



Comprehensive Transportation Plan



Tyrrell County

October 2012

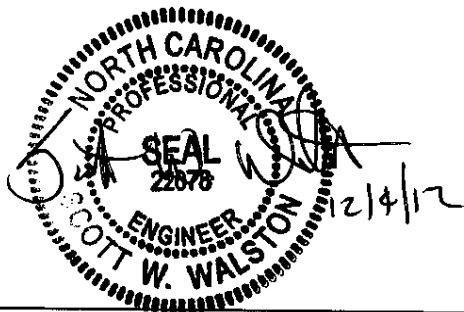
Comprehensive Transportation Plan

Tyrrell County

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Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Tyrrell County
Town of Columbia
Albemarle Rural Planning Organization

October 2012



Scott Walston, PE
Triangle Planning Group Supervisor

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Executive Summary

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

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

This report documents the recommendations for improvements that are included in the Tyrrell 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 64:** Improve to a 4-lane divided expressway with partially controlled access from the Scuppernong River Bridge to East of Columbia.
- **Road Street (SR 1209):** Alleviate flooding at the culvert along Road Street (SR 1209) before Cemetary Road (SR 1210) to allow emergency vehicles to safely travel along Road Street (SR 1209).

Adopted by:

Tyrrell County
Date: 04/17/12

Town of Columbia
Date: 05/07/12

NCDOT
Date: 10/04/12

Endorsed by:

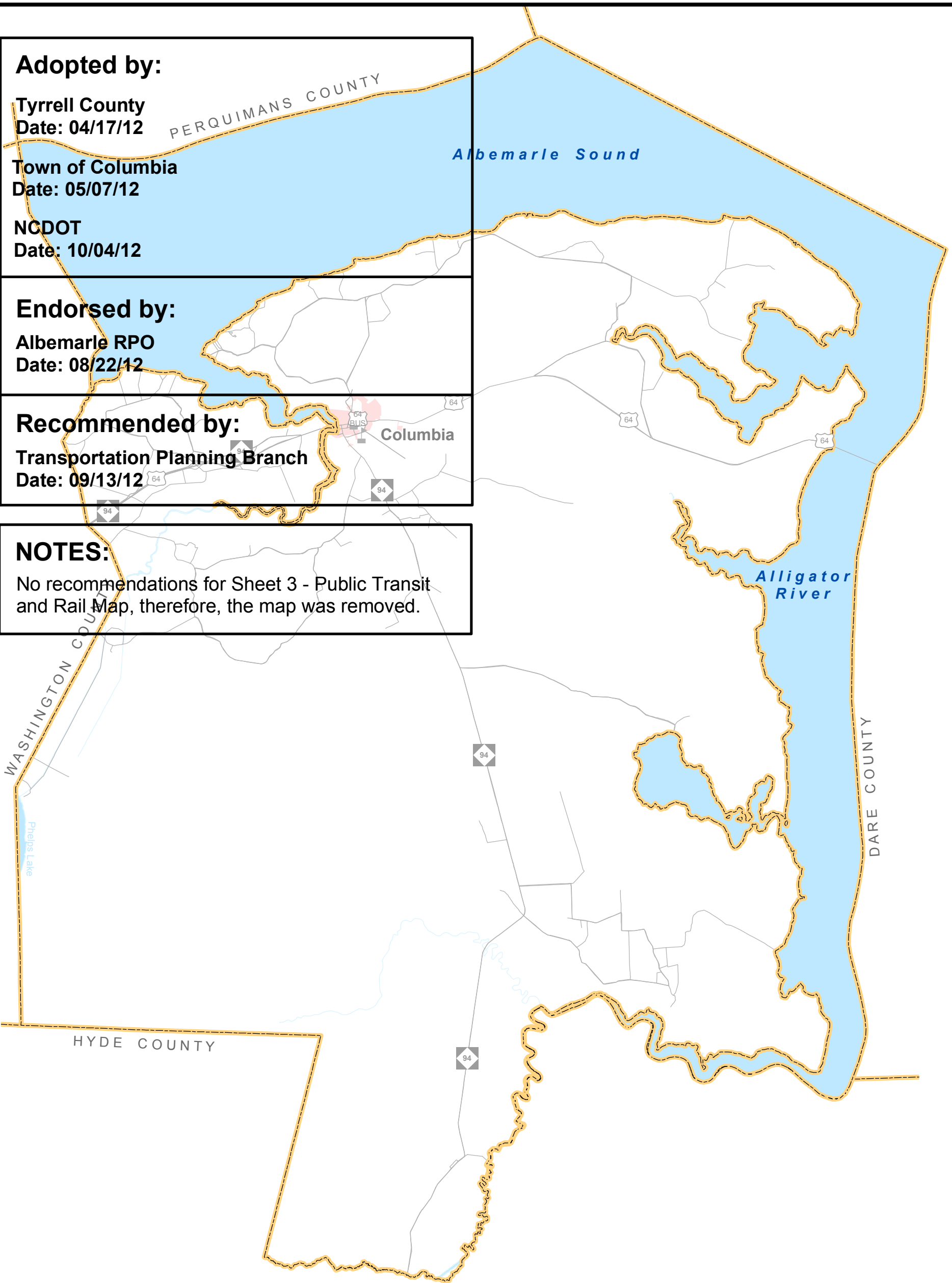
Albemarle RPO
Date: 08/22/12

Recommended by:

Transportation Planning Branch
Date: 09/13/12

NOTES:

No recommendations for Sheet 3 - Public Transit and Rail Map, therefore, the map was removed.



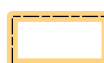


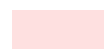
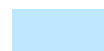
Sheet 1 Adoption Sheet

Sheet 2 Highway Map

Sheet 3 Public Transportation and Rail Map

Sheet 4 Bicycle Map

Sheet 5 Pedestrian Map

-  County Boundary
-  Schools
-  Roads
-  Municipal Boundary
-  Water

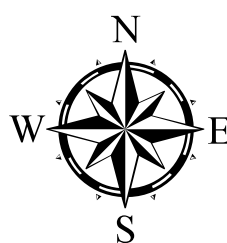


Figure 1 - Sheet 1

Base map date: January 2011

Refer to CTP document for more details



Tyrrell County
North Carolina

**Comprehensive
Transportation Plan**
Plan date: February 20, 2012



- Freeways**
- Existing
 - Needs Improvement
 - Recommended
- Expressways**
- Existing
 - Needs Improvement
 - Recommended
- Boulevards**
- Existing
 - Needs Improvement
 - Recommended

- Other Major Thoroughfares**
- Existing
 - Needs Improvement
 - Recommended
- Minor Thoroughfares**
- Existing
 - Needs Improvement
 - Recommended
- Interchanges and Grade Separations**
- Existing Interchange
 - Proposed Interchange
 - Existing Grade Separation
 - Proposed Grade Separation

0 1 2 3 Miles

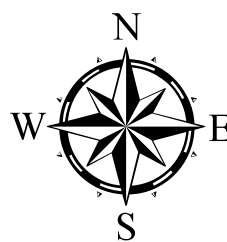


Figure 1 - Sheet 2

Base map date: January 2011

Refer to CTP document for more details

Highway Map

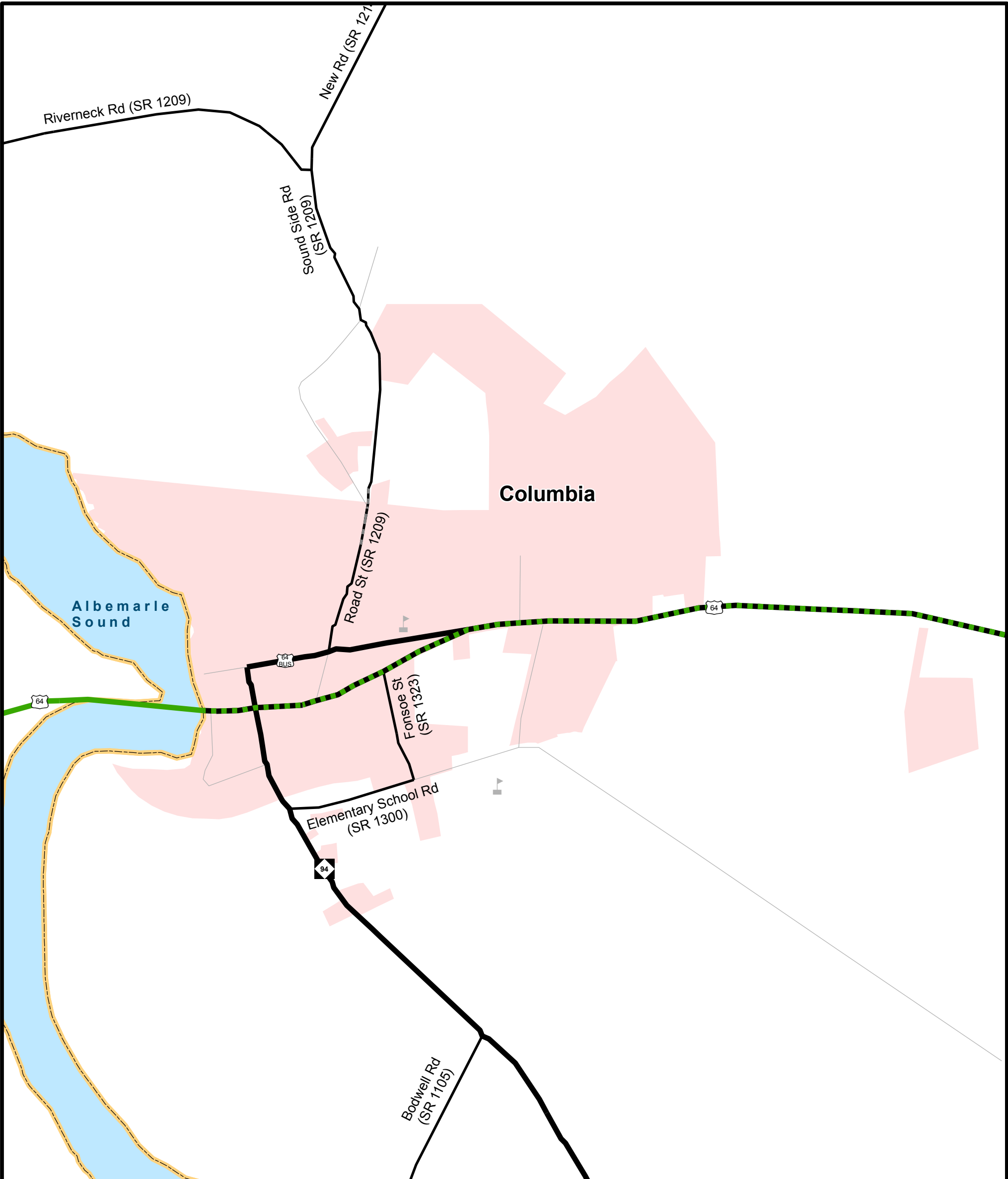


Tyrrell County

North Carolina

Comprehensive Transportation Plan

Plan date: February 27, 2012



- | | |
|--|---|
| <p>Freeways</p> <ul style="list-style-type: none"> — Existing - - - Needs Improvement . . . Recommended <p>Expressways</p> <ul style="list-style-type: none"> — Existing - - - Needs Improvement . . . Recommended <p>Boulevards</p> <ul style="list-style-type: none"> — Existing - - - Needs Improvement . . . Recommended | <p>Other Major Thoroughfares</p> <ul style="list-style-type: none"> — Existing - - - Needs Improvement . . . Recommended <p>Minor Thoroughfares</p> <ul style="list-style-type: none"> — Existing - - - Needs Improvement . . . Recommended <p> ● Existing Interchange
 ● Proposed Interchange
 ○ Existing Grade Separation
 ○ Proposed Grade Separation </p> |
|--|---|

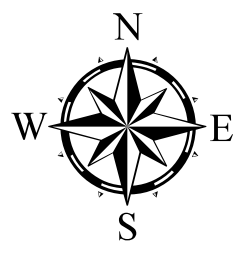
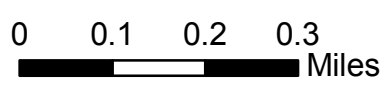


Figure 1 - Sheet 2A

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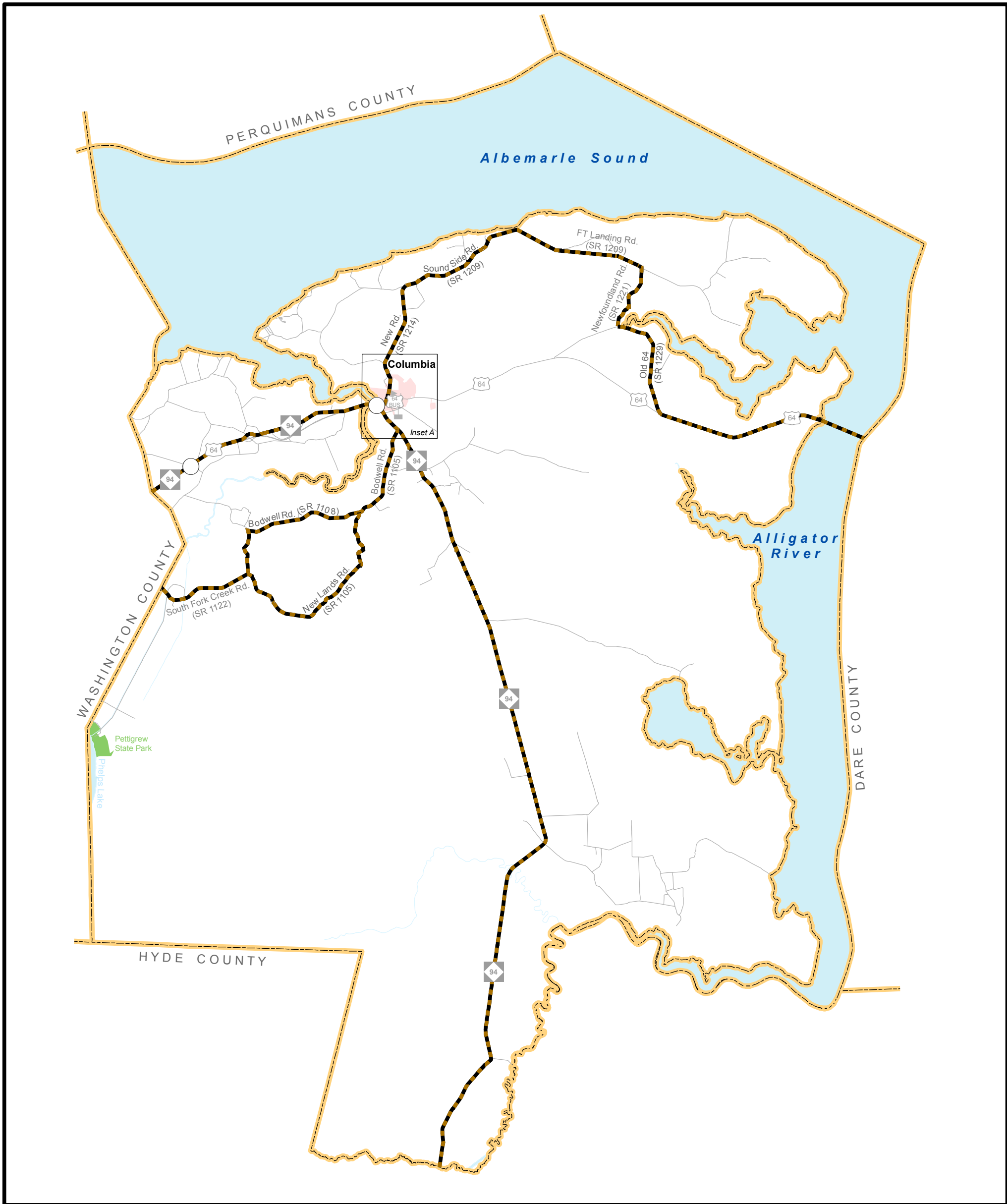
Refer to CTP document for more details

