Comprehensive Transportation Plan

Currituck County

May 2012

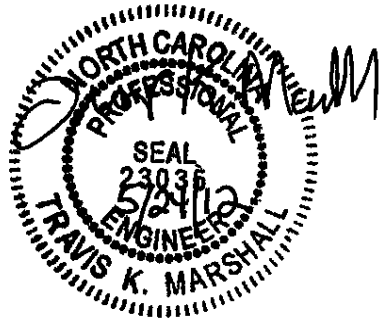
Comprehensive Transportation Plan

Currituck County

Prepared by: Kerry Morrow, Project Engineer
Transportation Planning Branch
N.C. Department of Transportation

In Cooperation with: Currituck County
Albemarle Rural Planning Organization

May 2012



Travis Marshall
Eastern Planning Unit Head

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Executive Summary

In October of 2009, the Transportation Planning Branch of the North Carolina Department of Transportation and Currituck County initiated a study to cooperatively develop the Currituck County Comprehensive Transportation Plan (CTP). This is a long range multi-modal transportation plan that covers transportation needs through 2035. Modes of transportation evaluated as part of this plan include: highway, public transportation and rail, bicycle, and pedestrian. This plan does not cover standard bridge replacements, routine maintenance, or minor operations issues. Refer to Appendix A for contact information on these types of issues.

Findings of this CTP study were based on an analysis of the transportation system, environmental screening, and public input. Refer to Figure 1 for the CTP maps, which were mutually endorsed/adopted in 2011. Implementation of the plan is the responsibility of Currituck County and NCDOT. Refer to Chapter 2 for information on the implementation process.

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

- **R-2576:** Construct Mid-Currituck Bridge across Currituck Sound connecting mainland Currituck County with Corolla.

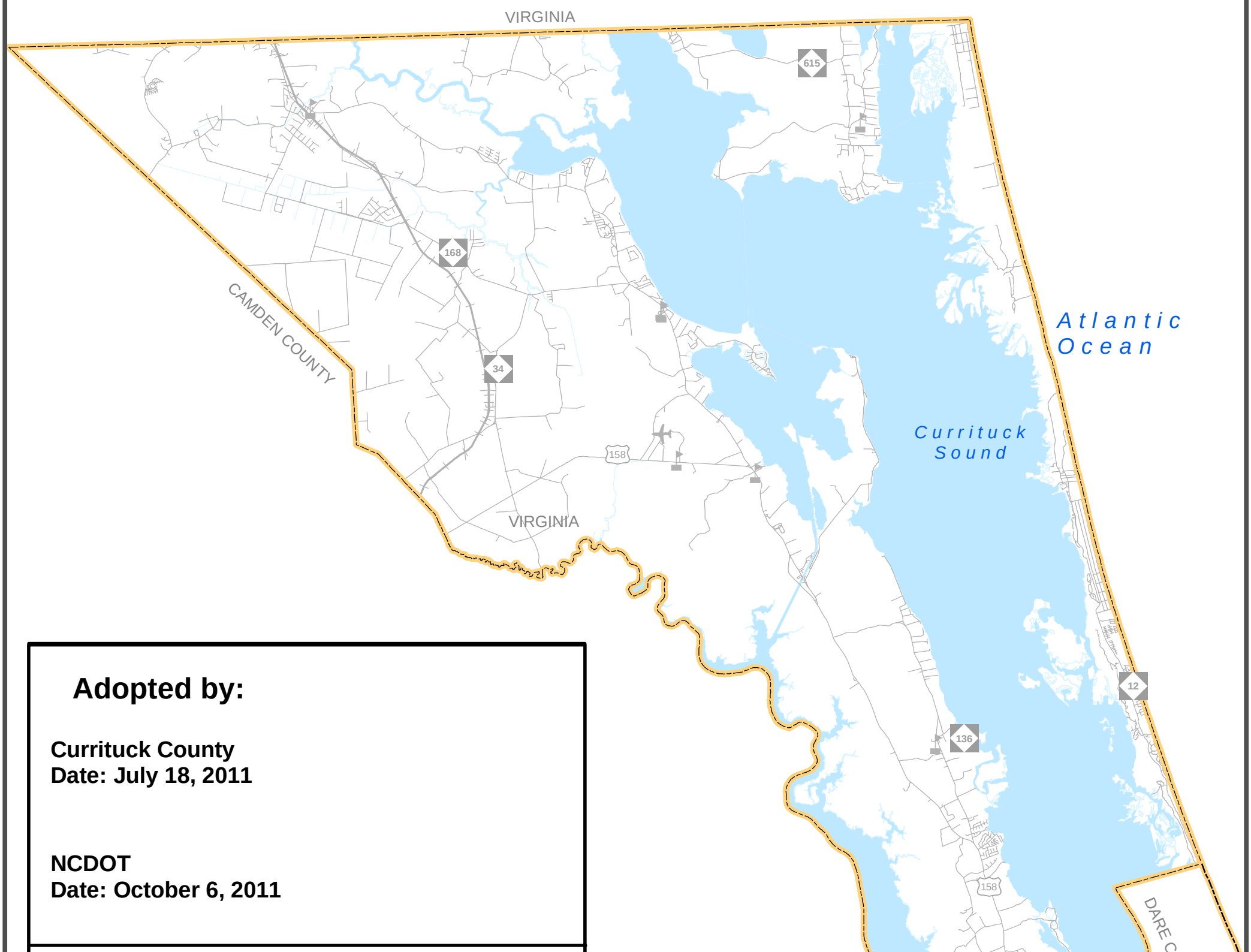
- **R-2574:** Widen US 158 to a four-lane expressway from Camden County to the proposed Mid-Currituck Bridge.

- **CURR0001-H:** Improve US 158 to a four-lane divided boulevard from the proposed Mid-Currituck Bridge to Dare County.

- **CURR0002-H:** Improve NC 168 to a four-lane divided boulevard from Virginia to US 158.

- **CURR0003-H:** Construct a four-lane freeway on new location bypassing Moyock from NC 168 near Virginia to US 158, with interchanges at NC 168, South Mills Road (SR 1227/1218), NC 34 and US 158.

- **CURR0001-T:** Provide public transit on NC 12 along the Outer Banks portion in Currituck County.



Adopted by:

Currituck County
Date: July 18, 2011

NCDOT
Date: October 6, 2011

Endorsed by:

Albemarle RPO
Date: August 24, 2011

Recommended by:

Transportation Planning Branch
Date: September 15, 2011

NOTES:

Legend

- Airport
- County Boundary
- Schools
- Roads
- Railroads
- Water

Miles
0 0.5 1 2 3

N W E S

Figure 1

Sheet 1 of 5

Base map date: August 2010

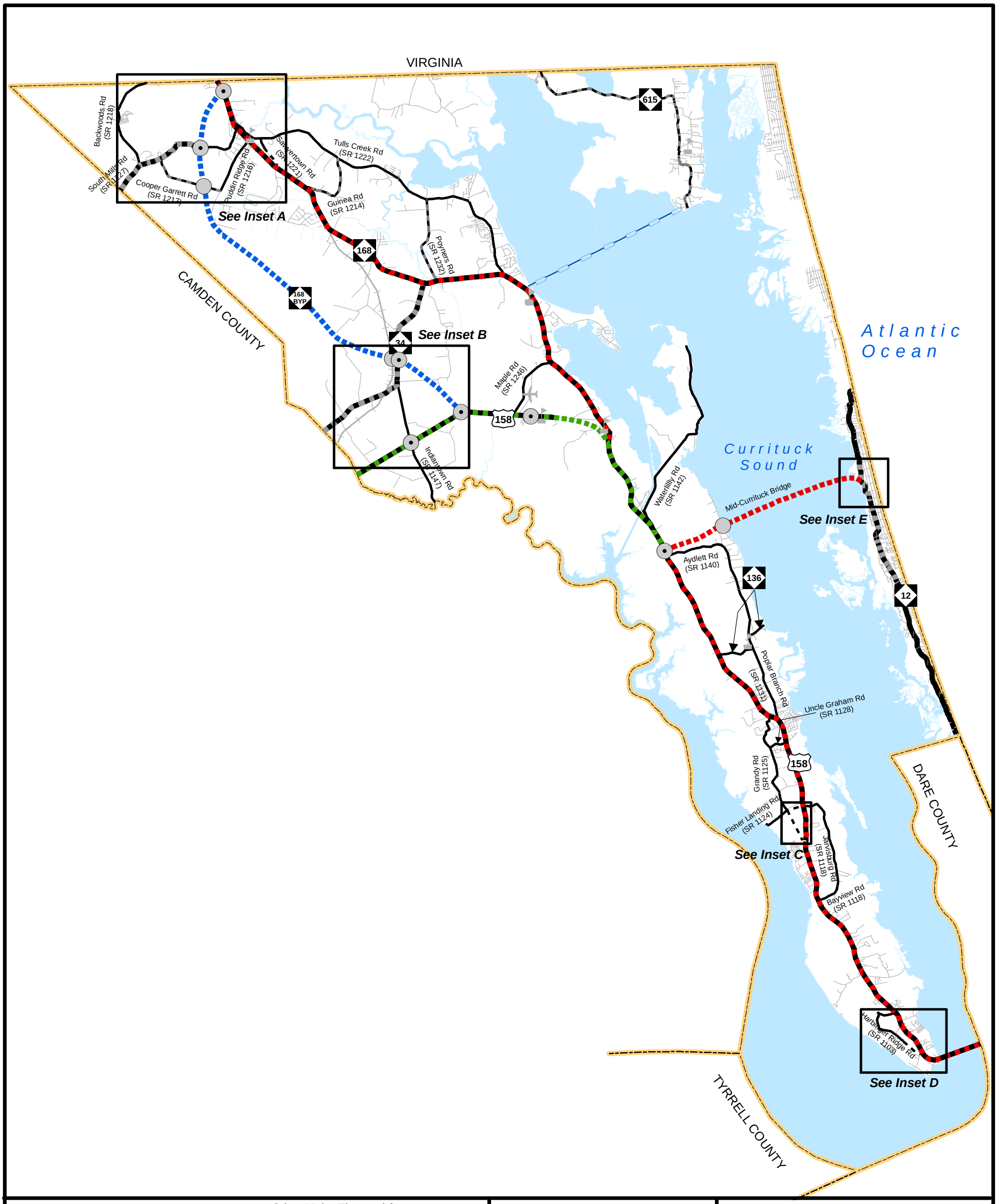
Refer to CTP document for more details

Currituck County

North Carolina

Comprehensive Transportation Plan

Plan date: June 30, 2011



Freeways
- Existing
- Needs Improvement
- Recommended

Expressways
- Existing
- Needs Improvement
- Recommended

Boulevards
- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares
- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares
- Existing
- Needs Improvement
- Recommended

- Existing Interchange
- Proposed Interchange
- Existing Grade Separation
- Proposed Grade Separation
- Ferry Route

0 0.5 1 2 3 Miles

N W E S

Figure 1

Sheet 2 of 5

Base map date: August 2010

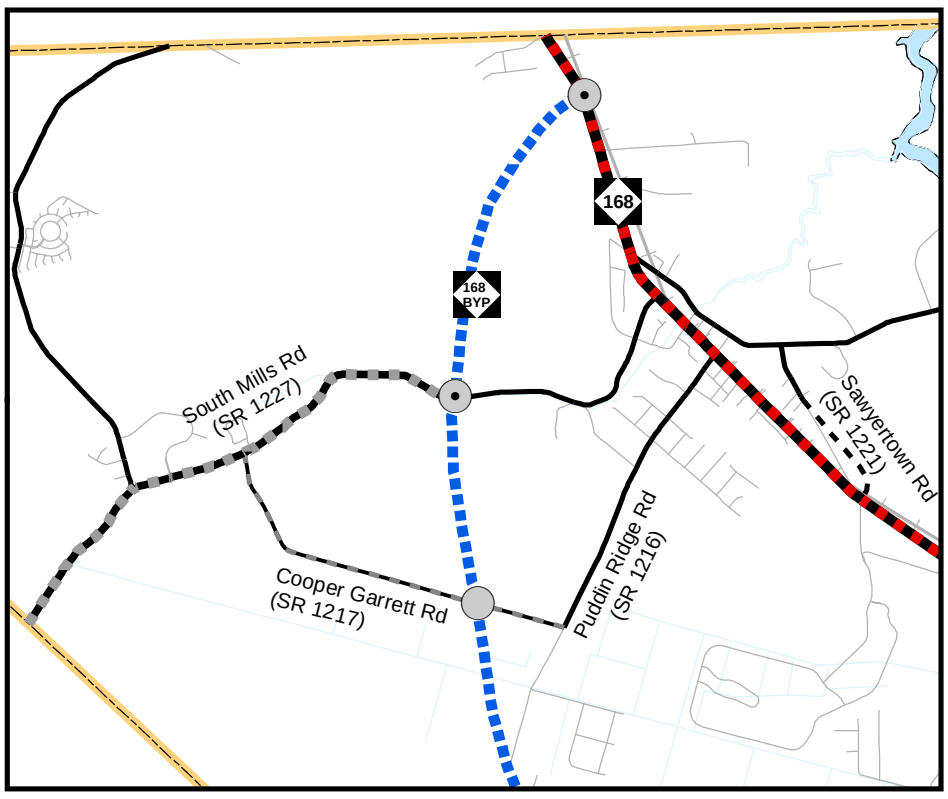
Refer to CTP document for more details

Highway Map

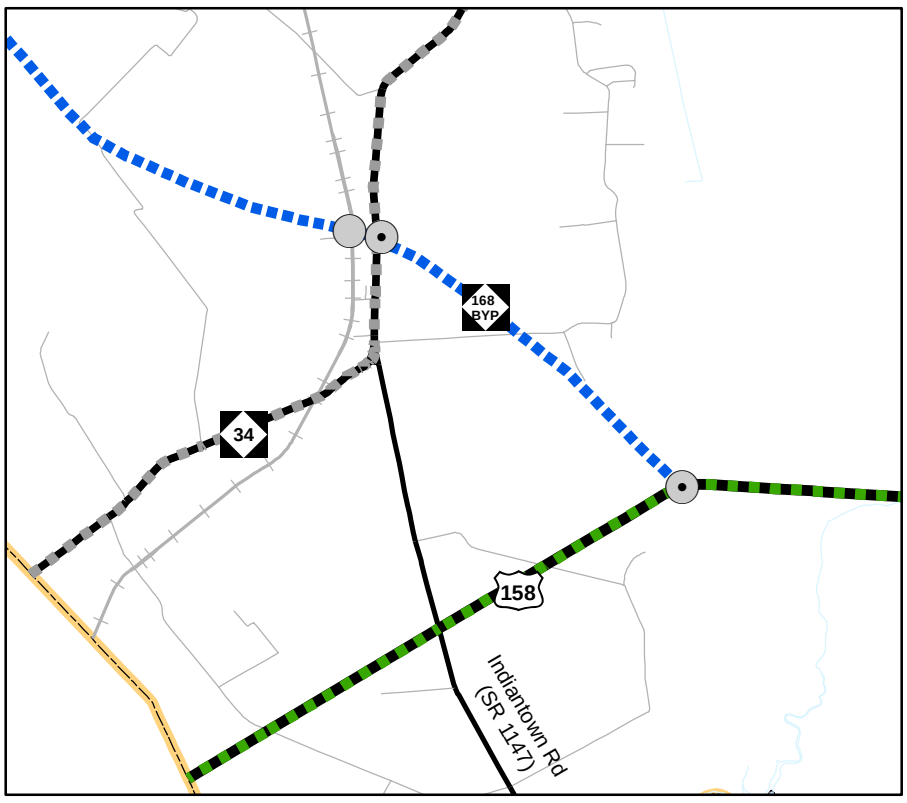
Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011



Inset A



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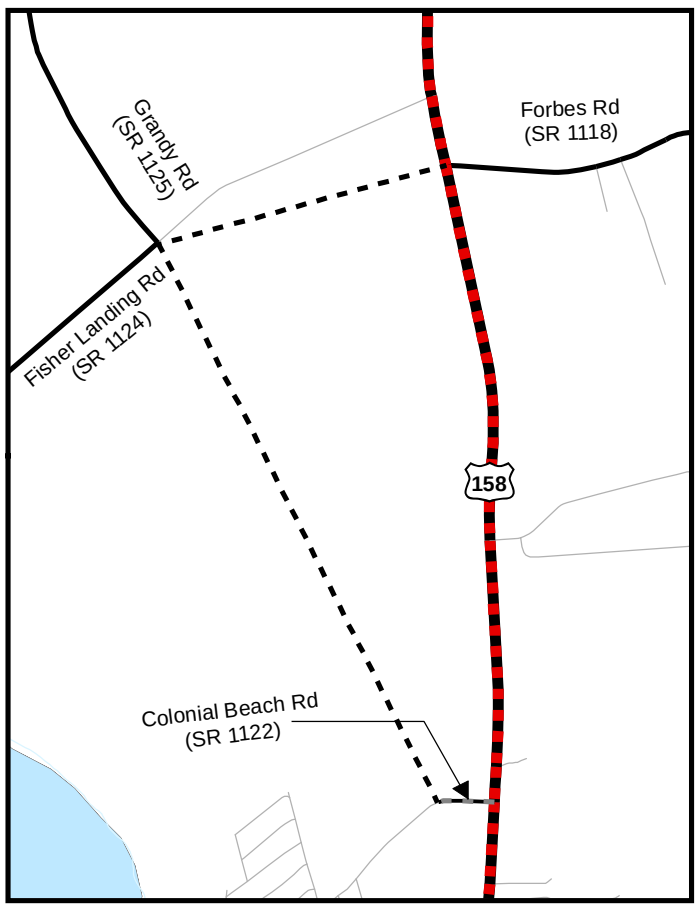

