NCDOT TPB
TRANSPORTATION PLANNING BRANCH

Comprehensive Transportation Plan

Pamlico County

"Where the Land and the Sea Meet the Sky"

May 2012

Comprehensive Transportation Plan

Pamlico County

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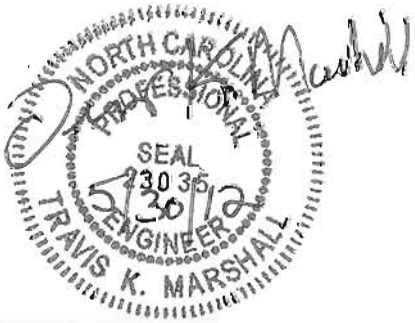
North Carolina Department of Transportation

In Cooperation with: Pamlico County
Down East Rural Planning Organization
Federal Highway Administration
United States Department of Transportation

May 2012



Travis K. Marshall, PE
Eastern Unit Head

Executive Summary

On December 12, 2007, the Transportation Planning Branch of the North Carolina Department of Transportation (TPB) and Pamlico County made a formal agreement to begin work on the Pamlico County Comprehensive Transportation Plan (CTP). The Pamlico County CTP, as shown in Figure 1, resulted from the implementation of the transportation planning principles.

The Pamlico County CTP 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, rail, bicycle, and pedestrian. This plan does not cover routine maintenance, or minor operations issues. Refer to Appendix A for contact information on these types of issues.

It is important to realize that the plan is based on anticipated growth and development of Pamlico County reflecting current trends as provided by Pamlico County. Prior to the construction of specific projects, a more detailed study will be required to reconsider development trends, determine specific design requirements, and further evaluate environmental impacts.

The Pamlico County Comprehensive Transportation Plan currently includes recommendations for five planning elements: highway, public, rail, bicycle, and pedestrian.

This report documents the findings of the transportation study along with the resulting recommendations for improvements. Additionally, this report presents transportation cross-section recommendations, cost estimates for the recommended improvements, and environmental features found in Pamlico County.

After coordination with Pamlico County and the Down East Rural Planning Organization (DERPO), and two drop-in sessions with the citizens of Pamlico County, the Pamlico County Board of Commissioners adopted the Pamlico County Comprehensive Transportation Plan on November 2, 2009. The North Carolina Board of Transportation voted to mutually adopt the Pamlico County CTP on March 4, 2010. The Down East Rural Planning Organization endorsed the CTP on December 1, 2009.

This report documents the recommendations for improvements that are included in the Pamlico County CTP. The major recommendations for improvements are listed below. Detailed information about these and other recommendations can be found in Chapter II.

Highway Recommendations

Major Thoroughfares

NC 306 – Widen entire facility within Pamlico County to a 24-foot standard width, with a minimum shoulder width of two feet. The facility's turning radius at the intersection with SR 1005 (Kershaw Road) should be increased to accommodate turning trucks.

Minor Thoroughfares

NC 304 - Widen from the current 20-foot width to a 24-foot standard width with a minimum shoulder width of two feet from the intersection of NC 304 and SR 1209 (Chinchilla Drive) to the intersection of NC 304 and NC 307.

NC 33 - Widen the entire facility from the current 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides.

Secondary Routes

SR 1005 – Starting east of NC 306, SR 1005 (Kershaw Road), widen to a 24-foot standard width, with a minimum shoulder width of two feet on both sides. Starting west of NC 306, SR 1005 (Neuse Road)**,** widen to a 24-foot standard width, with a minimum shoulder width of two feet on both sides.

SR 1100 (Scott Town Road) - Widen to a 24-foot standard width, with a minimum shoulder width of two feet on both sides to increase capacity and improve safety

SR 1230 (Lowland Road) - It is recommended that this facility be checked for blockage and roadside ditches due to periodic flooding. Roadway and drainage improvements are recommended. As a potential improvement, it is recommended to raise the roadway and install cross drainage culverts to eliminate road closures and eliminate flooding (for a detailed solution of roadway flooding coordination with the NCDOT Division 2 is recommended).

SR 1302 (Janiero Road) - Widen from the current 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet to increase capacity and improve safety. Improve sight distance at the Cash Corner No. 2 to reduce the potential for crashes. One way of achieving this is to reduce the skew angle of the intersection through reconstruction and address the wild vegetation growth that impedes vision.

SR 1321 (Straight Road) - Widen from the current 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides.

SR 1322 (Trent Road) - Widen from the current 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides. Other improvements may include raising the roadway grade or deflect drainage away from the roadway by installing drainage culverts.

SR 1324 (Florence Road) - Widen from the current 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides.

Public Transportation and Rail Recommendations

The recommended improvements for this element will be done in two phases.

Phase one includes NC 55 with a fixed-route mini-van system is proposed that would connect Craven County and the town of Oriental through NC 55.

Phase two includes NC 304 and NC 306 with a fixed-route mini-van system that would connect the town of Bayboro through the NC 304 intersection and following NC 307 into the town of Vandemere toward Hobucken passing through NC 33-304 ending in the town of Hobucken.

Bicycle Recommendations

The following on-road bike facilities have been identified as needing improvement in Pamlico County.

NC 55

NC 306

SR 1100 (Scott Town Road)

SR 1005 (Kershaw Road)

SR 1321 (Straight Road)

SR 1322 (Trent Road)

SR 1349 (White Farm Road)

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 becomes available:

- Curb and gutter sections require at minimum a four-foot bike lane on either side or 14-foot wide outside lanes.
- Shoulder sections require a minimum four-foot paved shoulder on either side.
- All bridges along roadways where bike facilities are recommended shall be equipped with 54” railings.

Pedestrian Recommendations

The following facilities in Pamlico County have been recommended for improvements.

Grantsboro:

NC 55 – A continuous sidewalk is proposed along NC 55, which will extend through the existing sidewalk segments along NC 55.

NC 306 – A sidewalk is proposed to complete the quadrant on NC 55 and NC 306.

Arapahoe:

NC 306 - At the five-point intersection on SR 1005 (Kershaw Road) and NC 306 in Arapahoe, sidewalks are proposed.

Oriental:

NC 55 – A sidewalk is proposed along NC 55 (Broad Street).

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I. Introduction

An area's transportation system is its lifeline, contributing to its economic prosperity and social well-being. A safe and efficient transportation infrastructure is vital. It provides a means of transporting people and goods quickly, conveniently, and safely. A well-planned system will meet the existing travel demands, as well as, keep pace with the growth of the region. Pamlico County recognized the importance of planning for future transportation needs and requested transportation planning assistance from the Transportation Planning Branch (TPB) of the North Carolina Department of Transportation (NCDOT) in December 12, 2007.

This study examined the present and future transportation needs of Pamlico County and developed a CTP to meet these needs. The plan recommends those improvements necessary to provide an efficient transportation system within the 2009-2035 planning period. The recommended cross-sections outlined in Appendix D are based on the existing conditions and projected traffic volumes.

Pamlico County is situated on a peninsula marking the center of North Carolina's Lower Coastal Plain. A variety of habitats is found throughout the area, including Pamlico Sound, marshlands, and mixed pine and hardwood forests. Pamlico County is surrounded by water on three sides: Goose Creek and the Pamlico River on the north, Upper Broad Creek to the west, and the Neuse River to the south. Pamlico County is surrounded by Beaufort County, Craven County, Carteret County, and the Pamlico Sound. Bayboro, the county seat, is located near the center of Pamlico County.

This report documents the development of the 2010 Pamlico County CTP as shown in Figure 1. It presents recommendations for each mode of transportation in the plan. The CTP was developed to ensure that the transportation system will progressively meet the needs of Pamlico County and to serve as an official guide to providing a well-coordinated, efficient, and economical transportation system utilizing all modes of transportation. This document will be used by local officials to ensure that planned transportation facilities reflect the needs of the public, while minimizing the disruption to local residents, business, and the environment.

Initiative for implementing the CTP rests predominately with the policy boards and citizens of Pamlico County. Local governments and the North Carolina Department of Transportation share the responsibility for access management, planning and design. As transportation needs throughout the state exceed available funding, it is imperative that Pamlico County aggressively pursue funding for the priority projects.

The CTP is based on the projected growth for Pamlico County as coordinated with Pamlico County and the Down East Rural Planning Organization (DERPO). Actual growth patterns may differ from those previously anticipated; thus, making it necessary to accelerate or delay the development of some recommendations. Some portions of the plan may require revisions in order to accommodate unexpected changes in urban development. Therefore, any changes made to one element of the CTP should be consistent with the other elements.

II. Recommendations

One of the most important steps in identifying the transportation recommendations associated with the CTP is making an assessment of the transportation deficiencies. This assessment helps identify what actions should be pursued and the implications involved if a project is not implemented. The problem statements resulting from this assessment help to justify recommended actions and to define practical alternatives. This chapter presents the recommended improvements and associated problem statements resulting from the transportation needs assessment conducted during the development of the Pamlico County CTP, based on the ability of the area's roadway system to serve existing and anticipated travel demands. These improvements are needed to enable the Pamlico County transportation system to serve anticipated travel desires as this area continues to grow.

The objective of the Pamlico County CTP is to reduce congestion and improve safety by eliminating both existing and projected deficiencies in the transportation system. The adopted plan represents a transportation system that will address anticipated traffic and land development needs. The process of formulating and evaluating recommendations for the facilities in this CTP involves many factors including: goals and objectives of the area, existing road conditions, identified deficiencies, environmental impacts, and existing and anticipated land development. Some recommendations will involve further research and analysis to ensure that the recommendations are feasible and are able to accommodate future needs.

CTP Implementation

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

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

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

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

Problem Statements

HIGHWAY

The recommended plan for the highway element of the Pamlico County CTP is presented on Figure 1, Sheet 2. This plan includes roadways within Pamlico County that fall into five general categories: freeways, expressways, boulevards, other major thoroughfares, and minor thoroughfares.

Refer to Appendix B for a more detailed description of each category, Appendix C for an inventory of the existing and recommended highway attributes, and Appendix D for a listing of typical cross-sections used by NCDOT.

Major Improvements

The major recommendations are described in the following pages.

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HIGHWAY

NC 55 Proposed Improvements	Local ID: PAML0001-T B P Last Updated: June, 2011

Problem Statement

The primary purpose of the proposed improvements along this corridor is to provide better multi-modal connectivity between Craven County and the town of Oriental through NC 55.

Justification of Need

NC 55 is a major east – west corridor in Pamlico County, connecting to Craven County. The facility is a vital artery moving people and goods throughout the two counties.

CTP Project Proposal

Supporting Information:

Land Use Patterns:

- One of the goals in the Pamlico County Land Use Plan is "better traffic flow and safety to accommodate Pamlico County's growing permanent population and its visitors." Another goal is, "adequate transportation and access to surrounding areas for residents who work outside Pamlico County." Mixed-use development is expected along this corridor.

Natural & Human Environmental Context:

- Based on available GIS data, none of the natural and human environmental features examined as a part of this study were identified in the immediate vicinity of the project. Therefore, the proposed project should have a minimal impact on the natural and human environment.

Multi-modal considerations:

- The CTP includes recommendations for public transportation, bicycle, and pedestrian facilities along NC 55.
- A fixed-route mini-van system is proposed that would connect Craven County and the town of Oriental through NC 55. This will be a two-phase process. Phase one includes NC 55 and phase two includes NC 304 and NC 306. The mini-van system proposed would connect Craven County and the Town of Oriental through NC 55 with two Park-and-Ride Lots, one in Bayboro and the other in Oriental. The Park-and-Ride lot proposed in Bayboro is an existing parking lot at the Pamlico government complex. The Park-and-Ride proposed lot in Oriental is at the intersection between White Farm Road (SR 1349) and Straight Road.

- There are specific improvements for adding bicycle lanes along NC 55.
- A sidewalk is proposed along NC 55, which will extend to the existing sidewalk.
- These multi-modal features will not significantly impact the traffic demand along this corridor.

Linkages within the overall CTP, other community/state plans, other projects:

- Multi-modal improvements proposal for NC 55 are important links to other recommendations within the Pamlico County CTP for interconnectivity with other facilities.

Documentation of public/stakeholder involvement process:

- A public workshop was held on September 17, 2009, where no comments were received regarding this specific recommendation. No significant issues associated with this project were identified during the public/stakeholder involvement process. Refer to Appendix H for further information regarding public involvement.

Crash Data:

- Refer to Appendix F for traffic crash analysis

Problem Statement

The primary purpose of the proposed improvements along this corridor is to improve mobility of motorized vehicles along NC 306 during the peak periods.

The aim is to help reduce the incidence of crashes, with particular attention to the intersection with NC 55.

Justification of Need

NC 306 is a major north–south corridor in Pamlico County, connecting to Beaufort County. The facility is a vital artery moving people and goods throughout the two counties.

There is a high percentage of log trucks at the intersection with SR 1005 (Neuse Road), which was identified as being too narrow to accommodate turning trucks.

Located between SR 1100 (Scott Town Road) and SR 1005 (Neuse Road), the Pamlico County Community College has a new training center plus a new auditorium with 650-seats. Its goal is to become a cultural arts center for Pamlico County.

The present conditions are as follows: speed limit is 45 mph; no paved shoulders; and roadway width is 21 feet.

From June 30, 2006 to June 30, 2009, 12 documented crashes have occurred at the intersection of NC 55 and NC 306.

CTP Project Proposal

Project Description and Overview

The turning radius at the intersection with SR 1005 (Kershaw Road) should be increased to accommodate turning trucks coming from SR 1005 (Kershaw Road) turning right onto NC 306.

It is recommended that the entire length of NC 306 within Pamlico County be widened to a 24-foot standard width, with a minimum shoulder width of two feet on both sides to provide needed transportation infrastructure to support community growth objectives for the NC 306 corridor.

These improvements will enhance traffic flow and connectivity. The proposed improvements to NC 306 will provide a high mobility north-south corridor.

Supporting Information:

Proposed improvements to NC 306 have not been identified on any prior transportation plan.

Land Use Patterns:

- One of the Pamlico County Land Use Plan goals is “better traffic flow and safety to accommodate Pamlico County’s growing permanent population and its visitors.”

Natural & Human Environmental Context:

- Based on available GIS data, none of the natural and human environmental features examined as a part of this study were identified in the immediate vicinity of this project.