Highway Map
Inset A (Columbia)



Tyrrell County
North Carolina

**Comprehensive
Transportation Plan**
Plan date: February 24, 2012



On-road

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

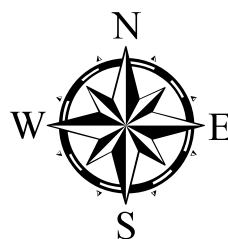
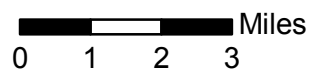


Figure 1 - Sheet 4

Base map date: January 2011

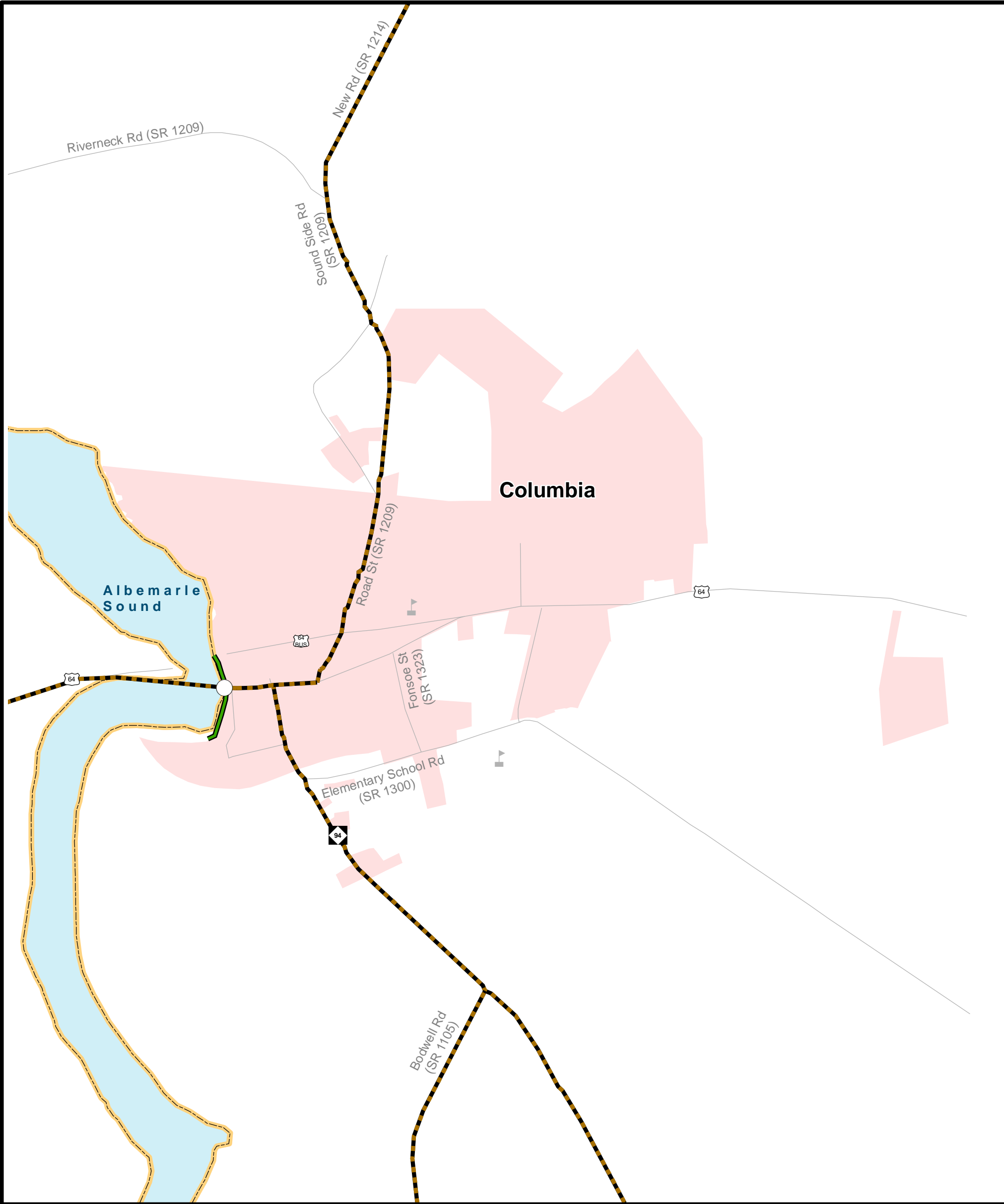
Refer to CTP document for more details

Bicycle Map



Tyrrell County
North Carolina

**Comprehensive
Transportation Plan**
Plan date: February 27, 2012



On-road

- Existing
- Needs Improvement
- Recommended

Off-road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

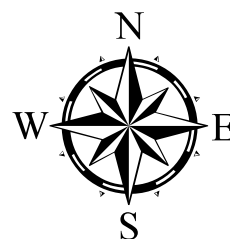
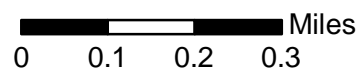


Figure 1 - Sheet 4A

Base map date: January 2011

Refer to CTP document for more details

Bicycle Map

Inset A (Columbia)



Tyrrell County

North Carolina

**Comprehensive
Transportation Plan**

Plan date: February 27, 2012



Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

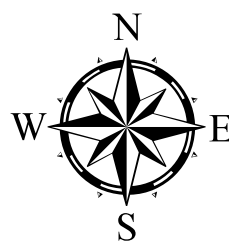


Figure 1 - Sheet 5

Base map date: January 2011

Refer to CTP document for more details

Pedestrian Map



Tyrrell County
North Carolina

**Comprehensive
Transportation Plan**

Plan date: February 27, 2012



Sidewalks

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

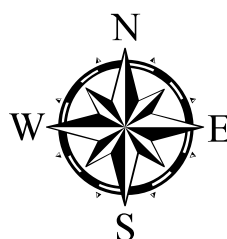
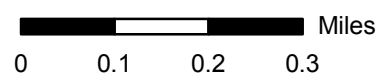


Figure 1 - Sheet 5A

Base map date: January 2011

Refer to CTP document for more details

Pedestrian Map

Inset A (Columbia)



Tyrrell County
North Carolina

**Comprehensive
Transportation Plan**

Plan date: February 27, 2012

I. Analysis of the Existing and Future Transportation System

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

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

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

Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

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

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

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

In the development of this plan, travel demand was projected from 2007 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1991 to 2009. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The established future growth rates were endorsed by the Tyrrell County CTP Committee on April 25, 2011.

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

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

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

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

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

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

Traffic Crash Analysis

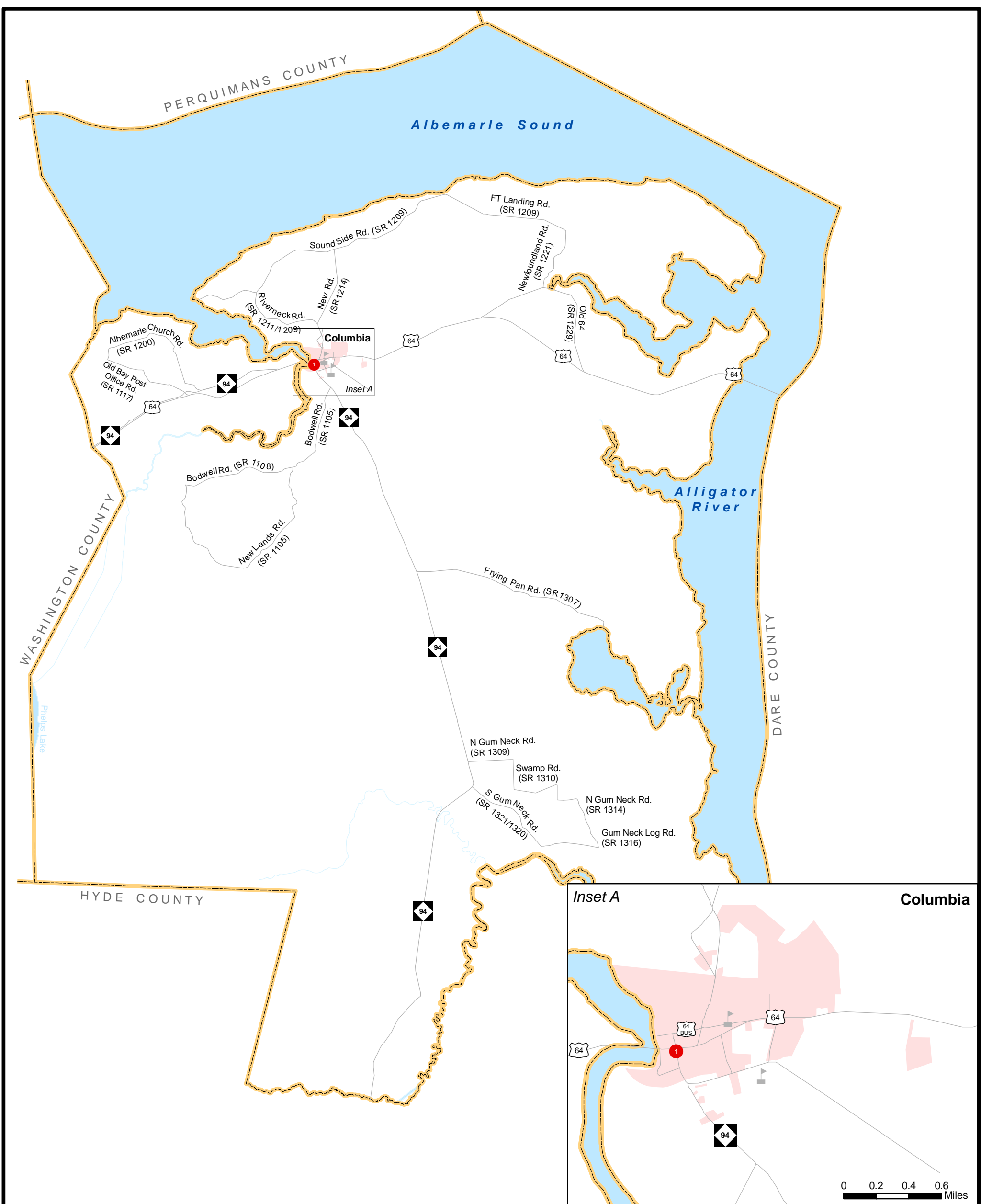
Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Tyrrell County CTP for crashes occurring in the planning area between January 1, 2007 and December 31, 2009. During this period, the intersection of US 64/NC 94 was identified as having a high number of crashes as illustrated in Figure 3. Refer to Appendix F for a detailed crash analysis.



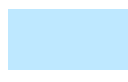


Bridge Deficiency Assessment

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. Five deficient bridges were identified within the planning area and are illustrated in Figure 4. Refer to Appendix G for more detailed information.

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-  County Boundary
-  Municipal Boundary
-  Water
-  Roads
-  Crashes
(# Map Index)

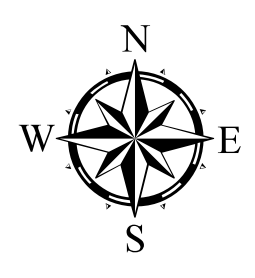
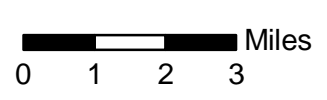


Figure 3

Base map date: January 2011

Refer to CTP document for more details

Crash Locations



Tyrrell County Comprehensive Transportation Plan



- Flooding
 - Local Roads
 - Network Roads
 - Near Capacity
 - Over Capacity
 - ▭ County Boundary
 - ▭ Municipal Boundary
 - ▭ Water
- | | |
|------|--------------------------|
| 0000 | 2007 AADT |
| 0000 | 2035 AADT |
| 0000 | Current Roadway Capacity |

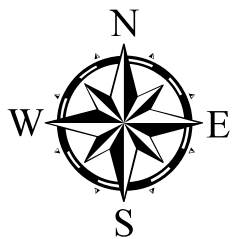
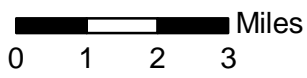


Figure 2

Base map date: January 2011

Refer to CTP document for more details

Volumes and Roadway Deficiencies



Tyrrell County Comprehensive Transportation Plan

Public Transportation and Rail

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

Public Transportation

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

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

The Tyrrell County Senior and Disabled Transportation System is a community transit system that serves the Tyrrell County Department of Social Services through subscription and dial-a-ride routes. Operations are from 9 am – 5 pm on weekdays with 2 service vehicles. There is no service to the general public. Tyrrell County does not currently have any fixed transit routes so no recommendations were made for this mode.

Rail

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

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

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

Tyrrell County does not have a rail system so no recommendations were made for this mode.

Bicycles & Pedestrians

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

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4, 4A, 5 and 5A of Figure 1. 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.

The Town of Columbia had a planning project done by Rivers and Associates that looked at US 64 through Columbia and the downtown riverfront (US 64/Scuppernon Drive Corridor Planning Project and Riverfront Development Plan). Along US 64, recommendations were made for vegetated medians and pedestrian infrastructure improvements (decorative crosswalks, signs and/or signals) at Broad Street and near Water Street (SR 1238). Pedestrian infrastructure improvements (decorative crosswalks, signs and/or signals) were also recommended at the intersection of US 1 Business and Broad Street. Water Street (SR 1238) was recommended to be converted into a one-way North and Elm Street was recommended to be converted into one-way South.