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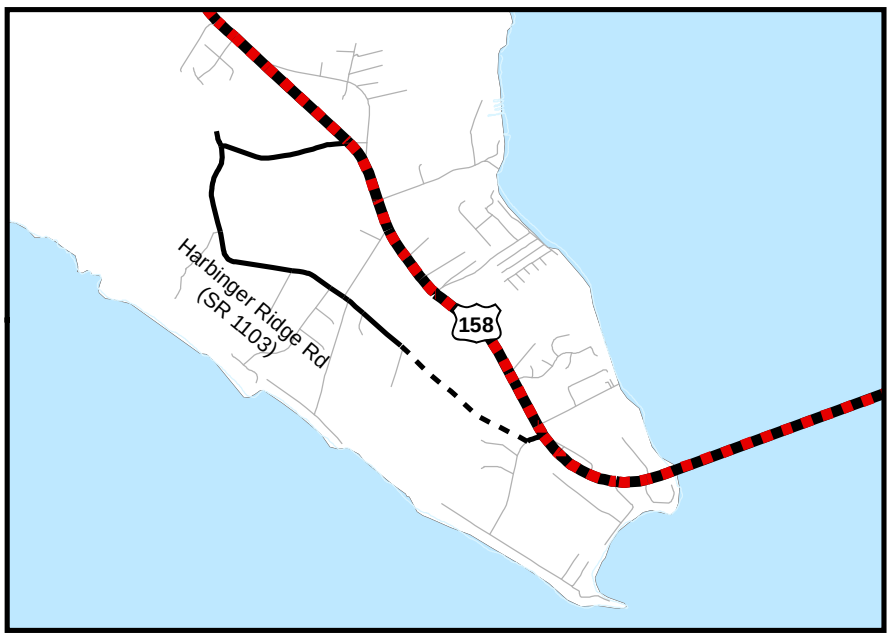

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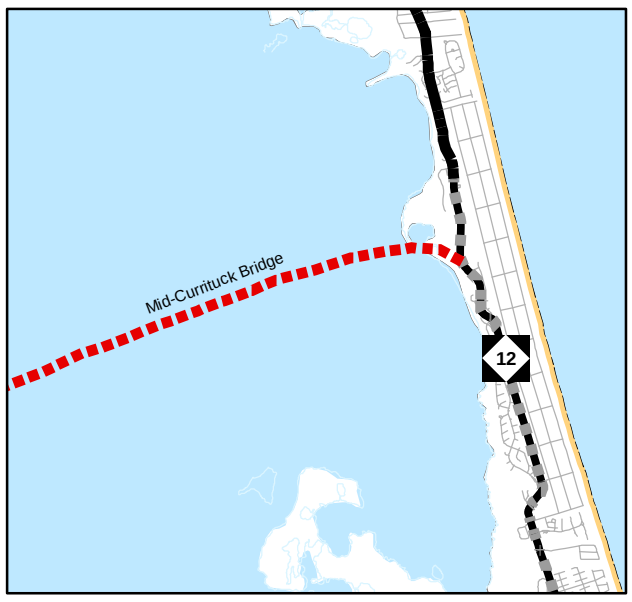


Inset E

Freeways
- Existing
- Needs Improvement
- Recommended

Expressways
- Existing
- Needs Improvement
- Recommended

Boulevards
- Existing
- Needs Improvement
- Recommended

Other Major Thoroughfares
- Existing
- Needs Improvement
- Recommended

Minor Thoroughfares
- Existing
- Needs Improvement
- Recommended

- Existing Interchange
- Proposed Interchange
- Existing Grade Separation
- Proposed Grade Separation
- Ferry Route

0 0.2 0.4 0.8 1.2 1.6 Miles

N W E S

Figure 1

Sheet 2A of 5

Base map date: August 2010

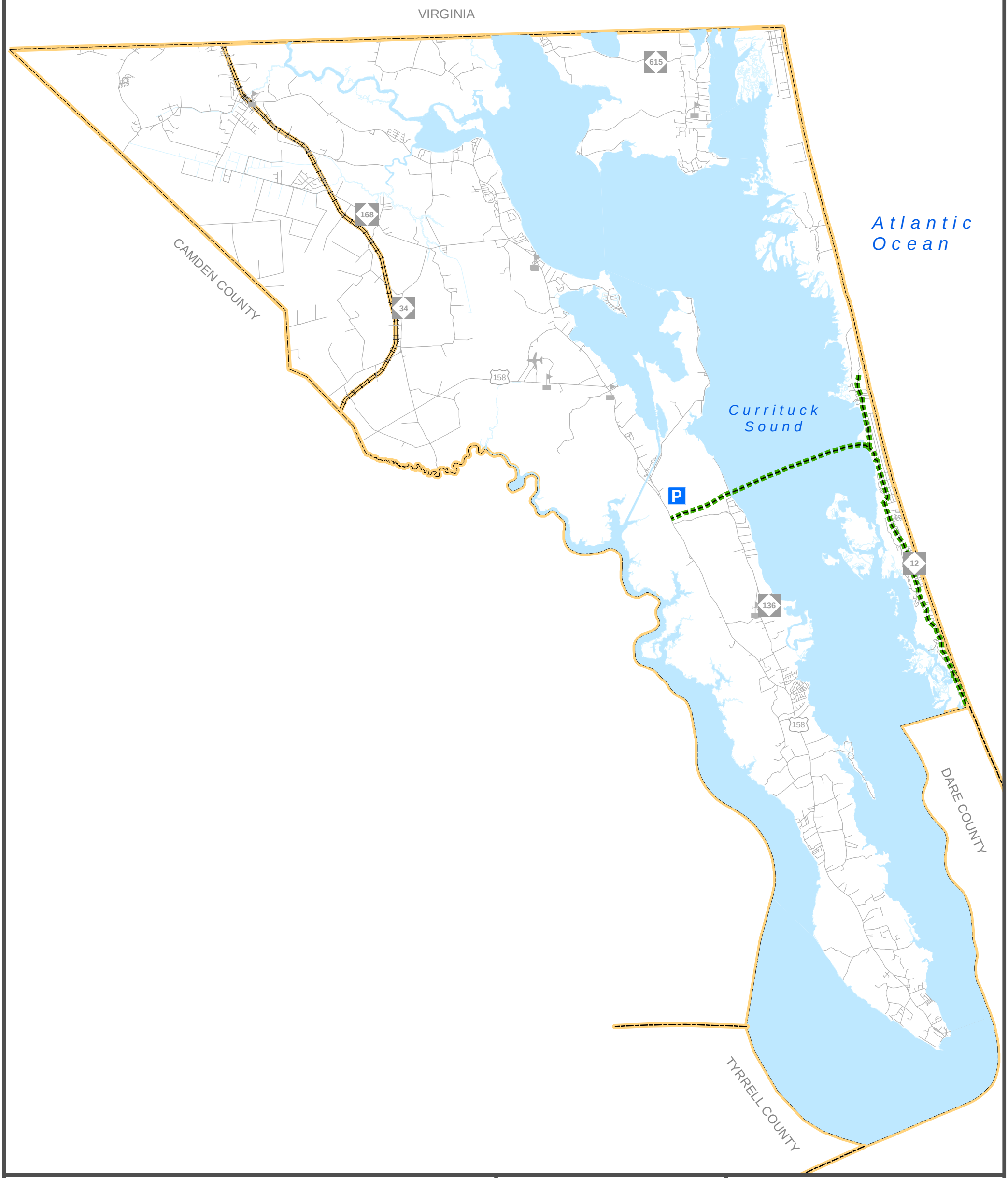
Refer to CTP document for more details

Highway Map Insets A - E

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011



Bus Routes
- Existing
- Needs Improvement
- Recommended

Rail Corridor
- Active
- Inactive
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

Fixed Guideway
- Existing
- Needs Improvement
- Recommended

High Speed Rail Corridor
- Existing
- Recommended

Intermodal Connector
- Existing
- Recommended

Operational Strategies
- Existing
- Needs Improvement
- Recommended

Park and Ride Lot
- Existing
- Recommended

Rail Stops
- Existing
- Recommended

0 0.5 1 2 3 Miles

N W E S

Figure 1

Sheet 3 of 5

Base map date: August 2010

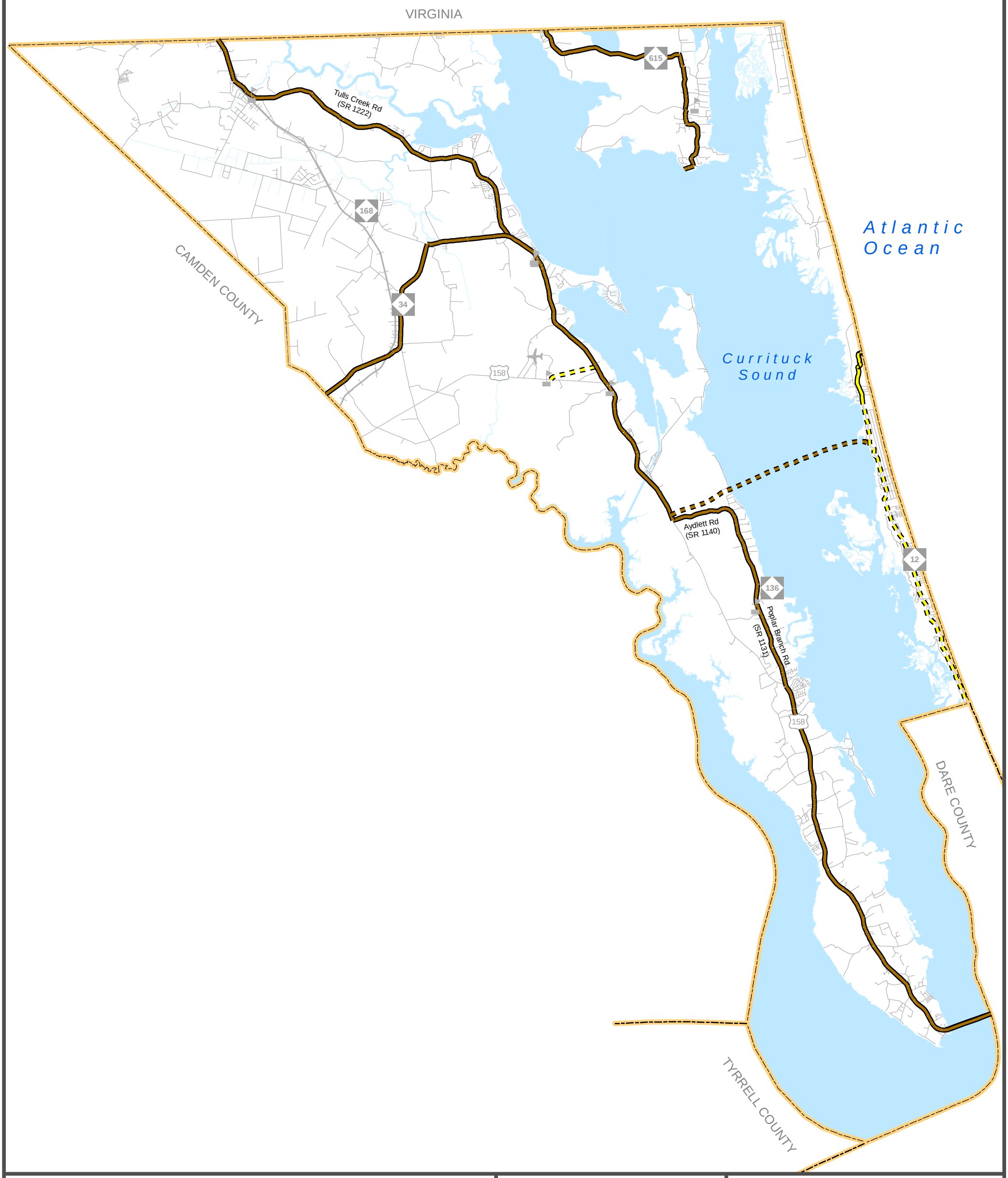
Refer to CTP document for more details

Public Transportation and Rail Map

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011



On-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.5 1 2 3 Miles

N W E S

Figure 1

Sheet 4 of 5

Base map date: August 2010

Refer to CTP document for more details

Bicycle Map

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011

VIRGINIA

CAMDEN COUNTY

DARE COUNTY

TYRRELL COUNTY

Atlantic Ocean

Currituck Sound

168

615

34

158

12

136

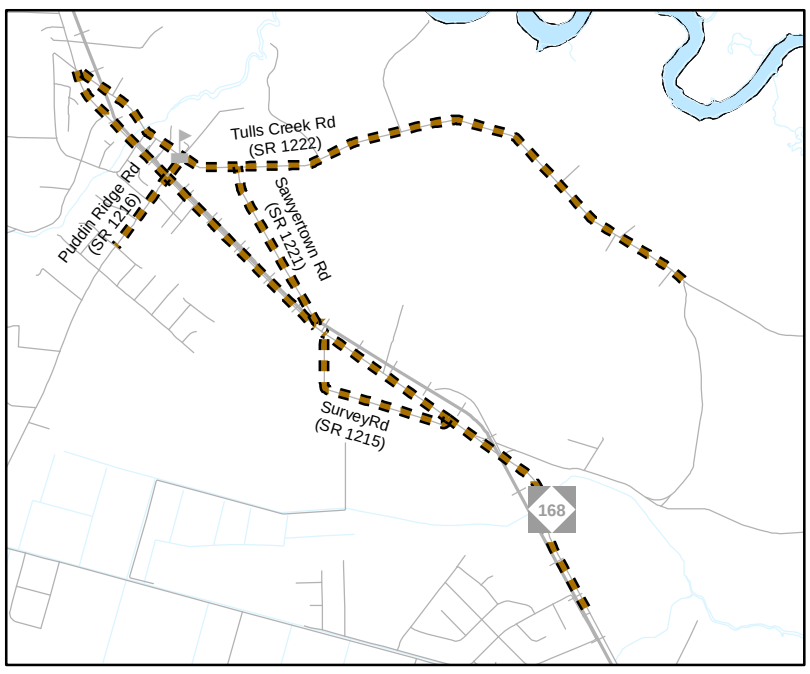
Tulls Creek Rd (SR 1222)

Aydlett Rd (SR 1140)

Poplar Branch Rd (SR 1131)

Jarvisburg Rd (SR 1149)

See Inset A



Inset A

Sidewalks

- Existing
- Needs Improvement
- Recommended

Off-Road

- Existing
- Needs Improvement
- Recommended

Multi-Use Paths

- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation

0 0.5 1 2 3 Miles

N W E S

Figure 1

Sheet 5 of 5

Base map date: August 2010

Refer to CTP document for more details

Pedestrian Map

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011

I. Analysis of the Existing and Future Transportation System

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

In order to develop a Comprehensive Transportation Plan (CTP), the following are considered:

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

Analysis Methodology and Data Requirements

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

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

Roadway System Analysis

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

One of those statewide initiatives is the Strategic Highway Corridor (SHC) Vision Plan adopted by the Board of Transportation on September 2, 2004. 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). 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 2009 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.

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

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

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

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

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

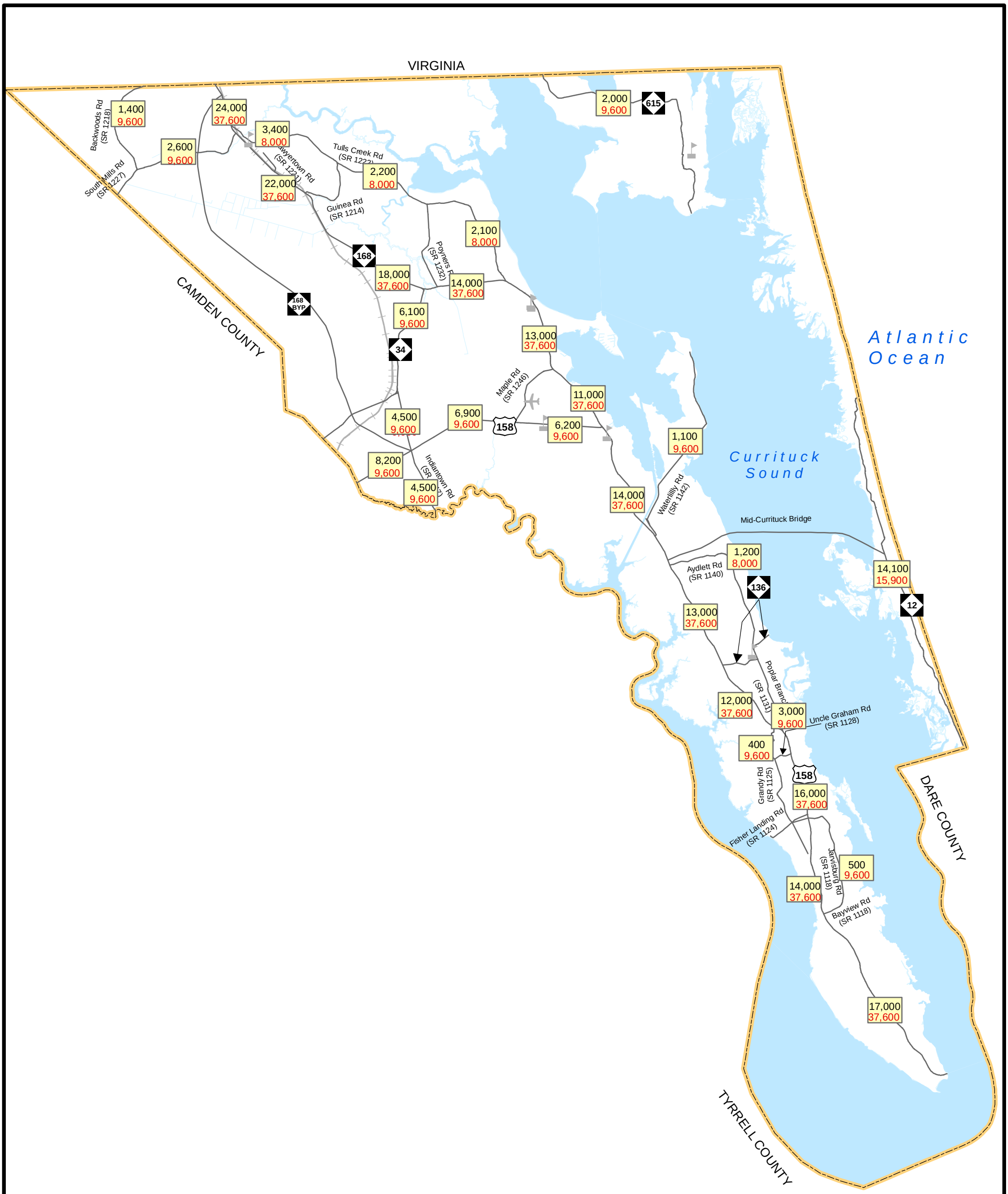
Traffic Crash Analysis

Traffic crashes are often used as an indicator for locating congestion and roadway problems. Crash patterns obtained from an analysis of crash data can lead to the identification of improvements that will reduce the number of crashes. A crash analysis was performed for the Currituck County CTP for crashes occurring in the planning area between January 1, 2007 and December 31, 2009. During this period, a total of five intersections were identified as having a high number of crashes as illustrated in Figure 6. Refer to Appendix F for a detailed crash analysis.