Multi-modal considerations:

- The CTP includes recommendations for public transportation, bicycle, and pedestrian facilities along NC 306.
- A fixed-route mini-van system is proposed that would connect Town of Bayboro and the Town of Arapahoe through NC 55 and NC 306, with one Park-and-Ride Lot located within the vicinity of the Five-Point intersection in Arapahoe. This will be a two-phase process. Phase one includes NC 55 and phase two includes NC 304 and NC 306.
- Bicycle routes via on-road accommodations are recommended along NC 306 to enhance Pamlico County-wide bicycle network and to allow interconnectivity among major existing bicycle routes.
- A sidewalk is proposed at the intersection of NC 55 and NC 306, going north on NC 306. At the five-point intersection on SR 1005 (Kershaw Road) and NC 306 in Arapahoe, sidewalks are proposed.
- These multi-modal features will not significantly impact the traffic demand along this corridor.

Linkages within the overall CTP, other community/state plans, other projects:

- This roadway is a north-south facility connecting Beaufort County to Pamlico County ending in Minnessott Beach.

Documentation of public/stakeholder involvement process (project specific):

- A public workshop was held on September 17, 2009, where no comments were received regarding this specific recommendation. No significant issues associated with this project were identified during the public/ stakeholder involvement process. Refer to Appendix H for further information regarding public involvement.

Problem Statement

The primary purpose of the proposed improvements is to increase the mobility of vehicles along the NC 33, NC 304, and SR 1230 (Lowland Road).

Justification of Need

NC 304 is a major corridor in Pamlico County, which connects to the towns of Bayboro, Vandemere, Mesic, Hobucken and Lowland. NC 33, and SR 1230 (Lowland Road) are vital arteries moving people and goods throughout nearby towns.

Along NC 33, just after SR 1239 (Rowe Road), the roadway width is 18 feet. The posted speed limit is 55 mph, with no paved shoulder.

Along SR 1230 (Lowland Road), to the side of the road, water does not drain properly.

CTP Project Proposal

Project Description and Overview

Along NC 304, it is recommended to widen from the current 20-foot lanes to 24-foot lanes with a minimum shoulder width of two feet on both sides starting from the intersection of NC 304 and SR 1209 (Chinchilla Drive) up to the intersection of NC 304 and NC 307.

It is recommended to widen the entire facility along NC 33 from the current 18-foot lanes to a 24-foot standard width, with a minimum shoulder width of two feet on both sides.

These improvements will enhance traffic flow and connectivity. The proposed improvements will bring NC 33, NC 304, and SR 1230 (Lowland Road) to current highway standards, which will result in improved mobility of vehicles along these corridors.

The proposed improvements to SR 1230 (Lowland Road), will help with the drainage issue.

Supporting Information:

Proposed improvements to NC 33, NC 304, and SR 1230 (Lowland Road) have not been identified on any prior transportation plan.

Land Use Patterns:

- The purpose is to provide the needed transportation infrastructure to support community growth objectives. These roads are the only access to services and amenities in Bayboro.

Natural & Human Environmental Context:

- Based on available GIS data, none of the natural and human environmental features examined as a part of this study were identified in the immediate vicinity of the project.

Multi-modal considerations:

- A fixed-route mini-van system is proposed that would connect the town of Bayboro through the NC 304 intersection, then following NC 307 into the town of Vandemere and proceeding to the final destination into the town of Hobucken. This multi-modal feature will not significantly impact the traffic demand along this corridor.

Documentation of public/stakeholder involvement process (project specific):

- A public workshop was held on September 17, 2009, where no comments were received regarding this specific recommendation. No significant issues associated with this project were identified during the public/stakeholder involvement process. Refer to Appendix H for further information regarding public involvement.

Minor Improvements

The following roadway sections, based on the traffic volumes and other geometric concerns, are recommended for widening projects that will improve safety and increase capacity. Each section of roadway listed below currently has a lane width of less than 12 feet.

The following routes do not have capacity issues, but are recommended to be upgraded.

SR 1005 (Kershaw Road and Neuse Road)

Starting east of NC 306, widen from the existing 20-foot width to a 24-foot standard width, with a minimum shoulder width of two feet on both sides. Starting west of NC 306 widen from the existing 20-foot width to a 24-foot standard width, with a minimum shoulder width of two feet on both sides.

SR 1100 (Scott Town Road)

This small segment is currently used as a shortcut on the way out of Pamlico County. It is currently 19-foot wide with a posted speed of 55 mph. It is recommended that this facility be widened to a 24-foot standard, with a minimum shoulder width of two feet on both sides.

SR 1302 (Janiero Road)

Windmill Pointe, a 1300-acre community, is in development between SR 1308 (Oriental Road), and SR 1378 (Creek Place Road). A new marina that can accommodate boats up to 50 feet and a 400-slip world-class harbor are in development. Shine Landing, a new community, and a new marina are in development near the intersection with SR 1369 (Hardison-Lee Farm).

It is recommended that the entire length of SR 1302 (Janiero Road) be widened from the existing 18-foot width to a 24-foot standard, with a minimum shoulder width of two feet on both sides.

There is poor sight distance at the intersection of Janiero Road and Don Lee Road (Cash Corner No. 2), when driving from the west of SR 1302 and approaching this intersection. Horizontal realignment of this skewed intersection is recommended, with the coordination of the NCDOT Division 2. This will improve sight distance and reduce the potential for crashes. One way of achieving this is to reduce the skew angle of the intersection through reconstruction.

SR 1321 (Straight Road)

Widen from the existing 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides.*

SR 1322 (Trent Road)

Widen from the existing 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides.*

Some potential deficiencies observed in the field along SR 1322 (Trent Road) include roadway flooding. Improvements may include raising the roadway grade or deflect drainage away from the roadway by installing drainage culverts.

SR 1324 (Florence Road)

Widen the entire length of SR 1324 from the existing 18-foot width to a 24-foot standard width with a minimum shoulder width of two feet on both sides.*

SR 1322 (Trent Road), SR 1321 (Straight Road), and NC 55

Special attention should be made to this loop, where projects or new developments are projected in the future years. Widen to a 24-foot standard width with a minimum shoulder width of two feet on both sides.*

SR 1324 (Florence Road), SR 1321(Straight Road), and SR 1322 (Trent Road)

Special attention should be made to this loop, where projects or new developments are projected in the future years. Widen to a 24-foot standard width with a minimum shoulder width of two feet on both sides.*

*The Pamlico County CTP Steering Committee decided that these roads needed to be taken into consideration for improvement in anticipation for future growth and development.

PUBLIC TRANSPORTATION AND RAIL

The Public Transportation and Rail element of the transportation plan is a way to consider other modes of transportation and give the public other options of traveling from one place to another.

At this time, there are no fixed route public transportation services available in Pamlico County. Currently the rail system is inactive. The Craven Area Rural Transit System (CARTS) provides public transportation services to Pamlico County

CTP Project Proposal

Project Description

A fixed-route mini-van system is proposed that would connect Craven County with Oriental through NC 55. There would be two Park-and-Ride lots, one in Bayboro and the other in Oriental. The Park-and-Ride lot proposed in Bayboro is an existing parking lot at the Pamlico County government complex. The proposed Park-and-Ride lot in Oriental is to be located between SR 1349 (White Farm Road), and SR 1321 (Straight Road).

A fixed-route mini-van system is proposed that would connect Bayboro through NC 304 with a Park-and-Ride lot in Vandemere, using NC 307 and continuing on NC 304 from Vandemere ending in Hobucken with another Park-and-Ride lot located at Hobucken School Road.

The Park-and-Ride lot in Bayboro is used by the route connecting to Oriental, and the route connecting to Vandemere.

A fixed-route mini-van system is proposed that would connect Bayboro and Arapahoe through NC 55 and NC 306, with one Park-and-Ride lot located near the intersection with NC 306 and Kershaw Road in Arapahoe.

There are no improvements planned for the existing non-operational rail lanes for Pamlico County.

The Public Transportation and Rail Map for Pamlico County is presented on Figure 1, Sheet 3. See Appendix B for a more detailed description of each category.

BICYCLE

The NCDOT envisions that all citizens of North Carolina and visitors to the state should be able to walk and ride their bicycles safely and conveniently to their chosen destination with reasonable access to roadways. Information on events, funding, maps, policies, projects, and processes dealing with these modes of transportation is available by contacting the NCDOT Division of Bicycle and Pedestrian Transportation.

The Bicycle Map is presented on Figure 1, Sheet 4. This map classifies the bicycle routes into three categories depending on the type of service each route provides. These classifications are On-road and Off-road, Multi-use paths and are described in detail in Appendix B

The CTP Bicycle element includes several improvements needed to meet future travel demands. These improvements were developed based on the needs assessment, the goals and objectives of Pamlico County.

CTP Project Proposal

Project Description

The following on-road bicycle facilities, as shown in the bicycle map, have been identified as needing improvement.

NC 55

NC 306

SR 1100 (Scott Town Road)

SR 1005 (Kershaw Road)

SR 1321 (Straight Road)

SR 1322 (Trent Road)

SR 1349 (White Farm Road)

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

- Curb and gutter sections require at a minimum a four-foot bike lane on either side or 14-foot wide outside lanes.
- Shoulder sections require a minimum four-foot paved shoulder.
- All bridges along roadways where bike facilities are recommended shall be equipped with 54” railings.

These improvements will enhance safety and the functional design of the facilities. The Pamlico County CTP Committee also recommends that bicycle accommodations be considered during the planning and funding for all future pavement rehabilitation or resurfacing projects. For more information, please check Project Proposal Spreadsheet and Roadway Inventory Appendix C and CTP Cross Sections Appendix D.

There are no off-road or multi-use path recommendations at this time.

When considering the widening of these facilities, it is recommended that the NCDOT Division of Bicycle and Pedestrian Transportation be consulted. They can help provide the most appropriate improvements based on present and future bicycle traffic. Pamlico County should contact the coordinator of this branch for further consideration and assistance.

PEDESTRIAN

There is a need to improve pedestrian safety along the recommended facilities in Pamlico County. The purpose of recommending pedestrian accommodations is to provide an alternative mode of transportation within Pamlico County.

The Pedestrian Map presented in Figure 1, Sheet 5 classifies the pedestrian facilities into three categories depending on the type of service each facility provides. These classifications are sidewalks, off-road, and multi-use paths. They are described in detail in Appendix B. The recommended improvements are also inventoried in Appendix C.

The Pedestrian Map includes several improvements needed to provide adequate, safe, and desirable facilities for use by pedestrians. These recommendations were developed based on a needs assessment taking into consideration the goals and objectives of Pamlico County.

CTP Project Proposal

Project Description

Grantsboro:

NC 55 – A sidewalk is proposed along NC 55 (Main Street), which will extend to the existing sidewalk starting east of the intersection at NC 306 and NC 55 to Alliance and reconnecting with the existing sidewalk along NC 55 in Bayboro.

NC 306 – A sidewalk is proposed going south from Hopkins Road and connecting with the existing sidewalk at the intersection with NC 55.

Arapahoe:

NC 306 – At the five-point intersection on SR 1005 (Kershaw Road) and NC 306 in Arapahoe, proposed sidewalks will extend radially for approximately 100 feet on NC 306 in both directions, and on SR 1005 (Neuse Road), SR 1117 (Seafarer Road) and SR 1005 (Kershaw Road) from the intersection with NC 306.

Oriental: NC 55 – A sidewalk is proposed along NC 55 (Broad Street) from Church Street to the Dollar General store.

Adopted by:

Pamlico County
Date: November 2, 2009

Town of Alliance
Date: October 12, 2009
Town of Arapahoe
Date: June 3, 2010
Town of Bayboro
Date: October 20, 2009
Town of Minnesott Beach
Date: November 10, 2009
Town of Oriental
Date: October 6, 2009
Town of Vandemere
Date: October 19, 2009

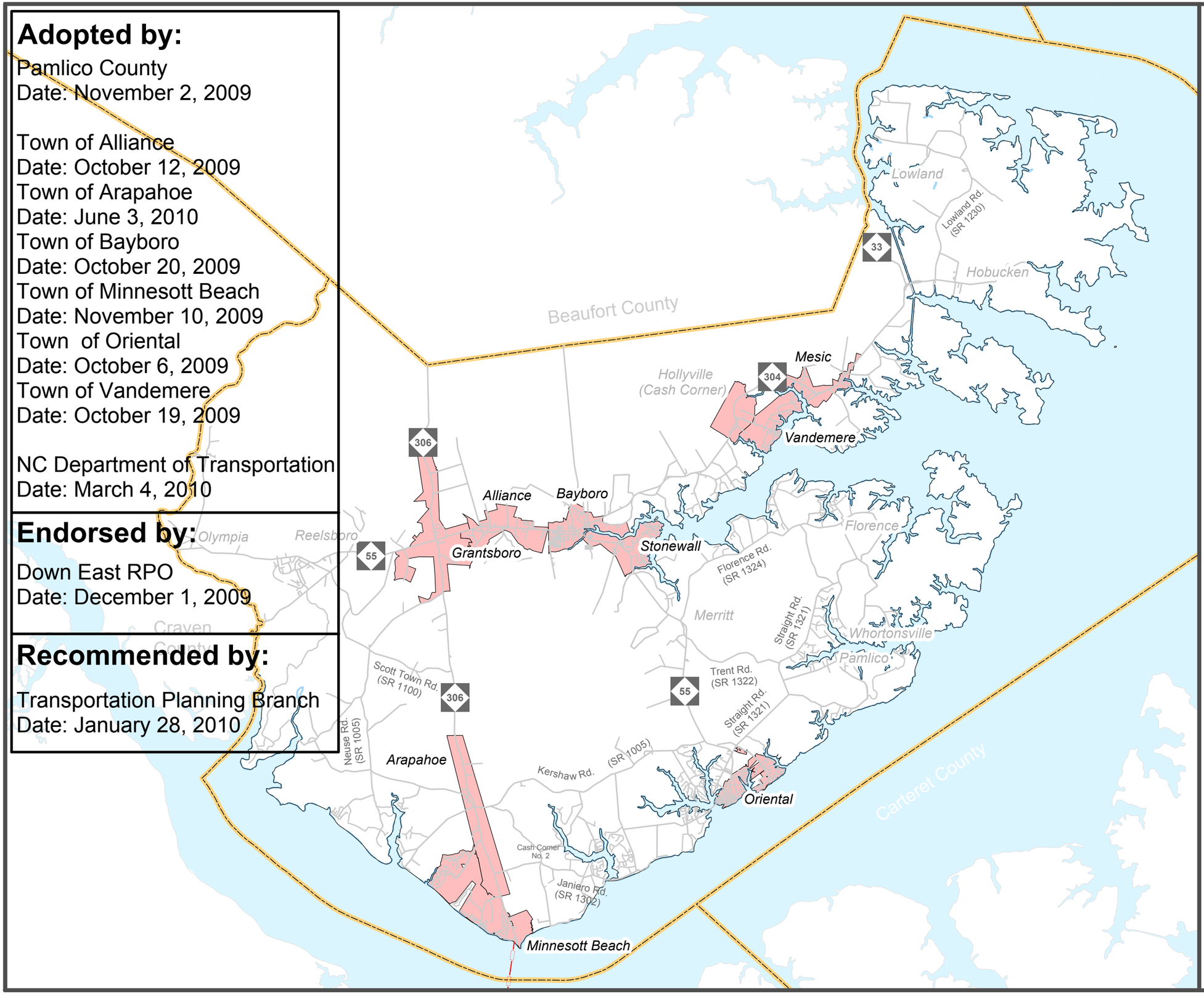
NC Department of Transportation
Date: March 4, 2010