Land Use

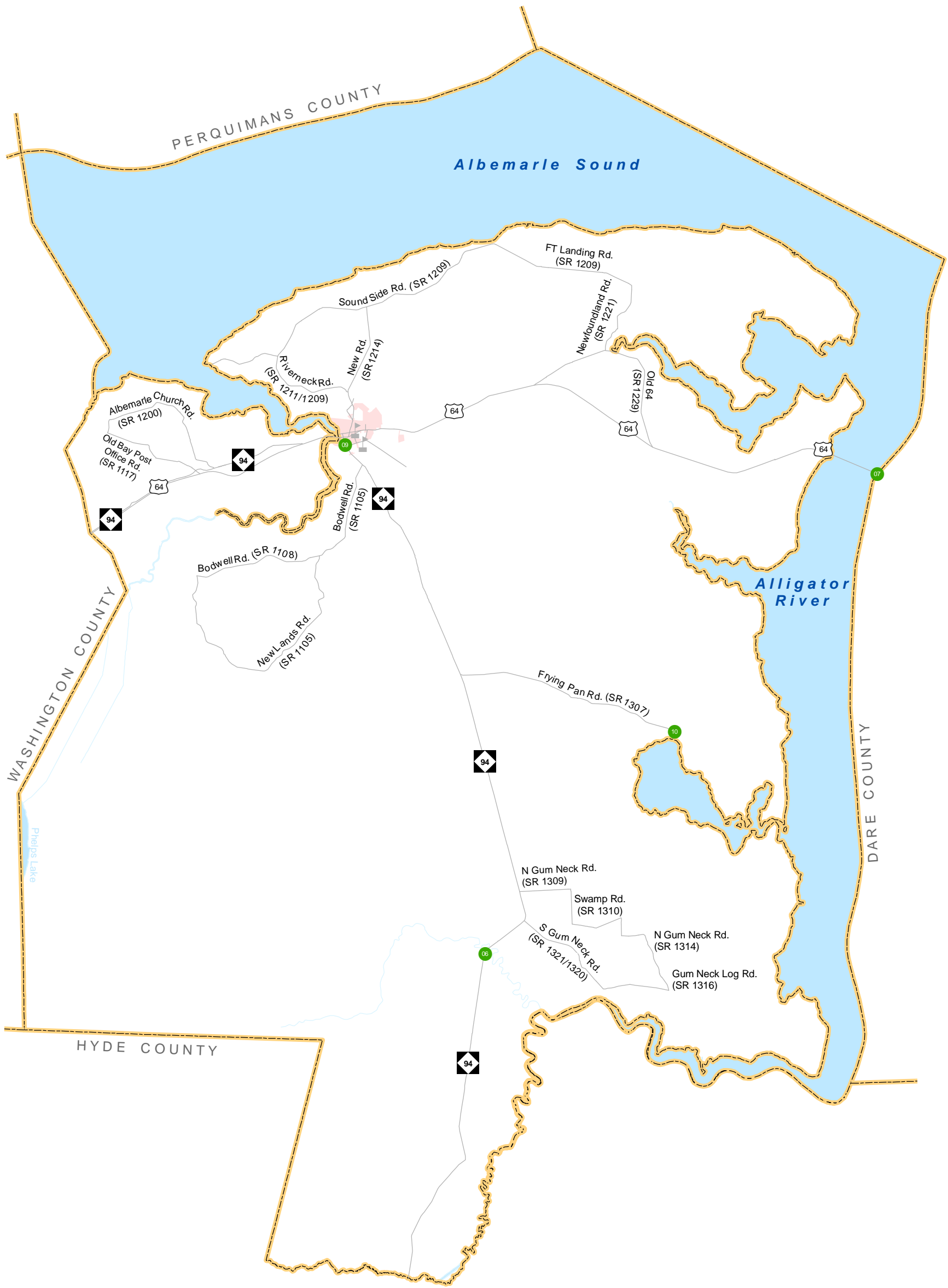
G.S. §136-66.2 requires that local areas have a current (less than five years old) land development plan prior to adoption of the CTP. For this CTP, the 2009 Tyrrell County/Town of Columbia Coastal Area Management Act (CAMA) Core Land Use Plan was used to meet this requirement and is illustrated in Figures 5 through 8, respectively. Most of the proposed development is in Columbia along US 64.


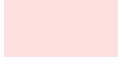
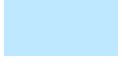



Land use refers to the physical patterns of activities and functions within an area. Traffic demand in a given area is, in part, attributed to adjacent land use. For example, a large shopping center typically generates higher traffic volumes than a residential area. The spatial distribution of different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



-  County Boundary
-  Municipal Boundary
-  Water
-  Roads
-  Schools
-  Bridge Locations
(# Map Index)

0 1 2 3 Miles

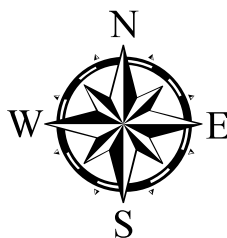


Figure 4

Base map date: January 2011

Refer to CTP document for more details

Bridge Deficiency Map

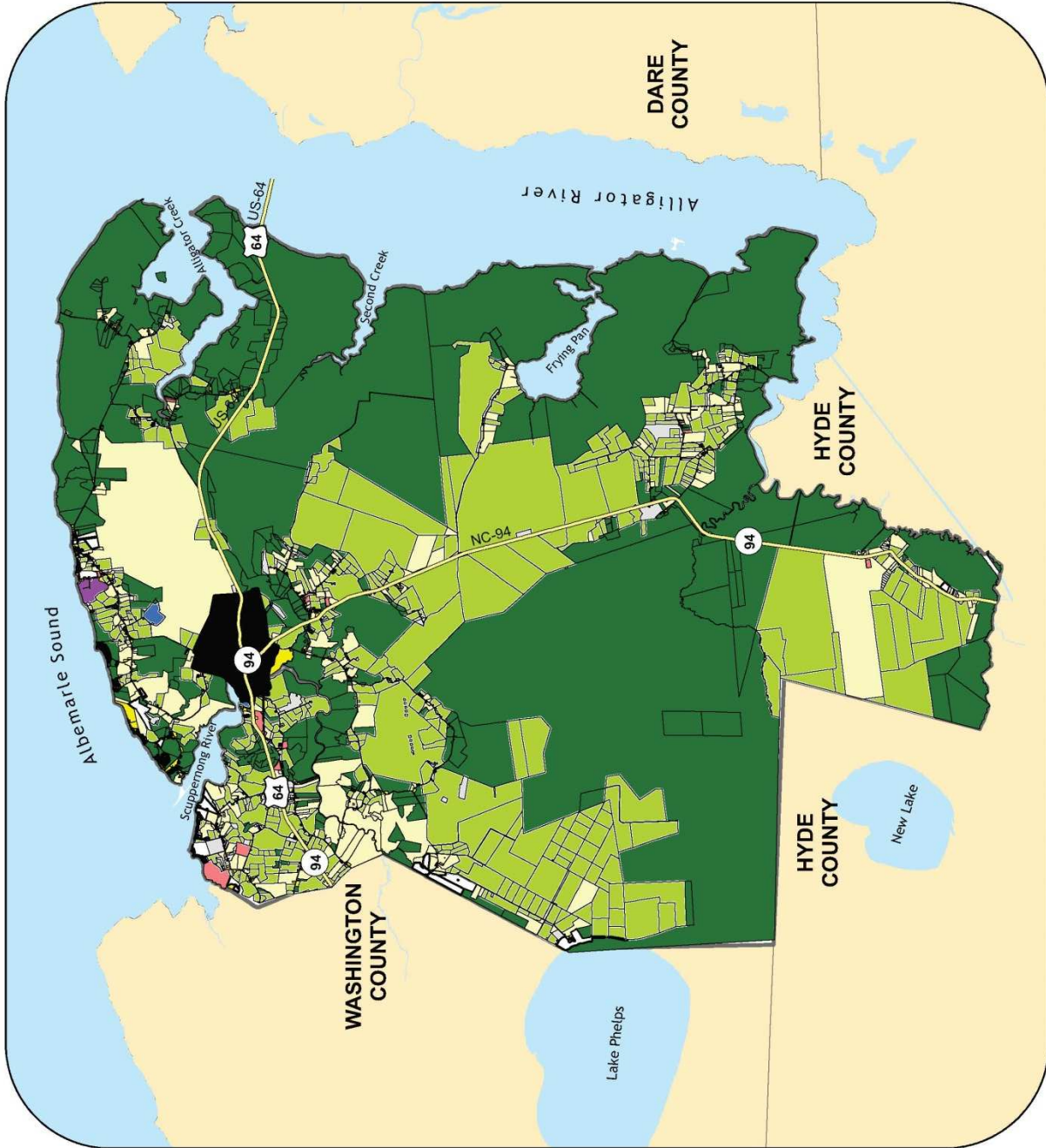


Tyrrell County Comprehensive Transportation Plan

Tyrrell County Town of Columbia Land Use Plan

Unincorporated Areas

Existing Land Use



Legend

- | | |
|--------------------------|---------------------------|
| Major Roads | Industrial |
| Town of Columbia | Multi-Family Residential |
| NC Counties | Mobile Home Park |
| Tyrrell County | Office & Institutional |
| Hydrology | Residential/Agricultural |
| Existing Land Use | Recreational |
| Commercial | Single-Family Residential |
| Farmland | Vacant |
| Forest Land | |



1 inch = 15,000 feet



The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

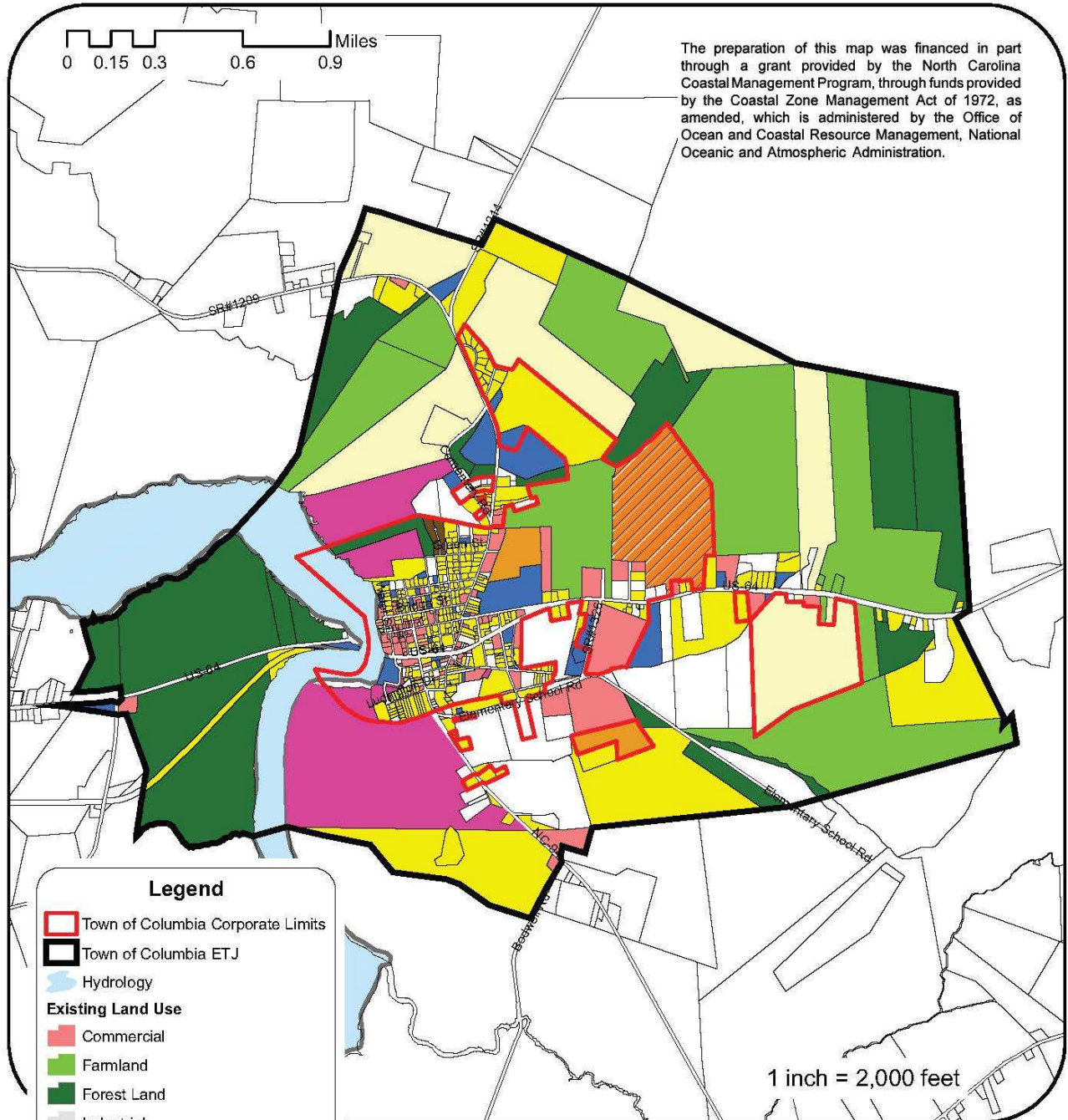


12/5/2007

Figure 5

0 0.15 0.3 0.6 0.9 Miles

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.



- Legend**
- Town of Columbia Corporate Limits
 - Town of Columbia ETJ
 - Hydrology
 - Existing Land Use**
 - Commercial
 - Farmland
 - Forest Land
 - Industrial
 - Multi-Family Residential
 - Mobile Home Park
 - National Wildlife Reserve
 - Office & Institutional
 - PUD
 - Residential/Agricultural
 - Single-Family Residential
 - Vacant

1 inch = 2,000 feet

HCP
Holland Consulting Planners, Inc.

**Tyrrell County
Town of Columbia
Land Use Plan
Town of Columbia
Existing Land Use**



Figure 6

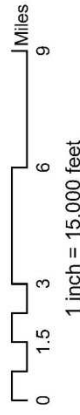
12/5/2007

Tyrrell County Town of Columbia Land Use Plan

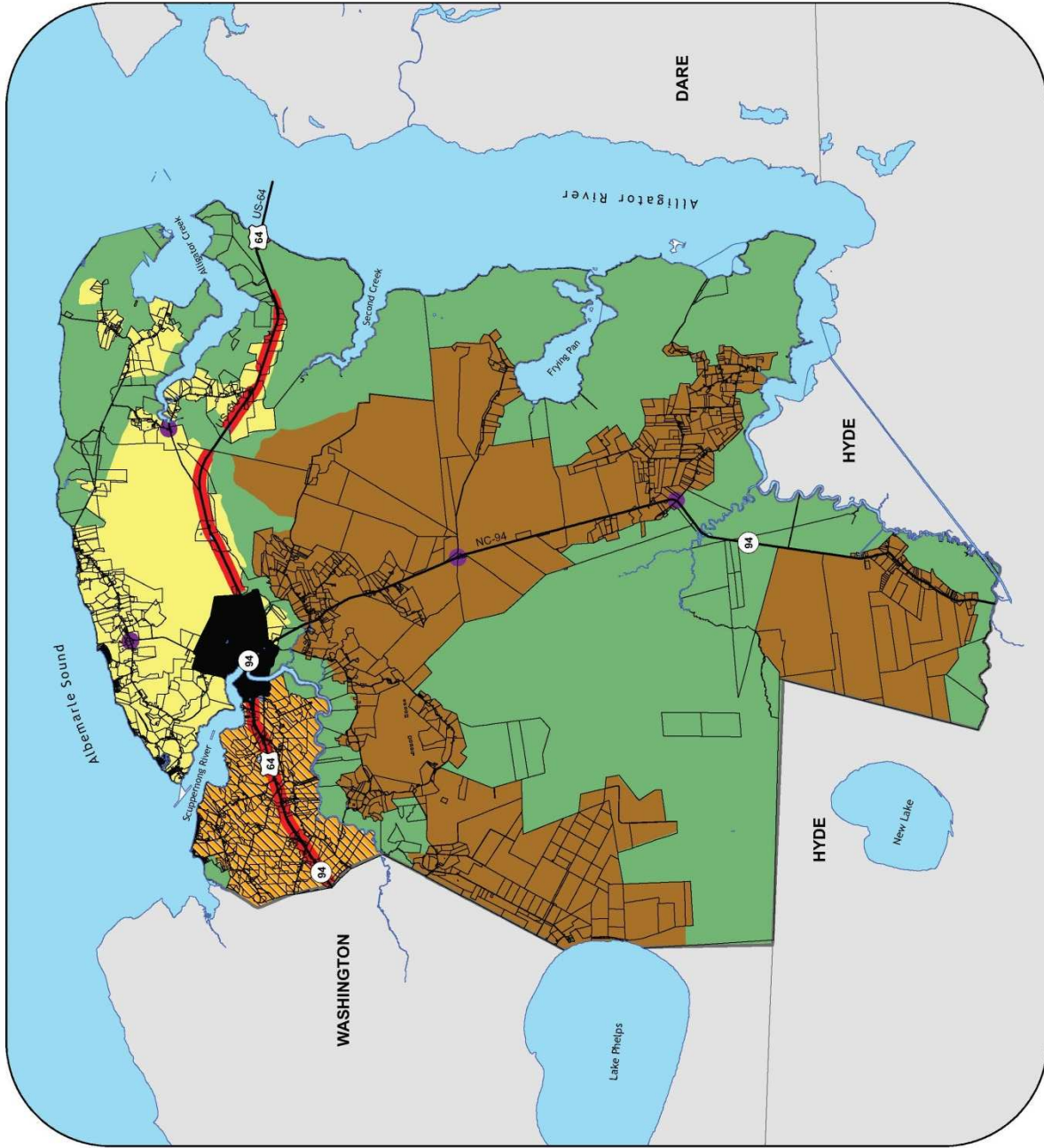
Future Land Use

Legend

- NC DOT Primary Roads
- Hydrology
- NC Counties
- District**
- Rural Mixed Use Nodes
- US 64 Mixed Use Growth Corridor
- Conservation
- Residential - Agricultural
- Residential with Sewer Service
- Rural
- Town of Columbia