Bridge Deficiency Assessment

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

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



Legend

- Airports
- Schools
- County Boundary
- Rail
- Water
- Under Capacity (0.00 - 0.79)
- Near Capacity (0.80 - 0.99)
- Over Capacity (1.00 - 1.49)
- XXXX / XXXX — 2009 Volumes (AADT) / 2009 Capacities

0 0.5 1 2 3 Miles

N W E S

Figure 2

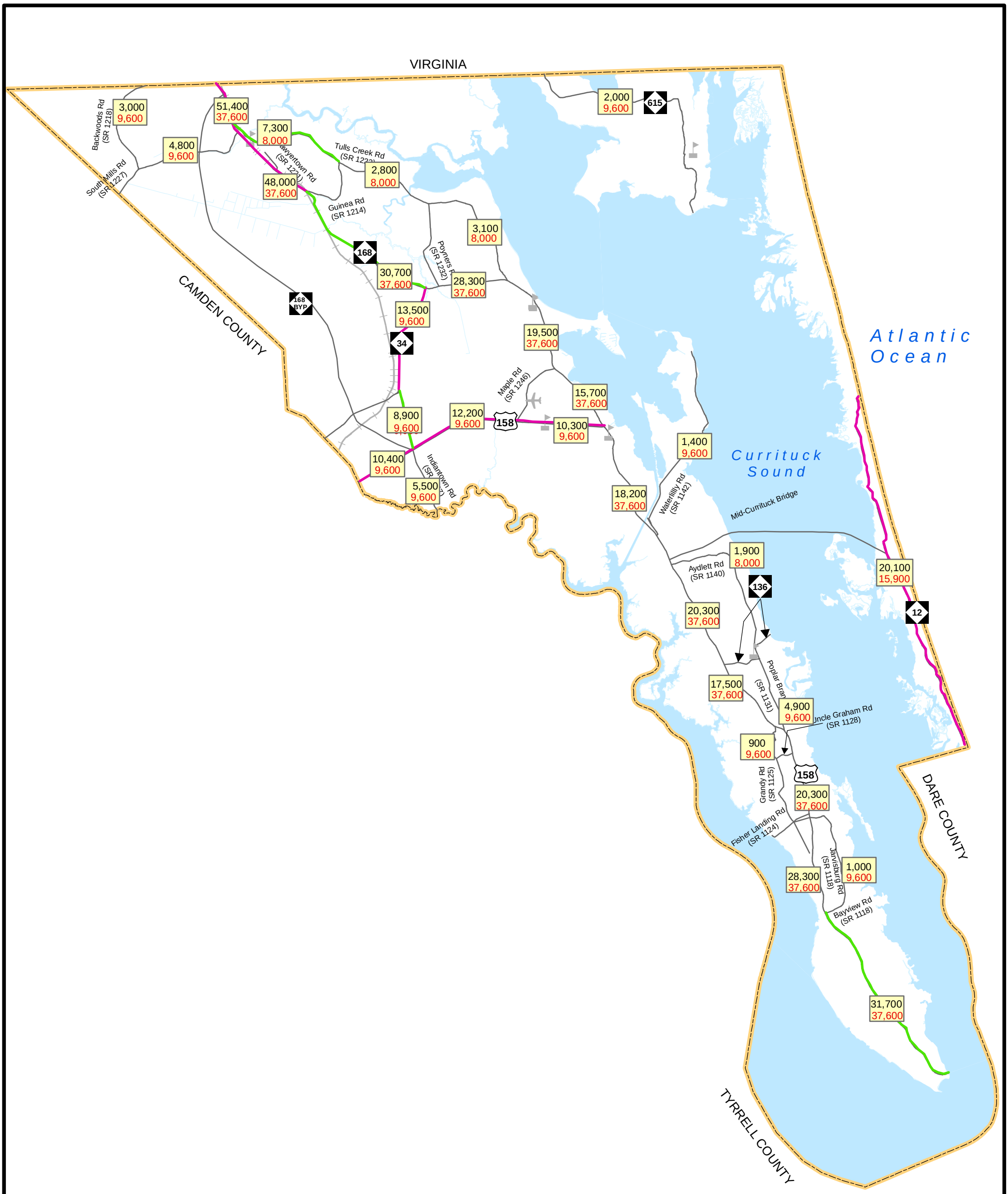
Base map date: August 2010

2009 Volumes and Capacity Deficiencies

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011



Legend

- Airports
- Schools
- County Boundary
- Rail
- Water
- Under Capacity (0.00 - 0.79)
- Near Capacity (0.80 - 0.99)
- Over Capacity (1.00 - 1.49)
- XXXX / XXXX — 2035 Volumes (AADT) / 2035 Capacities

0 0.5 1 2 3 Miles

N W E S

Figure 3

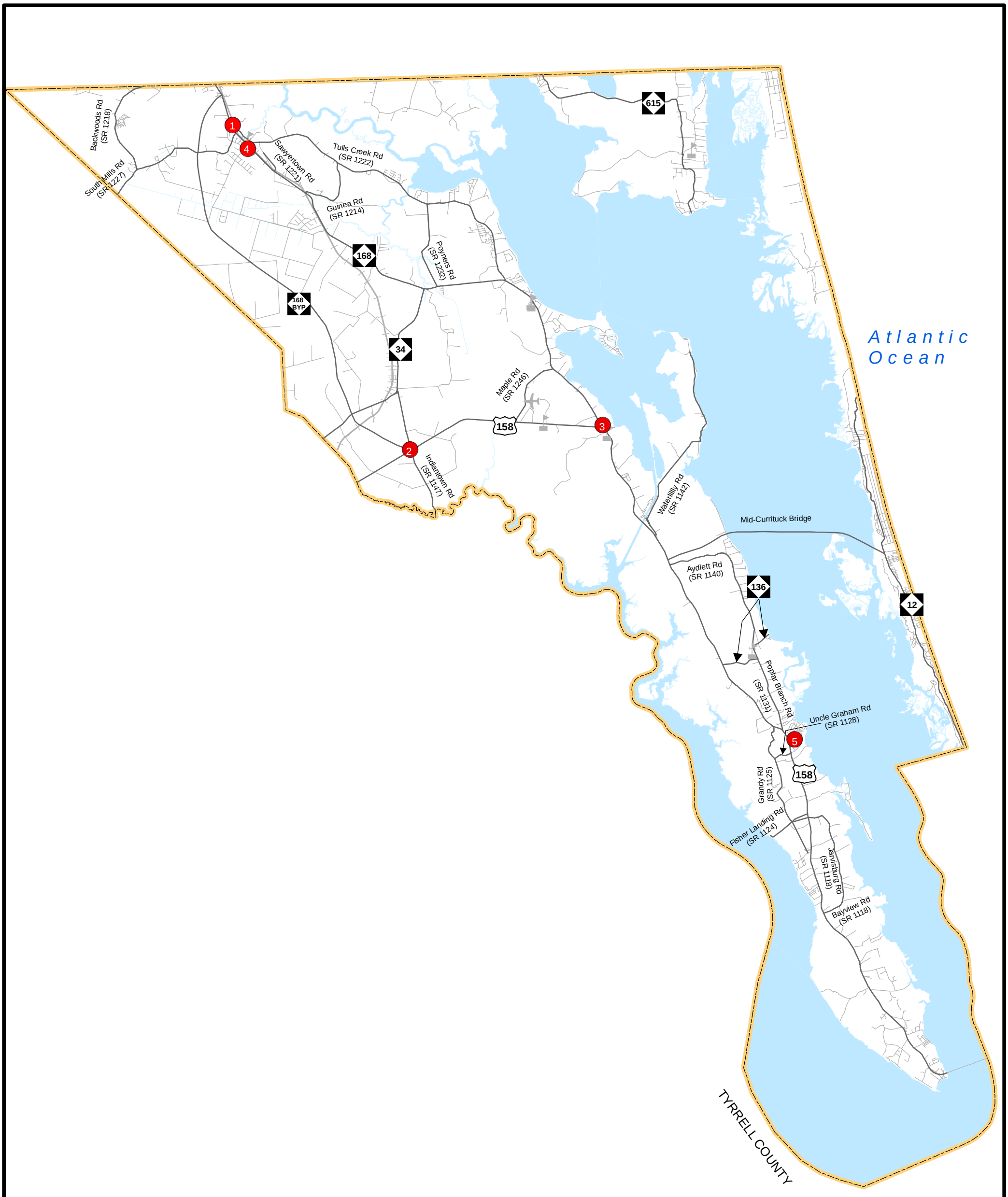
Base map date: August 2010

2035 Volumes and Capacity Deficiencies

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011



Legend

- Airports
- Schools
- Roads
- County Boundary
- Rail
- Water
- Crash Locations

Miles
0 0.5 1 2 3

N W E S

Figure 4

Base map date: August 2010

Refer to Appendix F for more details

Crash Locations

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011

Backwoods Rd (SR 1218)
South Mills Rd (SR 1227)
Sawyertown Rd (SR 1221)
Tulls Creek Rd (SR 1222)
Guinea Rd (SR 1214)
Poyners Rd (SR 1232)
6
28
3
168
168 BYP
34
32
615
19
Atlantic Ocean
Maple Rd (SR 1246)
158
Indiantown Rd (SR 1147)
Waterlilly Rd (SR 1142)
Mid-Currituck Bridge
Aydlett Rd (SR 1140)
136
12
Poplar Branch Rd (SR 1131)
Uncle Graham Rd (SR 1128)
158
Grandy Rd (SR 1125)
Fisher Landing Rd (SR 1124)
Jarvisburg Rd (SR 1118)
Bayview Rd (SR 1118)
TYRRELL COUNTY

Legend

- Airports
- Schools
- Roads
- County Boundary
- Rail
- Water
- # Deficient Bridges

0 0.5 1 2 3 Miles

N W E S

Figure 5

Base map date: August 2010

Refer to Appendix G for more details

Deficient Bridges

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011

Public Transportation and Rail

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

Public Transportation

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

- Community Transportation - Local transportation efforts formerly centered on assisting clients of human service agencies. Today, the vast majority of rural systems serve the general public as well as those clients.

- Regional Community Transportation - Regional community transportation systems are composed of two or more contiguous counties providing coordinated / consolidated service. Although such systems are not new, the NCDOT Board of Transportation is encouraging single-county systems to consider mergers to form more regional systems.

- Urban Transportation – There are currently nineteen urban transit systems operating in North Carolina, from locations such as Asheville and Hendersonville in the west to Jacksonville and Wilmington in the east. In addition, small urban systems are at work in three areas of the state. Consolidated urban-community transportation exists in five areas of the state. In those systems, one transportation system provides both urban and rural transportation within the county.

- Regional Urban Transportation - Regional urban transit systems currently operate in three areas of the state. These systems connect multiple municipalities and counties.

- Intercity Transportation - Intercity bus service is one of a few remaining examples of privately owned and operated public transportation in North Carolina. Intercity buses serve many cities and towns throughout the state and provide connections to locations in neighboring states and throughout the United States and Canada. Greyhound/Carolina Trailways operates in North Carolina. However, community, urban and regional transportation systems are providing increasing intercity service in North Carolina.

An inventory of existing and planned fixed public transportation routes for the planning area is presented on Sheet 3 of Figure 1. Currituck County is currently served by Inter-County Transportation Authority, which provides demand-response public transportation. All recommendations for public transportation were coordinated with the local governments and the Public Transportation Division of NCDOT. Refer to Appendix A for contact information.

Rail

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

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

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

An inventory of existing and planned rail facilities for the planning area is presented on Sheet 3 of Figure 1. All recommendations for rail were coordinated with the local governments and the Rail Division of NCDOT. Refer to Appendix A for contact information.

Bicycles & Pedestrians

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

NCDOT's Bicycle Policy, updated in 1991, clarifies responsibilities regarding the provision of bicycle facilities upon and along the 77,000-mile state-maintained highway system. The policy details guidelines for planning, design, construction, maintenance, and operations pertaining to bicycle facilities and accommodations. All bicycle improvements undertaken by the NCDOT are based on 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 transportation planning process. This policy was incorporated so that critical corridors which have been adopted by localities for future greenways will not be severed by highway construction.

Inventories of existing and planned bicycle and pedestrian facilities for the planning area are presented on Sheets 4 and 5 of Figure 1. All recommendations for bicycle and pedestrian facilities were coordinated with the local governments and the NCDOT Division of Bicycle and Pedestrian Transportation. Refer to Appendix A for contact information.

Land Use

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

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

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

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

Currituck County primarily anticipates growth in areas designated as “Full Service Areas.” These areas encompass parts of the county where a broad range of infrastructure and service investments will be made available. For residential development, base development density is contemplated to be two units per acres.

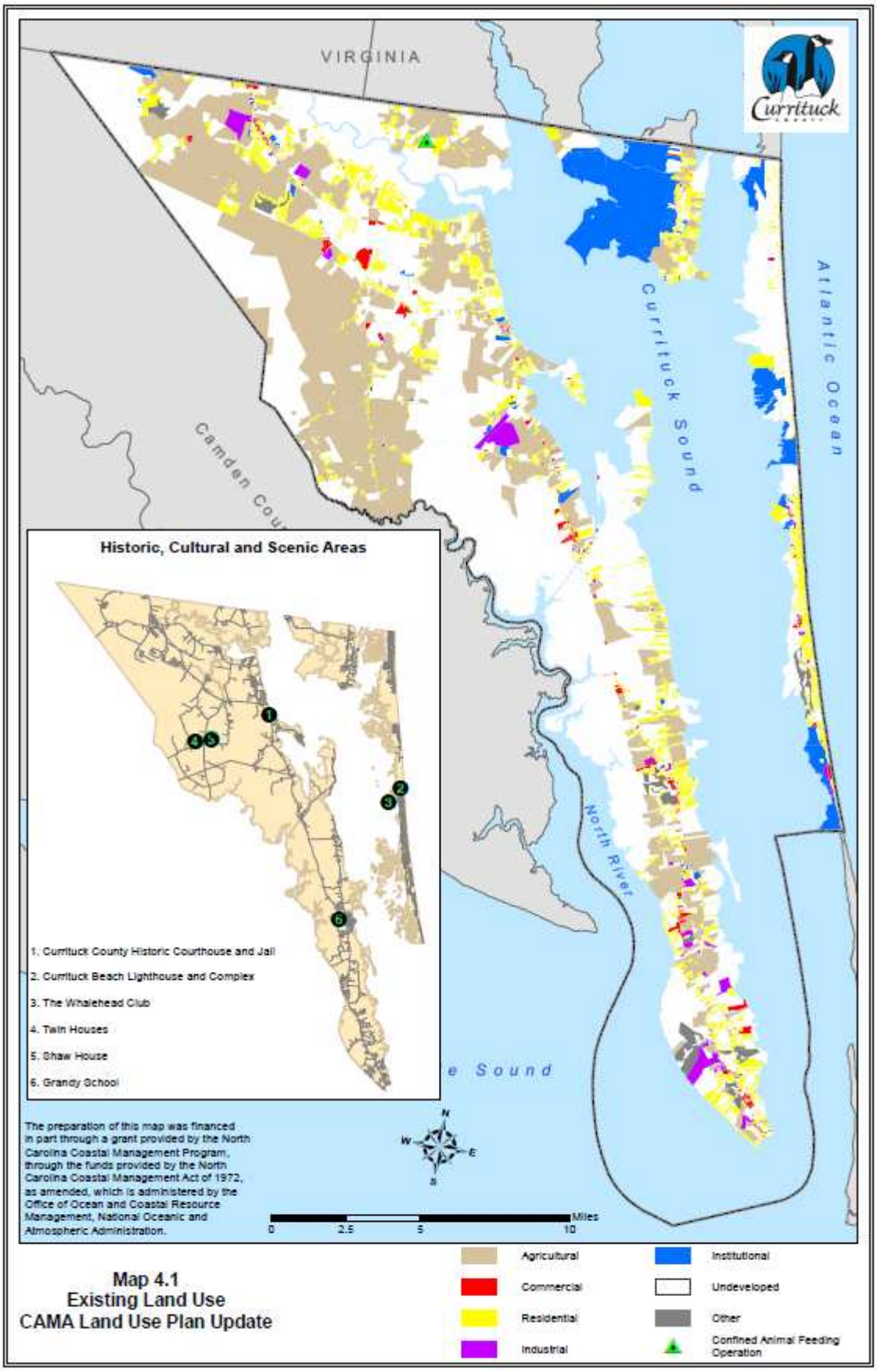

VIRGINIA
Currituck
Currituck Sound
Atlantic Ocean
North River
Historic, Cultural and Scenic Areas
1. Currituck County Historic Courthouse and Jail
2. Currituck Beach Lighthouse and Complex
3. The Whalehead Club
4. Twin Houses
5. Shaw House
6. Grandy School
The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through the funds provided by the North Carolina Coastal Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.
N
W
E
S
0
2.5
5
10
Miles
Agricultural
Commercial
Residential
Industrial
Institutional
Undeveloped
Other
Confined Animal Feeding Operation
Map 4.1
Existing Land Use
CAMA Land Use Plan Update