Endorsed by:

Down East RPO
Date: December 1, 2009

Recommended by:

Transportation Planning Branch
Date: January 28, 2010



Adoption Sheet

Pamlico County

North Carolina

Comprehensive Transportation Plan

Plan date: September 30, 2009

Legend

- Pamlico Roads
- County Boundary
- Rivers and Streams
- Town Boundary
- Existing Ferry

Miles
0 1 2 3 4 5 6

N W E S

Figure 1 (Sheet 1 of 5)

Base map date: July 31, 2008

Refer to CTP document for more details

Highway Map

Pamlico County

Comprehensive Transportation Plan

Plan date: September 30, 2009

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

- Existing Ferry

Miles
0 1 2 3 4 5 6

N W E S

Figure 1 (Sheet 2 of 5)

Base map date: July 31, 2008

Refer to CTP document for more details

Public Transportation and Rail Map

Pamlico County

Comprehensive Transportation Plan

Plan date: September 30, 2009

Bus Routes
- Existing
- Needs Improvement
- Recommended

Fixed Guideway
- Existing
- Needs Improvement
- Recommended

Operational Strategies
- Existing
- Needs Improvement
- Recommended

Park and Ride Lot
- Existing
- Recommended

Existing Ferry

Miles
0 1 2 3 4 5 6

N W E S

Figure 1 (Sheet 3 of 5)
Base map date: July 31, 2008
Refer to CTP document for more details

Bicycle Map

Pamlico County

Comprehensive Transportation Plan

Plan date: September 30, 2009

On-road
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation
- Existing Ferry

0 1 2 3 4 5 6 Miles

N W E S

Figure 1 (Sheet 4 of 5)

Base map date: July 31, 2008

Refer to CTP document for more details

Beaufort County
Craven County
Carteret County
Lowland
Lowland Rd. (SR 1230)
Hobucken
Mesic
Hollyville (Cash Corner)
Vandemere
Florence
Florence Rd. (SR 1324)
Stonewall
Bayboro
Alliance
Grantsboro
Olympia
Reelsboro
Merritt
Straight Rd. (SR 1321)
Whortonsville
Pamlico
Trent Rd. (SR 1322)
Scott Town Rd. (SR 1100)
Neuse Rd. (SR 1005)
Arapahoe
Kershaw Rd. (SR 1005)
Oriental
Cash Corner Rd. 2
Janiero Rd. (SR 1302)
Minnesott Beach
33
304
306
55
7
APS

Pedestrian Map

Pamlico County

Comprehensive Transportation Plan

Plan date: September 30, 2009

Inset Map 1: Grantsboro

Inset Map 2: Arapahoe

Inset Map 3: Bayboro

Inset Map 4: Oriental

Beaufort County

Craven County

Carteret County

Olympia

Reelsboro

Alliance

Bayboro

Grantsboro

Stonewall

Florence

Merritt

Whortonsville

Pamlico

Mesic

Hollyville (Cash Corner)

Vandemere

Arapahoe

Oriental

Minnesott Beach

See Inset Map 1

See Inset Map 2

See Inset Map 3

See Inset Map 4

Old Bay River Rd. (SR 1347)

Mill Pond Rd. (SR 1203)

Main St.

Neal's Creek Rd. (SR 1343)

Kershaw Rd. (SR 1005)

Don Lee Rd. (SR 1301)

Neuse Rd. (SR 1005)

Scott Town Rd. (SR 1100)

Florence Rd. (SR 1324)

Straight Rd. (SR 1321)

Trent Rd. (SR 1322)

Janiero Rd. (SR 1302)

Cash Corner No. 2

White Farm Rd. (SR 1349)

Broad St. (NC 55)

55

306

304

33

Sidewalks
- Existing
- Needs Improvement
- Recommended

Off-road
- Existing
- Needs Improvement
- Recommended

Multi-Use Paths
- Existing
- Needs Improvement
- Recommended

- Existing Grade Separation
- Proposed Grade Separation
- Existing Ferry
- Schools

Miles
0 1 2 3 4 5 6

N W E S

Figure 1 (Sheet 5 of 5)
Base map date: July 31, 2008
Refer to CTP document for more details

III. Analysis of the Existing and Future Transportation System

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, 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, or additional radial routes.

In the development of this plan, travel demand was projected from 2008 to 2035 using a trend line analysis based on Annual Average Daily Traffic (AADT) from 1990 to 2008. In addition, local land use plans and growth expectations were used to further refine future growth rates and patterns. The Pamlico County CTP Steering Committee endorsed the established future growth rates on September 2009.

Existing and future travel demand is compared to existing roadway capacities. Capacity deficiencies occur when the traffic volume of the 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.
- Number of traffic signals along the route.
- Peaking characteristics of the traffic on the road.
- Characteristics of side-roads feeding into the road.

- Access control, including streets and driveways, or lack thereof, along the roadway.
- Development along the road, including residential, commercial, agricultural, and industrial developments loop facilities.
- Typical users of the road, such as commuters, recreational travelers, and truck traffic.
- Directional split of traffic or the percentages of vehicles traveling in each direction along a road at any given time.

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 V2.0 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 – Level of Service Definitions for detailed information on LOS.

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.

Traffic Crash Analysis

Traffic crashes are often used as an indicator for locating congestion and roadway problems. While often the result of driver or vehicle performance, crashes may also be a result of the physical characteristics of roadway conditions, obstructions, traffic conditions, and weather. In the later cases, crashes may be prevented with physical improvement, design or traffic control changes such as the installation of stop signs or traffic signals, or development of horizontal and vertical realignment.

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 Pamlico County CTP for crashes occurring in Pamlico County between June 30, 2006 and June 30, 2009. The crash analysis considered both collision frequency and severity. During this period, a total of 5 intersections were identified with a number of crashes, as illustrated in Figure 4. Refer to Appendix F - Traffic Crash Analysis for a detailed crash analysis.

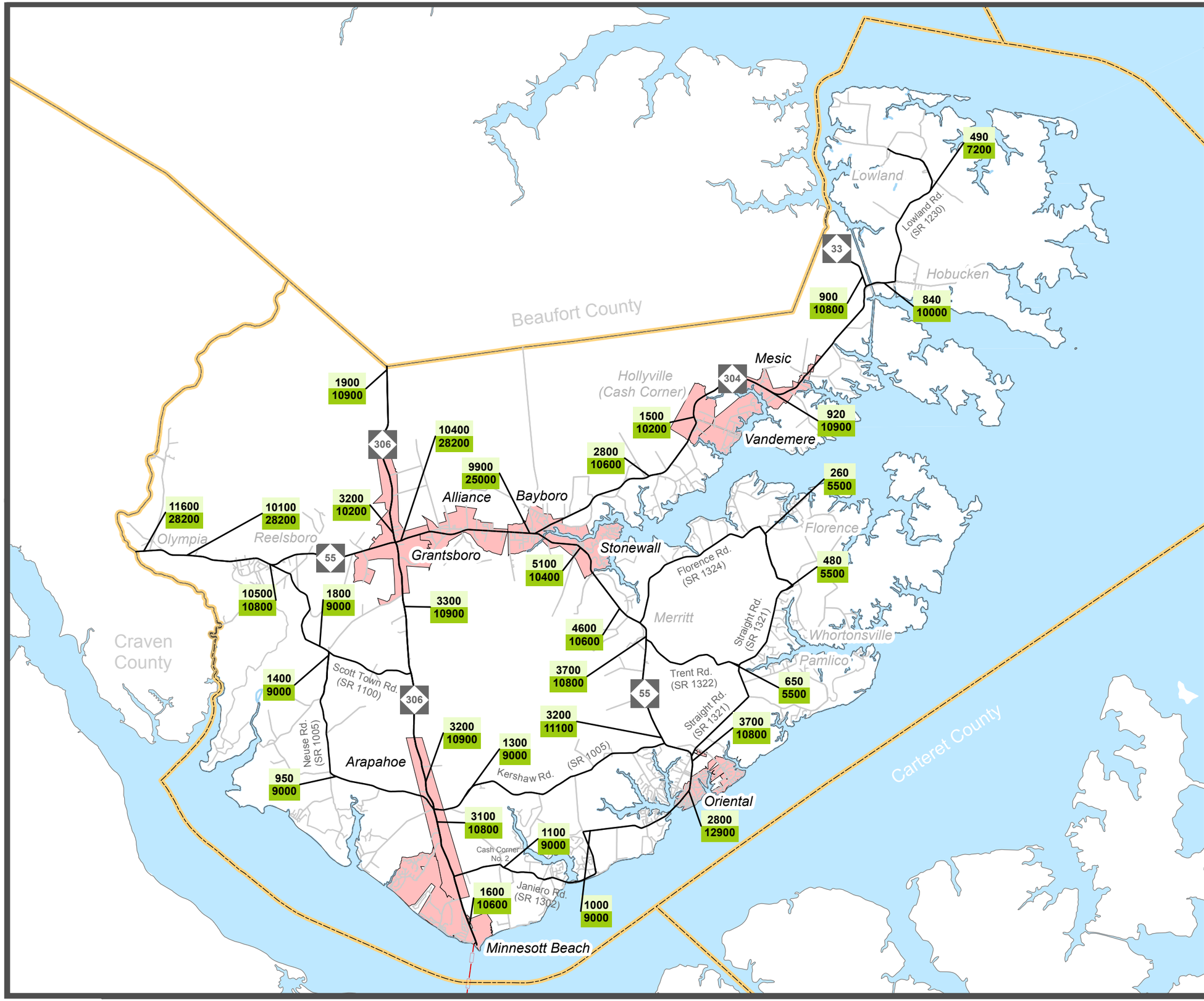


Figure 2

2008 Volumes and Roadway Deficiencies

Legend

0000 / 0000 — 2008 Volumes (AADT) / Capacity

Over Capacity (>1.0)

Near Capacity (0.8 to 1.0)

Network Road

Municipal Boundaries

County Boundary

Existing Ferry

Pamlico County

North Carolina

Prepared By The

North Carolina Department of Transportation
Transportation Planning Branch

In Cooperation With The
U.S. Department of Transportation
Federal Highway Administration

0 0.5 1 2 3 4 5 6 Miles

N W E S

Base map date: July 31, 2008

Refer to CTP document for more details

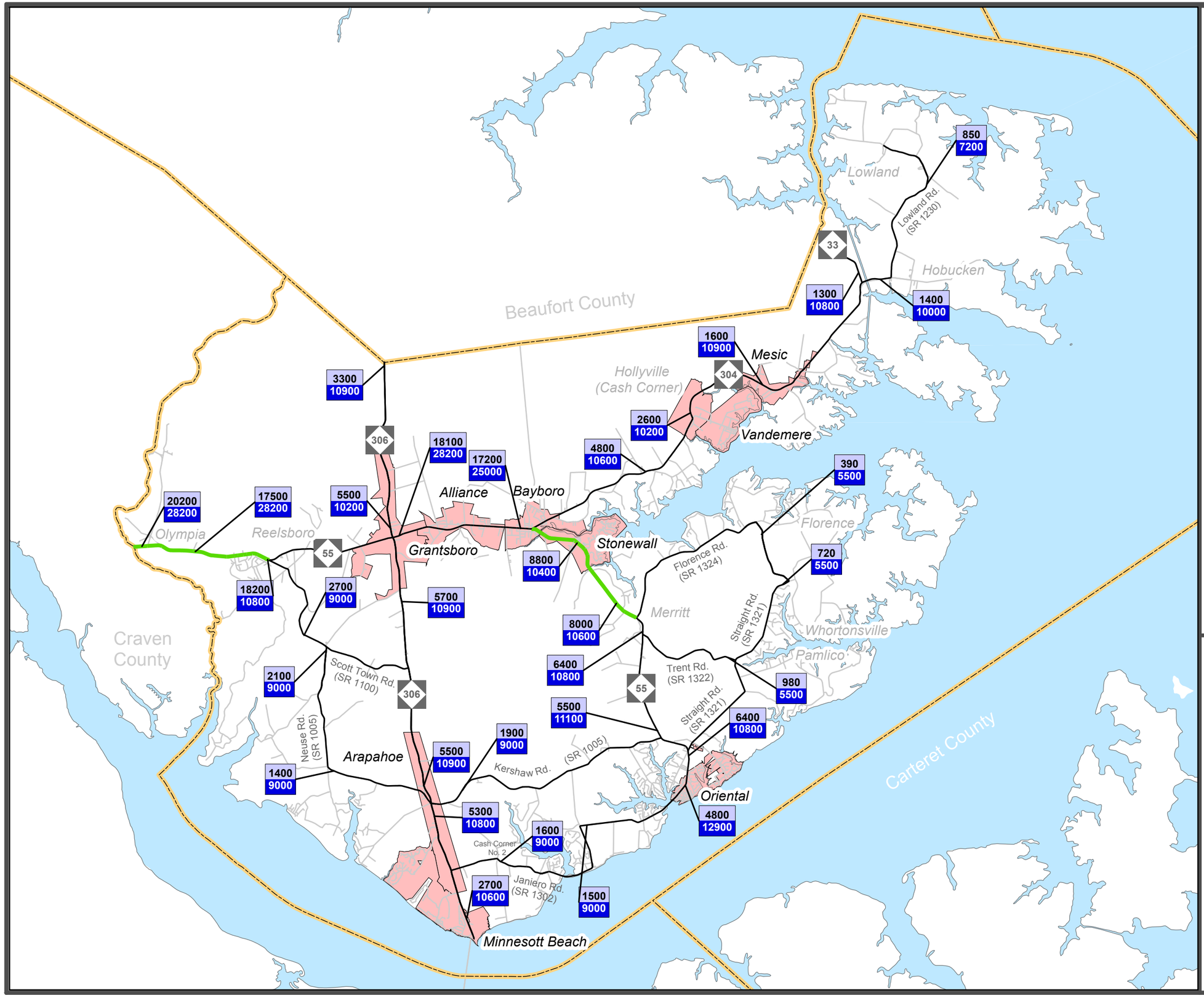


Figure 3

2035 Volumes and Capacity Deficiencies

Legend

0000 / 0000 — 2035 Volumes (AADT) / Capacity

Over Capacity (>1.0)