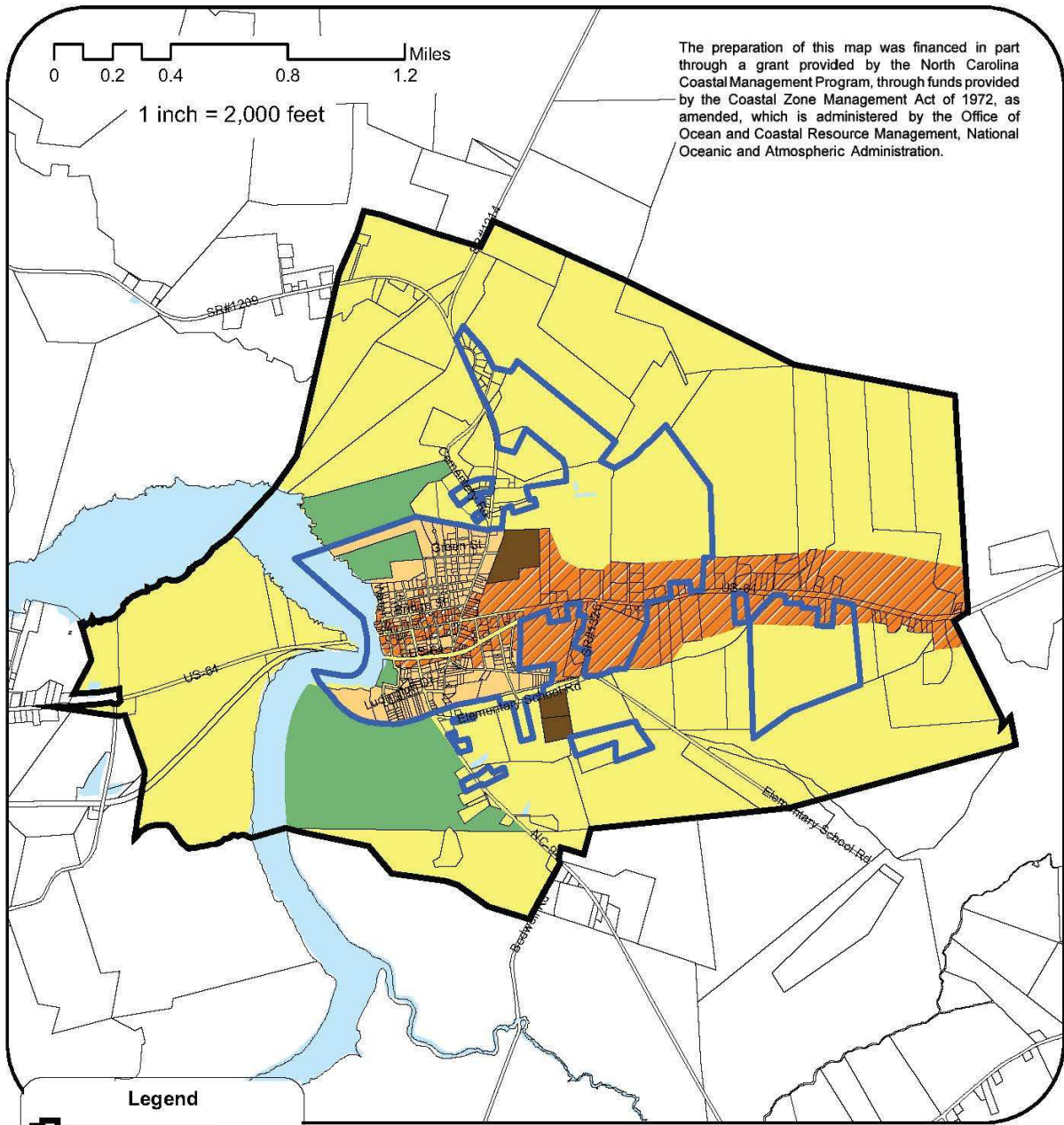


The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.



12/5/2007

Figure 7



The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

Legend

- Town of Columbia ETJ
- Town of Columbia Corporate Limits
- Hydrology
- Future Land Use**
- Mixed Use
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Conservation

**Tyrrell County
Land Use Plan**
Town of Columbia
Future Land Use

HCP
Holland Consulting Planners, Inc.



Figure 8

12/5/2007

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 Tyrrell County are shown in Figure 9.

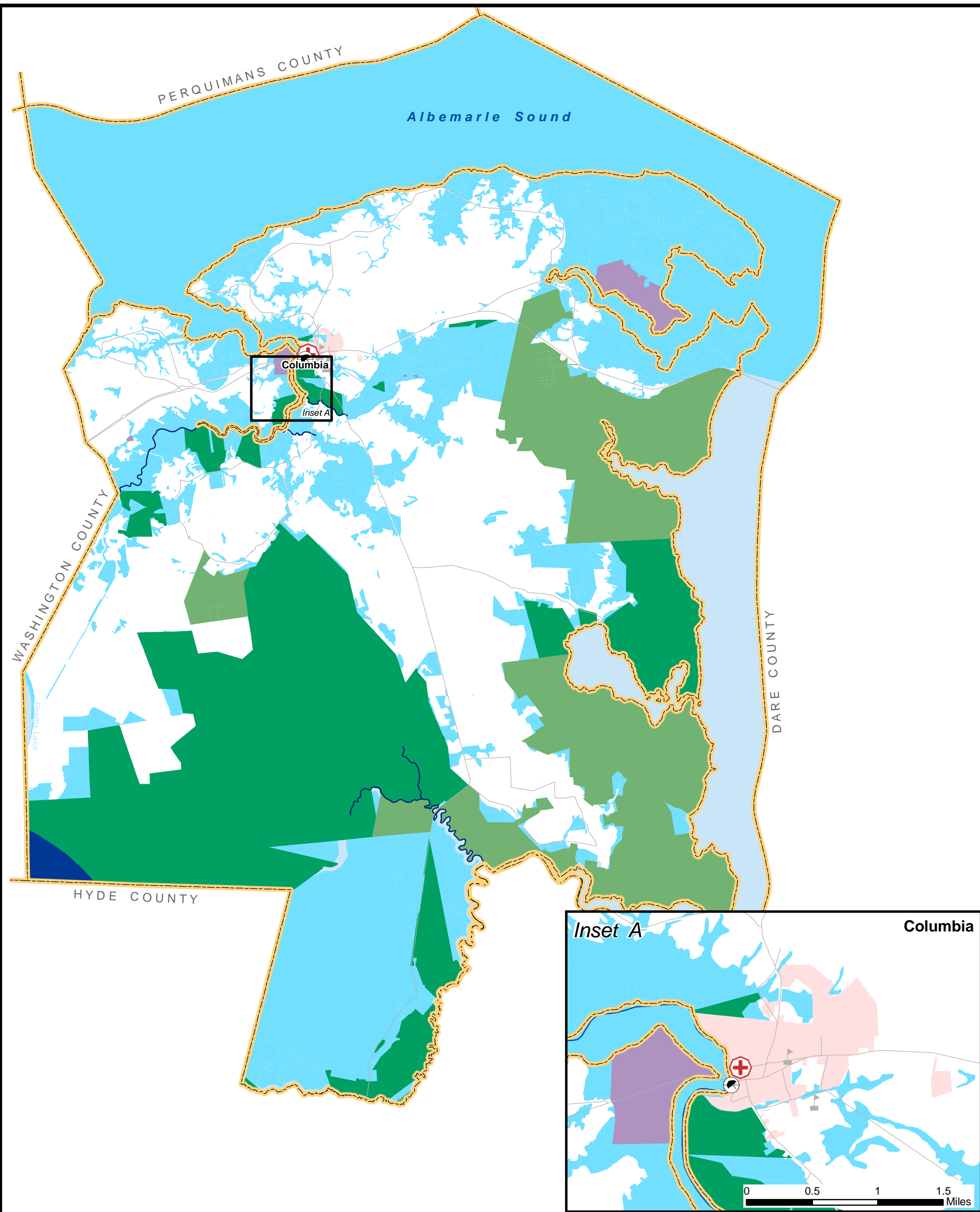
Table 1 – Environmental Features














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

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

Table 2 – Restricted Environmental Features

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



-  Schools
-  Beach Access
-  Emergency Operation Centers
-  Roads
-  Paddle Trails
-  Gameland
-  Target Local Watershed
-  Conservation Tax Credit Properties
-  Federal Land Ownership
-  High Quality Water
-  National Wetlands Inventory
-  Municipal Boundary
-  County Boundary

0 1 2 3 Miles

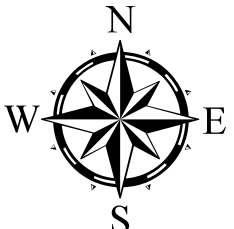


Figure 9

Base map date: January 2011

Refer to CTP document for more details

Environmental Data



Tyrrell County Comprehensive Transportation Plan

Public Involvement

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

A meeting was held with the Tyrrell County Board of Commissioners in January 2011 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on area transportation needs.

Throughout the course of the study, the Transportation Planning Branch cooperatively worked with the Tyrrell County CTP Committee, which included a representative from the Town of Columbia, 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 the Town of Columbia to present the proposed CTP to the public and solicit comments. The first meeting was held on February 15, 2012 at the town library in Columbia from 4-7 pm. The session was publicized by the committee through word of mouth and flyers and was also posted on the Tyrrell County CTP website. One comment form was submitted during the session held on February 15, 2012.

A public hearing was held on April 17, 2012 during the Tyrrell County Commissioners meeting and on May 7, 2012 during the Town of Columbia Board of Alderman 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 Albemarle RPO endorsed the CTP on August 22, 2012. The North Carolina Board of Transportation voted to mutually adopt the Tyrrell County CTP on October 4, 2012.

II. Recommendations

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

Implementation

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

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

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

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

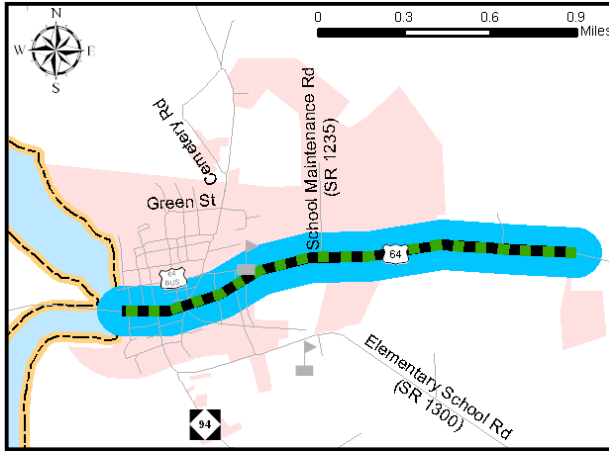
Problem Statements

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

HIGHWAY

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

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



Project Location within Tyrrell County



Existing US 64 in Tyrrell County

IDENTIFIED PROBLEM

Existing US 64 is projected to be nearing capacity by 2035 through the town of Columbia, from Road Street (SR 1209) to the Dare County Line. The primary purpose of improving US 64 through the Town of Columbia is to improve safety and accessibility for all modes while also meeting the Strategic Highway Corridor Vision Plan. Fulfilling this purpose would meet the states needs of the project by improving traffic flow, regional travel, safety and reducing crashes.

The Strategic Highway Corridor Initiative identifies highway corridors that play a critical role in regional or statewide mobility and seeks to protect and improve these routes in an effort to enhance transportation, economic development, and environmental stewardship. US 64 is on the Strategic Highway Corridor Vision Plan as an expressway from NC 94 to the Dare County Line and is designated as a hurricane evacuation route.

Justification of Need

US 64 is a major east-west corridor in Tyrrell County, connecting the town of Columbia with other municipal centers such as Plymouth, Tarboro and Manteo. The facility is a vital artery in moving people and goods through North Carolina, connecting towns from Cherokee County to Dare County and ultimately connects eastern North Carolina to Arizona. The section of US 64 in Tyrrell County is essential in getting vehicles, goods and services to the coast. US 64 is included as part of Strategic Highway Corridor #44 which connects Raleigh to Nags Head. The US 64 corridor is ultimately envisioned to be an expressway from NC 94 to the Dare County Line based on the Strategic Highway Corridor Vision Plan, in order to improve regional and statewide mobility and connectivity.

US 64 is currently a freeway (4-lane divided cross section) from the Washington County Line to the NC 94 interchange in Tyrrell County and an expressway (4-lane divided cross section) from the NC 94 interchange in Tyrrell County to the Albemarle Sound. Existing US 64 is a 5-lane major thoroughfare from the Scuppernong River Bridge to east of Columbia and a 2-lane major thoroughfare from east of Columbia to the Dare County Line. By 2035 the facility is projected to be nearing capacity from Road Street (SR 1209) to School Maintenance Road (SR 1235) based on the capacity of providing a LOS D. Traffic is projected to increase from 8,400 vehicles per day (vpd) in 2007 to 22,000 vpd in 2035, compared to a capacity of 26,500 vpd resulting in a LOS D.

One high crash location was identified along US 64 during the traffic crash analysis between the time period of January 1, 2007 and December 31, 2009 at the intersection with NC 94 in the town of Columbia. The intersection of US 64 and NC 94 had a total of 12 crashes with an average severity index of 9.17 which is greater than the state's average of 4.56. Pedestrian and bicycle access is difficult along US 64 through the town of Columbia due to the existing 5-lane cross section. A retrofit of the existing 5-lane cross section of US 64 to a 4-lane expressway facility with median, bicycle and pedestrian accommodations would provide the town of Columbia with a more walkable community while still maintaining consistency with Strategic Highway Corridor Vision Plan.

Community Vision and Problem History

Tyrrell County is considered part of the Inner Banks and US 64 is a major route for people, services and goods travelling to the Outer Banks. US 64 travels through the town of Columbia and mixes with local traffic causing heavy congestion during the summer months. There is also a great deal of farming truck traffic that runs along NC 94 and US 64 through Columbia. The current intersection design for NC 94 and US 64 in the town of Columbia is difficult for trucks turning right onto NC 94 from US 64 due to the sharp turning radius.

While the town of Columbia envisions a more walkable community, the current cross section (5-lane major thoroughfare) of US 64 makes crossing the road difficult. In a 2011 planning project (US 64/Scuppernong Drive Corridor Planning Project and Waterfront Development) completed by Rivers and Associates for the town of Columbia, the town stressed the importance of a more walkable and welcoming community. Rivers and Associates recommended the use of vegetated medians, pedestrian refuge islands and gateway enhancements. Also, the lower speeds and the traffic signal along US 64 through the town of Columbia are conducive to pedestrian and local vehicular traffic, but make it inefficient for vehicles travelling through the area.