Figure 6

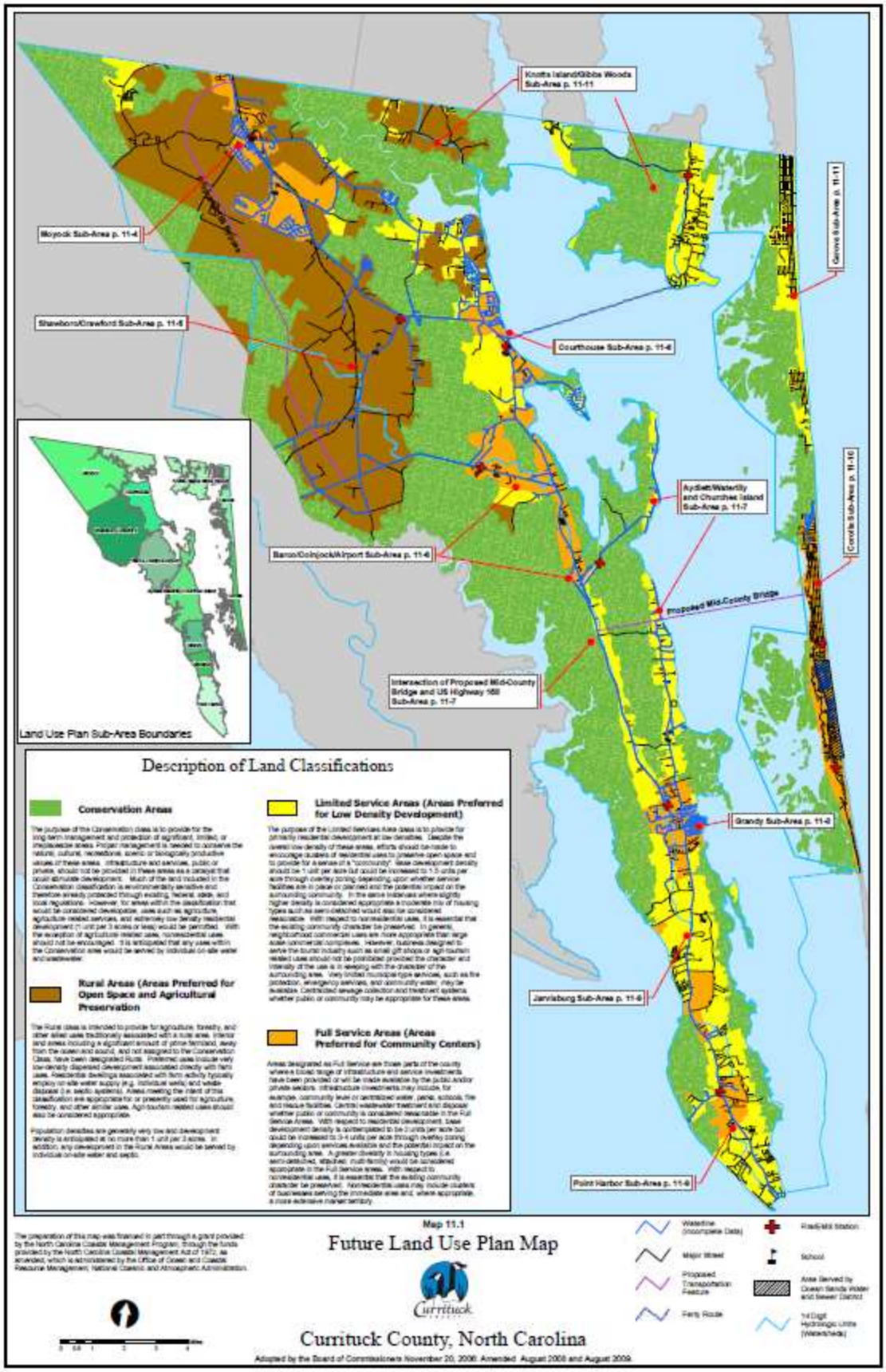

Knotts Island/Gibbs Woods Sub-Area p. 11-11
Moyock Sub-Area p. 11-4
Shawboro/Crawford Sub-Area p. 11-6
Courthouse Sub-Area p. 11-6
Grove Sub-Area p. 11-11
Aydlett/Waterlily and Churches Island Sub-Area p. 11-7
Barco/Coinjock/Airport Sub-Area p. 11-6
Corolla Sub-Area p. 11-10
Proposed Mid-County Bridge
Intersection of Proposed Mid-County Bridge and US Highway 168 Sub-Area p. 11-7
Grandy Sub-Area p. 11-8
Jarvisburg Sub-Area p. 11-6
Point Harbor Sub-Area p. 11-6
Land Use Plan Sub-Area Boundaries
Description of Land Classifications
Conservation Areas
Rural Areas (Areas Preferred for Open Space and Agricultural Preservation
Limited Service Areas (Areas Preferred for Low Density Development)
Full Service Areas (Areas Preferred for Community Centers)
Map 11.1
Future Land Use Plan Map
Currituck County, North Carolina
Adopted by the Board of Commissioners November 20, 2006. Amended: August 2008 and August 2009.

Figure 7

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 Currituck County are shown in Figure 8.

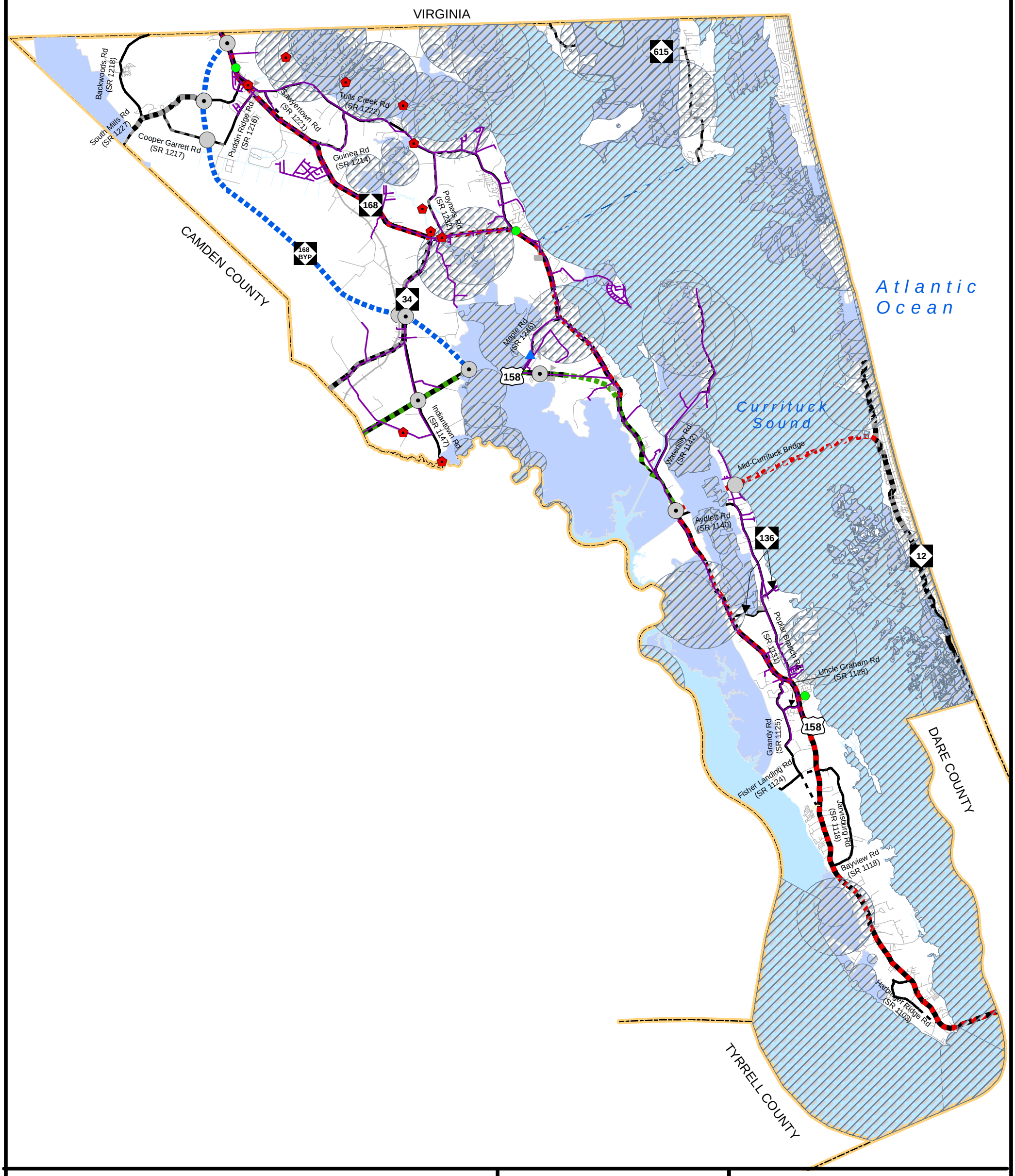
Table 1 – Environmental Features

- Airport Boundaries
- Anadromous Fish Spawning Areas
- Beach Access Sites
- Bike Routes (NCDOT)
- Coastal Marinas
- Colleges and Universities
- Conservation Tax Credit Properties
- Emergency Operation Centers
- Federal Land Ownership
- Fisheries Nursery Areas
- Geology (including Dikes and Faults)
- Hazardous Substance Disposal Sites
- Hazardous Waste Facilities
- High Quality Water and Outstanding Resource Water Management Zones
- Hospital Locations
- Hydrography (1:24,000 scale)
- Land Trust Priority Areas
- National Heritage Element Occurrences
- National Wetlands Inventory
- North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)
- Paddle Trails – Coastal Plain
- Railroads (1:24,000 scale)
- Recreation Projects – Land and Water Conservation Fund
- Sanitary Sewer Systems – Discharges, Land Application Areas, Pipes, Pumps and Treatment Plants
- Schools – Public and Non-Public
- Shellfish Strata
- Significant Natural Heritage Areas
- State Parks
- Submersed Rooted Vasculars
- Target Local Watersheds - EEP
- Trout Streams (DWQ)
- Trout Waters (WRC)
- Water Distribution Systems – Pipes, Pumps, Tanks, Treatment Plants, and Wells
- Water Supply Watersheds
- Wild and Scenic Rivers

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

Table 2 – Restricted Environmental Features

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



Legend

- Water Distribution System Treatment Plants
- Water Distribution System Tanks
- Paddle Trails
- Water Distribution System Pipes
- Natural Heritage Element Occurance
- Significant Natural Heritage Area
- Schools
- Airports
- Currituck County Boundary

Figure 8

Base map date: August 2010

Environmental Map

Currituck County

Comprehensive Transportation Plan

Plan date: June 30, 2011

Public Involvement

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

The Albemarle RPO requested the development of a comprehensive transportation plan for Currituck County through a prioritized list of regional needs. A meeting was held with the Currituck County Board of Commissioners in October 2009 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 Currituck County Transportation Committee, which included county staff, the RPO and others, to provide information on current local plans, to develop transportation vision and goals, to discuss population and employment projections, and to develop proposed CTP recommendations. Refer to Appendix H for detailed information on the vision statement, the goals and objectives survey and a listing of committee members.

The public involvement process included holding two public drop-in sessions in Currituck County to present the proposed Comprehensive Transportation Plan to the public and solicit comments. The first meeting was held on May 9, 2011 from 1:00 pm to 3:00 pm at Corolla Light Sports Center; the second meeting was held on May 9, 2011 from 5:00 pm to 7:00 pm at Currituck County Cooperative Extension. Each session was publicized in the local newspaper.

A public hearing was held on July 18, 2011 during the Currituck County Commissioners meeting. The purpose of this meeting was to discuss the plan recommendations and to solicit further input from the public. The CTP was adopted during this meeting.

The Albemarle RPO endorsed the CTP on August 24, 2011. North Carolina Department of Transportation mutually adopted the Currituck County CTP on October 6, 2011.

II. Recommendations

This chapter presents recommendations for each mode of transportation.

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 plan rests predominately with the policy boards and citizens of the county. 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. Local governments may use the CTP to guide development and protect corridors for the recommended improvements. It is critical that NCDOT and local government coordinate on relevant land development reviews and all transportation projects to ensure proper implementation of the CTP. Local governments and the North Carolina Department of Transportation share the responsibility for access management and the planning, design and construction of the recommended projects.

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

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

Problem Statements

HIGHWAY

Mid-Currituck Bridge, TIP No. R-2576

Identified Problem

Existing US 158 and NC 12 are currently over capacity during the summer tourist season within Currituck County. The primary purpose of constructing the Mid-Currituck Bridge is to relieve congestion on the existing facilities and provide an additional connection between Currituck County Mainland and Currituck County Outer Banks. The project is currently in the 2009-2015 Transportation Improvement Program (TIP). For additional information about this project, including the Purpose and Need, contact NCDOT's Project Development and Environmental Analysis (PDEA).

US 158 Proposed improvements from Camden County to Mid-Currituck Bridge, TIP No. R-2574

Identified Problem

Existing US 158 is projected to be over capacity by 2035 from Camden County to NC 168. The primary purpose of improving US 158 is to relieve congestion on the existing facility such that a minimum of Level of Service (LOS) D can be achieved.

Justification of Need

US 158 is a major corridor in Currituck County, connecting the western part of the county, near Camden County and Elizabeth City with the southern region of the county as well as Dare County. US 158 is a vital artery in moving people and goods through North Carolina, connecting northern North Carolina and Virginia with the northern outer banks region of North Carolina.

US 158 is currently a 2-lane thoroughfare from the Camden County line to NC 168. US 158 is designated as an Expressway from Camden County to NC 168, based on the Strategic Highway Corridor (SHC) Vision Plan, in order to improve regional and statewide mobility and connectivity. From NC 168 to the proposed Mid-Currituck Bridge, US 158 is designate by the SHC Vision Plan as a Boulevard.

By 2035, the facility is projected to be over capacity from the Camden County line to NC 168, based on a capacity of LOS D. Traffic on this segment is projected to increase from about 8,000 vehicles per day (vpd) in 2009 to about 12,000 vpd in 2035, compared to a capacity of 9,600 vpd.

Community Vision and Problem History

Currently, US 158 is a 2-lane major thoroughfare from the Camden County line to NC 168. Residents who live in the area use this facility to access jobs and other amenities in the Elizabeth City area. This facility is heavily used by tourists travelling from North Carolina and Virginia to the Outer Banks.

CTP Project Proposal

Project Description and Overview

The proposed project (TIP No. R-2574) is to widen US 158 to a 4-lane expressway from the Camden County line to the proposed Mid-Currituck Bridge. Interchanges are recommended at proposed NC 168 Bypass, Maple Community Center and NC 168. It is recommended that the alignment of the facility be brought south on the eastern end, connecting with NC 168 just south of the middle school, high school and library on NC 168.

The proposed improvements to US 158 will help to reduce congestion between Elizabeth City and other points west, and the Outer Banks. The CTP recommendation would provide for a LOS D or better along US 158 from the Camden County line to the NC 168 Interchange.

Linkages to Other Plans and Proposed Project History

The proposed project for US 158 is an important link to three recommendations in the Currituck County CTP. It directly connects to proposed NC 168 Bypass as well as the proposed improvements of NC 168 and of US 158, south of the proposed Mid-Currituck Bridge. In the 1999 Currituck County Thoroughfare Plan, this section of US 158 was recommended to be widened to multi-lanes.

The SHC Vision Plan was originally adopted by NCDOT on September 2, 2004 and updated on July 10, 2008. In this plan, US 158 is designated to be improved in Currituck County to Expressway standards from Camden County to NC 168 and improved to Boulevard standards from NC 168 to Dare County.

Land Use Patterns

There is a large multi-use community center planned along this section of US 158, in the Maple area. Currently the Currituck Airport is located here, along with an elementary school and Cooperative Extension building. Along with these existing facilities, the Maple Community Center will have a YMCA, many athletic fields, an animal shelter, playgrounds, a botanical garden, and other attractions. The community center is set to be complete by 2025. This community center is expected to encourage more commercial development along this area of US 158.

US 158 Proposed improvements from proposed Mid-Currituck Bridge to Dare County, Local ID: CURR0001-H

Identified Problem

Existing US 158 is projected to be near capacity by 2035 from Fisher Landing Road (SR 1124) to Snow Lane (SR 1115) and from Church Road (SR 1107) to Dare County. There is significant congestion on this facility during the summer tourist season. The primary purpose of improving US 158 is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved and to improve mobility of the facility through Currituck County, consistent with the North Carolina Strategic Highway Corridor (SHC) Vision Plan.

Justification of Need

US 158 is a major corridor in Currituck County, connecting the western part of the county, near Camden County and Elizabeth City with the southern region of the county as well as Dare County. South of the proposed Mid-Currituck Bridge site, this existing facility is the primary north-south connector. The facility is a vital artery in moving people and goods through North Carolina, connecting northern North Carolina and Virginia with the northern outer banks region of North Carolina.

US 158 is currently a 5-lane boulevard from the proposed Mid-Currituck Bridge to the Dare County line. US 158 is designated as a Boulevard from NC 168 to Dare County, based on the SHC Vision Plan, in order to improve regional and statewide mobility and connectivity.

By 2035, the facility is projected to be near capacity from Fisher Landing Road (SR 1124) to Snow Lane (SR 1115) and from Church Road (SR 1107) to the Dare County line, based on a capacity of LOS D. Traffic from Fisher Landing Road (SR 1124) to the Snow Lane (SR 1115) is projected to increase from 14,000 vpd in 2009 to 28,300 vpd in 2035, compared to a capacity of 37,600 vpd. Traffic from Church Road (SR 1107) to the Dare County line is projected to increase from 17,000 vpd in 2009 to 31,700 vpd in 2035, compared to a capacity of 37,600 vpd.

