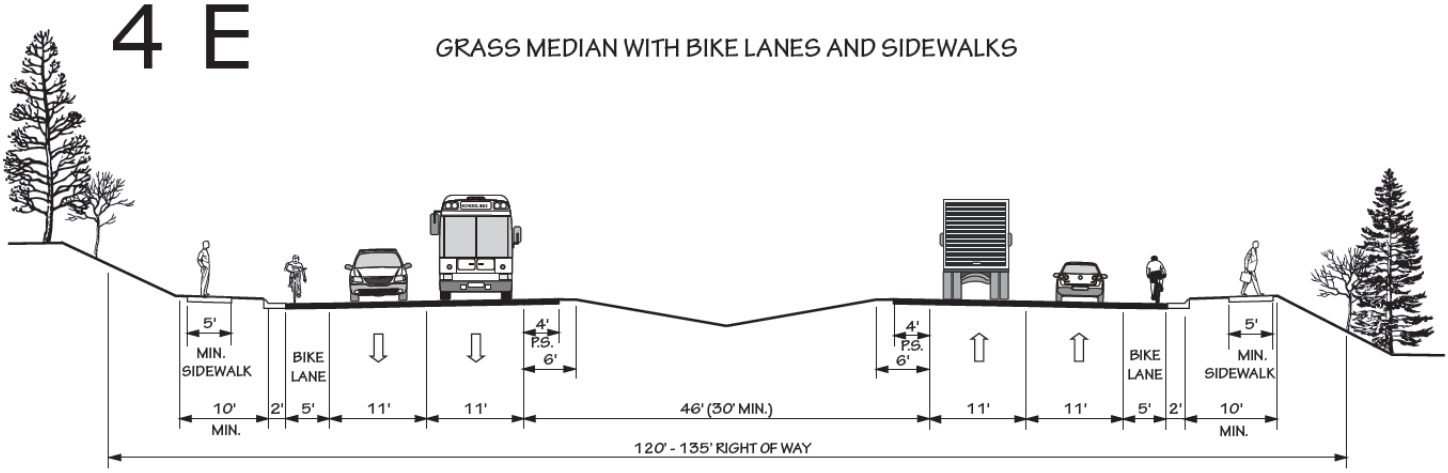
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

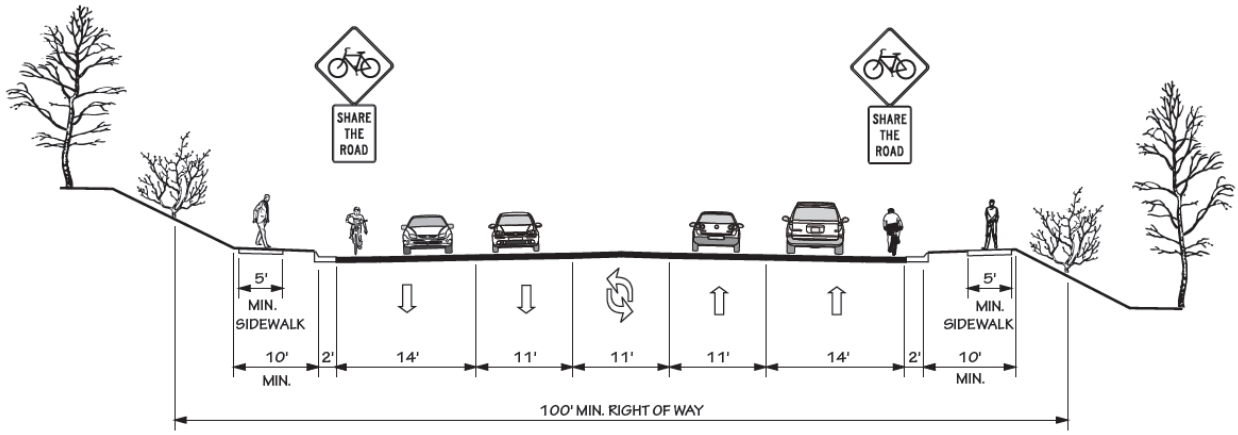
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