Near Capacity (0.8 to 1.0)

Network Road

Municipal Boundaries

County Boundary

Existing Ferry

Pamlico County

North Carolina

Prepared By The

North Carolina Department of Transportation
Transportation Planning Branch

In Cooperation With The
U.S. Department of Transportation
Federal Highway Administration

0 0.5 1 2 3 4 5 6 Miles

N W E S

Base map date: July 31, 2008

Refer to CTP document for more details

Figure 4

Crash Locations

Legend

County Boundary

Municipal Boundaries

Intersection Reference (Table 4, Appendix F)

Existing Ferry

Note:
-Crashes occured for the period June 30, 2006 through June 30, 2009

Pamlico County

North Carolina

Prepared By The

North Carolina Department of Transportation
Transportation Planning Branch

In Cooperation With The
U.S. Department of Transportation
Federal Highway Administration

0 0.5 1 2 3 4 5 6 Miles

N W E S

Base map date: July 31, 2008

Refer to CTP document for more details

Beaufort County

Craven County

Carteret County

Lowland

Lowland Rd. (SR 1230)

Hobucken

Mesic

Hollyville (Cash Corner)

Vandemere

Florence

Florence Rd. (SR 1324)

Stonewall

Merritt

Straight Rd. (SR 1321)

Whortonsville

Pamlico

Trent Rd. (SR 1322)

Straight Rd. (SR 1321)

Oriental

Kershaw Rd. (SR 1005)

Carteret County

Alliance

Bayboro

Grantsboro

Olympia

Reelsboro

Scott Town Rd. (SR 1100)

Neuse Rd. (SR 1005)

Arapahoe

Cash Corner No. 2

Janiero Rd. (SR 1302)

Minnesott Beach

33

304

306

55

306

55

1

2

3

4

5

Bridge Deficiency Assessment

Bridges are a vital and unique element of a highway system. They represent the highest unit investment of all elements of the system. Any inadequacy or deficiency in a bridge reduces the value of the total investment. A bridge presents the greatest opportunity of all potential highway failures for disruption of community welfare. 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. 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.

Eleven deficient bridges—nine structurally deficient and two functionally obsolete bridges- were identified within Pamlico County, and are illustrated in Appendix G, Table 5, Deficient Bridges.

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.

At this time, there are no existing or recommended rail transportation services available in Pamlico County. The Public Transportation and Rail Map for Pamlico County is presented on Figure 1, Sheet 3. See Appendix B for a more detailed description of each category.

Public Transportation

North Carolina's public transportation systems serve more than 50 million passengers each year. Five categories define North Carolina's public transportation: 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 planned fixed public transportation routes for Pamlico County is presented on Figure 1, Sheet 3. This information was taken from the Pamlico County Coordinated Human Service Transportation Plan, CPT-HSTP.

Public transportation services in Pamlico County are supplied by the Craven Area Rural Transit System (CARTS). CARTS also provides public transportation services to Craven County and Jones County. These three counties are contiguous.

The CARTS daily operation is as follows:

- CARTS began with a fleet of twenty-one vans, one bus and three sedans.
- Ten of the vans were modified to accommodate elderly and mobility impaired riders and four of those have wheelchair lifts.
- There are a total of 32 revenue vehicles in the fleet.
- New Bern in Craven County houses most of the health, human services and government facilities for the three contiguous counties.
- Routes are designed to bring clients into the New Bern area by 8:15 a.m. Return pick up starts around 2:30 p.m.
- These routes include communities such as:
    - Jasper, Cove City, Spring Garden, Bridgeton, James City, Havelock, Oriental, Lowlands, Comfort, Long Point, etc.
- CARTS is a demand/response system, which picks up every 20 minutes door to door within the New Bern area.
- Demand Response in the Pamlico area is available as drivers and schedule will allow.
- CARTS provides a "dial-a-ride" or “demand/response” type service to all residents of Pamlico County when there is space available.
- Human Service agency clients have priority over the general public passenger.

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.

Bicycle and 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.

The NCDOT envisions that all citizens of North Carolina and visitors to the state should be able to walk and bicycle safely and conveniently to their chosen destinations with reasonable access to roadways.

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

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

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

Inventories of existing and planned bicycle and pedestrian facilities for Pamlico County are presented in the Figure 1, Sheets 4 and 5. In Pamlico County, there are approximately 19 miles of State Bike Route No. 7—Ocracoke, and approximately 35 miles of Around Pamlico Sound: Bicycling North Carolina's Outer Banks Region. 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 prior to adoption of the CTP. Pamlico County has a Joint CAMA (Coastal Area Management Act) Land Use Plan dated November 2004, which was used for this CTP to meet the requirement and is illustrated in Figure 6, which shows the 2004 existing land use map for Pamlico County; Figure 7, which shows the future 2035 Comprehensive Land Use Plan for Pamlico County. Noticeable residential growth is expected in Pamlico County with the highest growth in the southwestern area of the county.

Land Use refers to the physical patterns of activities and functions within an area. The transportation demand along a particular road or for multi-modal facilities is related to the land uses adjacent to that facility and the intensity of land use affects the traffic patterns for multi-modal facilities. For example, a shopping center generates larger traffic volumes than a residential area. The spatial distribution of varying land uses is the predominant determinant of when, where, and why congestion occurs. The attraction between different land uses and their association with travel varies with the size, type, intensity, and spatial separation of each land use.

Commercial and residential traffic generation patterns have different peaks based on the time of day and the day of the week. The transportation planning process in Pamlico County involves residential, commercial, industrial and public land use distribution. The residential land use in Pamlico County has shown to be the largest increase in recent years, especially along the estuarine shoreline areas. This growth is expected to continue throughout the next 30-year planning period.

FOR TRANPORTATION PLANNING PURPOSES,

LAND USE IS DIVIDED INTO THE FOLLOWING CATEGORIES

- **Residential** – All land is devoted to the housing of people, with the exception of hotels and motels.

- **Commercial** – All land is 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** – All land is devoted to the manufacturing, storage, warehousing, and transportation of products.

- **Public** – All land is 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 Pamlico County help to determine the location and type of proposed transportation improvements.

FIGURE 5

Deficient Bridges

Legend

- Functionally Obsolete
- Structurally Deficient
- County Boundary
- Pamlico Roads
- Water Bodies

Pamlico County

North Carolina

Pepared By The
North Carolina Department of Transportation
Transportation Planning Branch

In Cooperation With The
U.S. Department of Transportation
Federal Highway Administration

0 1 2 4 6 Miles

N W E S

BASE MAP DATE: July 31, 2008

HYDE
BEAUFORT
CRAVEN
CARTERET
Lowland
Lowland Rd. (SR 1230)
Hobucken
33
Mesic
304
Hollyville (Cash Corner)
Vandemere
306
Alliance
Bayboro
Olympia
Reelsboro
55
Grantsboro
Stonewall
Florence
Florence Rd. (SR 1324)
Merritt
Straight Rd. (SR 1321)
Whortonsville
Pamlico
Trent Rd. (SR 1322)
Scott Town Rd. (SR 1100)
Neuse Rd. (SR 1005)
Arapahoe
Kershaw Rd. (SR 1005)
Oriental
Cash Corner No. 2
Janiero Rd. (SR 1302)
Minnesott Beach

Pamlico County
Joint CAMA Land Use Plan Update

Existing Land Use Map

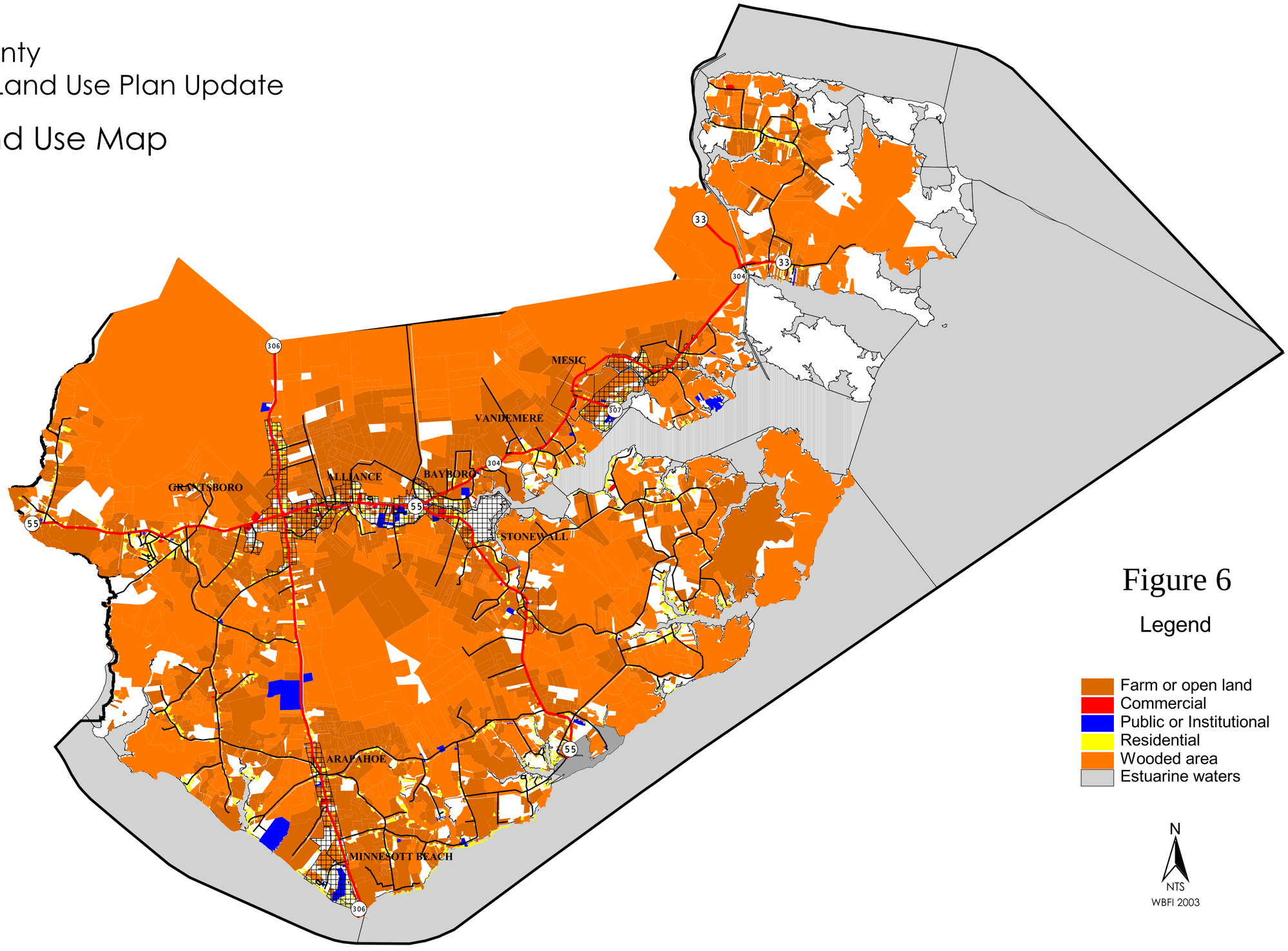


Figure 6

Legend

- Farm or open land
- Commercial
- Public or Institutional
- Residential
- Wooded area
- Estuarine waters

N
NTS
WBFI 2003

Pamlico County
Joint Land Use Plan

Future Land Use Map

Figure 7
Future Land Use Map

Pamlico County
Joint Land Use Plan

Estuarine Shoreline
AEC extends 75 feet landward from mean low water. Classified as Conservation.

Estuarine Shoreline
AEC extends 75 feet landward from mean low water. Classified as Conservation.

- Conservation
- Town Centers
- Community Centers
- Enterprise Corridor
- Rural with Services
- Agriculture/Rural Housing
- Proposed Sewer Lines
- Major Collectors
- Minor Collectors and Local Roads
- Oriental - not in planning area
- County Boundary

Consideration of Natural and Human Environment

In recent years, environmental considerations have come to the forefront of 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 II 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 table. Environmental features occurring within Pamlico County are shown in Figures 8 and 9.