Community Vision and Problem History

Currently, US 158 is a five-lane boulevard from NC 168 to Dare County. The facility is used heavily by tourists travelling to the Outer Banks. Residents who live in the southern portion of Currituck County use this facility to access jobs and other amenities throughout the area. The continuous middle turn lane creates potential safety problems at various at-grade intersections as well as at many private access roads.

CTP Project Proposal

Project Description

The proposed project (Local ID: CURR-0001-H) is to improve the existing 5-lane boulevard to a 4-lane divided boulevard from the proposed Mid-Currituck Bridge to the Dare County line.

The proposed improvements to US 158 will help to reduce congestion between Virginia and Dare County. Additionally, it will fulfill the SHC Vision Plan.

Linkages to Other Plans and Proposed Project History

The improvement proposal for US 158 is an important link to many of the recommendations in the Currituck County CTP. It directly connects to the proposed Mid-Currituck Bridge, as well as the proposed improvements of NC 168 and of US 158, northwest of the proposed Mid-Currituck Bridge. The 1999 Currituck County Thoroughfare Plan recommends this segment of US 158 as a 6-lane divided facility. For the future year 2035, it was found that six lanes are not warranted for this facility, and that by providing neighborhood connectivity along the corridor a 4-lane divided boulevard would be the most appropriate solution.

The SHC Vision Plan was originally adopted by NCDOT on September 2, 2004 and updated on July 10, 2008. In this plan, US 158 is designated to be improved in Currituck County to

Expressway standards from Camden County to NC 168 and improved to Boulevard standards from NC 168 to Dare County.

Land Use Patterns

The 2006 Currituck County Land Use Plan indicates that there will be significant development along this corridor in the future, particularly near the site of the proposed Mid-Currituck Bridge.

Multi-modal Considerations

The CTP includes recommendations for a bicycle facility along portions of US 158. Wide shoulders for bicycles are proposed from the south end of Poplar Branch Road (SR 1131). However, this multi-modal feature does not significantly impact the traffic demand along this facility.

NC 168 Proposed improvements from Virginia to US 158, Local ID: CURR0002-H

Identified Problem

Existing NC 168 is currently a 5-lane boulevard from the Virginia line to US 158. This facility is projected to exceed capacity by 2035 from the Virginia line to Survey Road (SR 1215) and to approach capacity by 2035 from Survey Road (SR 1215) to NC 34. There is significant congestion on this facility during the summer tourist season. The primary purpose of improving NC 168 is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved and to improve mobility of the facility through Currituck County, consistent with the North Carolina Strategic Highway Corridor (SHC) Vision Plan.

Justification of Need

NC 168 is a major north-south corridor in Currituck County, connecting the Hampton Roads area of Virginia with Currituck County. The facility is a vital artery in moving people and goods through North Carolina, connecting Virginia and other points north with the coastal region of North Carolina.

NC 168 is currently a 5-lane boulevard from the Virginia line to US 158. The entire facility is ultimately envisioned to be a boulevard, based on the SHC Vision Plan.

Community Vision and Problem History

Currently, NC 168 is a 5-lane boulevard from Virginia to US 158. The facility is used heavily by tourists travelling to the Outer Banks. Residents who live in the northern portion of Currituck County use this facility to access jobs and other amenities throughout the area. The continuous middle turn lane creates potential safety problems at various at-grade intersections as well as at many private access roads.

CTP Project Proposal

Project Description

The proposed project (Local ID: CURR0002-H) is to improve the existing 5-lane major thoroughfare to a 4-lane divided boulevard from the Virginia line to US 158.

The proposed improvements to US 158 will fulfill the SHC Vision Plan, which designates NC 168 as a boulevard.

Linkages to Other Plans and Proposed Project History

The improvement proposal for NC 168 is an important link to many of the recommendations in the Currituck County CTP. It directly connects to proposed improvements to US 158. According to the 1999 Currituck County Thoroughfare Plan, NC 168 was proposed to be widened from a 2-lane facility to a 5-lane boulevard. In that plan, a bypass of NC 168 was proposed as well.

The SHC Vision Plan was originally adopted by NCDOT on September 2, 2004 and updated on July 10, 2008. In this plan, NC 168 was designated to be improved in Currituck County to boulevard standards from Virginia to US 158.

Land Use Patterns

The 2006 Currituck County Land Use Plan indicates the northern mainland area of Currituck County will have continued residential and commercial growth, particularly in the Moyock area which is a bedroom community for the Tidewater Area of Virginia.

Multi-modal Considerations

The CTP includes recommendations for a bicycle facility along portions of NC 168. Wide shoulders for bicycles are proposed from Virginia to north end of Tulls Creek Road (SR 1222) and from the south end of Tulls Creek Road (SR 1222) to US 158. However, this multi-modal feature does not significantly impact the traffic demand along this facility.

NC 168 Proposed Bypass from NC 168 to US 158, Local ID: CURR0003-H

Identified Problem

Existing NC 168 is projected to exceed capacity by 2035 from Virginia to Survey Road (SR 1215) and to approach capacity by 2035 from Survey Road (SR 1215) to NC 34. There is significant congestion on this facility during the summer tourist season. The primary purpose of improving NC 168 is to relieve congestion on the existing facility such that a minimum of LOS D can be achieved and to improve mobility of the facility through Currituck County, consistent with the North Carolina Strategic Highway Corridor (SHC) Vision Plan.

Justification of Need

Existing NC 168 is currently a 5-lane boulevard from the Virginia line to US 158. NC 168 is a major north-south corridor in Currituck County, connecting the Hampton Roads area of Virginia

with Currituck County. The facility is a vital artery in moving people and goods through North Carolina, connecting Virginia and other points north with the coastal region of North Carolina.

NC 168 is currently a 5-lane boulevard from the Virginia line to US 158. The entire facility is ultimately envisioned to be a boulevard, based on the SHC Vision Plan.

By 2035, the route is projected to exceed capacity from the Virginia line to Survey Road (SR 1215) and to approach capacity by 2035 from Survey Road (SR 1215) to NC 34, based on a LOS D. There is significant congestion on this facility during the summer tourist season. Traffic on the northern end of NC 168 is projected to increase from about 22,000 vpd in 2008 to 48,000 vpd in 2035, compared to a capacity of 37,600 vpd.

Community Vision and Problem History

Currently, NC 168 is a five-lane boulevard from Virginia to US 158. The continuous middle turn lane creates potential safety problems at various at-grade intersections as well as at many private access roads.

CTP Project Proposal

Project Description

The proposed project (Local ID: CURR0003-H) is to construct a 4-lane freeway on new location bypassing Moyock from NC 168 near the Virginia line to US 158, with interchanges at NC 168, South Mills Road (SR 1227/1218), NC 34 and US 158.

The proposed NC 168 Bypass around Moyock will help to reduce congestion along NC 168 between Virginia and the proposed Mid-Currituck Bridge.

Linkages to Other Plans and Proposed Project History

The improvement proposal for NC 168 is an important link to many of the recommendations in the Currituck County CTP. It directly connects to proposed improvements of NC 168, NC 34, US 158, and South Mills Road (SR 1227). The 1999 Currituck County Thoroughfare Plan recommended a 4-lane divided bypass of NC 168 around Moyock, with a similar alignment on new location. This proposed bypass continues to be a priority for Currituck County; the County wishes to explore all possible alignments for this project, including one that connects north of the Virginia border.

Land Use Patterns

The 2006 Currituck County Land Use Plan indicates that Moyock is currently the fastest growing part of Currituck County. It is a bedroom community for the Tidewater Area of Virginia. Mixed use development is expected to occur along the existing NC 168 corridor in the future.

Multi-modal Considerations

There are no other modes of transportation associated with this proposed project.

Other Highway Recommendations

NC 34 Proposed improvements from the Camden County Line to NC 168, Local ID: CURR0004-H

The proposed project (Local ID: CURR0004-H) is to widen NC 34 to a 2-lane major thoroughfare from the Camden County Line to NC 168, which will improve existing narrow lane widths. The proposed improvements to NC 34 will help to reduce congestion and improve safety along this facility.

The improvement proposal for this section NC 34 is an important link to recommendations in the Currituck County CTP. It directly connects to proposed improvements of NC 168 and the proposed NC 168 Bypass, which includes an interchange at NC 34.

NC 615 Proposed Improvements, Local ID: CURR0005-H

NC 615 is the main route throughout Knotts Island, connecting this area of Currituck County with Virginia. Currently this is the only highway that leads into Knotts Island. Otherwise this area can only be reached by ferry from the Mainland Currituck County. It is recommended that the entire facility be widened to 24 feet with paved shoulders and turn lanes where necessary. Improving this facility will improve safety throughout Knotts Island.

South Mills Road (SR 1227) Proposed improvements from the Camden County Line to Proposed NC 168 Bypass, Local ID: CURR0006-H

This two-lane road currently serves as a connection between NC 168 in Currituck County and US 17 in Camden County. It is recommended that South Mills Road (SR 1227) be widened to a four lane major thoroughfare, with paved shoulders and turn lanes where necessary from the Camden County line to the location of the proposed NC 168 Bypass. The facility should be realigned on new location wherever necessary.

Currently, there is a large-scale commercial and residential development being planned along the eastern side of US 17 in northern Camden County, just south of the Virginia border. There is also a proposed Mega Site development in northern Currituck County along the west side of NC 168. Improvements to South Mills Road (SR 1227) would help create a better connection to both new developments for residents of Currituck County as well as traffic travelling from other points both north and south of Currituck County. This connection was identified as a local priority. Currituck County wishes to have direct access from South Mills Road (SR 1227) to NC 168 to be provided through the proposed Mega Site.

Cooper Garrett Road (SR 1217) Proposed improvements from South Mills Road (SR 1227) to Puddin Ridge Road (SR 1216), Local ID: CURR0007-H

Cooper Garrett Road (SR 1217) is currently an unpaved connection between South Mills Road (SR 1227) and Puddin Ridge Road (SR 1216). It is used primarily by vehicles travelling to and from a private military company located on Puddin Ridge Road (SR1216). It is recommended that this road be improved to a 2-lane 24-foot roadway with paved shoulders and turn lanes where necessary from South Mills Road (SR 1227) to Puddin Ridge Road (SR 1216).

Grandy Road (SR 1125) Extension, Local ID: CURR0008-H

Grandy Road is currently a 2-lane facility in the Grandy area of southern Mainland Currituck County. It is recommended that the south end of Grandy Road be connected with the eastern end of Colonial Beach Road (SR 1122). This will connect these two neighborhoods and allow for shared access onto US 158.

Harbinger Road Extension, Local ID: CURR0009-H

Harbinger Road is currently a 2-lane facility in a primarily residential area of southern Mainland Currituck County. It is recommended that the south end of Harbinger Road be connected with the northwest end of Griggs Acres Drive. This will connect these two neighborhoods and allow for one or two future joint-use signaled accesses onto US 158.

Other Improvements

- **Intersections Improvement**
  Realignment of Sawyertown Road (SR 1221): Realign Sawyertown Road (SR 1221) in Moyock to form a crossroads at NC 168 and Survey Road (SR 1215) at the existing traffic signal.

- **Intersection Improvement**
  Realignment of Fisher Landing Road (SR 1124): Realign Fisher Landing Road (SR 1124) to form a crossroads at US 158 and Forbes Road (SR 1118) and install a traffic signal at the newly formed intersection.

PUBLIC TRANSPORTATION & RAIL

NC 12 Transit Route, Local ID: CURR0001-T

Identified Problem

Currently, there are no fixed route services in Currituck County. There is extremely heavy tourist traffic along NC 12 during the summertime. It takes an enormous amount of time for tourists and residents to make trips to shops, restaurants and other amenities in the area. The primary purpose of proposing transit service along NC 12 is to provide another mode of transportation to get around the Outer Banks portion of Currituck County.

CTP Project Proposal

Project Description

The CTP proposed project (Local ID: CURR0001-T) is to provide public transit along NC 12 on the Outer Banks portion of Currituck County. It is recommended that a fixed-route trolley service be developed through the Inter-County Public Transportation Authority (ICPTA) along almost the entire length of NC 12 within Currituck County, from Corolla to the Dare County Line, with part of the proposed route following Lighthouse Drive (SR 1403) from Dolphin Street (SR 1458) to Shad Street (SR 1409). It is also recommended that a park-and-ride lot be constructed near the US 158/Mid-Currituck Bridge Interchange.

BICYCLE

Identified Problem

Currently, there are a few bicycle routes connecting different parts of Currituck County. There is already a multi-use path in the Outer Banks area, from the north end of NC 12 to Club Road. It is local priority to see that multi-use path extended for the entire length of NC 12. The primary purpose of recommending additional bicycle route improvements is to better connect the Outer Banks area of Currituck County to the Dare County beach communities, as well as in other popular recreational areas.

CTP Project Proposal

Project Description

The following on-road bicycle facility is recommended in the Currituck County CTP:

- Mid-Currituck Bridge from US 158 to NC 12

The following off-road multi-use bicycle facilities are recommended in the Currituck County CTP:

- West side of NC 12 from Club Road to the Dare County Line
- North side of US 158 from Community Way to US 168

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

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

PEDESTRIAN

Identified Problem

Currently, there are very few pedestrian accommodations in Currituck County. There is a need for pedestrian accommodations to connect the Corolla area to the Dare County beach communities, US 158 between Walnut Island and the local shopping center, and the primary and secondary schools within Currituck County. The primary purpose of recommending pedestrian accommodations is to provide an alternative mode of transportation within Currituck County.

CTP Project Proposal

Project Description

The following facilities are recommended to have sidewalks for pedestrians.

- **CURR0001-P:** Aydlett Road (SR 1137) from O'Neal Lane (SR 1150) to Dowdy's Bay Road (SR 1130)
- **CURR0002-P:** US 158 from Walnut Island Boulevard (SR 1186) to Augusta Drive (SR 1129)
- **CURR0003-P:** NC 168 from Guinea Road (SR 1214) to Lazy Corner Road (SR 1222)
- **CURR0004-P:** Tulls Creek Road (SR 1222) from NC 168 to Panther Landing Road (SR 1231)
- **CURR0005-P:** Sawyertown Road (SR 1221) from Tulles Creek Road (SR 1222) to NC 168
- **CURR0006-P:** Survey Road (SR 1215) from NC 168 to NC 168
- **CURR0007-P:** Eagle Creek Road from Survey Road (SR 1215) to Andrews Road
- **CURR0008-P:** Puddin Ridge Road (SR 1216) from Beechwood Drive (SR 1329) to NC 168
- **CURR0009-P:** Jarvisburg Road (SR 1118) from US 158 to Cattail Lane

The following off-road multi-use pedestrian facilities are recommended in the Currituck County CTP:

- West side of NC 12 from Club Road to the Dare County Line
- North side of US 158 from Community Way to US 168.

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

P.O. Box 159
Camden, NC 27921
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.
Edenton, NC 2932
(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.
Edenton, NC 2932
(252) 482-7977

Division Construction Engineer

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

113 Airport Dr.
Edenton, NC 2932
(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.
Edenton, NC 2932
(252) 482-7977

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

Vacant

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.
Edenton, NC 2932
(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.

1929 North Road St.
Elizabeth City, NC 27909
(252) 331-4739

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.

P.O. Box 646
Hertford, NC 27944
(252) 426-5753 Ext. 230
http://albemarlecommission.org/Planning/planning/planning.htm

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 Office

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

1535 Mail Service Center
Raleigh, NC 27699-1535
(919) 733-3250
http://www.ncdot.gov/doh/operations/secondaryroads/

Program Development Branch

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

1534 Mail Service Center
Raleigh, NC 27699-1534
(919) 733-2039
http://www.ncdot.org/planning/development/

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

1550 Mail Service Center
Raleigh, NC 27699-1550
(919) 733-4713
http://www.ncdot.org/transit/nctransit/

Rail Division

Contact the Rail Division for rail information throughout the state.

1553 Mail Service Center
Raleigh, NC 27699-1553
(919) 733-7245
http://www.bytrain.org/

Division of Bicycle and Pedestrian Transportation

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

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

Bridge 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/

Highway Design Branch

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

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

Other State Government Offices

Department of Commerce – Division of Community Assistance

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

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

Appendix B
Comprehensive Transportation Plan Definitions

Highway Map

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

Facility Type Definitions

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

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

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

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

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

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

Other Highway Map Definitions

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

Public Transportation and Rail Map

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

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

- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed 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 '2009 AADT E+C' is an estimate of the volume in 2009 with only existing plus committed projects assumed to be in place, where committed is defined as projects programmed for construction in the 2009 - 2015 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 Mulitmodal Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.