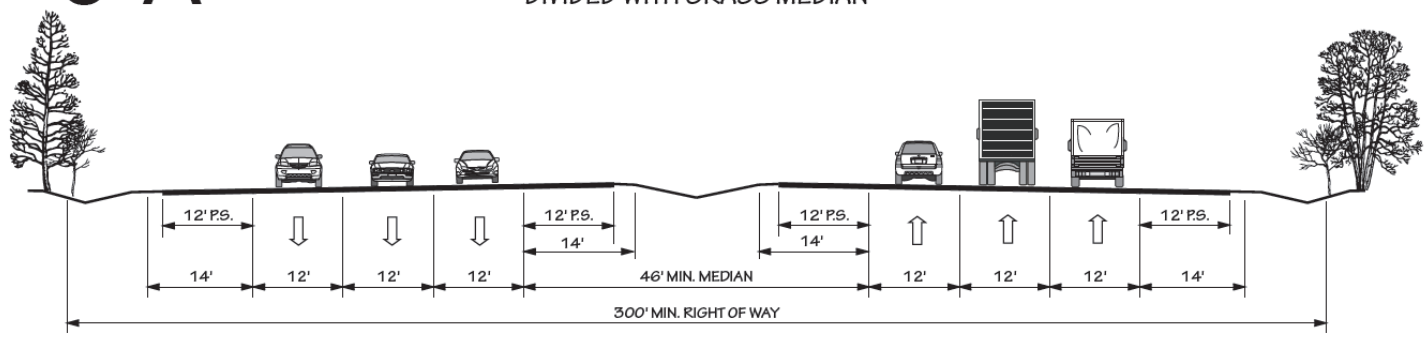
WIDE OUTSIDE LANES



6 LANES

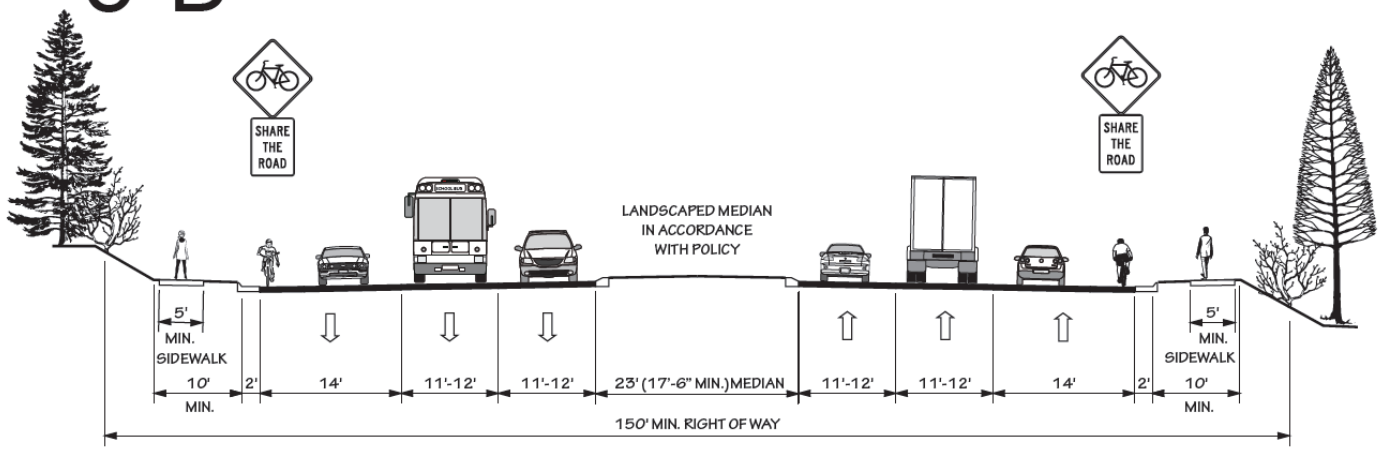
6 A

DIVIDED WITH GRASS MEDIAN



6 B

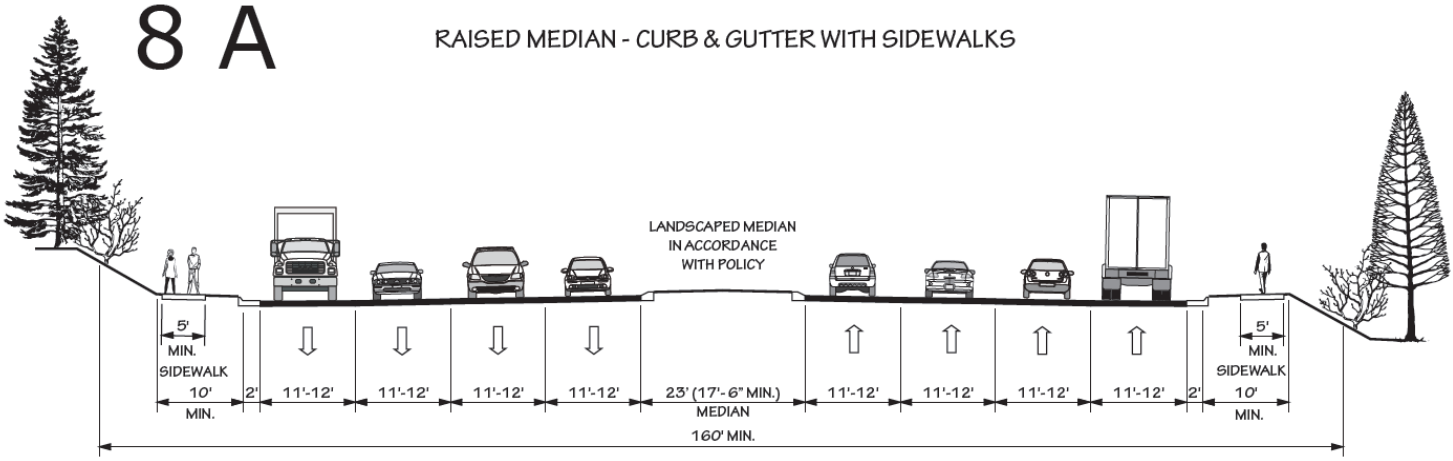
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

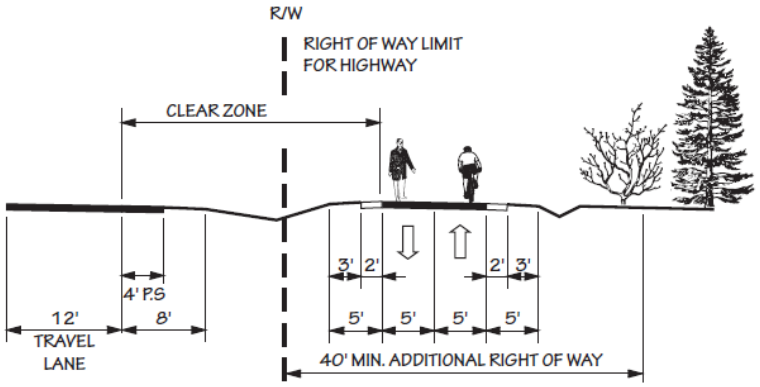
8 A

RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS



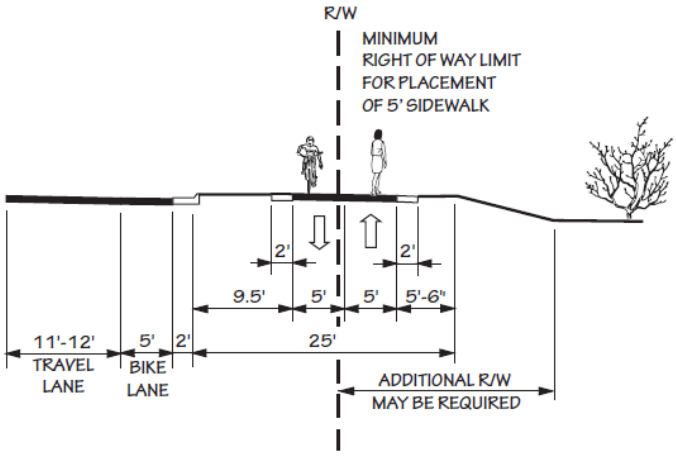
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Appendix E
Level of Service Definitions

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

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

- **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 8 - 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 Northampton County CTP factored crash frequency, crash type, and crash severity. Crash frequency is the total number of reported collisions 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 4.56 index. The "Total" column indicates the total number of accidents reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 4 - Crash Locations