Table 1 – Environmental Features

- Air Quality Pollution Discharge Points
- Ambient Water Quality Monitoring Sites
- Animal Operation Permits
- Artificial Marine Reefs
- Beach Access Sites
- Benthic Monitoring Results
- Bottom Sediment Sampling Sites
- Citizen Water Quality Monitoring Sites
- Closed Shellfish Harvesting Areas
- Coastal Reserves
- Conditionally Approved Shellfish Harvesting Areas
- Conservation Easements, US Fish & Wildlife Service
- Conservation Tax Credit Properties
- Discharger Coalitions' Monitoring Sites
- Ecosystem Enhancement Program (EEP) Local Watershed Plans, 2004
- Ecosystem Enhancement Program (EEP) Targeted Local Watersheds, 2004
- Federal Land Ownership
- Fish Community Sampling Sites
- Game Lands – Wildlife Resources Commission
- Groundwater Incidents, unverified
- Groundwater Recharge/Discharge
- Hazardous Substance Disposal Sites
- Hazardous Waste Facilities
- Heavy Metal & Organic-Rich Mud Pollutant Sample Sites
- Hurricane Storm Surge Inundation Areas
- Land Trust Conservation Properties
- Land Trust Priority Areas
- Lands Managed for Conservation & Open Space
- National Wetlands Inventory
- North Carolina Coastal Region Evaluation of Wetland Significance (NC-CREWS)
- Recreation Projects – Land and Water Conservation Fund
- Shellfish Strata
- Solid Waste Facilities
- State Parks
- Submersed Rooted Vasculars
- Trout Streams (DWQ)
- Water Supply Watersheds

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

- Anadromous Fish Spawning Areas
- Archaeological Sites
- Dedicated Nature Preserves and Registered Heritage Areas
- Fisheries Nursery Areas
- High Quality Water and Outstanding Resource Water Management Zones
- Historic National Register Districts
- Historic National Register Structures
- Historic Study List Districts
- Historic Study List Structures
- Macrosite Boundaries
- Managed Areas
- Megasite Boundaries
- National Heritage Element Occurrences
- National Pollutant Discharge Elimination System Sites (NPDES) – Major and Minor
- Public Water Supply Water Sources
- Significant Aquatic Endangered Species Habitats
- Significant Natural Heritage Areas
- Surface Water Intakes
- Water Distribution Systems – Water Treatment Plants
- Well Ground Water Intakes

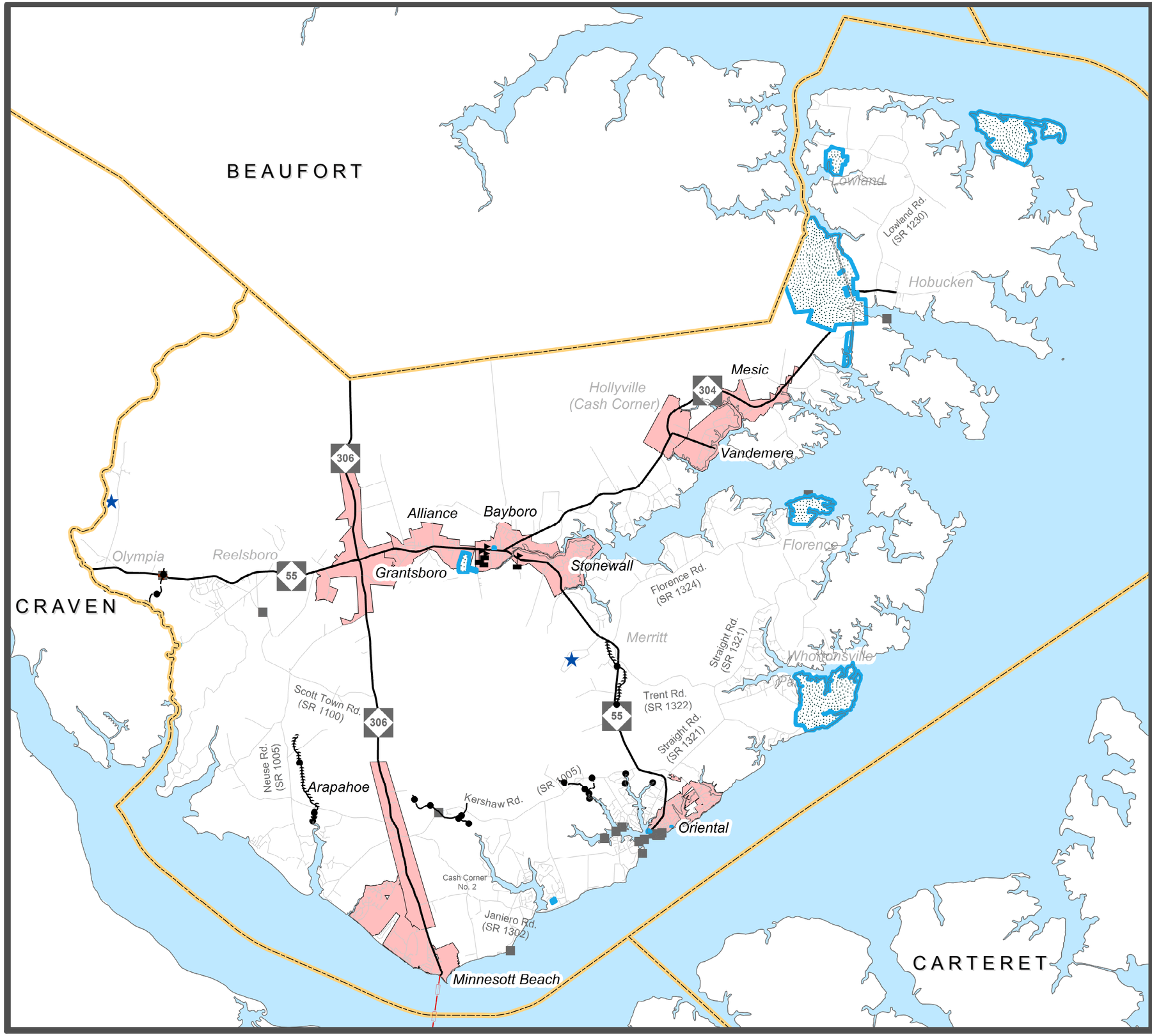


Figure 8

Environmental Features I

Legend

- Public Schools
- Lands Managed for Conservation
- AnadromousFishSpawningAreas
- Fish Community Sampling Sites
- Animal Operation Permits
- Benthic Monitoring Results
- Hydrology

N
W E
S

0 2 4 6 8 Miles

Existing Ferry

Pamlico County

North Carolina

Prepared By The

North Carolina Department of Transportation
Transportation Planning Branch

In Cooperation With The
U.S. Department of Transportation
Federal Highway Administration

Base map date: July 31, 2008

Refer to CTP document for more details

Figure 9

Environmental Features II

Legend

- County Boundary
- Ambient Water Quality Monitoring Sites
- Groundwater Recharge Areas
- High Quality Outstanding Resource Waters
- Wetlands

N
W E
S

Miles
0 2 4 6 8

Existing Ferry

Pamlico County

North Carolina

Prepared By The

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In Cooperation With The
U.S. Department of Transportation
Federal Highway Administration

Base map date: July 31, 2008

Refer to CTP document for more details

BEAUFORT

CRAVEN

CARTERET

Lowland

Lowland Rd (SR 1230)

Hobucken

Mesic

Hollyville (Cash Corner)

Vandemere

Florence

Florence Rd (SR 1324)

Stonewall

Alliance

Bayboro

Olympia

Reelsboro

Grantsboro

Merritt

Whortonsville

Pamlico

Trent Rd (SR 1322)

Oriental

Arapahoe

Minnesott Beach

Cash Corner Rd

Janiro Rd (SR 1302)

33

304

306

55

IV. Public Involvement

Public Drop in Workshop held at the Pamlico County Courthouse in Bayboro on September 17, 2009.

Overview

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.

Plan Development

A meeting was held with the Pamlico County Board of Commissioners on December 2007 to formally initiate the study, provide an overview of the transportation planning process, and to gather input on their transportation needs.

Throughout the course of the study, the Transportation Planning Branch (TPB) met with Pamlico transportation committee, which included a representative from each municipality and county staff, to provide plan information, to discuss population and employment projections, and to discuss the proposed recommendations.

Two public drop-in sessions were held in Pamlico County to present the proposed Comprehensive Transportation Plan to the public and solicit comments. The first meeting was held on September 17, 2009, from 3:00 p.m. to 5:00 p.m. at the Pamlico County Courthouse; the second meeting was also held at the Pamlico County Courthouse on September 17, 2009, from 6:00 p.m. to 8:00 p.m. Each session was publicized in *The Pamlico News.* Comment forms were submitted during the session held on September 2009.

A public hearing was held on October 19, 2009 during the Pamlico 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 unanimously during the Board of commissioner's following meeting on November 2, 2009.

The Down East RPO voted unanimously to endorse the CTP on December 1, 2009. The North Carolina Board of Transportation voted to mutually adopt the Pamlico County CTP on March 4, 2010

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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

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

Board of Transportation Member

Mr. Hugh Overholt
Ward and Smith
1001 College Court
New Bern, NC 28562
(252) 672-5462
hoverholt@ncdot.gov 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.
Mr. C.E. (Neil) Lassiter, Jr., PE
105 Pactolus Hwy. (NC 33)
Greenville, NC 27835
(252) 830-3490
nlassiter@ncdot.gov http://www.ncdot.gov/doh/operations/division2/

Division Project Manager

Contact the Division Project Manager with questions concerning transportation projects within each Division.
Ms. Betty Ann Caldwell, PE
105 Pactolus Hwy. (NC 33)
Greenville, NC 27835
(252) 830-3490
bacaldwell@ncdot.gov

Division Construction Engineer

Contact the Division Construction Engineer for information concerning major roadway improvements under construction.
Mr. Ed Eatmon, PE
105 Pactolus Hwy. (NC 33)
Greenville, NC 27835
(252) 830-3490
beatmon@ncdot.gov

Division Traffic Engineer

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

Mr. Steven J. Hamilton, PE, CPM
1712 North Memorial Dr
Greenville, NC 27835
(252) 830-3490
shamilton@ncdot.gov

Division Operations Engineer

Contact the Division Operations Engineer for information concerning facility operations.

Mr. Dwayne Alligood, PE
105 Pactolus Hwy. (NC 33)
Greenville, NC 27835
(252) 830-3490
dalligood@ncdot.gov

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.

Mr. John Rouse, PE
105 Pactolus Hwy. (NC 33)
Greenville, NC 27835
(252) 830-3490
jrouse@ncdot.gov

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.

Mr. Reed Smith, PE
209 South Glenburnie Road
New Bern, NC 28560
(252) 514-4716
rsmith@ncdot.gov

Transportation Planning Branch (TPB)

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

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

Down East Rural Planning Organization (DERPO)

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

Mr. Robert Will, AICP
P.O. Box 1717
New Bern, NC 28563-1717
(252) 638-3185 Ext. 3002
rwill@eccog.org http://www.eccog.org/document.asp?document_name=rpo/derpo

Strategic Planning Office

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

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

Project Development & Environmental Analysis Branch (PDEA)

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

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

Secondary Roads Office

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

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

Program Development Branch

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

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

Public Transportation Division

Contact the Public Transportation Division for information public transit systems.

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

Rail Division

Contact the Rail Division for rail information throughout the state.

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

Division of Bicycle and Pedestrian Transportation

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

1552 Mail Service Center
Raleigh, NC 27699-1552
(919) 807-0777
http://www.ncdot.gov/transit/bicycle/

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 1,000 ft or for 350 ft plus 650 ft 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 2,000 ft; 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.
- **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 45 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 lanes 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 public 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 the 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 bicycle transportation (may also accommodate pedestrians, e.g. greenways) and is physically separated from a highway facility usually on a separate right-of-way.
- **Off-Road Needs Improvement** – A facility that accommodate bicycle transportation (may also accommodate pedestrians, e.g. greenways) and is physically separated from a highway facility usually on a separate right-of-way that will not adequately serve future bicycle needs. Improvements may include but are not limited to, widening, paving (not re-paving), and improved horizontal or vertical alignment.
- **Off-Road Recommended** – A facility needed to accommodate bicycle transportation (may also accommodate pedestrians, e.g. greenways) and is physically separated from a highway facility usually on a separate right-of-way. This may also include greenway segments that do not necessarily serve a transportation function but intersect recommended facilities on the highway map or public transportation and rail map.
- **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

This appendix includes a detailed tabulation of all streets identified as elements of the Pamlico County Comprehensive Transportation Plan. The table includes a description of the roads by sections, as well as the length, cross section, and right-of-way for each section. Also included is the existing and projected average daily traffic volumes, roadway capacity, and the recommended ultimate lane configuration. Due to space constraints, these recommended cross sections are given in the form of an alphabetic code. A detailed description of each of these codes and an illustrative figure for each can be found in Appendix D.

Assumptions/ Notes:

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

- **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.

- **ROW:** The estimated existing right-of-way is based on the pavement condition survey files provided by NCDOT Pavement Management Unit. These right-of-way amounts are approximate and may vary.

- **Existing and Proposed Capacity:** The estimated capacities are given in vehicles per day (vpd) based on LOS D for existing facilities and LOS C for new facilities. These capacity estimates were developed using NCDOT LOS 2.0 software, developed by the Institute for Transportation and Education (ITRE) at NCSU, as documented in Chapter III. The Proposed Capacity is shown in bold if it does not meet or exceed the 2035 AADT with CTP.

- **Existing and Proposed AADT** (Annual Average Daily Traffic) volumes, given in vehicles per day (vpd), are estimates only based on a systems-level analysis. The 2035 AADT is an estimate of the volume in 2035 with all proposed CTP improvements assumed to be in place. For additional information about the assumptions and techniques used to develop the AADT volume estimates, refer to Chapter III.

- **Rec. (Recommended) 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 Investment Network (NCMIN). Abbreviations are Sta= statewide tier, Reg= regional tier, Sub= subregional tier.

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

Table 3 - Pamlico County CTP Inventory and Recommendations
Highway

Local ID	Facility	Section (From - To)	Jurisdiction	Distance (mi)	2008 Existing System						2035 Proposed System				CTP Classification	Other Modes
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing AADT Capacity (vpd)	2008 AADT	2035 AADT	Proposed AADT Capacity (vpd)	Rec. Cross-Section	ROW (ft)		
					(ft)	lanes										
PAML0001-H	NC 55	Craven Co. Line – Pivet Rd	Pamlico County	0.21	60	5	100	55	28200	11600	20200	28200	ADQ	100	Maj	T
		Pivet Rd – Deep Run Dr		1.49	48	4	100	55	28200	10100	17500	28200	ADQ	100	Maj	T
		Deep Run Dr – SR 1005		2.82	60	5	100	55	28200	10500	18200	28200	ADQ	100	Maj	T
		SR 1005 – NC 306		3.79	55	5	100	35					ADQ	100	Maj	T,B
		NC 306 – Camping Rd		0.17	55	5	100	35	28200	10400	18100	28200	ADQ	100	Maj	T,B
		Camping Rd – 4th St		3.05	33	3	80	35	22000	9900	17200	22000	ADQ	80	Maj	T,B,P
		4th St – Jackson St		2.73	23	2	80	35	10400	5100	8800	10400	ADQ	80	Maj	T
		Jackson St – Alligator Loop Rd		2.13	23	2	60	45	10600	4600	8000	10600	ADQ	60	Maj	T
		Alligator Loop Rd – Trent Rd		1.22	24	2	60	45	10800	3700	6400	10800	ADQ	60	Maj	T
		Trent Rd – Kershaw Rd		2.82	23	2	60	45	11000	3200	5500	11000	ADQ	60	Maj	T
		Kershaw Rd – Straight Rd		1.37	23	2	60	45	10800	3700	6400	10800	ADQ	60	Maj	T
		Straight Rd – Mildred St		0.95	22	2	60	35	12900	2800	4800	12900	ADQ	60	Maj	T,P
		Mildred St – Begin of Hwy 55 Bridge		0.53	24	2	60	35					ADQ	60	Maj	T
PAML0002-H	NC 306	S Shore Neuse - N Shore Neuse Ann Dr		0.75	20	2	60	35	10600	1600	2700	12000	K	60	Maj	
		N Shore Neuse – Blount Rd		2.84	21	2	60	35	10800	3100	5300	12000	K	60	Maj	
		Blount Rd – Hardison Field Rd		1.43	20	2	100	35	10900	3200	5500	12000	K	60	Maj	P
		Hardison Field Rd – Scotts Store Rd		5.04	22	2	100	45	10900	3300	5700	12000	K	100	Maj	T,B
		Scotts Store Rd – NC 55		2.01	22	2	60	35				12000	K	100	Maj	T,B
		NC 55 – Lucynda Ave		0.37	22	2	60	35	10200	3200	5500	12000	K	60	Maj	B
		Lucynda Ave – Beaufort Co		4.97	21	2	60	45	10900	1900	3300	12000	K	60	Maj	B
PAML0003-H	NC 304	NC 55 – Bridge		0.20	22	2	60	35					ADQ	60	Min	T
		Bridge – Chinchilla Dr		0.44	23	2	60	35					ADQ	60	Min	T
		Chinchilla Dr – Lynchs Beach Loop Rd		3.42	22	2	60	45	10600	2800	4800	12000	K	60	Min	T
		Lynchs Beach Loop Rd – Pennsylvania Ave		0.87	22	2	100	35	10200	1500	2600	12800	K	100	Min	T
		Pennsylvania Ave – Half Moon Rd		3.15	22	2	100	35	10900	920	1600	10900	ADQ	100	Min	T
		Half Moon Rd – Draw Bride (Hobucken)		5.17	22	2	100	45					ADQ	100	Min	T
		Draw Bridge (Hobucken) – Lowland Rd		0.68	22	2	100	45	10000	840	1400	10000	ADQ	100	Min	T