CTP PROJECT PROPOSAL

Project Description and Overview

US 64 in Columbia is currently a 5-lane major thoroughfare with sidewalks. The CTP project proposal (Local ID: TYRR0001-H) is to provide a 4-lane divided, expressway facility with partially controlled access and pedestrian accommodations on existing US 64. Locations for possible roundabouts along US 64 are at NC 94 (east of the Scuppernong River Bridge), Road Street and US 64 Business. This project will start at the Scuppernong River Bridge and tie into the existing TIP project R-2545 (widen to a 4-lane facility with partially controlled access) east of the town of Columbia. Traffic is currently at 8,400 vpd and is estimated to reach 22,000 vpd in 2035, compared to a capacity of 26,500 vpd.

This CTP recommendation would provide for a LOS B or better along existing US 64 through the town of Columbia and allow through traffic to move more efficiently through the area while also providing safer crossings for pedestrians by incorporating refuge islands. Phasing could be utilized in this project by first installing sections of median to provide a safer roadway through town and allow for pedestrian refuges. Later, roundabouts could be incorporated to eliminate the traffic signal in town as well as accommodate the local traffic. On-road bicycle lanes are recommended from the Scuppernong River Bridge to Road Street (SR 1209) and will allow for safer access.

Natural and Human Environmental Context

In the development of the Tyrrell County CTP, several alternatives were considered for improving US 64 through the town of Columbia. Improving US 64 on existing was chosen because the town of Columbia wanted traffic to continue through town, and the environmental and housing impacts that would occur from a bypass north or south of town would be more significant than improvements to the existing facility. Detailed analyses of the bypass alternatives were not conducted but are further documented in Appendix I. The land use plan maps developed by the North Carolina Division of Coastal Management (DCM) and the environmental features map were evaluated and the best alternative was chosen. The selected CTP alternative for a 4-lane divided expressway on existing minimizes the environmental, business, and residential impacts.

Relationship to Land Use Plans

Tyrrell County and the town of Columbia had a land use plan developed in 2009 by the North Carolina Division of Coastal Management (DCM) which aims at maintaining the county's rural character, preserving agriculture, affordable housing and the protection of environmental resources. The Division of Coastal Management (DCM) as required by law completes the land use plans for the Coastal Area Management Act counties. Along US 64 through the town of Columbia, there are a variety of existing land uses consisting of commercial, residential, office and institutional which can be seen on Figures 5 and 6. Proposed future land use is for mixed use which can be seen on Figures 7 and 8. The CTP proposed project for an expressway facility would allow Tyrrell County and the town of Columbia to develop in a manner consistent with their land use plan vision.

Linkages to Other Plans and Proposed Project History

US 64 is part of the statewide tier (Strategic Highway Corridor) of the NC Multimodal Investment Network (NCMIN). US 64 is classified as a freeway from the Washington County Line to the NC 94 interchange in Tyrrell County and an expressway from the NC 94 interchange in Tyrrell County to the Dare County Line. The section of US 64 from the NC 94 interchange in Tyrrell County to the Scuppernon River Bridge is an existing expressway. US 64 from east of Columbia to the Dare County Line is in the Transportation Improvement Program (TIP) and is part of Project R-2545 and is recommended to be upgraded to a 4-lane expressway with partially controlled access.

US 64 is also one of North Carolina's hurricane evacuation routes for the Outer Banks and northeastern North Carolina and is on the North Carolina Truck Network from the Washington County Line to the NC 94 interchange in Columbia. It is on the Functional Classification Map as a principal arterial and on the North Carolina Multimodal Investment Network (NCMIN) on the statewide tier.

The town of Columbia completed a planning project (Scuppernon Drive (US 64) Corridor Study and Riverfront Development Plan) by Rivers and Associates which recommended vegetated medians, pedestrian refuge islands, gateway enhancements and improvements to the Scuppernon River Bridge. The recommendation to convert US 64 through the town of Columbia, into a 4-lane divided expressway from the Scuppernon River Bridge to east of the town of Columbia is consistent with that recommendation.

Multi-modal Considerations

The CTP project proposal for US 64 includes recommendations for pedestrian and bicycle accommodations. There are recommendations for on-road bicycle lanes from the Scuppernon River Bridge to Road Street (SR 1209) and there are existing sidewalks along US 64 through the town of Columbia. Also, there is currently no transit system or planned system through the year 2035 that would impact this facility.

Public/Stakeholder Involvement

As part of the CTP, a public survey was developed by the Tyrrell County CTP committee and sent out in May 2011. A total of 69 surveys were collected and several of the responses mentioned US 64 needed to be improved.

US 64 (east of the town of Columbia to the Dare County Line), TIP Project: R-2545

Transportation Improvement Program Project R-2545 is to improve US 64 in Tyrrell County to a 4-lane divided expressway with partially controlled access. The North Carolina Strategic Highway Corridor plan designated the US 64 corridor as a multilane expressway. Project improvements along this corridor will increase mobility and connectivity through central and eastern North Carolina. The current 2-lane highway cross-section of US 64 between the town of Columbia and US 264 is not in compliance with Intrastate Highway System standards. Additionally, the US 64 project corridor does not meet the state mandated clearance times for hurricane evacuation, and conditions are projected to degrade over time. US 64 is a primary North Carolina hurricane evacuation route for the Outer Banks and Northeastern North Carolina. The North Carolina statewide hurricane evacuation clearance goal is 18 hours (North Carolina General Statute § 136-102.7).

For additional information about this project, including the Purpose and Need, contact NCDOT Project Development and Environmental Analysis (PDEA). Project R-2545 is currently in the 2012-2018 NCDOT STIP.

Road Street (SR 1214) (US 64 Business to Soundside Road (SR 1209)), Local ID: TYRR0002-H

Road Street (SR 1209) is a 2-lane facility that runs from US 64 Business to Soundside Road (SR 1209). Tyrrell County's Emergency Management Center is located on the north side of a culvert located along Road Street (SR 1209) right before Cemetary Road (SR 1210) and is subject to backwater when there is a heavy rain. This flooding culvert forces emergency vehicles to travel an additional 19 miles (New Road (SR 1214) to Soundside Road (SR 1209) to Newfoundland Road (SR 1221) to Old 64 (SR 1229) to US 64) to get to emergencies located on the south side of the culvert on Road Street (SR 1209). The primary purpose of this recommendation is to alleviate the flooding at this culvert and allow emergency vehicles to safely travel along Road Street (SR 1209). The proposed CTP project recommends upgrading this section of Road Street (SR 1209) to eliminate the flooding concerns by raising the road or constructing a bridge. Pedestrian and bicycle facilities are recommended along Road Street (SR 1209). Road Street (SR 1209) is currently a 2-lane facility with 10' lanes and a speed limit of 55 miles per hour (mph).

PUBLIC TRANSPORTATION & RAIL

The Tyrrell County Senior and Disabled Transportation System is a community transit service that operates 2 vehicles and serves the Tyrrell County Department of Social Services through subscription and dial-a-ride routes. Operations are from 9 am to 5 pm on weekdays and there is regular out-of-area service to Edenton, Elizabeth City, Plymouth, Williamston, Washington, Greenville, Raleigh/Durham, Manteo, Nags Head, and Chesapeake Virginia. The transit system does not service the general public.

Since there is no fixed route transit, there are no recommendations for this mode.

BICYCLE

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

The Comprehensive Transportation Plan (CTP) recommends a 5' paved shoulder along the following facilities to accommodate bicycle travel. Although a 5' shoulder is standard, drainage ditches along the sides of the road could necessitate a smaller shoulder to improve safety for bicyclists.

- **Local ID: TYRR0001-B** US 64 from NC 94 to Scuppernon River Bridge
- **Local ID: TYRR0003-B** NC 94 from Washington County Line to US 64
- **Local ID: TYRR0004-B** NC 94 from US 64 to Newlands Road (SR 1105)
- **Local ID: TYRR0005-B** NC 94 from Newlands Road (SR 1105) to Hyde County Line
- **Local ID: TYRR0006-B** Bodwell Road (SR 1108) from Newlands Road (SR 1105) to Newlands Road (SR 1105)
- **Local ID: TYRR0007-B** Fork Creek Road from Washington County Line to Newlands Road (SR 1105)
- **Local ID: TYRR0008-B** FT Landing Road (SR 1209) from Loop Road (SR 1100) to Newfoundland Road (SR 1221)
- **Local ID: TYRR0009-B** New Road (SR 1214) from Road Street (SR 1209) to Soundside Road (SR 1209)
- **Local ID: TYRR0010-B** Newfoundland Road (SR 1221) from FT Landing Road (SR 1209) to Old 64 (SR 1229)
- **Local ID: TYRR0011-B** Newlands Road (SR 1105) from Bodwell Road (SR 1108) to NC 94
- **Local ID: TYRR0012-B** Old 64 (SR 1229) from US 64 to Newfoundland Road (SR 1221)
- **Local ID: TYRR0014-B** Soundside Road (SR 1209) from Road Street (SR 1209) to New Road (SR 1214)

- **Local ID: TYRR0015-B** Soundside Road (SR 1209) from New Road (SR 1214) to FT Landing Road (SR 1209)

The Comprehensive Transportation Plan (CTP) recommends a 4' paved shoulder along the following facility to accommodate bicycle travel. Although a 5' shoulder is standard, drainage ditches along the sides of the road could necessitate a smaller shoulder to improve safety for bicyclists.

- **Local ID: TYRR0002-B** US 64 from Old 64 (SR 1229) to Alligator River Bridge
This project is in the same location as the current Transportation Improvement Program Project R-2545 and will incorporate project recommendations for bicycle facilities. The proposed 3-mile replacement bridge over the Alligator River includes 10-foot paved shoulders in both directions to accommodate bicycles and vehicle breakdowns.
- **Local ID: TYRR0013-B** Road Street (SR 1209) from US 64 to Soundside Road (SR 1209)

The Comprehensive Transportation Plan (CTP) recommends a wide outside lane along the following facility to accommodate bicycle travel.

- **Local ID: TYRR0001-H** US 64 from Scuppernong River Bridge to east of Columbia

PEDESTRIAN

The CTP Pedestrian Element is shown on Figure 1 Sheets 5 and 5A and recommends the following pedestrian facilities.

- **Local ID: TYRR0001-P** US 64 from 0.1 mile west of Scuppernong River Bridge to Scuppernong River Bridge
- **Local ID: TYRR0001-H** US 64 from Scuppernong River Bridge to east of Columbia
- **Local ID: TYRR0002-P** US 64 Business from Fonsoe Street (SR 1323) to US 64
- **Local ID: TYRR0003-P** Bridge Street from Water Street to Road Street (SR 1209)
- **Local ID: TYRR0005-P** Cemetary Road (SR 1210) from Road Street (SR 1209) to Road Street (SR 1209)
- **Local ID: TYRR0006-P** Church Street from Main Street to Bridge Street
- **Local ID: TYRR0007-P** Columbia Street from Bridge Street to Green Street
- **Local ID: TYRR0008-P** Elementary School Road (SR 1300) from NC 94 to L.A. Keiser Drive (SR 1326)

- **Local ID: TYRR0009-P** Fonsoe Street (SR 1323) from Elementary School Road (SR 1300) to Main Street
- **Local ID: TYRR0010-P** Green Street from Extension to Road Street (SR 1209)
- **Local ID: TYRR0011-P** Kohloss Street from Railroad Street to US 64
- **Local ID: TYRR0012-P** Ludington Drive from Scotsville Street to US 64
- **Local ID: TYRR0014-P** Martha Street from Elm Street to Road Street (SR 1209)
- **Local ID: TYRR0015-P** Railroad Street from Road Street (SR 1209) to End of Road
- **Local ID: TYRR0016-P** Road Street from Green Street to Cemetary Road (SR 1210)
- **Local ID: TYRR0017-P** Scotsville Street from Ludington Drive to Road Street (SR 1209)
- **Local ID: TYRR0018-P** Soundside Road (SR 1209) from Road Street (SR 1209) to 0.2 miles north of Cemetary Road (SR 1210)
- **Local ID: TYRR0019-P** Virginia Avenue from Bridge Street to Green Street

The following sidewalk improvements were included in the 2011 planning project (US 64/Scuppernong Drive Corridor Planning Project and Waterfront Development) completed by Rivers and Associates for the town of Columbia.

- **Local ID: TYRR0004-P** Broad Street from US 64 to Howard Street
- **Local ID: TYRR0013-P** Main Street from Fonsoe Street (SR 1323) to US 64

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 27669

(252) 335-4357

<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 Dr.

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 Dr.
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 Dr.
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 Dr.
Suite 100
Edenton, NC 27932
(252) 482-7977

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

113 Airport Dr.
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 Dr.
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.

1300 US HWY 64 West
Plymouth, NC 27962
(252) 793-4568

Transportation Planning Branch (TPB)

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

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

Albemarle Rural Planning Organization (RPO)

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

512 S. Church St
Hertford, NC 27944
(252) 426-5753 ext. 230
<http://www.albemarlecommission.org/>

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) 707-6000
<http://www.ncdot.gov/doh/preconstruct/pe/>

Secondary Roads Unit

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) 707-2600

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

Structure Maintenance Unit

Contact the Bridge Maintenance 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/

Roadway Design Unit

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/>

Division of Coastal Management

Contact the Division of Coastal Management for information on planning, permitting, education and research for North Carolina's coastal resources.

400 Commerce Avenue
Morehead City, NC 28557
(252) 808-2808

<http://dcm2.enr.state.nc.us/index.htm>

Appendix B

Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

- **Freeways**

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

- **Expressways**

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

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

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

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

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

Bicycle Map

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

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

Pedestrian Map

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

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

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

Appendix C

CTP Inventory and Recommendations

Assumptions/ Notes:

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

TABLE 3 - CTP INVENTORY AND RECOMMENDATIONS

		HIGHWAY																	
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System				CTP Classification	Tier	Other Modes			
		From	To			Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT CTP	Proposed Capacity (vpd)				Cross-Section	ROW (ft)	
	US 64	Washington County Line	Travis Rd (SR 1113)	TYRRELL	3.2	60	4D	100	70	64700	5000	7600	7600	64700	ADQ	100	E	Sta	-
	US 64	Travis Rd (SR 1113)	Old Columbia Rd (SR 1110)	TYRRELL	2.9	60	4D	100	70	64700	5900	9000	9000	64700	ADQ	100	E	Sta	-
	US 64	Old Columbia Rd (SR 1110)	Scuppernon River Bridge	TYRRELL	0.9	48	4D	200	70	56100	7300	11100	11100	56100	4C	110	E	Sta	☞
TYRR0001-H	US 64	Scuppernon River Bridge	Water St (SR 1328)	COLUMBIA	0.2	60	5	100	35	25400	6700	10200	10200	57400	4C	110	E	Sta	☞
TYRR0001-H	US 64	Water St (SR 1328)	Road St (SR1209)	COLUMBIA	0.2	60	5	280	35	25400	8800	17600	17600	57400	4C	110	E	Sta	☞
TYRR0001-H	US 64	Road St (SR1209)	School Maintenance Rd (SR 1235)	COLUMBIA	0.5	60	5	80	45	26500	8400	22000	22000	57400	4C	110	E	Sta	☞
R-2545	US 64	School Maintenance Rd (SR 1235)	Old Highway 64 (SR 1229)	TYRRELL	8.1	24	2	100	55	12700	4000	10500	10500	58800	4A	180	E	Sta	-
R-2545	US 64	Old Highway 64 (SR 1229)	Dare County Line	TYRRELL	6.3	24	2	100	55	12700	4100	10700	10700	58800	4A	180	E	Sta	☞
	US 64 Bus (Main St)	S Broad St	Road St (SR 1209)	COLUMBIA	0.2	32	2	N/A	35	11000	1300	1700	1700	11000	ADQ	N/A		Maj Th	-
	US 64 Bus (Main St)	Road St (SR 1209)	US 64	COLUMBIA	0.2	36	2	65	25	10000	1800	3600	3600	10500	2E	60		Maj Th	☞
	NC 94	Hyde County Line	Kilkenny Rd (SR 1322)	TYRRELL	3.5	22	2	100	55	12700	460	600	600	14600	2A	60		Maj Th	Reg
	NC 94	Kilkenny Rd (SR 1322)	Gum Neck Rd (SR 1309)	TYRRELL	7.5	22	2	100	55	12700	460	600	600	14600	2A	60		Maj Th	Reg
	NC 94	Gum Neck Rd (SR 1309)	Burton Shell Rd (SR 1103)	TYRRELL	8.3	22	2	90	55	12700	880	1200	1200	14600	2A	60		Maj Th	Reg
	NC 94	Burton Shell Rd (SR 1103)	Levels Rd (SR 1301)	TYRRELL	2.3	22	2	90	55	12700	1000	1300	1300	14600	2A	60		Maj Th	Reg
	NC 94	Levels Rd (SR 1301)	Boothwell Rd (SR 1108)	TYRRELL	1.3	22	2	90	55	12700	1700	2200	2200	14600	2A	60		Maj Th	Reg
	NC 94	Boothwell Rd (SR 1108)	Elementary School Rd (SR 1300)	TYRRELL	0.7	22	2	90	55	12700	2500	3300	3300	14600	2E	60		Maj Th	Reg