Map Index	Intersection	Average Severity	Total Crashes
1	US 158 and US 258	10.8	10

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

Appendix G
Bridge Deficiency Assessment

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

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

The NCDOT 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 1344	Rogers Swamp	Functionally Obsolete	
13	SR 1339	Meherrin River	Structurally Deficient	B-5502
14	SR 1500	Potecasi Creek	Structurally Deficient	B-4919
15	SR 1505	Wildcat Swamp	Structurally Deficient	B-4920
17	SR 1508	Doolittle Mill Pond	Structurally Deficient	
27	SR 1108	Creek	Structurally Deficient	
28	SR 1119	Quarter Swamp	Functionally Obsolete	
33	NC 305	Urahaw Swamp	Functionally Obsolete	
39	NC 305	Urahaw Swamp	Functionally Obsolete	
41	NC 46	I-95 NB & SB	Functionally Obsolete	
43	NC 48	I-95	Functionally Obsolete	
46	SR 1360	Branch of Kirby's Creek	Structurally Deficient	
48	SR 1126	Gumberry Swamp	Structurally Deficient	
63	SR 1126	Occoneechee Creek	Structurally Deficient	
70	SR 1201	I-95	Structurally Deficient	
81	NC 35	Meherrin River	Structurally Deficient	
90	SR 1324	Cypress Creek	Structurally Deficient	
111	SR 1137	Gumberry Swamp	Structurally Deficient	

Appendix H
Public Involvement

This appendix includes a listing of CTP committee members, the Goals and Objectives and Vision Statement, the Goals and Objectives Survey and results, and a summary of the public involvement opportunities.

CTP Committee Members:

- Wayne Jenkins – Northampton County Manager
- William Flynn – Northampton County Planning and Zoning Director
- Gary Brown – Community Development Director
- Joy Edwards – Land Record Coordinator
- June Warren – Northampton County Community Development
- Robert Collier – Town of Woodland
- Johnny young – Town of Jackson
- Rye Simmons – Town of Conway
- M.E. Lassiter – Town of Severn
- Fannie Greene – Town of Garysburg and Northampton County Commissioners
- C. W. Bridgers, Jr., PE – North Carolina Department of Transportation District Engineer
- Jason Morris – North Carolina Department of Transportation Assistant District Engineer

Goals & Objectives & Vision Statement:

Purpose:

To work with Northampton County and the towns of Conway, Jackson, Lasker, Rich Square, Seaboard, Severn, and Woodland 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 Northampton 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 Northampton County as well as public awareness of those choices. Develop a regional transportation network that improves Northampton County residents' quality of life and surrounding environment.

Goals:

1. Insure the integrity of the existing system by encouraging planning 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 Northampton County with surrounding metropolitan areas including Rocky Mount, Greenville, and other areas in the Eastern United States.

8. Review existing access management and provide recommendations to improve safety and efficiency of the transportation system while enhancing development.

9. Educate the public on general transportation issues as well as alternative forms of transportation.

Northampton County CTP Survey

1. **What type of transportation do you use the most?**

Answer Options	Response Percent	Response Count
Drive yourself in a private automobile	93.8%	61
Ride with others in a private automobile	4.6%	3
Use public transportation, such as bus service	0.0%	0
Walk	0.0%	0
Bicycle	1.5%	1
Take a cab or taxi service	0.0%	0
Other (please specify)		1
answered question		65
skipped question		0

2. **Which of the following describes the most common destination for trips that you make during a normal week?**

Answer Options	Response Percent	Response Count
Work	66.2%	43
School	7.7%	5
Shopping	40.0%	26
Medical Care	20.0%	13
Recreation	16.9%	11
Church	32.3%	21
Friends or Family Homes	27.7%	18
Restaurants	13.8%	9
Other (please specify)		3
answered question		65
skipped question		0

3. **In an average month, how often do you travel to the following destinations? (Please place a number in the blank.)**

Answer Options	Response Percent	Response Count
Virginia	68.9%	42
Greenville	44.3%	27
Rocky Mount	73.8%	45
Raleigh	39.3%	24
Other (Please specify.)	36.1%	22
answered question		61
skipped question		4

4. **Please indicate the following methods you agree with for increasing a road's efficiency:**