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

CTP INVENTORY AND RECOMMENDATIONS

HIGHWAY																			
					2010 Existing System						2035 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
R-2574	US 158	Camden Co. Line - Indiantown Rd (SR 1147)	Currituck County	1.2	24	2	100	55	9600	8200	10400	10400	39600	4A	100	E	Sta.	
R-2574	US 158	Indiantown Rd (SR 1147) - Maple Rd (SR 1246)	Currituck County	3.6	24	2	100	55	9600	6900	12200	12200	39600	4E	100	E	Sta.	BP
R-2574	US 158	Maple Rd (SR 1246) - Caratoke Hwy (NC 168)	Currituck County	2.9	24	2	100	55	9600	6200	10300	10300	39600	4A	100	E	Sta.	
R-2574	US 158	Caratoke Hwy NC 168 - Coinjock Village Dr (SR 1416)	Currituck County	2.3	60	5	100	55	37600	16000	25700	25700	39600	4A	100	E	Sta.	
R-2574	US 158	Coinjock Village Dr (SR 1416) - Hampton Rd (SR 1143)	Currituck County	1.1	60	5	100	55	37600	14000	18200	18200	39600	4A	100	E	Sta.	
R-2574	US 158	Hampton Rd (SR 1143) - Aydlett Rd (SR 1140)	Currituck County	1.7	60	5	100	55	37600	14000	21300	21300	39600	4A	100	E	Sta.	
CURR0001-H	US 158	Aydlett Rd (SR 1140) - NC 136	Currituck County	3.7	60	5	100	55	37600	13000	20300	20300	39600	4B	100	B	Sta.	
CURR0001-H	US 158	NC 136 - Grandy Rd (SR 1125)	Currituck County	2.6	60	5	100	45	37600	12000	17500	17500	39600	4B	100	B	Sta.	
CURR0001-H	US 158	Grandy Rd (SR 1125) - Uncle Graham Rd (SR 1128)	Currituck County	1.1	60	5	100	45	37600	16000	20300	20300	39600	4B	100	B	Sta.	
CURR0001-H	US 158	Uncle Graham Rd (SR 1128) - Fisher Landing Rd (SR 1124)	Currituck County	2.0	60	5	100	45	37600	14000	23500	23500	39600	4B	100	B	Sta.	
CURR0001-H	US 158	Fisher Landing Rd (SR 1124) - Snows Lane (SR 1115)	Currituck County	4.7	60	5	100	55	37600	14000	28300	28300	39600	4B	100	B	Sta.	
CURR0001-H	US 158	Snows Lane (SR 1115) - Church Rd (SR 1107)	Currituck County	2.6	60	5	100	55	37600	17000	26700	26700	39600	4B	100	B	Sta.	
CURR0001-H	US 158	Church Rd (SR 1107) - Wright Memorial Bridge	Currituck County	2.6	60	5	100	55	37600	17000	31700	31700	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	VA Line - Tulls Creek Rd (SR 1222)	Currituck County	1.4	60	5	100	55	37600	24000	51400	51400	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Tulls Creek Rd (SR 1222) - Camellia Dr (SR 1228)	Currituck County	0.6	60	5	100	45	37600	22000	47400	47400	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Camellia Dr (SR 1228) - Survey Rd (SR 1215)	Currituck County	2.3	60	5	100	45	37600	22000	48000	48000	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Survey Rd (SR 1215) - Snowden Rd (SR 1210)	Currituck County	3.7	60	5	100	55	37600	19000	35200	35200	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Snowden Rd (SR 1210) - Shawboro Rd (NC 34)	Currituck County	1.8	60	5	100	55	37600	18000	30700	30700	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Shawboro Rd (NC 34) - Tulls Creek Rd (SR 1222)	Currituck County	2.6	60	5	100	55	37600	14000	26800	26800	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Tulls Creek Rd (SR 1222) - Sound Shore Rd (SR 1345)	Currituck County	0.2	60	5	100	55	37600	15000	19900	19900	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Sound Shore Rd (SR 1345) - Courthouse Rd (SR 1242)	Currituck County	0.8	60	5	100	55	37600	13000	19500	19500	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Courthouse Rd (SR 1242) - Bells Island Rd (SR 1247)	Currituck County	0.3	60	5	100	55	37600	11000	15700	15700	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Bells Island Rd (SR 1247) - Maple Rd (SR 1246)	Currituck County	1.5	60	5	100	55	37600	10000	14400	14400	39600	4B	100	B	Sta.	
CURR0002-H	NC 168	Maple Rd (SR 1246) - Caratoke Hwy (NC 158)	Currituck County	2.5	60	5	100	55	37600	11000	14500	14500	39600	2B	100	B	Sta.	
R-2576	Mid-Currituck Bridge	US 158 - NC 12	Currituck County	N/A	N/	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	B	N/A	B
CURR0003-H	NC 168 BYP - New Route	NC 168 - US 158	Currituck County	N/A	N/	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4A	N/A	F	N/A	
CURR0005-H	NC 615	VA Line - Knotts Island Rd (SR 1255)	Currituck County	4.8	20	2	60	50	9600	2000	3900	3900	9600	2B	60	Min.	Reg.	
CURR0005-H	NC 615	Knotts Island Rd (SR 1255) - Woodleigh Rd (S) (SR 1257)	Currituck County	0.4	20	2	60	50	9600	1700	2300	2300	9600	2B	60	Min.	Reg.	
CURR0005-H	NC 615	Woodleigh Rd (S) (SR 1257) - Ferry Dock Rd (SR 1260)	Currituck County	3.6	22	2	60	50	9600	1000	1300	1300	9600	2B	60	Min.	Reg.	
CURR0004-H	NC 34	Caratoke Hwy (NC 168) - Maple Knoll Rd (SR 1208)	Currituck County	2.8	24	2	100	55	9600	6100	13500	13500	9600	2B	100	Maj.	Reg.	
CURR0004-H	NC 34	Maple Knoll Rd (SR 1208) - N Indiantown Rd (SR 1147)	Currituck County	0.8	24	2	100	55	9600	5400	7400	7400	9600	2B	100	Maj.	Reg.	
CURR0004-H	NC 34	N Indiantown Rd (SR 1147) - N Gregory Rd (SR 1148)	Currituck County	2.3	24	2	100	55	9600	4500	8900	8900	9600	2B	100	Maj.	Reg.	
CURR0004-H	NC 34	N Gregory Rd (SR 1148) - Camden Co Line	Currituck County	0.7	24	2	100	55	9600	4500	5500	5500	9600	2B	100	Maj.	Reg.	
	NC 12	N Beach Access Rd (SR 1437) - Shad St (SR 1409)	Currituck County	1.9	26	2	60	45	15900	7300	9400	9400	15900	2C	60	Maj.	Reg.	BP
R-2576	NC 12	Shad St (SR 1409) - Ocean Way (SR 1426)	Currituck County	5.9	26	2	60	45	15900	14100	20100	20100	15900	2C	60	Maj.	Reg.	BP
	NC 12	Ocean Way (SR 1426) - Dare Co Line	Currituck County	4.1	26	2	60	45	15900	14800	23400	23400	15900	2C	60	Maj.	Reg.	BP
	NC 136	Caratoke Hwy (US 158) - Griggs School Rd (SR 1134)	Currituck County	1.4	24	2	60	55	9600	600	1400	1400	9600	2C	60	Min.	Reg.	
	NC 136	Griggs School Rd (SR 1134) - Poplar Haven Rd (SR 1401)	Currituck County	0.4	24	2	60	55	9600	2400	3000	3000	9600	2C	60	Min.	Reg.	
	NC 136	Poplar Haven Rd (SR 1401) - Caroon Rd (SR 1136)	Currituck County	0.3	24	2	60	55	9600	600	700	700	9600	2C	60	Min.	Reg.	
	NC 136	Caroon Rd (SR 1136) - End of Road	Currituck County	0.1	24	2	60	55	9600	400	800	800	9600	2C	60	Min.	Reg.	

HIGHWAY																			
					2010 Existing System						2035 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	NW Backwoods Rd (SR 1218)	VA Line - S Mills Rd (SR 1227)	Currituck County	3.3	22	2	60	40	9600	1400	3000	3000	9600	2C	60	Min.	Sub.	
	Old Swamp Rd (SR 1218)	S Mills Rd (SR 1227) - Camden Co Line	Currituck County	5.7	22	2	60	40	9600	3000	5900	5900	9600	2C	60	Min.	Sub.	
	S Mills Rd (SR 1227)	Caratoke Hwy (NC 168) - Camellia Rd (SR 1218)	Currituck County	0.3	22	2	60	40	9600	2600	4800	4800	9600	2C	60	Min.	Sub.	
	S Mills Rd (SR 1227)	Camellia Rd (SR 1218) - Jarvis Rd (SR 1313)	Currituck County	2.4	22	2	60	40	9600	2700	5900	5900	9600	2C	60	Min.	Sub.	
	S Mills Rd (SR 1227)	Jarvis Rd (SR 1313) - NW Backwoods Rd (SR 1218)	Currituck County	1.2	22	2	60	40	9600	2500	5700	5700	9600	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Caratoke Hwy (NC 168) - Sawyertown Rd (SR 1221)	Currituck County	1.1	28	2	60	40	8000	3400	7300	7300	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Sawyertown Rd (SR 1221) - Old Tulls Creek Rd (W) (SR 1213)	Currituck County	4.4	28	2	60	40	8000	2700	3400	3400	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Old Tulls Creek Rd (W) (SR 1213) - Poyner's Rd (SR 1232)	Currituck County	1.8	28	2	60	40	8000	2200	2800	2800	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Poyner's Rd (SR 1232) - Copeland Dr (SR 1267)	Currituck County	1.4	28	2	60	40	8000	1500	2500	2500	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Copeland Dr (SR 1267) - Launch Landing Rd (SR 1239)	Currituck County	0.3	28	2	60	40	8000	2100	3100	3100	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Launch Landing Rd (SR 1239) - Creekmoore Rd (SR 1238)	Currituck County	0.4	28	2	60	40	8000	1000	2000	2000	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Creekmoore Rd (SR 1238) - Dozier Ln (SR 1234)	Currituck County	1.5	28	2	60	40	8000	2200	4500	4500	8000	2C	60	Min.	Sub.	
	Tulls Creek Rd (SR 1222)	Dozier Ln (SR 1234) - Caratoke Hwy (NC 168)	Currituck County	0.5	28	2	60	40	8000	3200	6400	6400	8000	2C	60	Min.	Sub.	
	Guinea Rd (SR 1214)	Tulls Creek Rd (SR 1222) - Caratoke Hwy (NC 168)	Currituck County	2.3	24	2	60	40	8000	1100	1800	1800	8000	2C	60	Min.	Sub.	
	Poyner's Rd (SR 1232)	Tulls Creek Rd (SR 1222) - Lou Sawyer Rd (SR 1279)	Currituck County	1.5	24	2	60	40	8000	800	1000	1000	8000	2C	60	Min.	Sub.	
	Poyner's Rd (SR 1232)	Lou Sawyer Rd (SR 1279) - Caratoke Hwy (NC 168)	Currituck County	1.3	24	2	60	40	8000	1800	3400	3400	8000	2C	60	Min.	Sub.	
	Dozier Rd (SR 1234)	Tulls Creek Rd (SR 1222) - Caratoke Hwy (NC 168)	Currituck County	0.9	24	2	60	40	8000	900	1400	1400	8000	2C	60	Min.	Sub.	
	N Indiantown Rd (SR 1147)	Shawboro Rd (NC 34) - Sanderlin Rd (SR 1200)	Currituck County	1.3	24	2	60	55	9600	1300	1500	1500	9600	2C	60	Min.	Sub.	
	N Indiantown Rd (SR 1147)	Sanderlin Rd (SR 1200) - Shortcut Rd (US 158)	Currituck County	0.6	24	2	60	55	9600	1100	1400	1400	9600	2C	60	Min.	Sub.	
	S Indiantown Rd (SR 1147)	Shortcut Rd (US 158) - Camden Co Line	Currituck County	2.1	24	2	60	55	9600	1100	2200	2200	9600	2C	60	Min.	Sub.	
	Maple Rd (SR 1246)	Caratoke Hwy (NC 168) - Happy Landing Dr	Currituck County	0.7	24	2	60	45	9600	1600	2300	2300	9600	2C	60	Min.	Sub.	
	Maple Rd (SR 1246)	Happy Landing Dr - Shortcut Rd (US 158)	Currituck County	1.6	24	2	60	45	9600	1100	1400	1400	9600	2C	60	Min.	Sub.	
	Waterlilly Rd (SR 1142)	Old Coinjock Canal Rd (SR 1167) - Piney Island Rd (SR 1145)	Currituck County	2.8	22	2	60	45	9600	1100	1400	1400	9600	2C	60	Min.	Sub.	
	Waterlilly Rd (SR 1142)	Piney Island Rd (SR 1145) - S Waterlilly Rd (SR 1154)	Currituck County	0.8	22	2	60	45	9600	600	700	700	9600	2C	60	Min.	Sub.	
	Aydlett Rd (SR 1140)	Caratoke Hwy (US 158) - Old Boat Yard Rd	Currituck County	1.7	24	2	60	45	8000	1200	1900	1900	8000	2C	60	Min.	Sub.	
	Aydlett Rd (SR 1139)	Old Boat Yard Rd - Narrow Shore Rd (SR 1137)	Currituck County	0.2	24	2	60	45	8000	900	1100	1100	8000	2C	60	Min.	Sub.	
	Aydlett Rd (SR 1137)	Narrow Shore Rd (SR 1137) - Bayview Rd (SR 1449)	Currituck County	1.2	24	2	60	45	8000	1200	1700	1700	8000	2C	60	Min.	Sub.	
	Aydlett Rd (SR 1137)	Bayview Rd (SR 1449) - Caroon Rd (SR 1136)	Currituck County	1.3	24	2	60	45	8000	1200	1600	1600	8000	2C	60	Min.	Sub.	
	Aydlett Rd (SR 1135)	Caroon Rd (SR 1136) - Emma Ct	Currituck County	0.6	24	2	60	45	8000	1000	1800	1800	8000	2C	60	Min.	Sub.	
	Aydlett Rd (SR 1135)	Emma Ct - Poplar Branch Rd (NC 136)	Currituck County	0.1	24	2	60	45	8000	1100	2200	2200	8000	2C	60	Min.	Sub.	
	Poplar Branch Rd (SR 1131)	Macedonia Ch Rd (NC 136) - Barnard Rd (SR 1132)	Currituck County	1.3	24	2	60	45	9600	2000	3600	3600	9600	2C	60	Min.	Sub.	
	Poplar Branch Rd (SR 1131)	Barnard Rd (SR 1132) - Waterview Ct (SR 1183)	Currituck County	1.0	24	2	60	45	9600	2200	3600	3600	9600	2C	60	Min.	Sub.	
	Poplar Branch Rd (SR 1131)	Waterview Ct (SR 1183) - Dowdy Bay Rd (SR 1130)	Currituck County	0.1	24	2	60	45	9600	4000	6500	6500	9600	2C	60	Min.	Sub.	
	Poplar Branch Rd (SR 1131)	Dowdy Bay Rd (SR 1130) - Caratoke Hwy (US 158)	Currituck County	0.1	24	2	60	45	9600	3000	4900	4900	9600	2C	60	Min.	Sub.	
	Grandy Rd (SR 1125)	Caratoke Hwy (US 158) - Fisher Landing Rd (SR 1124)	Currituck County	3.5	24	2	60	45	9600	400	900	900	9600	2C	60	Min.	Sub.	
	Uncle Graham Rd (SR 1128)	Caratoke Hwy (US 158) - Grandy Rd (SR 1125)	Currituck County	0.6	24	2	60	45	9600	500	700	700	9600	2C	60	Min.	Sub.	
	Fisher Landing Rd (SR 1124)	Caratoke Hwy (US 158) - Grandy Rd (SR 1125)	Currituck County	0.6	24	2	60	45	9600	300	400	400	9600	2C	60	Min.	Sub.	

HIGHWAY																			
					2010 Existing System						2035 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2009 AADT	2035 AADT E+C	2035 AADT with CTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classifi-cation	Tier	Other Modes
	Forbes Rd (SR 1118)	Caratoke Hwy (US 158) - Cattail Ln	Currituck County	1.3	24	2	60	45	9600	500	1000	1000	9600	2C	60	Min.	Sub.	
	Jarvisburg Rd (SR 1118)	Cattail Ln - Buster Newbern Rd (SR 1121)	Currituck County	1.1	24	2	60	45	9600	300	700	700	9600	2C	60	Min.	Sub.	
	Jarvisburg Rd (SR 1118)	Buster Newbern Rd (SR 1121) - Owens Rd (SR 1117)	Currituck County	1.2	24	2	60	45	9600	500	900	900	9600	2C	60	Min.	Sub.	
	Forbes Rd (SR 1118)	Owens Rd (SR 1117) - Caratoke Hwy (US 158)	Currituck County	0.5	24	2	60	45	9600	600	1000	1000	9600	2C	60	Min.	Sub.	

PUBLIC TRANSPORTATION AND RAIL

PUBLIC TRANSPORTATION[1]							
			Speed		Existing System	Proposed System	
Local ID	Facility/ Route	Section (From - To)	Limit (mph)	Distance (mi)	Type	Type	Other Modes
CURR0001- T	NC 12	N Beach Access Rd (SR 1437) - Shad St (SR 1409)	45	1.9	N/A	Bus	BP
CURR0001- T	NC 12	Shad St (SR 1409) - Ocean Way (SR 1426)	45	5.9	N/A	Bus	HBP
CURR0001- T	NC 12	Ocean Way (SR 1426) - Dare Co Line	45	4.1	N/A	Bus	BP

BICYCLE AND PEDESTRIAN

PEDESTRIAN								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Type	Side of Street	Type	Side of Street	Modes
CURR0001-P	Aydlett Rd	O'Neal Rd to Dowdy's Bay Rd	5.83	N/A	N/A	Sidewalk	Both	H
CURR0002-P	US 158	Walnut Island Blvd to Augusta Dr	0.98	N/A	N/A	Sidewalk	Both	HB
CURR0003-P	NC 168	Guinea Rd to Lazy Corner Rd	3.27	N/A	N/A	Sidewalk	Both	HB
CURR0004-P	Tulls Creek Rd	NC 168 to Panther Landing Rd	2.07	N/A	N/A	Sidewalk	Both	H
CURR0005-P	Sawyertown Rd	Tulls Creek Rd - NC 168	1.00	N/A	N/A	Sidewalk	Both	H
CURR0006-P	Survey Rd.	NC 168 - NC 168	1.06	N/A	N/A	Sidewalk	Both	H
CURR0007-P	Eagle Creek Rd	Survey Rd - Andrews Rd	0.3	N/A	N/A	Sidewalk	Both	H
CURR0008-P	Puddin Ridge Rd	Beechwood Dr to NC 168	0.48	N/A	N/A	Sidewalk	Both	H
CURR0009-P	Jarvisburg Rd	US 158 to US 158	4.11	N/A	N/A	Sidewalk	Both	H

MULTI-USE PATH								
				Existing System		Proposed System		Other
Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Side of Street	Cross-Section	Side of Street	Cross-Section	Modes
CURR0009-M	NC 12	N Beach Access Rd (SR 1437) - Shad St (SR 1409)	1.9	N/A	2A	West	MA	H
CURR0009-M	NC 12	Shad St (SR 1409) - Ocean Way (SR 1426)	5.9	N/A	2A	West	MA	H
CURR0009-M	NC 12	Ocean Way (SR 1426) - Dare Co Line	4.1	N/A	2A	West	MA	H
CURR0009-M	Mid-Currituck Bridge	US 158 - US 168	7.0	N/A	2A	North	MA	H

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.