TABLE 3 - CTP INVENTORY AND RECOMMENDATIONS

Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System				CTP Classification	Tier	Other Modes				
		From	To			Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT CTP	Proposed Capacity (vpd)				Cross-Section (ft)			
																		2035 AADT	2035 AADT	2035 AADT
	NC 94	Elementary School Rd (SR 1300)	US 64	COLUMBIA	0.2	22	2	90	40	14000	2500	3300	3300	14600	2E	60	Maj Th	Reg	☺	
	NC 94 (Common to US 64)	US 64	Scuppernon River Bridge	COLUMBIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NC 94 (Common to US 64)	Scuppernon River Bridge	Old Columbia Rd (SR 1110)	TYRRELL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NC 94	Old Columbia Rd (SR 1110)	Old Creswell Rd (SR 1112)	TYRRELL	2.2	22	2	60	55	12700	680	1000	1000	14600	2A	60	Maj Th	Reg	☺	
	NC 94	Old Creswell Rd (SR 1112)	Woodley Sta Rd (SR 1116)	TYRRELL	2.6	22	2	60	55	12700	270	500	500	14600	2A	60	Maj Th	Reg	☺	
	NC 94	Woodley Sta Rd (SR 1116)	Washington County Line	TYRRELL	1.3	22	2	60	55	12700	310	400	400	14600	2A	60	Maj Th	Reg	☺	
	Albemarle Church Rd (SR 1200)	Old Bay Post Office Rd (SR 1117)	Cahoon Rd (SR 1204)	TYRRELL	2.0	18	2	N/A	55	10700	520	1000	1000	12700	2A	60	Min Th	Sub	☺	
	Albemarle Church Rd (SR 1200)	Cahoon Rd (SR 1204)	Cut Off Rd (SR 1206)	TYRRELL	1.7	18	2	N/A	55	10700	480	900	900	12700	2A	60	Min Th	Sub	☺	
	Albemarle Church Rd (SR 1200)	Cut Off Rd (SR 1206)	NC 94	TYRRELL	0.6	18	2	N/A	55	10700	-	300	300	12700	2A	60	Min Th	Sub	☺	
	Bodwell Rd (SR 1108)	Newlands Rd (SR 1105)	Newlands Rd (SR 1105)	TYRRELL	5.2	16-20	2	N/A	55	10700	-	300	300	12700	2A	60	Min Th	Sub	☺	
	Bodwell Rd (SR 1105)	Newlands Rd (SR 1105)	NC 94	TYRRELL	1.1	20	2	60	55	11000	630	800	800	12700	2A	60	Min Th	Sub	☺	
	Butler Rd (SR 1113)	US 64	NC 94	TYRRELL	0.1	24	2	60	55	11500	870	1500	1500	11500	ADQ	60	Min Th	Sub	-	
	Butler Rd (SR 1113)	NC 94	Cut Off Rd (SR 1206)	TYRRELL	0.1	24	2	60	55	11500	630	1100	1100	11500	ADQ	60	Min Th	Sub	-	
	Elementary School Rd (SR 1300)	NC 94	Fonseca St (SR 1323)	TYRRELL	1.8	18	2	N/A	55	9700	660	900	900	12700	2F	60	Min Th	Sub	☺	

TABLE 3 - CTP INVENTORY AND RECOMMENDATIONS

		HIGHWAY																	
Local ID	Facility	Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System					CTP Classification	Tier	Other Modes		
		From	To			Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT CTP	Proposed Capacity (vpd)	Cross-Section (ft)				ROW (ft)	
	Fonse St (SR 1323)	US 64	Elementary School Rd (SR 1300)	TYRRELL	0.2	18	2	60	35	-	-	-	-	-	ADQ	N/A	Min Th	Sub	-
	Frying Pan Rd (SR 1307)	NC 94	Spencer Rd (SR 1308)	TYRRELL	5.9	18	2	N/A	55	9700	110	200	200	9700	ADQ	N/A	Min Th	Sub	-
	FT Landing Rd (SR 1209)	Loop Rd (SR 1100)	Newfoundland Rd (SR 1221)	TYRRELL	2.4	18	2	60	55	9700	-	200	200	12700	2A	60	Min Th	Sub	⊗
	Gum Neck Log Rd (SR 1314)	S Gum Neck Rd (SR 1320)	N Gum Neck Rd (SR 1314)	TYRRELL	1.1	16	2	N/A	55	9000	60	100	100	9000	ADQ	N/A	Min Th	Sub	-
	Newfoundland Rd (SR 1221)	FT Landing Rd (SR 1209)	Old Hwy 64 (SR 1229)	TYRRELL	1.9	18	2	N/A	55	9700	350	500	500	12700	2A	60	Min Th	Sub	⊗
	Newlands Rd (SR 1105)	Bodwell Rd (SR 1108)	South Fork Creek Rd (SR 1221)	TYRRELL	1.3	20	2	N/A	55	11000	140	200	200	12700	2A	60	Min Th	Sub	⊗
	Newlands Rd (SR 1105)	South Fork Creek Rd (SR 1221)	Bodwell Rd (SR 1108)	TYRRELL	6.2	16	2	N/A	55	9000	310	600	600	12700	2A	60	Min Th	Sub	⊗
	New Rd (SR 1214)	Riverneck Rd (SR 1209)	Snell Rd (SR 1216)	TYRRELL	0.7	18	2	N/A	55	9700	900	1800	1800	12700	2A	60	Min Th	Sub	⊗
	New Rd (SR 1214)	Snell Rd (SR 1216)	Sound Side Rd (SR 1209)	TYRRELL	1.7	18	2	N/A	55	9700	1200	1600	1600	12700	2A	60	Min Th	Sub	⊗
	N Gum Neck Rd (SR 1314)	Gum Neck Log Rd (SR 1316)	Swamp Rd (SR 1310)	TYRRELL	1.6	16	2	N/A	55	9000	170	200	200	9000	ADQ	N/A	Min Th	Sub	-
	N Gum Neck Rd (SR 1309)	Swamp Rd (SR 1310)	NC 94	TYRRELL	1.3	20	2	N/A	55	11000	210	300	300	11000	ADQ	N/A	Min Th	Sub	-
	Old Bay Post Office Rd (SR 1117)	Cut Off Rd (SR 1206)	Albemarle Church Rd (SR 1200)	TYRRELL	2.5	20	2	N/A	55	9700	300	500	500	9700	ADQ	60	Min Th	Sub	-

TABLE 3 - CTP INVENTORY AND RECOMMENDATIONS

Local ID		Facility		Section		Jurisdiction	Dist. (mi)	2007 Existing System				2035 Proposed System				CTP Classification	Tier	Other Modes			
								Cross-Section (ft)	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2007 AADT	2035 AADT E+C	2035 AADT CTP	Proposed Capacity (vpd)				Cross-Section (ft)	ROW (ft)	
																					2007 AADT
		Old Hwy 64 (SR 1229)		US 64	Newfoundland Rd (SR 1221)	TYRRELL	2.1	18	2	N/A	55	9700	320	400	400	9700	ADQ	N/A	Min Th	Sub	-
		Old Hwy 64 (SR 1229)		Newfoundland Rd (SR 1221)	US 64	TYRRELL	3.3	18	2	N/A	55	9700	200	300	300	12700	2A	60	Min Th	Sub	Ⓢ
		Riverneck Rd (SR 1211)		End of Rd	Sound Side Rd (SR 1209)	TYRRELL	1.9	20	2	N/A	55	11000	620	1100	1100	11000	ADQ	N/A	Min Th	Sub	-
		Riverneck Rd (SR 1209)		Riverneck Rd (SR 1211)	New Rd (SR 1214)	TYRRELL	2.5	18	2	N/A	55	9700	880	1500	1500	9700	ADQ	N/A	Min Th	Sub	-
		Road St (SR 1209)		US 64 BYP	Main St (SR 1246)	COLUMBIA	0.1	24	2	N/A	35	11000	1900	2500	2500	11500	2F	60	Min Th	Sub	Ⓢ
TYRR0002-H		Road St (SR 1209)		Main St (SR 1246)	Soundside Rd (SR 1209)	TYRRELL	0.3	20	2	N/A	55	11000	3600	4800	4800	12700	2F	60	Min Th	Sub	Ⓢ
		S Broad St		US 64 Bus	US 64	COLUMBIA	0.1	40	2	N/A	35	11000	2200	2900	2900	11500	2E	60	Min Th	Sub	Ⓢ
		S Gum Neck Rd (SR 1321)		NC 94	Post Office Rd (SR 1313)	TYRRELL	1.6	16	2	N/A	55	9000	180	200	200	9000	ADQ	N/A	Min Th	Sub	-
		S Gum Neck Rd (SR 1321)		Post Office Rd (SR 1313)	Cherry Ridge Lodge	TYRRELL	1.2	20	2	N/A	55	11000	110	100	100	11000	ADQ	N/A	Min Th	Sub	-
		S Gum Neck Rd (SR 1320)		Cherry Ridge Lodge	Gum Neck Log Rd (SR 1314)	TYRRELL	1.7	20	2	N/A	55	11000	80	100	100	11000	ADQ	N/A	Min Th	Sub	-
		Soundside Rd (SR 1209)		New Rd (SR 1214)	Road St (SR 1209)	TYRRELL	0.8	18	2	N/A	55	9700	210	300	300	9700	ADQ	N/A	Min Th	Sub	-
		Soundside Rd (SR 1209)		Riverneck Rd (SR 1211)	New Rd (SR 1214)	TYRRELL	3.1	18	2	N/A	55	9700	210	300	300	9700	ADQ	N/A	Min Th	Sub	-
		Soundside Rd (SR 1209)		New Rd (SR 1214)	Loop Rd (SR 1100)	TYRRELL	5.0	18	2	N/A	55	9700	750	1000	1000	12700	2A	60	Min Th	Sub	Ⓢ
		Spencer Rd (SR 1308)		Frying Pan Rd (SR 1307)	End of Road	TYRRELL	0.2	18	2	N/A	55	-	-	-	-	-	-	-	Min Th	Sub	-
		Swamp Rd (SR 1310)		N Gum Neck Rd (SR 1314)	N Gum Neck Rd (SR 1309)	TYRRELL	2.3	20	2	N/A	55	11000	200	300	300	11000	ADQ	N/A	Min Th	Sub	-

BICYCLE AND PEDESTRIAN ¹

Table 4 - BICYCLE¹

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Cross-Section (ft)	lanes	Type	Cross-Section	
TYRR0001-B	US 64	NC 94 - Scuppermong River Bridge	0.9	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0001-H	US 64	Scuppermong River Bridge - East of Columbia	0.9	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0002-B	US 64	Old 64 - Alligator River	4.9	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0003-B	NC 94	Washington County Line - US 64	7.2	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0004-B	NC 94	US 64 - Newlands Rd (SR 1105)	2.6	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0005-B	NC 94	Newlands Rd (SR 1105) - Hyde County Line	21.2	Concurrent with US 64	-	See Highway Table	-	-
TYRR0006-B	Bodwell Rd (SR 1108)	Newlands Rd (SR 1105) - Newlands Rd (SR 1105)	5.2	Concurrent with US 64	-	See Highway Table	-	-
TYRR0007-B	Fork Creek Rd	Washington County Line - Newlands Rd (SR 1105)	2.9	2	20	On-road	2A	-
TYRR0008-B	FT Landing Rd (SR 1209)	Loop Rd (SR 1100) - Newfoundland Rd (SR 1221)	2.4	Concurrent with US 64	-	See Highway Table	-	-
TYRR0009-B	New Rd (SR 1214)	Road St (SR 1209) - Sound Side Rd (SR 1209)	2.4	Concurrent with US 64	-	See Highway Table	-	-
TYRR0010-B	Newfoundland Rd (SR 1221)	FT Landing Rd (SR 1209) - Old 64 (SR 1229)	1.9	Concurrent with US 64	-	See Highway Table	-	-
TYRR0011-B	Newlands Rd (SR 1105)	Bodwell Rd (SR 1108) - NC 94	8.6	Concurrent with US 64	-	See Highway Table	-	-
TYRR0012-B	Old 64 (SR 1229)	Newfoundland Rd (SR 1221) - US 64	3.3	Concurrent with US 64	-	See Highway Table	-	-
TYRR0013-B	Road St (SR 1209)	US 64 - Soundside Rd (SR 1209)	0.4	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0014-B	Soundside Rd (SR 1209)	Road St (SR 1209) - New Rd (SR 1214)	0.8	Concurrent with US 64	-	See Highway Table	-	↑
TYRR0015-B	Soundside Rd (SR 1209)	New Rd (SR 1214) - FT Landing Rd (SR 1209)	5.0	Concurrent with US 64	-	See Highway Table	-	-

¹ Only major routes and proposals are shown here. For further documentation of bicycle and pedestrian facilities and proposals, refer to Chapter 2.