Pamlico County CTP Inventory and Recommendations
Highway

Local ID	Facility	Section (From - To)	Jurisdiction	Distance (mi)	2008 Existing System						2035 Proposed System				CTP Classification	Tier	Other Modes
					Cross-Section		ROW (ft)	Speed Limit (mph)	Existing AADT Capacity (vpd)	2008 AADT	2035 AADT	Proposed AADT Capacity (vpd)	Rec. Cross-Section	ROW (ft)			
					(ft)	lanes											
Local ID-PAML0003H Facility: NC 33			Pamlico County														
		NC 304 - Beaufort Co		2.10	18	2	100	45	10800	900	1300	12800	K	100	Min	Reg	
Secondary Routes																	
	SR1005	NC 55 - ECL Arapahoe		7.50	18	2	60	45	9000	1300	1900	12600	K	60	Min	Sub	B
		ECL Arapahoe - NC 306		0.15	18	2	60	35				12600	K	60	Min	Sub	B
		NC 306 - WCL Arapahoe		0.45	20	2	60	35				12600	K	60	Min	Sub	B
		WCL Arapahoe – S Goose Creek Rd		2.64	20	2	60	45	9000	950	1400	12600	K	60	Min	Sub	
		S Goose Creek Rd – Scott Town Rd		3.65	20	2	90	45	9000	1400	2100	12600	K	90	Min	Sub	
		Scott Town Rd – SR 1105		0.38	20	2	80	45	9000	1800	2700	12600	K	80	Min	Sub	
		SR 1105 – NC 55		3.33	20	2	80	45				12600	K	80	Min	Sub	
Facility: SR 1100																	
		SR 1005 - NC 55		2.65	20	2	60	45				12600	K	60	Min	Sub	B
Facility: SR 1230																	
		NC 304 – Middle Prong Rd		3.49	20	2	60	45				12600	K	60	Min	Sub	
		Middle Prong Rd - End		1.87	20	2	60	45	7200	490	850	12600	K	60	Min	Sub	
Facility: SR 1302																	
		Oriental Rd – Don Lee Rd		4.30	20	2	60	45	9000	1100	1600	12600	K	60	Min	Sub	
		Don Lee Rd – NC 306		2.60	20	2	60	45				12600	K	60	Min	Sub	
Facility: SR 1308																	
		Hwy 55 Bridge - 1.49 Mi. West		1.30	22	2	60	45	9000	1000	1500	12600	K	60	Min	Sub	
		1.49 Mi. West – Janiero Rd		0.36	22	2	60	45				12600	K	60	Min	Sub	
Facility: SR 1321																	
		SR 1329 – 0.52 Mi. West		0.52	20	2	60	45	5500	480	720	12600	K	60	Min	Sub	B
		0.52 Mi. West – NC 55		6.50	16	2	60	45				12600	K	60	Min	Sub	
Facility: SR 1322																	
		SR 1321 - NC 55		3.30	17	2	60	45	5500	650	980	12600	K	60	Min	Sub	B
Facility: SR 1324																	
		NC 55 – SR 1329		5.13	20	2	60	45				12600	K	60	Min	Sub	
Facility: SR 1329																	
		SR 1324 – SR 1321		2.16	18	2	60	45	5500	260	390	12600	K	60	Min	Sub	

Pamlico County CTP Public Transportation

Local ID	Facility/ Route	Section (From - To)	Speed Limit (mph)	Distance (mi)	Existing System Type	Proposed System Type	Other Modes
PAML 0001-T	**NC 55**	Connect Craven County and the Town of Oriental through NC 55.	45 to 55	34.6	N/A	Fixed-route mini-van Park-and-Ride	H, B, P
PAML 0003-T	**NC 304**	1. Connect Town of Bayboro through NC 304 intersecting and following NC 307 into the Town of Vandemere 2. Connect Town of Vandemere and the Town of Hobucken through NC 33-304.	45 to 55	13.9	N/A	Fixed-route mini-van Park-and-Ride	H, B
PAML 0002-T	**NC 306**	Connect Town of Bayboro and the Town of Arapahoe through NC 55 and NC 306.	45 to 55	8.0	N/A	Fixed-route mini-van Park-and-Ride	H, B, P

Pamlico County CTP Bicycle and Pedestrian

BICYCLE

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System Cross-Section (ft)	Existing System Cross-Section lanes	Proposed System Cross-Section Type	Other Modes
PAML0001-B	**NC 55**	Kershaw Road (SR 1005) – 2nd St in Bayboro	8.3	Concurrent with NC 55 – For further information, see CTP Highway Inventory and Recommendations Table.			H, T
PAML0002-B	**NC 306**	Kershaw Road (SR 1005) – Beaufort County Line	12.3	Concurrent with NC 306 – For further information, see CTP Highway Inventory and Recommendations Table.			H, T
PAML0003-B	**Path: SR 1322, SR 1329, SR 1321**	NC 55 – NC 55	7.2	Concurrent with path: Trent Road (SR 1322), - Sanders Road (SR 1329), and Straight Road (SR 1321) – For further information, see CTP Highway Inventory and Recommendations Table.			H
PAML0004-B	**SR 1100**	NC 306 – Neuse Road (SR 1005)	2.8	Concurrent with Scott Town Road (SR 1100) – For further information, see CTP Highway Inventory and Recommendations Table.			H
PAML0005-B	**SR 1005**	NC 55 – NC 306	8.9	Concurrent with Kershaw Road (SR 1005) – For further information, see CTP Highway Inventory and Recommendations Table.			H
PAML0006-B	**SR 1349**	NC 55 – Topsail Drive	1.6	Concurrent with White Farm Road (SR 1349) – For further information, see CTP Highway Inventory and Recommendations Table.			H

Pamlico County CTP Bicycle and Pedestrian

PEDESTRIAN

Local ID	Facility/ Route	Section (From - To)	Distance (mi)	Existing System		Proposed System		Other Modes
				Type	Side of Street	Type	Side of Street	
PAML0001-P	**NC 55 (Grantsboro)**	Proposed along NC 55 will extend through the existing sidewalk starting west of the intersection between NC 306 and NC 55 through Main Street in Alliance and will reconnect with existing sidewalk along NC 55 in Bayboro.	1.43	Sidewalks	Both Sides	Sidewalks	South	H, T, B
PAML0002-P	**NC 306 (Grantsboro)**	Proposed going south from Hopkins Road and connecting with the existing sidewalk at the intersection with NC 55; thus, completing the quadrant on NC 55 and NC 306.	0.12	Sidewalks	One Side	Sidewalks	East	H, T, B
PAML0002-P	**NC 306 (Arapahoe)**	At the five-point intersection, proposed sidewalks will extend radially for approximately 100 feet on NC 306 in both directions, and on SR 1005, SR 1117 and SR 1005 from the intersections with NC 306.	0.77	Non-Existent	N/A	Sidewalks	Radially	H, T, B
PAML0001-P	**NC 55 (Oriental)**	Proposed along NC 55 from 701 Broad Street at the intersection with Church Street to 1403 Broad Street.	0.31	Sidewalks	One Side	Sidewalks	East	T, B

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.
- roadways where an urban curb and gutter cross-section may be locally desirable because of urban development or redevelopment.
- Roadways, which may need to accommodate an additional transportation mode.