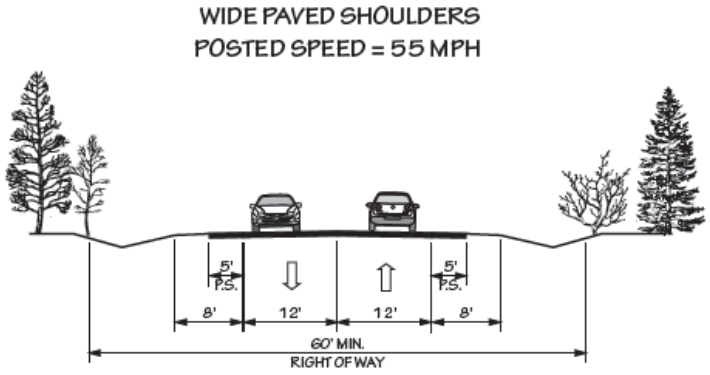
On all existing and proposed roadways delineated on the CTP, adequate right-of-way should be protected or acquired for the recommended cross sections. In addition to cross section and right-of-way recommendations for improvements, Appendix C may recommend ultimate needed right-of-way for the following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

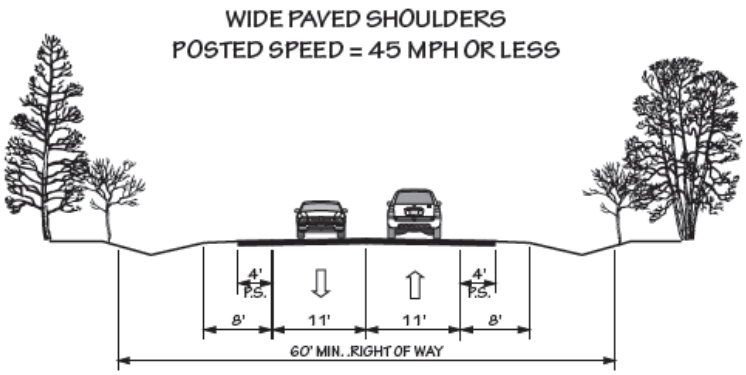
TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

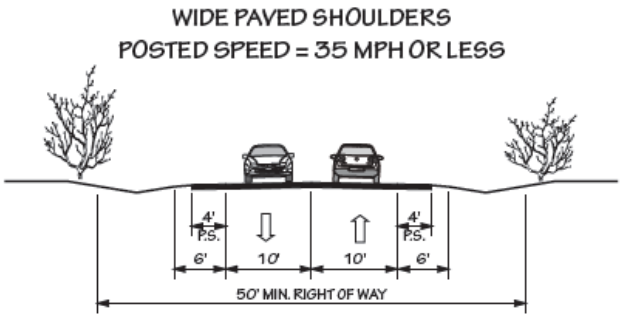
2 A



2 B



2 C

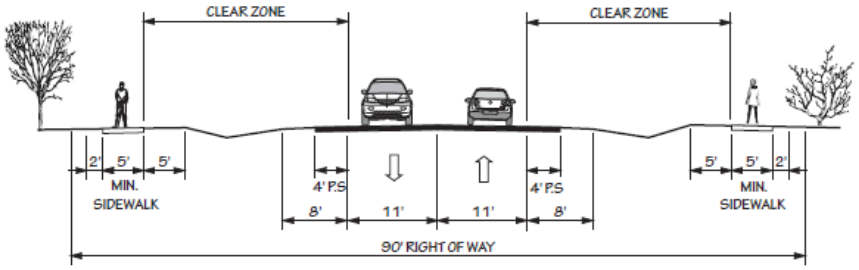


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

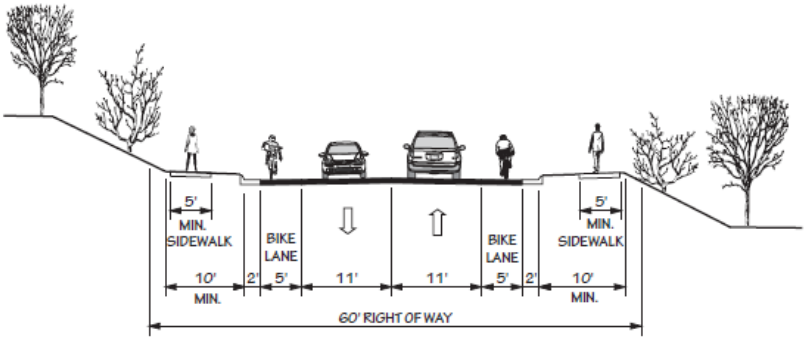
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



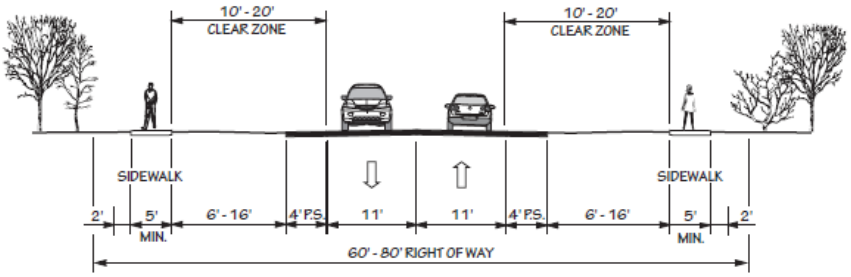
2 E

CURB AND GUTTER
WITH BIKE LANES AND SIDEWALKS



2 F

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

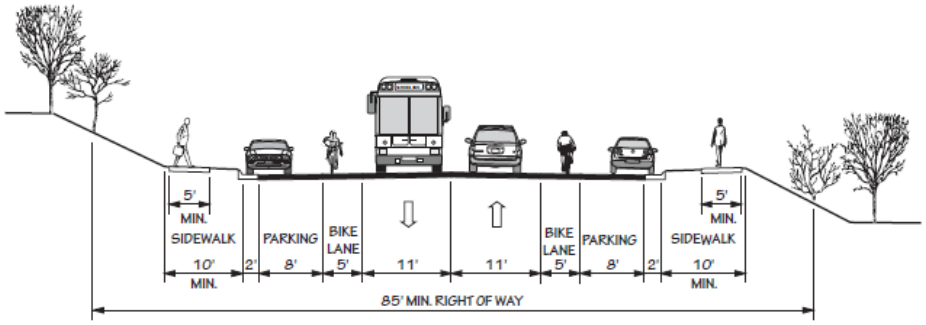


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

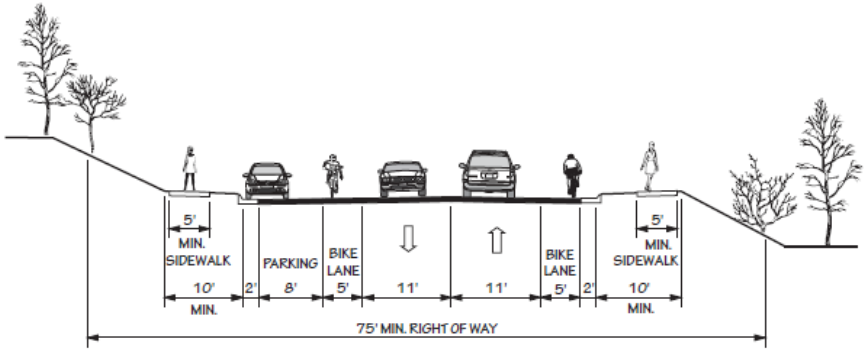
2 G

CURB & GUTTER - PARKING ON EACH SIDE



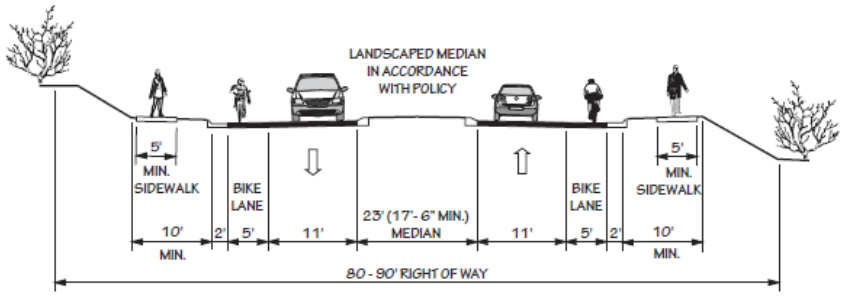
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER

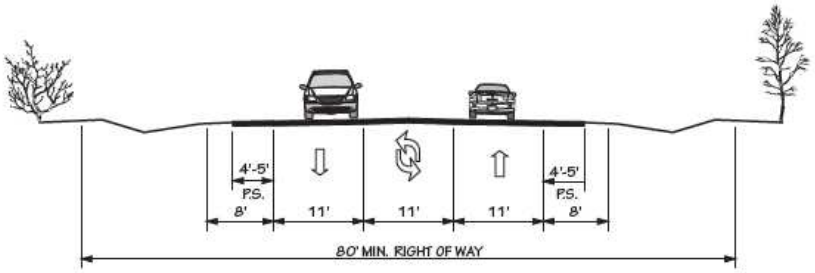


TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

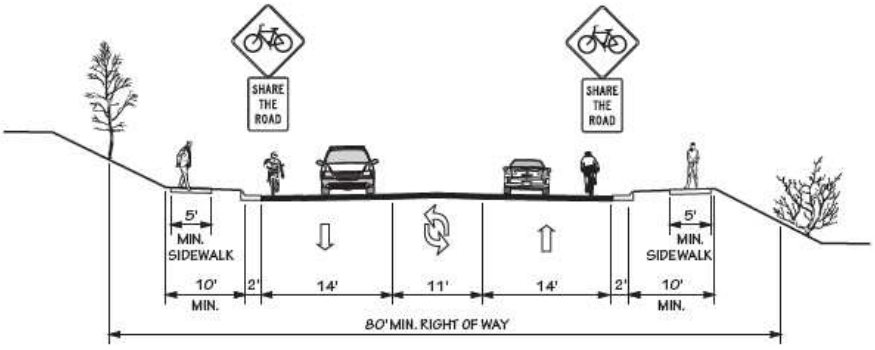
3 A

WIDE PAVED SHOULDERS



3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS

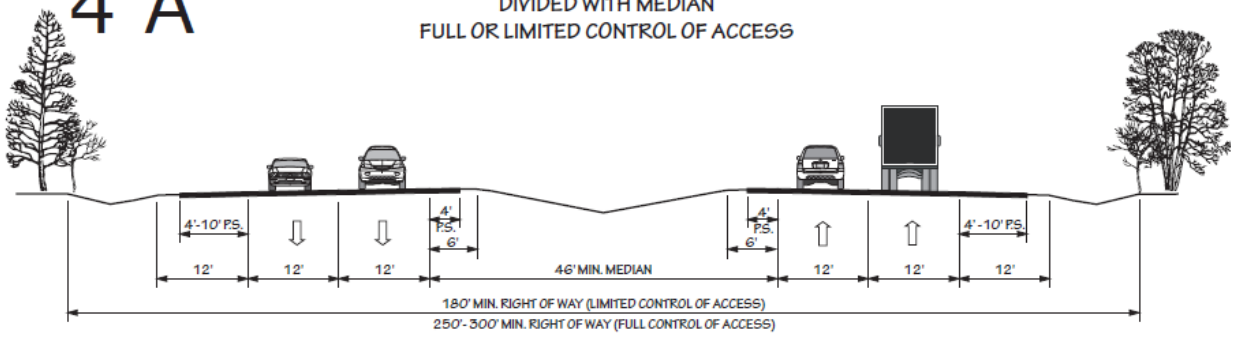


TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

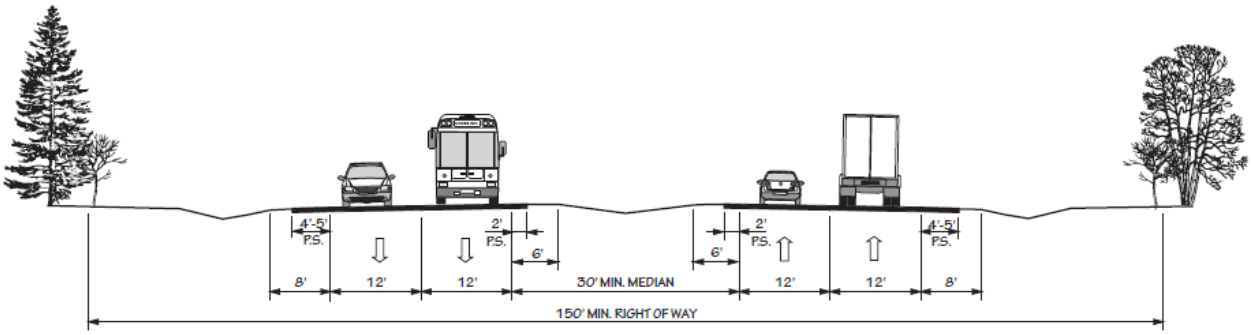
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



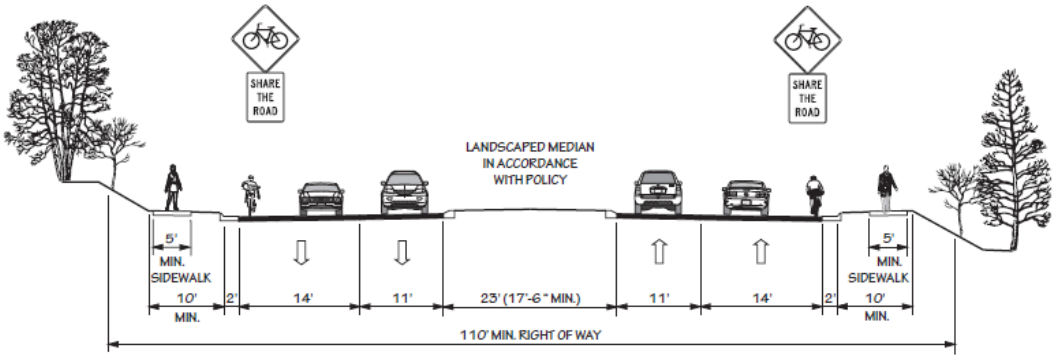
4 B

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



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS

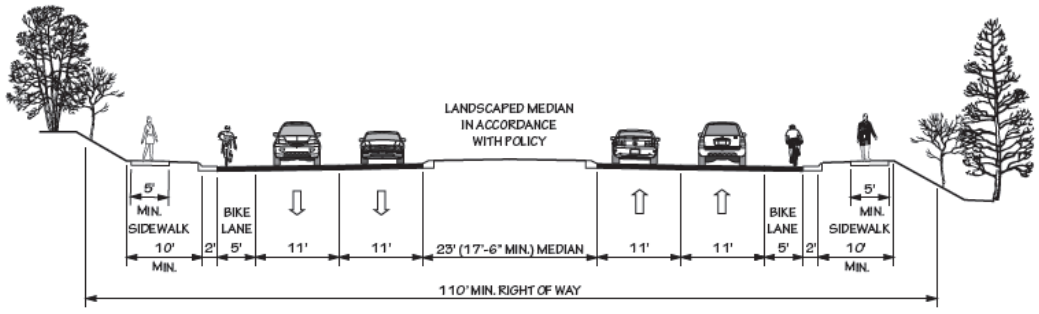


TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

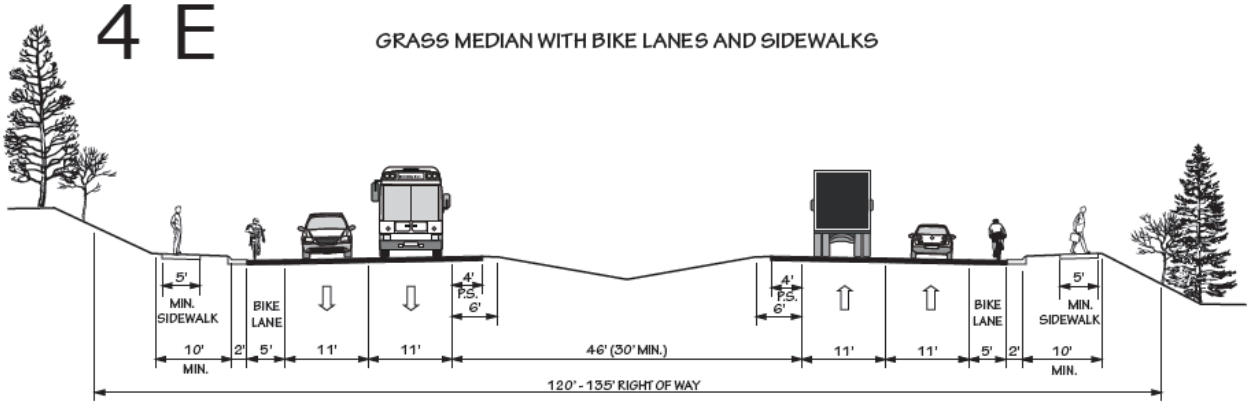
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