BICYCLE AND PEDESTRIAN ¹

Table 5 - PEDESTRIAN^{1,2}

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Type	Side of Street	Type	Side of Street	
TYRR0001-P	US 64	0.1 miles west of Scuppernon River Bridge - Scuppernon River Bridge	0.2	-	-	Sidewalk	Both	-
TYRR0001-H	US 64	Scuppernon River Bridge - West of Columbia	0.3	Sidewalk	Both	Sidewalk	Both	-
TYRR0002-P	US 64 Bus (Main St)	Fonsoe Street (SR 1323) - US 64	0.6	Sidewalk	Both	Sidewalk	Both	-
TYRR0003-P	Bridge St	Water St - Road St (SR 1214)	0.2	Sidewalk	Both	Sidewalk	Both	-
TYRR0004-P	Broad St	US 64 - Howard St	0.2	Sidewalk	Both	Sidewalk	Both	-
TYRR0005-P	Cemetery Rd (SR 1210)	Road St (SR 1209) - Road St (SR 1209)	0.5	-	-	Sidewalk	East	-
TYRR0006-P	Church St	Main St - Bridge St	0.1	Sidewalk	East	Sidewalk	East	-
TYRR0007-P	Columbia St	Bridge St - Green St	0.2	-	-	Sidewalk	East	-
TYRR0008-P	Elementary School Rd (SR 1300)	NC 94 - L.A. Keiser Dr (SR 1326)	0.5	-	-	Sidewalk	South	-
TYRR0009-P	Fonsoe St (SR 1323)	Elementary School Rd (SR 1300) - Main St	0.3	-	-	Sidewalk	West	-
TYRR0010-P	Green St	Extension to Road Street (SR 1214)	< 0.1	-	-	Sidewalk	North	-
TYRR0011-P	Kohloss St	Railroad St - US 64	0.1	-	-	Sidewalk	West	-
TYRR0012-P	Ludington Dr	Scotsville St - US 64	0.2	-	-	Sidewalk	East	-
TYRR0013-P	Main St	Fonsoe St (SR 1323) - US 64	0.1	-	-	Sidewalk	Both	-
TYRR0014-P	Martha St	Elim St - Road St (SR 1214)	0.3	-	-	Sidewalk	North	-
TYRR0015-P	Railroad St	Road St (SR 1214) - End of Road	0.4	-	-	Sidewalk	North	-
TYRR0016-P	Road St (SR 1214)	Green St - Cemetery Rd (SR 1210)	0.2	-	-	Sidewalk	Both	Ⓜ
TYRR0017-P	Scotsville St	Ludington Dr - Road St	0.2	-	-	Sidewalk	North	-
TYRR0018-P	Soundside Rd (SR 1209)	Road St (SR 1214) - 0.2 miles north of Cemetery Rd (SR 1210)	0.5	-	-	Sidewalk	Both	Ⓜ
TYRR0019-P	Virginia Ave	Bridge St - Green St	0.2	-	-	Sidewalk	East	-

¹ Only major routes and proposals are shown here. For further documentation of bicycle and pedestrian facilities and proposals, refer to Chapter 2.

² Taken from the 2010 Town of Columbia Pedestrian Map.

Appendix D

Typical Cross Sections

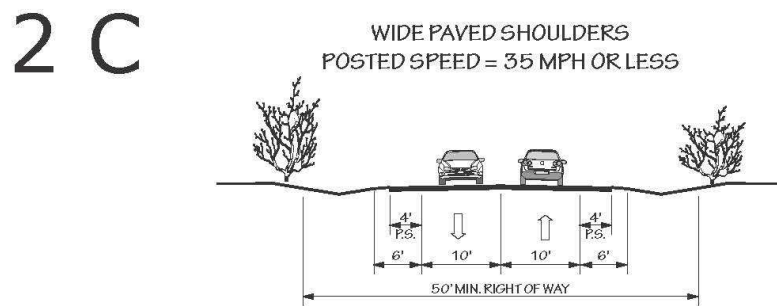
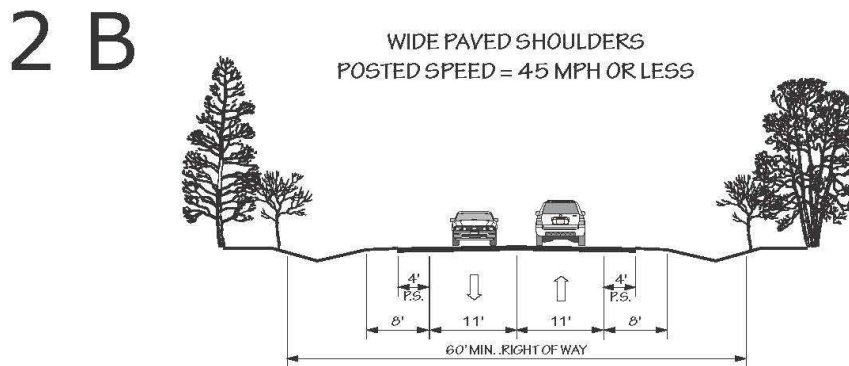
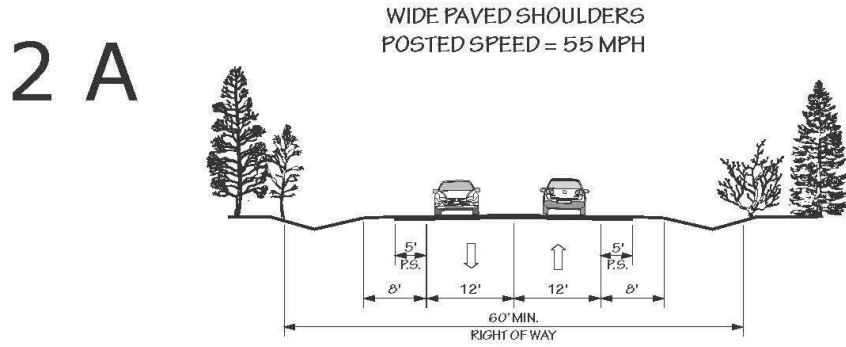
Cross section requirements for roadways vary according to the capacity and level of service to be provided. Universal standards in the design of roadways are not practical. Each roadway section must be individually analyzed and its cross section determined based on the volume and type of projected traffic,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

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

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

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

FIGURE 10
TYPICAL HIGHWAY CROSS SECTIONS
2 LANES



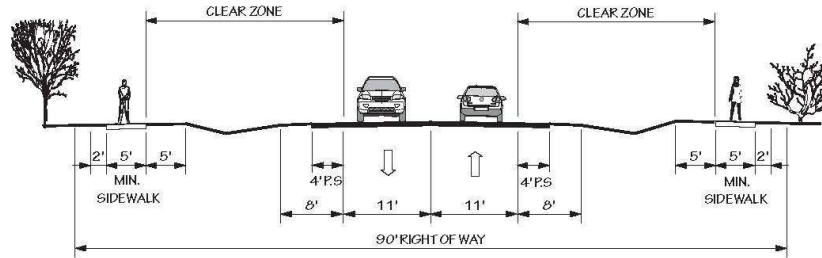
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

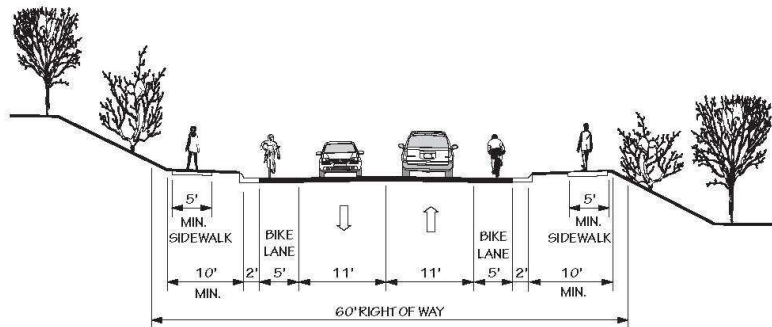
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



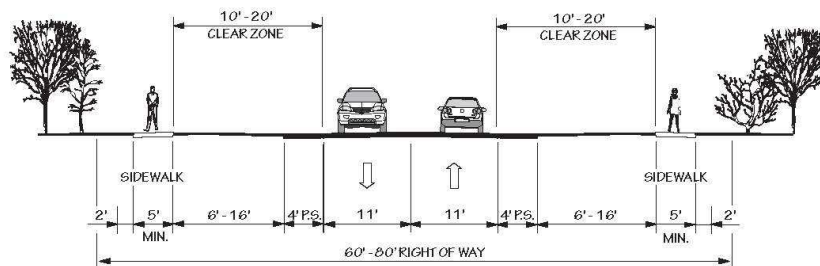
2 E

CURB AND GUTTER WITH BIKE LANES AND SIDEWALKS



2 F

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



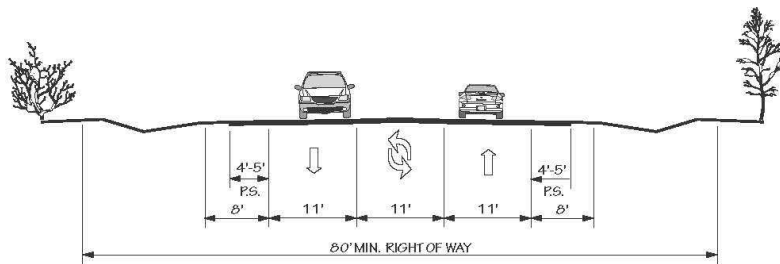
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

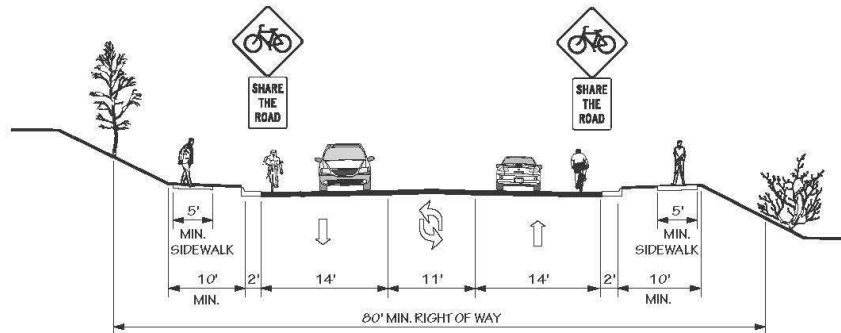
3 A

WIDE PAVED SHOULDERS



3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



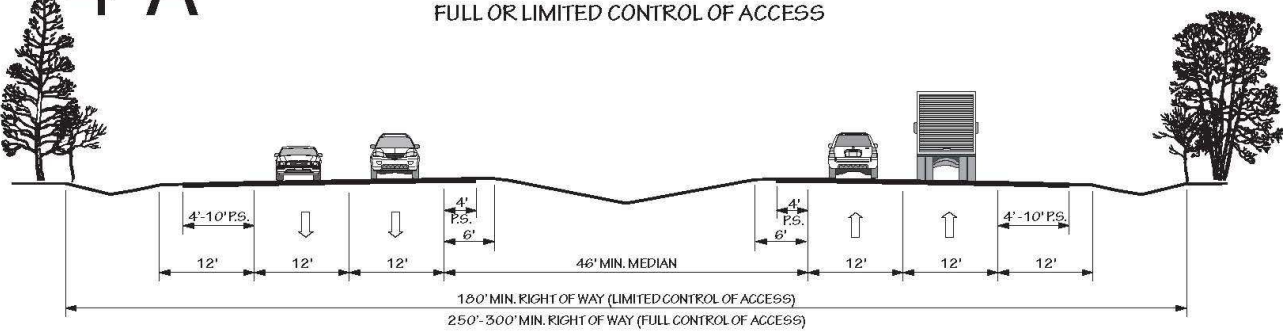
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

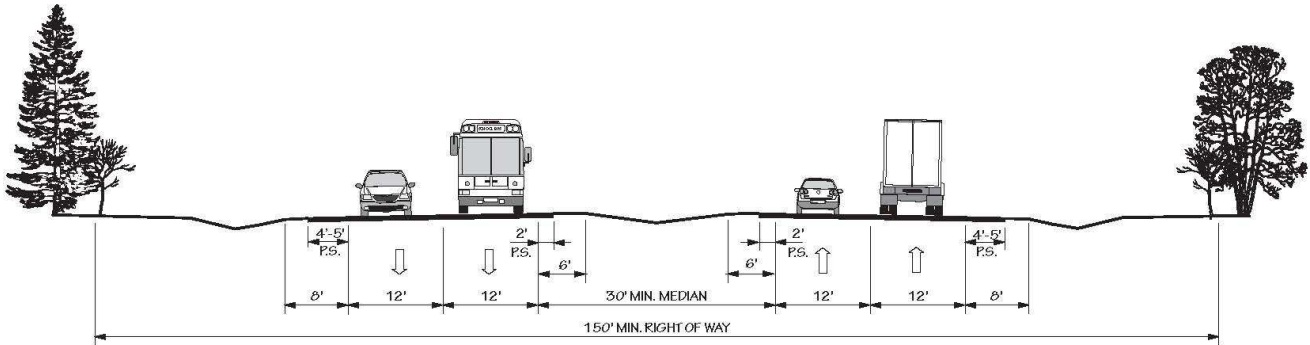
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



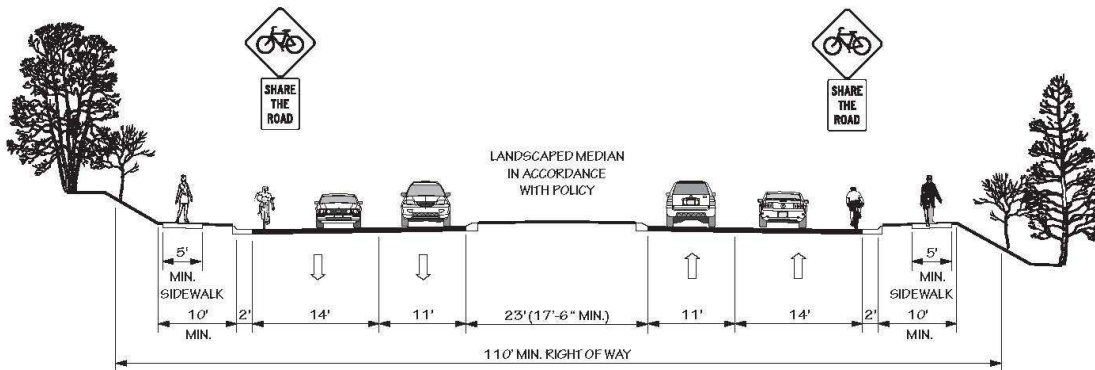
4 B

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



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS



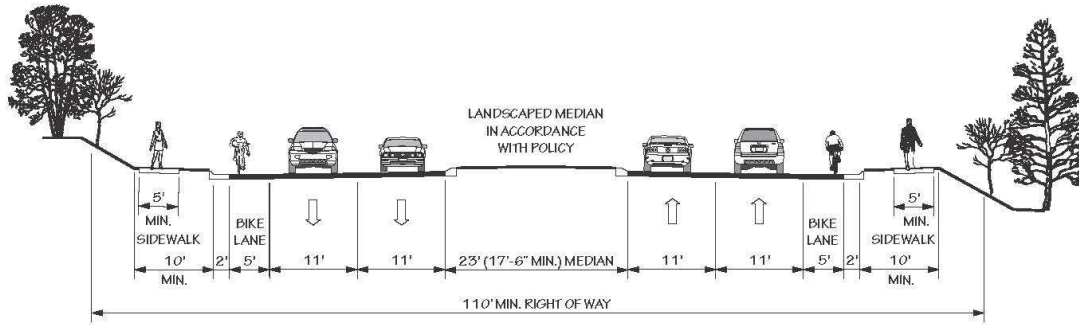
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

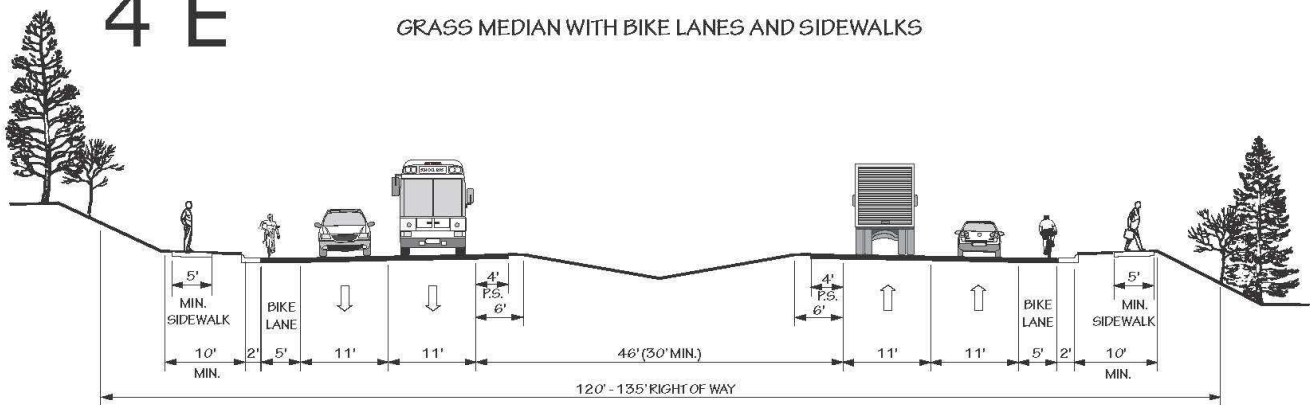
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