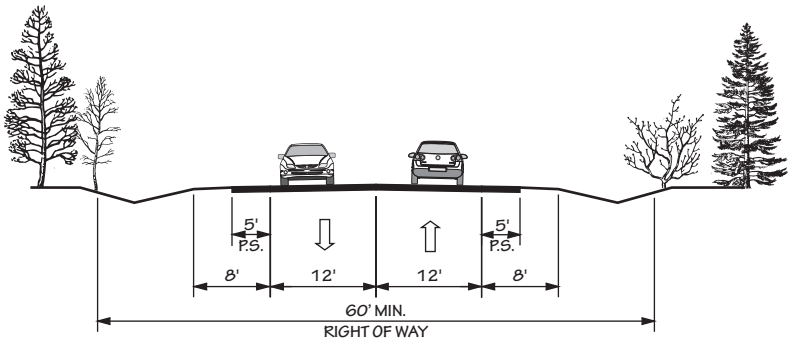
FIGURE 10

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

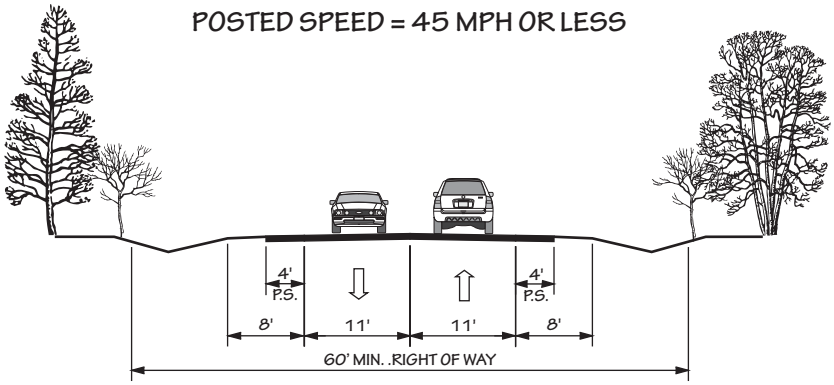
2 A

WIDE PAVED SHOULDERS
POSTED SPEED = 55 MPH



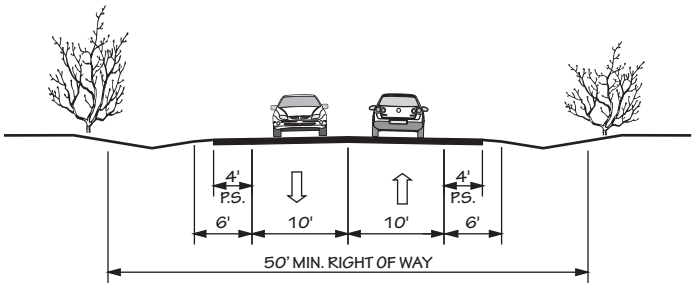
2 B

WIDE PAVED SHOULDERS
POSTED SPEED = 45 MPH OR LESS



2 C

WIDE PAVED SHOULDERS
POSTED SPEED = 35 MPH OR LESS



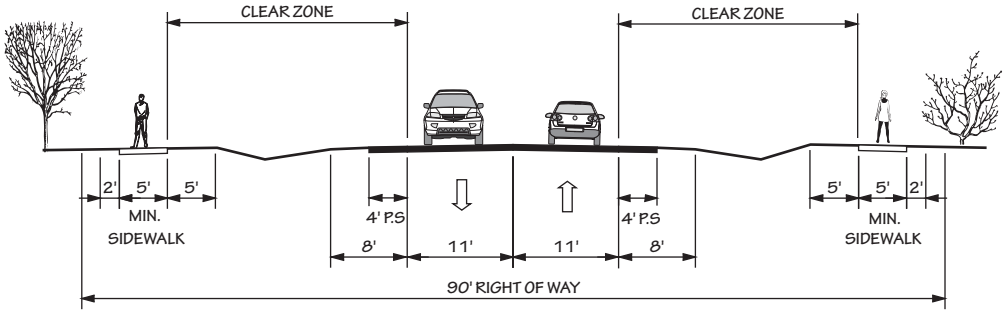
Revised December 7, 2010

TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

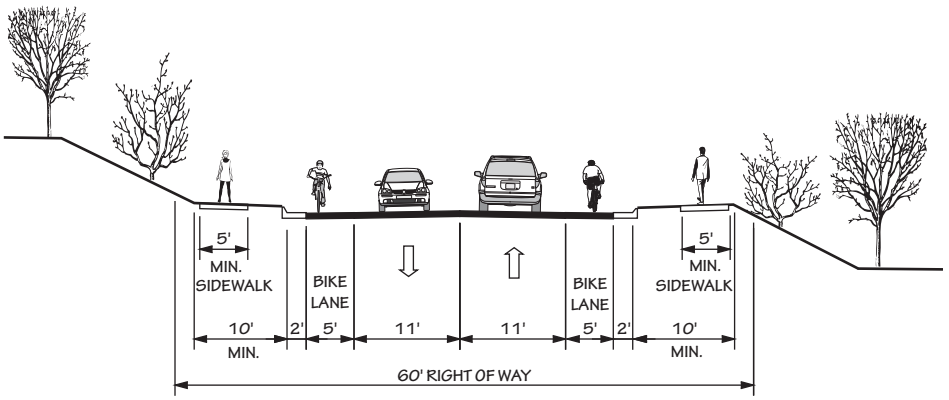
2 D

SIDEWALK PLACEMENT BEHIND A ROADWAY DITCH



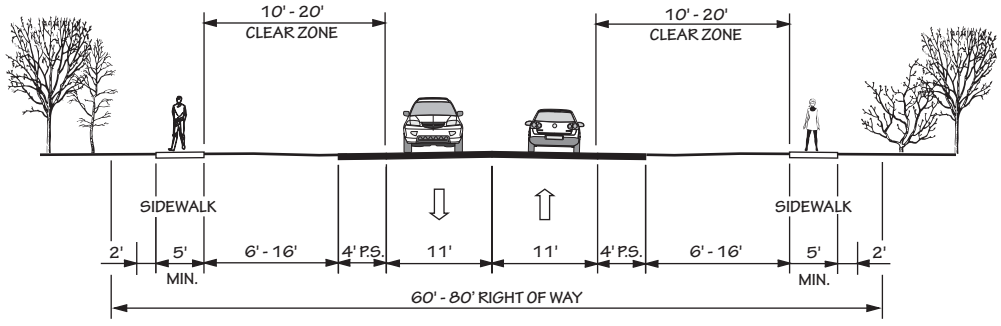
2 E

CURB AND GUTTER
WITH BIKE LANES AND SIDEWALKS



2 F

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

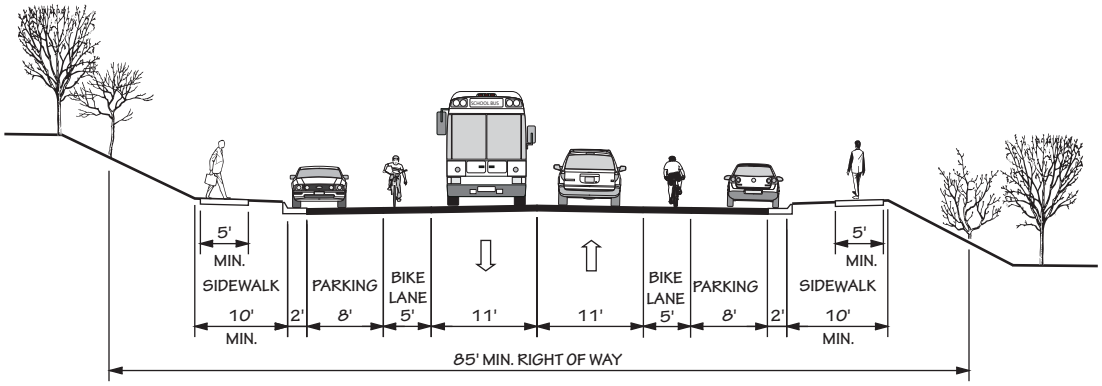


TYPICAL HIGHWAY CROSS SECTIONS

2 LANES

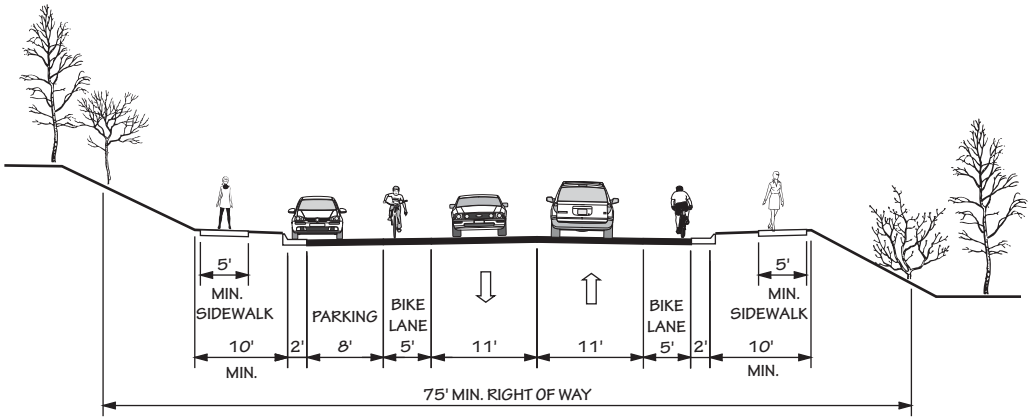
2 G

CURB & GUTTER - PARKING ON EACH SIDE



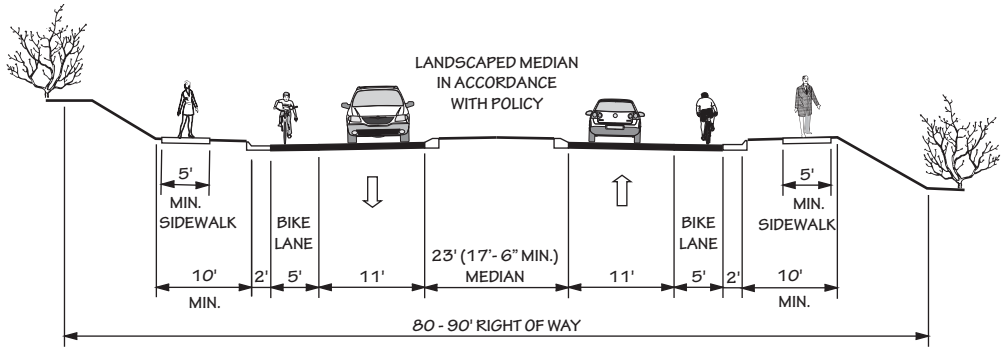
2 H

CURB & GUTTER - PARKING ON ONE SIDE



2 I

RAISED MEDIAN WITH CURB & GUTTER

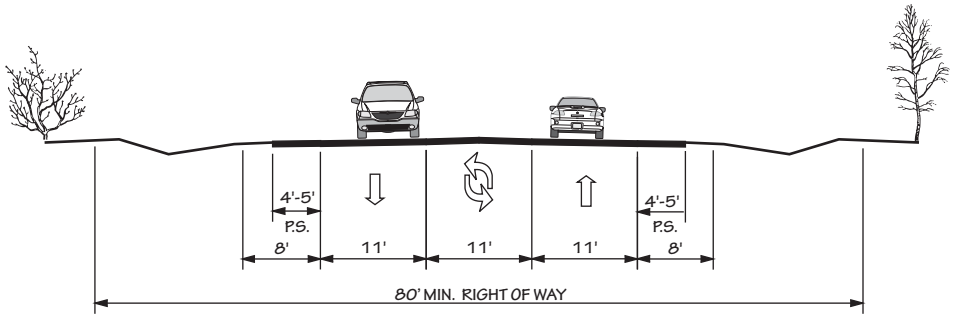


TYPICAL HIGHWAY CROSS SECTIONS

3 LANES

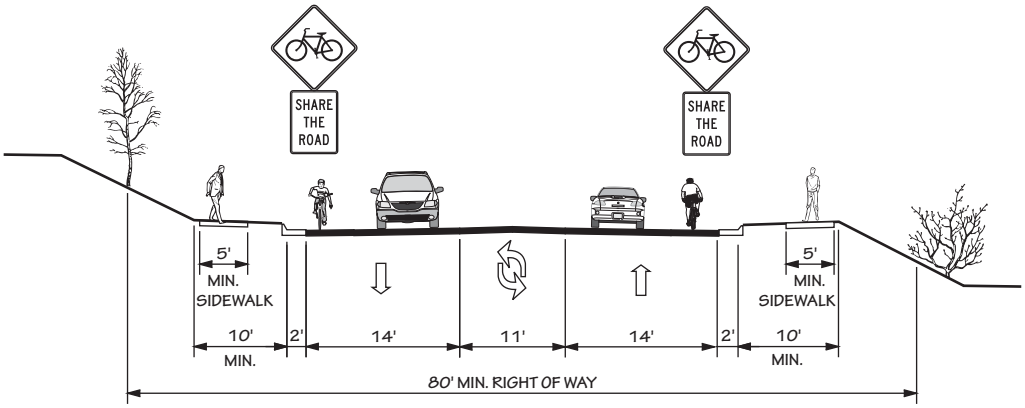
3 A

WIDE PAVED SHOULDERS



3 B

CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



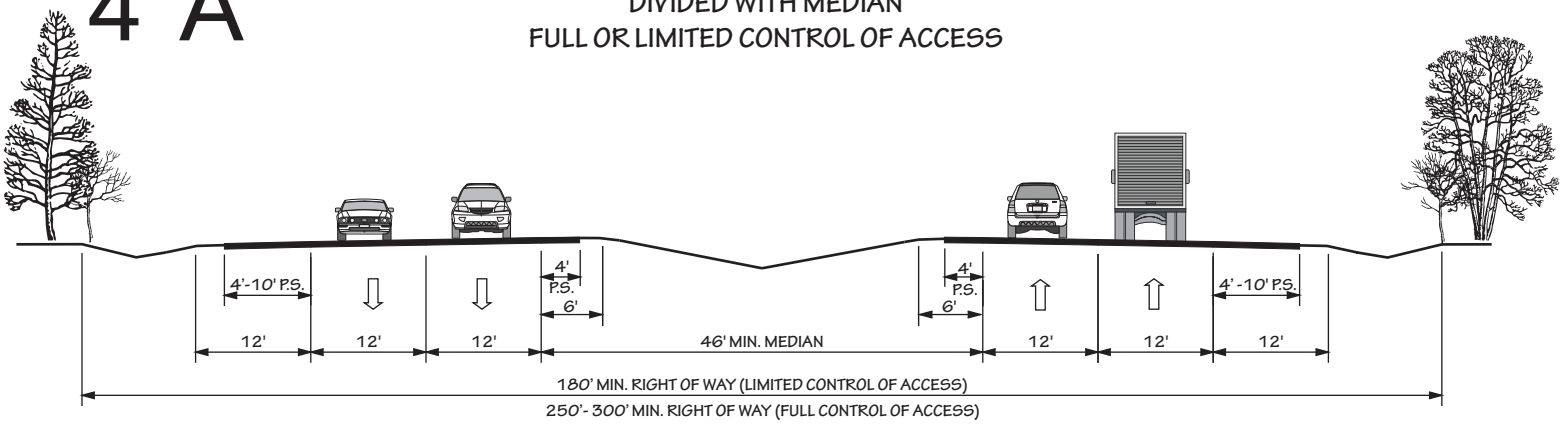
Revised December 7, 2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