Answer Options	Agree	Disagree	Response Count
Building additional travel lanes	44	16	60
Making improvements to intersections such as better traffic signal timing, adding turn lanes, creating roundabouts	41	6	47
Controlling the frequency and locations of driveways and cross streets that access the road	38	18	56
answered question			64
skipped question			1

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

Answer Options	Response Percent	Response Count
Yes	52.5%	31
No	47.5%	28
If yes, list specific location:		27
answered question		59
skipped question		6

6. **Is truck traffic a problem in the area?**

Answer Options	Response Percent	Response Count
Yes	46.0%	29
No	54.0%	34
If yes, please provide road names or locations.		26
answered question		63
skipped question		2

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

Answer Options	Response Percent	Response Count
Yes	53.7%	29
No	46.3%	25
If yes, please list desired locations:		28
answered question		54
skipped question		11

8. If available, would you use off-road trails or greenways for walking and biking instead of driving?

Answer Options	Response Percent	Response Count
Yes	49.2%	30
No	50.8%	31
If yes, please list desired locations:		17
answered question		61
skipped question		4

9. If available, would you use on-road bicycle facilities such as bike lanes and wide shoulders instead of driving?

Answer Options	Response Percent	Response Count
Yes	34.4%	21
No	65.6%	40
If yes, please list desired locations:		12
answered question		61
skipped question		4

10. If available, would you consider using transit service around the county?

Answer Options	Response Percent	Response Count
Yes	52.3%	34
No	47.7%	31
If yes, please list desired locations:		22
answered question		65
skipped question		0

11. Please indicate which of the following county goals you agree with for improving transportation in Northampton County:

Answer Options	Agree	Disagree	Response Count
Improve Economic Development County Wide	60	1	61
Create better Connectivity especially with Northampton and Halifax Counties	32	8	40
Create better Connectivity between Northampton County and I-95	44	9	53
Create better Connectivity between points in Northampton County and Roanoke Rapids	37	5	42
Create better Connectivity with Rocky Mount	25	5	30
Remove Truck Traffic on US 158	41	15	56
answered question			63
skipped question			2

12. To what communities or roads would you like to see improved access? (Please specify.)

Answer Options	Response Count
	33
answered question	**33**
skipped question	**32**

13. What are the key transportation issues in your area?

Answer Options	Response Count
	42
answered question	**42**
skipped question	**23**

14. What is your age?

Answer Options	Response Percent	Response Count
Under 18	0.0%	0
18-24	0.0%	0
25-34	6.3%	4
35-44	14.1%	9
45-64	62.5%	40
65-74	15.6%	10
Over 74	1.6%	1
answered question		**64**
skipped question		**1**

15. How would you classify your race?

Answer Options	Response Percent	Response Count
White	54.1%	33
Black	39.3%	24
Native American	3.3%	2
Hispanic	1.6%	1
Asian/South Asian	0.0%	0
Other	1.6%	1
answered question		**61**
skipped question		**4**

16. What was your household income last year?

Answer Options	Response Percent	Response Count
Less than $19,999	11.7%	7
$20,000 - $30,983	18.3%	11
$30,984 - $49,999	25.0%	15
$50,000 - $70,000	18.3%	11
more than $70,000	21.7%	13
Don't know	5.0%	3
answered question		60
skipped question		5

17. In what community of Northampton County do you live? (Please check only one box. Use the map below for reference.)

Answer Options	Response Percent	Response Count
Gaston Township	9.7%	6
Kirby Township	6.5%	4
Occoneechee Township	3.2%	2
Pleasant Hill Township	0.0%	0
Rich Square Township	6.5%	4
Roanoke Township	3.2%	2
Seaboard Township	4.8%	3
Wiccacanee Township	3.2%	2
Conway	12.9%	8
Garysburg	4.8%	3
Gaston	4.8%	3
Jackson	19.4%	12
Lasker	3.2%	2
Rich Square	6.5%	4
Seaboard	6.5%	4
Severn	0.0%	0
Woodland	4.8%	3
Other (please specify)		2
answered question		62
skipped question		3

Appendix I
Existing Transportation Plans

The following CTPs or Thoroughfare Plans for areas within the County that are not included as a part of this plan are listed below.

- Roanoke Rapids Urban Area