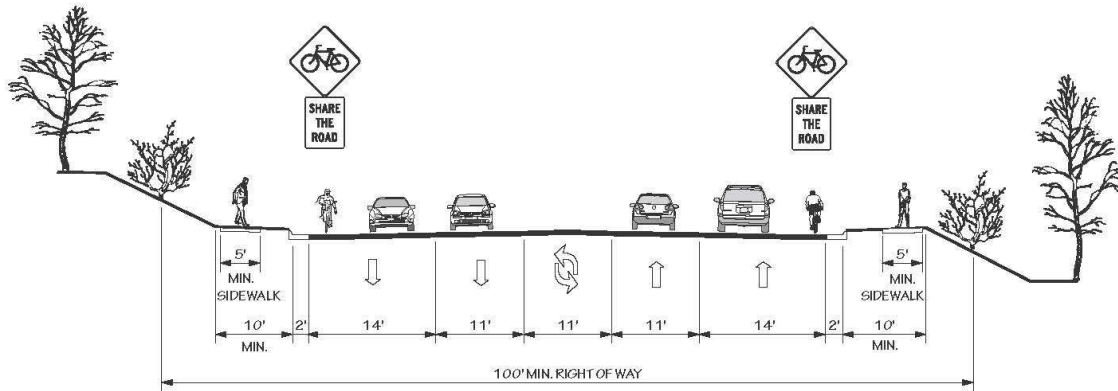
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES



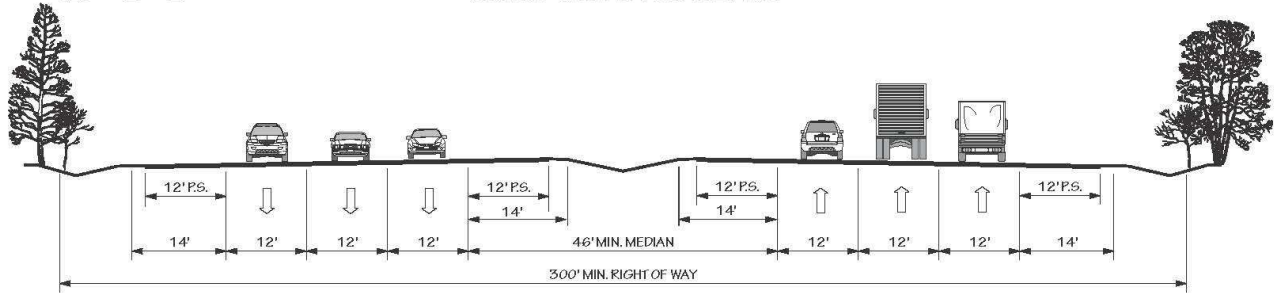
Revised 12/07/2010

TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

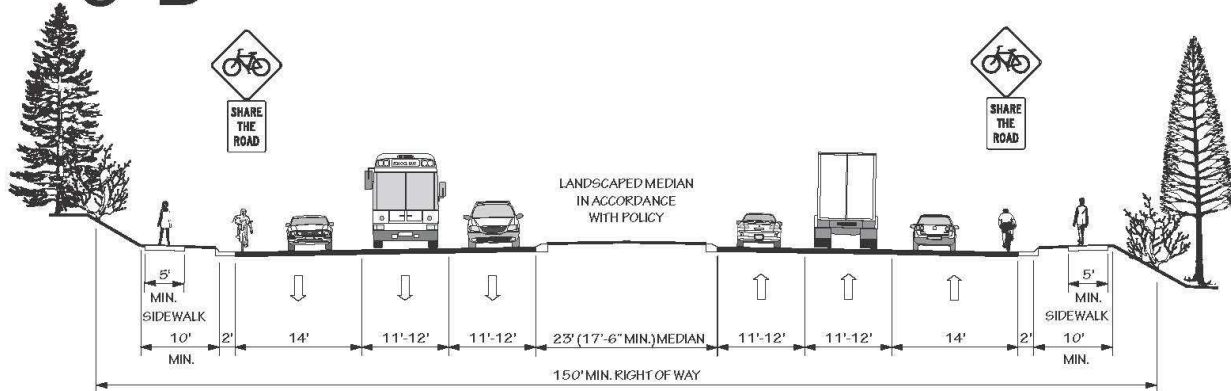
6 A

DIVIDED WITH GRASS MEDIAN



6 B

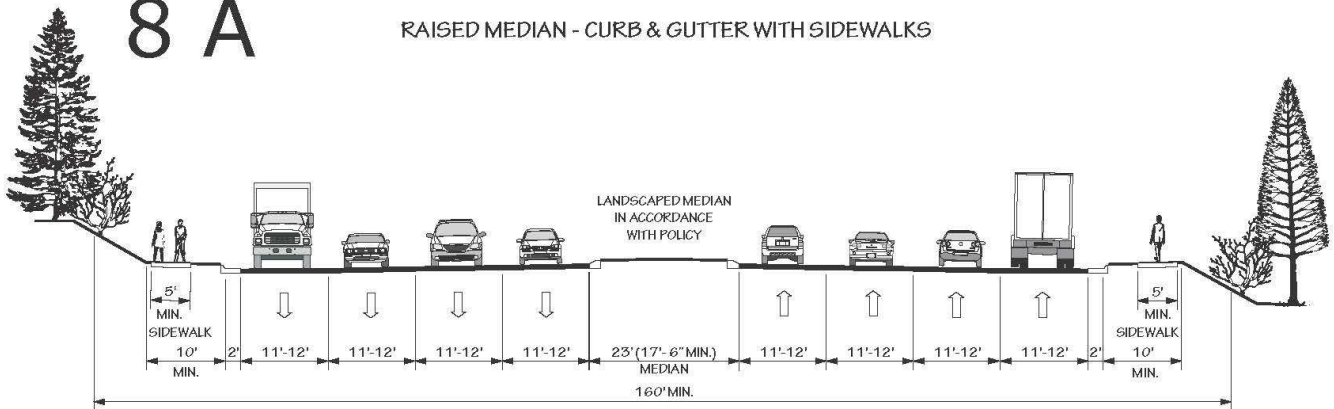
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS

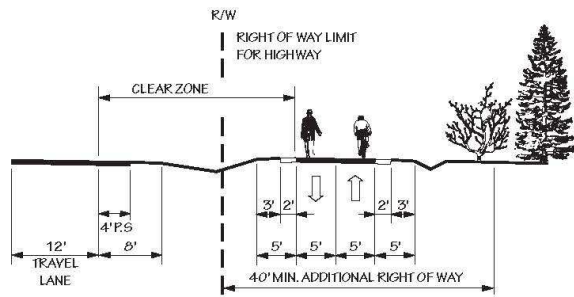


Revised 12/07/2010

TYPICAL MULTI - USE PATH

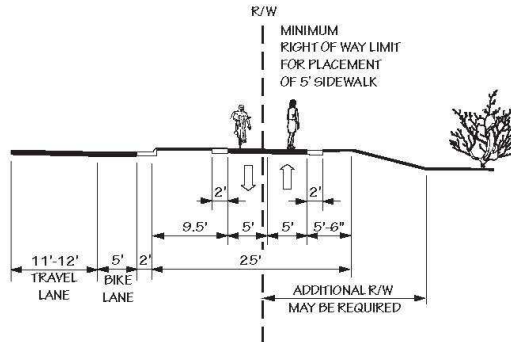
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Revised 12/07/2010

Appendix E

Level of Service Definitions

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

Design requirements for roadways vary according to the desired capacity and level of service. LOS D indicates “practical capacity” of a roadway, or the capacity at which the public begins to express dissatisfaction. Recommended improvements and overall design of the transportation plan were based upon achieving a minimum LOS D on existing facilities and a LOS C on new facilities. The six levels of service are described below and illustrated in Figure 11.

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

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

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

Table 7 depicts a summary of the crashes occurring in the planning area between January 1, 2007 and December 31, 2009. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's 4.56 index. The "Total" column indicates the total number of crashes reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 6 - Crash Locations

Map Index	Intersection	Average Severity	Total Crashes
1	US 64 and NC 94	9.17	12

The NCDOT is actively involved with investigating and improving this location. To request a more detailed analysis for the location listed in Table 6, 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 qualify for Federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges within the planning area are listed in Table 8.

Table 7 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
6	NC 94	NW Fork Alligator River	Structurally Deficient	B-4647
7	US 64	Alligator River	Structurally Deficient Functionally Obsolete	B-5195
9	NC 94	Canal	Structurally Deficient	B-4648
10	Foster Rd (SR 1308)	Canal	Structurally Deficient	
17	Crosslanding Rd (SR 1105)	Riders Creek	Structurally Deficient	

Appendix H Public Involvement

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

Committee Members

Member	Organization
Mack Carawan	Tyrrell County
Mike Crowder	Town of Columbia
Michael Griffin	Town of Columbia
Lee Scripture	Tyrrell County
James Swain	Tyrrell County
Rhett White	Town of Columbia
Steven Lambert	Albemarle RPO
Jerry Jennings	NCDOT Division 1
Darrick Lee	NCDOT Division 1
Lauren Nicholls	NCDOT TPB
Scott Walston	NCDOT TPB

Vision and Goals Statement

Vision

To provide a safe, reliable, efficient, and integrated multimodal transportation system that improves the quality of life in Tyrrell County and encourages sustainable economic development and connectivity that is compatible with environmental and land use patterns.

Goals

1. Ensure the integrity of the existing transportation system by encouraging planned and strategic development.
2. Identify and prioritize improvements that would enhance safety and quality of life through multimodal CTP implementation.
3. Promote roadways that allow and encourage alternative modes of transportation such as walking and biking.
4. Preserve right of way construction of future transportation facilities.
5. Create better connectivity and mobility throughout the county.
6. Preserve the rural character of the county while accommodating growth to targeted areas.
7. Recognize the impact of US 64 being multilane throughout the county.

Goals and Objectives Survey Results

1. Survey respondents were asked how many people live in their household.

People in Household	Responses	Percentage
1	6	8.8%
2	31	45.6%
3	14	20.6%
4	11	16.2%
5 or more	6	8.8%

2. Survey respondents were asked how many licensed drivers are in their household.

Licensed Drivers in Household	Responses	Percentage
1	9	13.2%
2	44	64.7%
3	13	19.1%
4	2	2.9%
5 or more	0	0.0%

3. Survey respondents were asked how many personal vehicles were at their household.

Personal Vehicles in Household	Responses	Percentage
1	9	13.2%
2	44	64.7%
3	13	19.1%
4	2	2.9%
5 or more	0	0.0%

4. Survey respondents were asked if they lived in Tyrrell County.

Location	Zip Code	Responses	Percentage
Columbia, NC	27925	53	77.9%
Fairfield, NC	27826	1	1.5%
Greenville, NC	27834	1	1.5%
Scranton, NC	27875	1	1.5%
Creswell, NC	27928	3	4.4%
Kill Devil Hills, NC	27948	1	1.5%
Plymouth, NC	28962	2	2.9%
Unknown	n/a	6	8.8%

5. Survey respondents were asked where they would like to see sidewalks constructed or improved.

Location	Responses
Columbia	21
Main Street	11
Broad Street	2
Scuppernong Area	2
US 64	2
Fonsoe Street	1
L.A. Keiser Drive	1
Railroad Street	1
Water Street	1

6. Survey respondents were asked where they would use on-road bike lanes and/or wide shoulders.

Location	Responses
US 64	8
NC 94	7
Newlands Road	5
Columbia	4
Soundside Road	3
Albemarle Church Road	1
Jerry Post Office Road	1
Levels Road	1
Road Street	1
Scuppernong Area	1

7. Survey respondents were asked where they would use off-road trails or greenways.

Location	Responses
Anywhere	13
Columbia	10
Scuppernong Area	6
US 64	3
NC 94	2
Along river or sound	1

8. Survey respondents were asked where they would like to have access improved.

Location	Responses
Columbia (Parking, Boat Ramps, From Visitor Center to Downtown, L.A. Keiser Drive)	11
US 64 (Finish Widening, Access to Food Lion and Dollar General, Crossings, NC 94 Intersection in Town)	6
Boat Access (North West Fork, Fort Landing, Alligator Creek, canoe and kayak access)	3
Bridge Path Road	1
River Neck Road	1

9. Survey respondents were asked to rate the importance of each goal.

- Safety and Care for Special Needs Citizens were the highest ranked goals.

10. Survey respondents were asked what was the most important transportation issue in Tyrrell County.

- US 64 (Finish widening, maintenance, stop lights)
- Public Transportation (More options)
- Road Maintenance
- Widening of rural roads
- Safety
- Replacement of bridge over Alligator River
- Pedestrian Facilities
- Water Drainage
- Direct route to Chowan Hospital
- Parking downtown
- Bridge repair to support farm equipment

11. Survey respondents were asked how they found out about this survey.

Survey	Responses
Email	49
County Commissioner	6
Department of Social Service	2
4-H Center	2
Internet	1
Mail	1
Facebook	1
Verbally	1

12. Survey respondents were asked if they would like to stay informed during the Tyrrell County CTP process.

- 23 Responses

Public Involvement

One public workshop was held during the development of the Comprehensive Transportation Plan to discuss proposed recommendations. Large copies of the maps were displayed for the public to evaluate. During this public drop-in session, public input was taken in the form of comment sheets, and through discussions between citizens and the CTP Committee members. The public drop-in session was held on February 15, 2012 at the town library in Columbia from 4-7 pm. One member of the public attended the workshop. Representatives from the County, Albemarle RPO, and the NCDOT were available to explain the proposed recommendations and answer questions. Attendees were encouraged to provide comments on each Comprehensive Transportation Plan element on the comment sheets provided.

There was no controversy to any of the proposed CTP projects.

Appendix I

Additional Transportation Alternatives & Scenarios Studied

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

US 64 (Scuppernong River Bridge to East of Columbia), Local ID: TYRR0001-H

Three alternatives were considered for improvements to US 64 through the town of Columbia: a northern bypass, southern bypass and improvement on existing. The option for improvement of existing was selected due to the minimal impacts it would have on human and environmental features as well as this option being favored by the town of Columbia.

A northern bypass of the town of Columbia would have more significant impacts to the human and natural environment as can be seen in Figure 9. There are wetlands, conservation tax credit property, and federal land that would need to be considered. In addition to these environmental features, several homes and businesses may be impacted if a northern bypass were selected.

A southern bypass of the town of Columbia would have more significant impacts to the human and natural environment as can be seen in Figure 9. There are wetlands, conservation tax credit property, and federal land that would need to be considered. In addition to these environmental features, there are several homes and the Tyrrell Elementary School that may be impacted.

The alternative for improving existing US 64 through the town of Columbia on existing was chosen. The town of Columbia wants to keep US 64 in town and the environmental and human impacts that would occur from a bypass north or south of town are more significant than improving on existing.

In regards to traffic demand, the improvement of existing US 64 can accommodate 2035 traffic demand. Since bypass alternatives were eliminated early in the development of the CTP recommendations, alternatives were not drawn on a map for consideration.