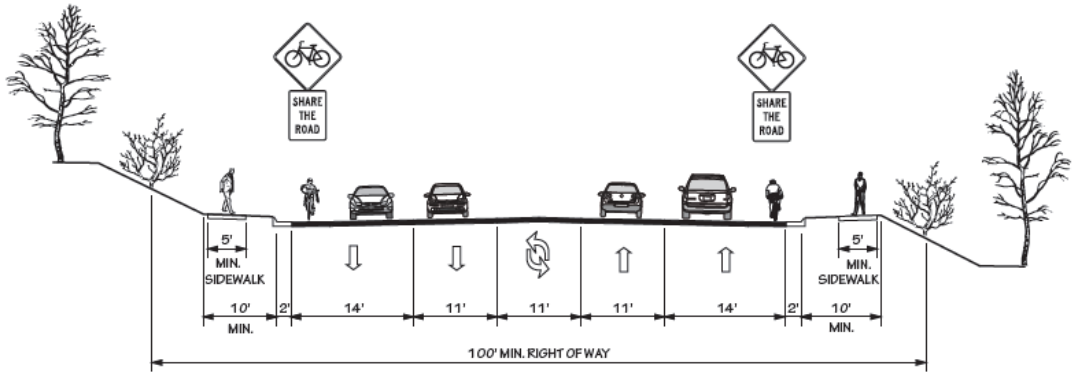
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES

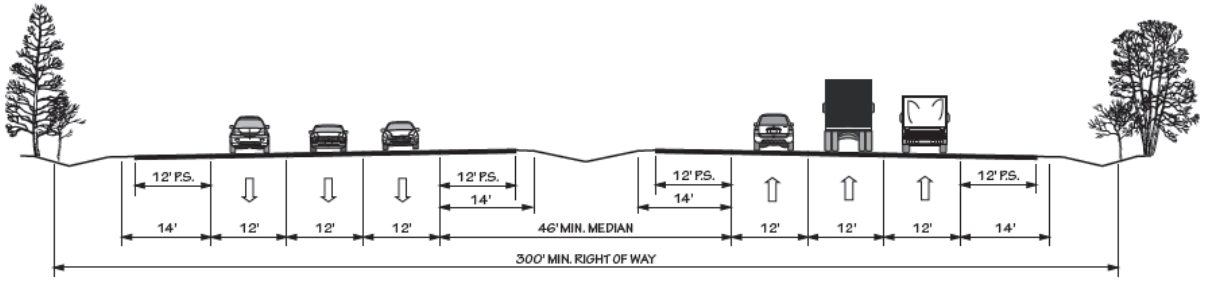


TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

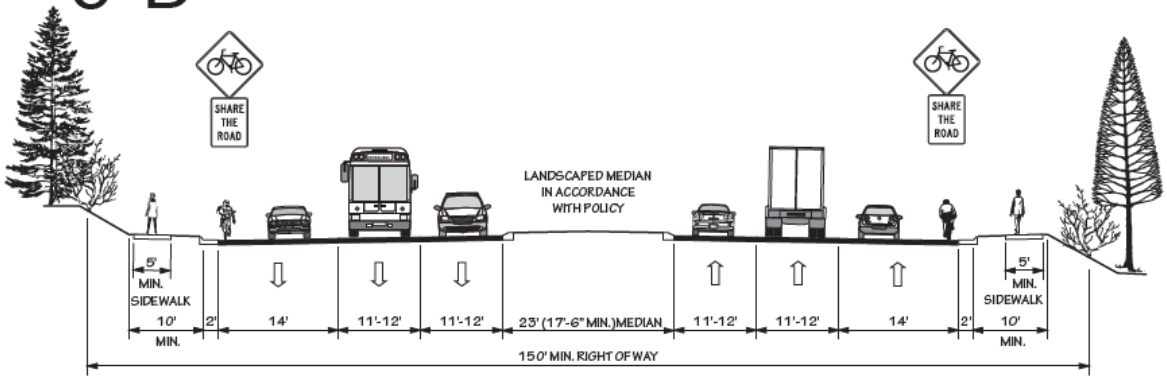
6 A

DIVIDED WITH GRASS MEDIAN



6 B

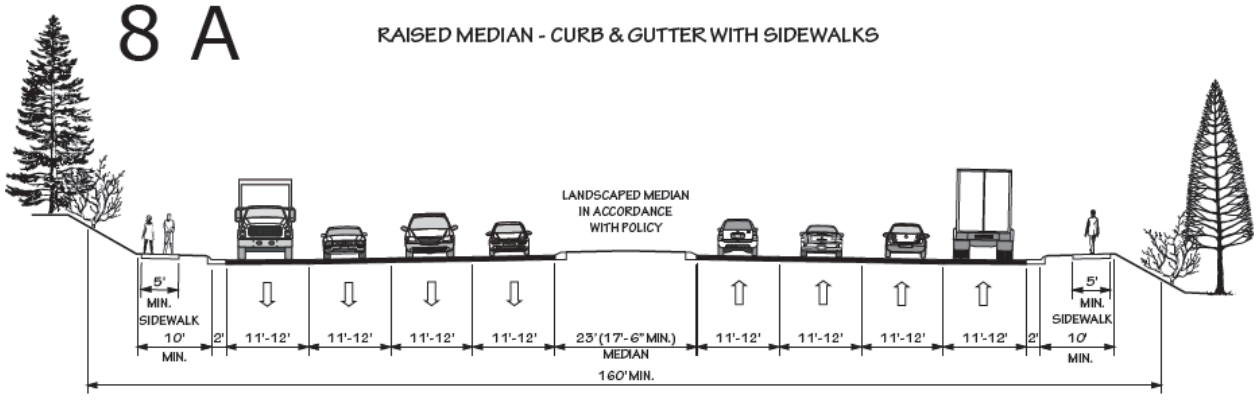
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

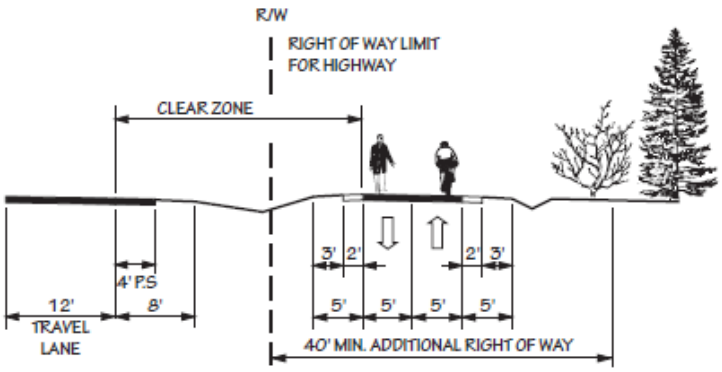
RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS



TYPICAL MULTI - USE PATH

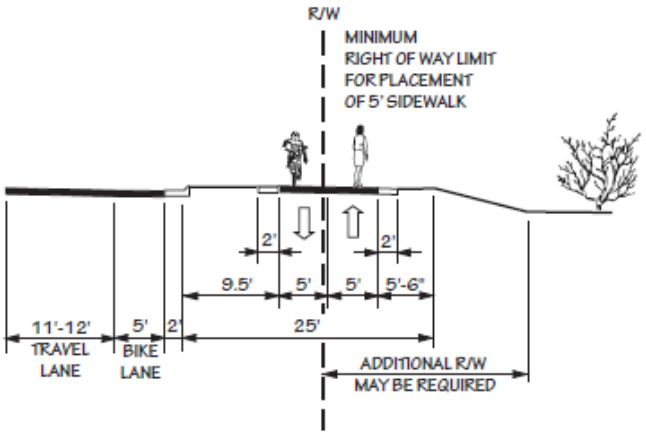
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

M A



MULTI - USE PATH ADJACENT TO CURB AND GUTTER

M B



Appendix E
Level of Service Definitions

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

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

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

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

Figure 10 - Level of Service Illustrations

Level of Service A

Driver Comfort: High

Maximum Density:

12 passenger cars per mile per lane

Level of Service B

Driver Comfort: High

Maximum Density:

20 passenger cars per mile per lane

Level of Service C

Driver Comfort: Some Tension

Maximum Density:

30 passenger cars per mile per lane

Level of Service D

Driver Comfort: Poor

Maximum Density:

42 passenger cars per mile per lane

Level of Service E

Driver Comfort: Extremely Poor

Maximum Density:

67 passenger cars per mile per lane

Level of Service F

Driver Comfort: The lowest

Maximum Density:

More than 67 passenger cars per mile per lane

Source: 2000 Highway Capacity Manual

Appendix F
Traffic Crash Analysis

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

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

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

Table 4 depicts a summary of the crashes occurring in the planning area between January 1, 2007 and December 31, 2010. The data represents locations with 10 or more crashes and/or a severity average greater than that of the state's 4.56 index. The "Total" column indicates the total number of crashes reported within 150-ft of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 4 - Crash Locations

Map Index	Intersection	Average Severity	Total Crashes
1	NC 168 and SR 1222	7.97	13
2	US 158 and SR 1147	7.05	11
3	US 158 and NC 168	4.17	14
4	NC 168 and SR SR 1216	4.08	12
5	US 158 and SR 1186	3.61	17

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

Appendix G
Bridge Deficiency Assessment

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

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

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

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

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

Table 5 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
03	SR 1232	Tulls Creek	Functionally Obsolete	
06	SR 1228	Shingle Landing Creek	Structurally Deficient	
19	NC 615 Ferry	Currituck Sound	Functionally Obsolete	
28	SR 1222	Shingle Landing Creek	Structurally Deficient	
32	SR 1242 Ferry Ramp	Currituck Sound	Functionally Obsolete	

Appendix H
Public Involvement

List of Steering Committee Members

Ben Woody, Currituck County Planning Director
Steven Lambert, Albemarle RPO Planner
Dan Scanlon, Currituck County Manager
Peter Bishop, Currituck County Economic Development Director
Manly West, Currituck County Planning Board
David Palmer, Currituck County Economic Development Advisory Board
Barbara Marzetti, Corolla Resident
Robert Brown, Corolla Resident
Jean-Paul Peron, Corolla Resident
Tessa Shuk, Corolla Resident
Karen Pierce, Coinjock Resident
John Sawyer, Mainland Resident
Herb Mullen, Inter-County Public Transportation Authority
Barry Hobbs, Division 1 Project Manager
Gretchen Byrum, District 1 Engineer

Vision and Goals Statement

Vision:

Provide a safe, reliable, efficient, sustainable and integrated transportation network, involving alternative modes of transportation, that supports economic development and efficient movement of people and products while being compatible with environmental and land use patterns.

Goals:

1. Complete a study of transportation facilities and develop a plan with improvements or strategies that address traffic congestion and consider economic impacts.
2. Identify and prioritize improvements that would enhance safety and quality of life through multi-modal CTP implementation.
3. Recognize and address the diverse transportation needs across the county.
4. Recognize the potential impact of the Mid-Currituck Bridge.
5. Recognize the potential for new strategic corridors throughout the county.

Public Workshop #1

This public workshop took place at Corolla Light Sports Center on May 9, 2011 from 1:00-3:00 pm. This workshop introduced the CTP process as well as what can be expected of the final plan. Citizens were given the opportunity to look through the recommendations and give additional feedback if anything needed to be added, removed, or changed. No particular concerns were raised at this meeting.

Public Workshop #2

This public workshop took place at Currituck County Cooperative Extension on May 9, 2011 from 5:00-7:00 pm. This workshop introduced the CTP process as well as what can be expected of the final plan. Citizens were given the opportunity to look through the recommendations and give additional feedback if anything needed to be added, removed, or changed. A few questions and concerns regarding the Mid-Currituck Bridge were raised at this meeting.

Currituck County Transportation Survey

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

Answer Options	Response Percent	Response Count
Drive yourself in a private automobile	96.4%	187
Ride with others in a private automobile	2.1%	4
Use public transportation, such as bus service	0.0%	0
Walk	0.0%	0
Bicycle	1.5%	3
Take a cab or taxi service	0.0%	0
Other (please specify)		0
answered question		**194**
skipped question		**0**

2. In what community of Currituck County do you live? (Please check only one box. Use the map above for reference.)

Answer Options	Response Percent	Response Count
Northern Mainland	36.8%	70
Southern Mainland	23.2%	44
Outer Banks	33.7%	64
Knotts Island / Gibbs Woods	6.3%	12
answered question		**190**

skipped question		**4**

3. In an average week, how often do you travel to the following destinations in Currituck County? (Please indicate the number of weekday and weekend trips.)

Weekday		
Answer Options	**Average # of Trips**	**Response Count**
Northern Mainland	3.53	155
Southern Mainland	2.02	148
Outerbanks	2.2	156
Knotts Island / Gibbs Woods	0.37	135
Weekend		
Answer Options	**Average # of Trips**	**Response Count**
Northern Mainland	1.68	147
Southern Mainland	0.93	139
Outerbanks	1.23	156
Knotts Island / Gibbs Woods	0.25	126
		Question Totals
answered question		**189**
skipped question		**5**

4. In an average week, how often do you travel to the following destinations outside Currituck County? (Please indicate the number of weekday and weekend trips.)

Weekday		
Answer Options	**Average # of Trips**	**Response Count**
Virginia (and other points north)	2.12	170
Elizabeth City (and other points west)	1.16	149
Dare County (and other points south)	1.8	162
Weekend		
Answer Options	**Average # of Trips**	**Response Count**
Virginia (and other points north)	1.23	162
Elizabeth City (and other points west)	0.51	143
Dare County (and other points south)	0.86	158
		Question Totals
answered question		**189**
skipped question		**5**

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

Answer Options	Agree	Disagree	Response Count
Building additional travel lanes	98	84	182
Making improvements to intersections such as better traffic signal timing, adding turn lanes, creating roundabouts	161	22	183
Controlling the frequency and locations of driveways and crossstreets that access the road	113	64	177
answered question			**187**
skipped question			**7**

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

Answer Options	Response Percent	Response Count
Yes	50.8%	95
No	49.2%	92
If yes, list specific location:		92
NC 12		20
NC 168		26
US 158		16
answered question		**187**
skipped question		**7**

Other responses include:
Puddin Ridge Rd, Bells Island Rd, Survey Rd, Tulls Creek Rd, Dozier Rd, and Knotts Island Rd.

7. Is truck traffic a problem in the area?

Answer Options	Response Percent	Response Count
Yes	18.8%	36
No	81.2%	155
If yes, please provide road names or locations.		35
NC 12		5
NC 168		9
US 158		3
answered question		**191**
skipped question		**3**

Other responses include:
Puddin Ridge Rd, Tulls Creek Rd, Moyock, and Shingle Landing.

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

Answer Options	Response Percent	Response Count
Yes	52.2%	96
No	47.8%	88
If yes, please list desired locations:		91
NC 12		42
NC 168/Moyock		8
Eagle Creek Subdivision		10
answered question		**184**
skipped question		**10**

Other responses include:
Poplar Branch Rd, Grandy, Bells Island Rd, Knotts Island Rd, US 158, and Puddin Ridge Rd.

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

Answer Options	Response Percent	Response Count
Yes	64.2%	120
No	35.8%	67
If yes, please list desired locations:		70
NC 12/Corolla		30
NC 168/Moyock		12
answered question		**187**
skipped question		**7**

Other responses include:
Mid-Currituck Bridge, Aydlett, Poplar Branch, Knotts Island, Ranchland, Bells Island Rd and Maple Rd.

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

Answer Options	Response Percent	Response Count
Yes	49.2%	91
No	50.8%	94
If yes, please list desired locations:		58
NC 12/Corolla		26
NC 168/Moyock		9
answered question		**185**
skipped question		**9**

Other responses include:
Aydlett, Mid-Currituck Bridge, Poplar Branch, Bells Island Rd, US 158, Knotts Island, and Tulls Creek Rd.

11. Do you ever use ICPTA public transit service around the county?

Answer Options	Response Percent	Response Count
Yes	3.2%	6
No	96.8%	184
Please list desired locations for service for weekdays and for weekends:		11
answered question		**190**
skipped question		**4**

Responses include:
Grandy, Elizabeth City, Virginia Beach, Corolla, NC 12, and Knotts Island.

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

Answer Options	Agree	Disagree	Response Count
Limit driveways on US 158 / NC 168	113	63	176
Create better Interconnectivity between neighborhood roads	132	44	176
Create better Connectivity with Elizabeth City	111	60	171
Create better Connectivity with Virginia	108	64	172
Create trolly/shuttle system within the Outer Banks	109	65	174
answered question			**187**
skipped question			**7**

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

Answer Options	Response Count
Outer Banks (to and from mainland)	29
answered question	**71**
skipped question	**123**

Other responses include:
Aydlett, Knotts Island, South Mills, Jarvisburg, Harbinger, Xe, Grandy, Carova, and Virginia.

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

Answer Options	Response Count
In favor of Mid-Currituck Bridge	13
Opposed to Mid-Currituck Bridge	7
Safety along NC 12	4
Bike/Pedestrian Concerns	15
Tourist Traffic/Congestion	20
answered question	**128**
skipped question	**66**

Other responses include:
Poor signal timing, access from Knotts Island to Mainland, need for rail, dredging for boat access, need for public transportation, safety on US 158/NC 168, speeding, and need for Moyock bypass.

15. What is your age?

Answer Options	Response Percent	Response Count
Under 18	0.0%	0
18-24	0.5%	1
25-34	6.0%	11
35-44	19.0%	35
45-64	54.9%	101
65-74	19.0%	35
Over 74	0.5%	1
answered question		**184**
skipped question		**10**

16. How would you classify your race?

Answer Options	Response Percent	Response Count
White	97.8%	176
Black	0.6%	1
Native American	0.0%	0
Hispanic	1.1%	2
Asian/South Asian	0.0%	0
Other	0.6%	1
answered question		**180**
skipped question		**14**

17. What was your household income last year?

Answer Options	Response Percent	Response Count
Less than $19,999	2.8%	5
$20,000 - $30,983	7.4%	13
$30,984 - $49,999	13.1%	23
$50,000 - $70,000	20.5%	36
more than $70,000	50.0%	88
Don't know	6.3%	11
answered question		**176**
skipped question		**18**