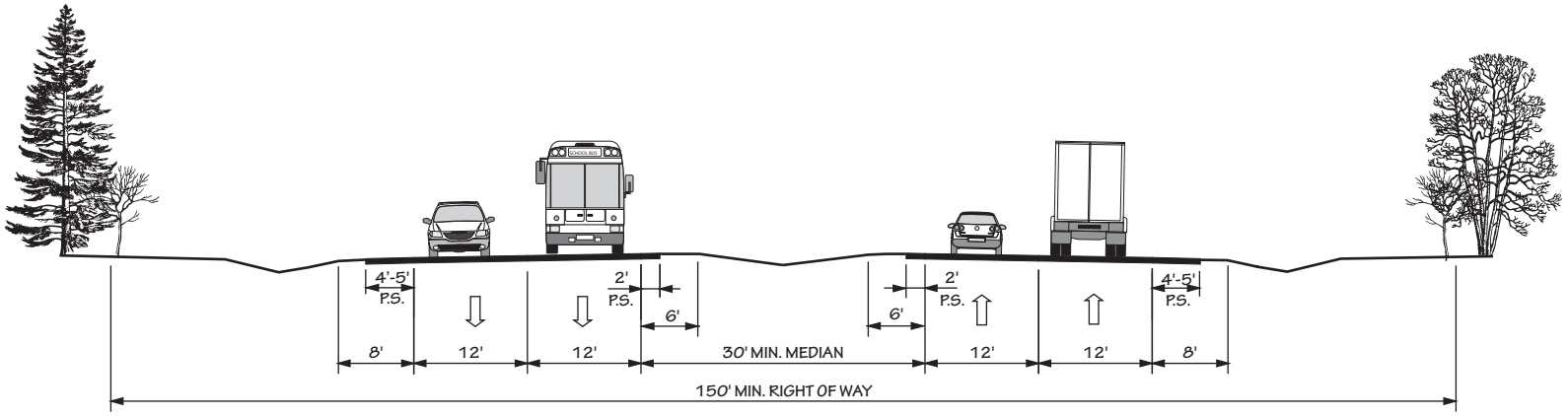
4 A

DIVIDED WITH MEDIAN
FULL OR LIMITED CONTROL OF ACCESS



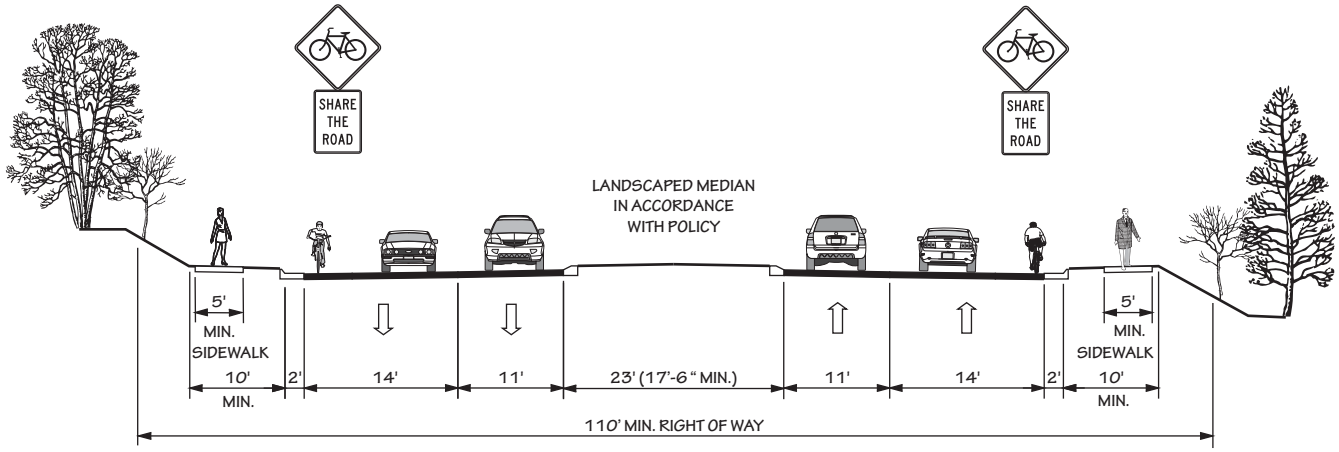
4 B

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



4 C

RAISED MEDIAN WITH WIDE OUTSIDE LANES AND SIDEWALKS



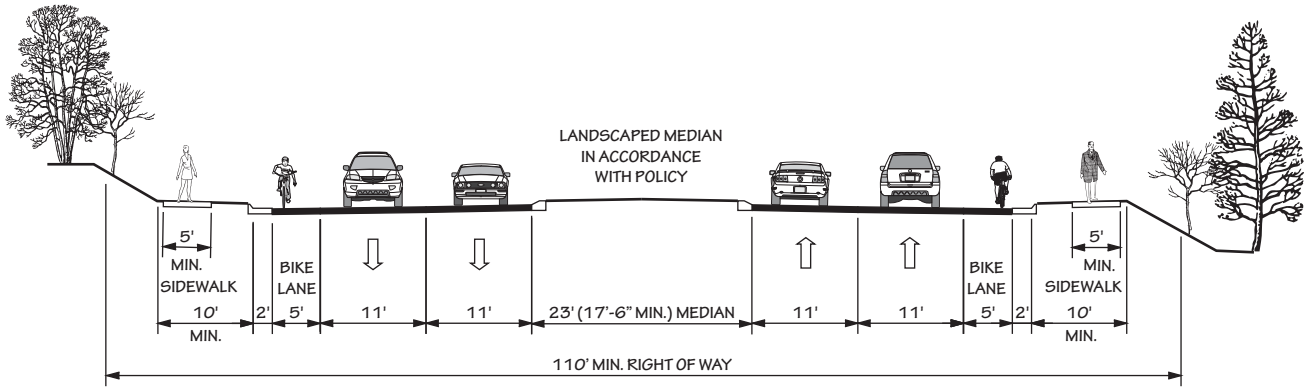
Revised December 7, 2010

TYPICAL HIGHWAY CROSS SECTIONS

4 LANES

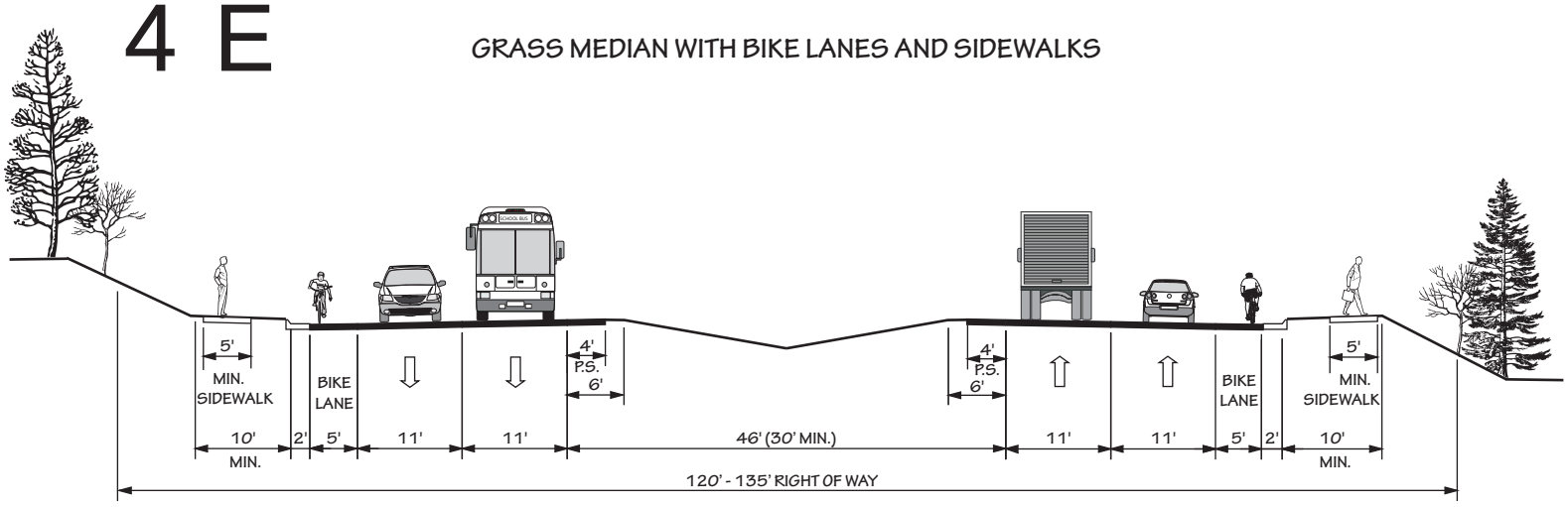
4 D

RAISED MEDIAN - CURB & GUTTER WITH BIKE LANES AND SIDEWALKS



4 E

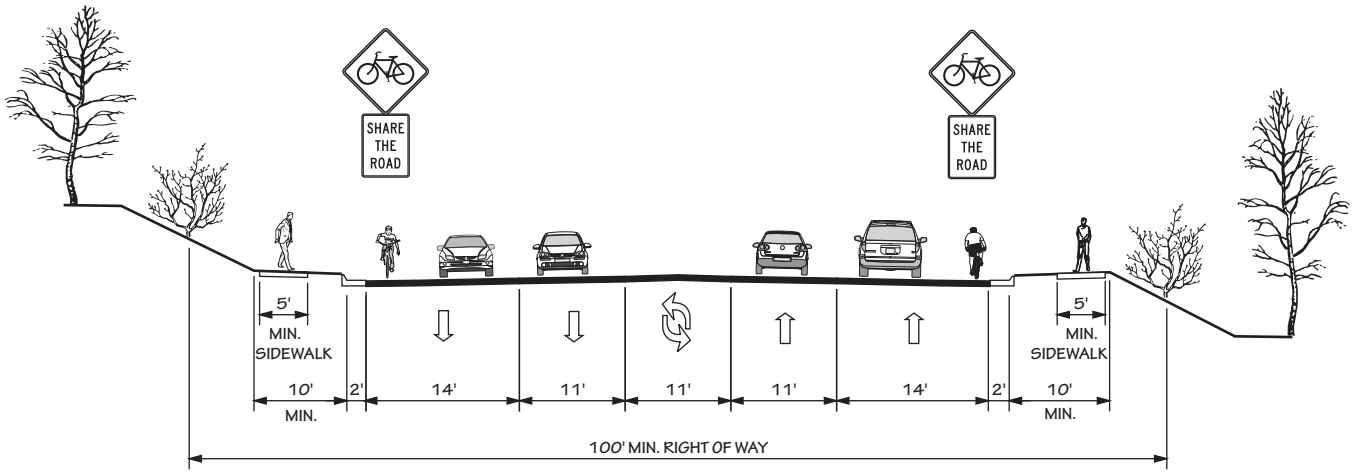
GRASS MEDIAN WITH BIKE LANES AND SIDEWALKS



5 LANES

5 A

WIDE OUTSIDE LANES

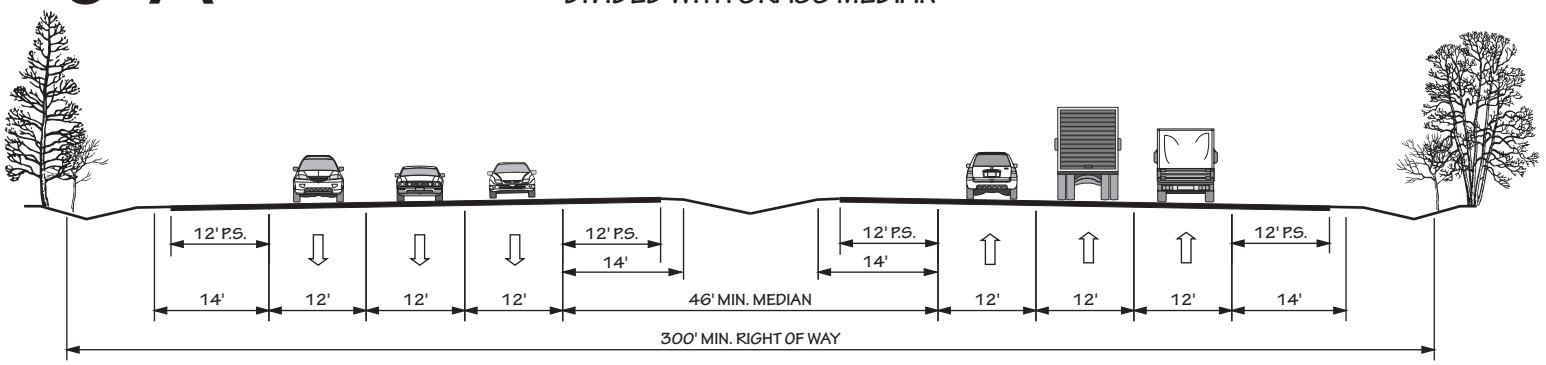


TYPICAL HIGHWAY CROSS SECTIONS

6 LANES

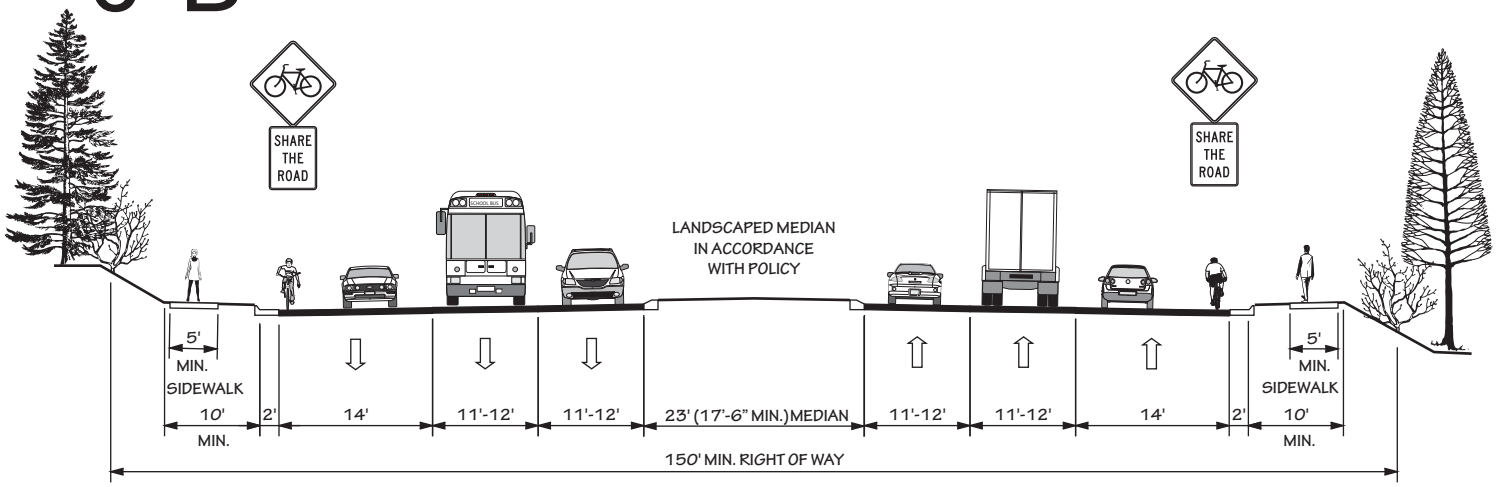
6 A

DIVIDED WITH GRASS MEDIAN



6 B

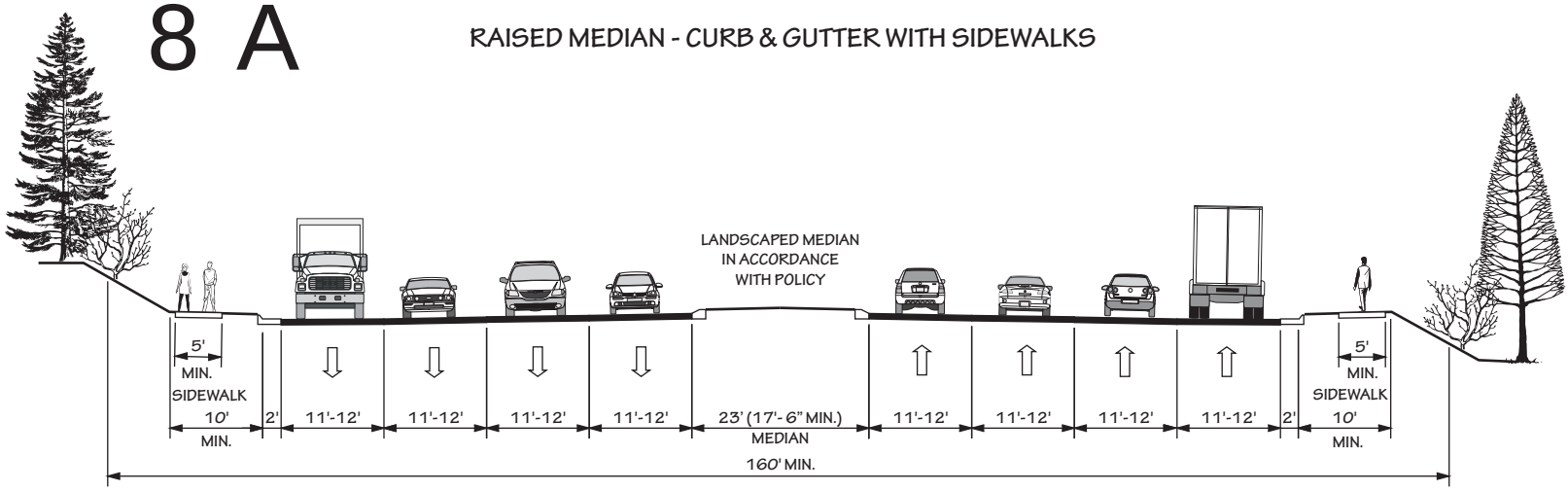
RAISED MEDIAN - CURB & GUTTER WITH WIDE OUTSIDE LANES AND SIDEWALKS



8 LANES

8 A

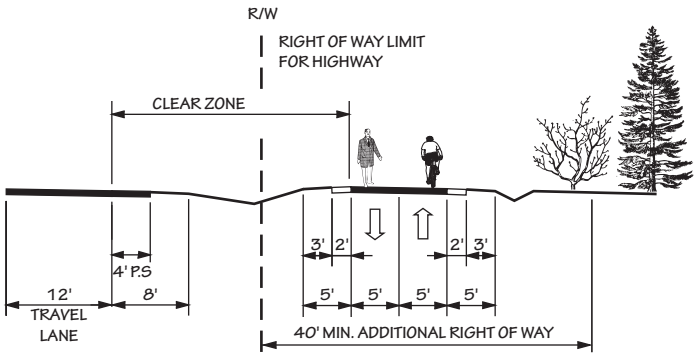
RAISED MEDIAN - CURB & GUTTER WITH SIDEWALKS



TYPICAL MULTI - USE PATH

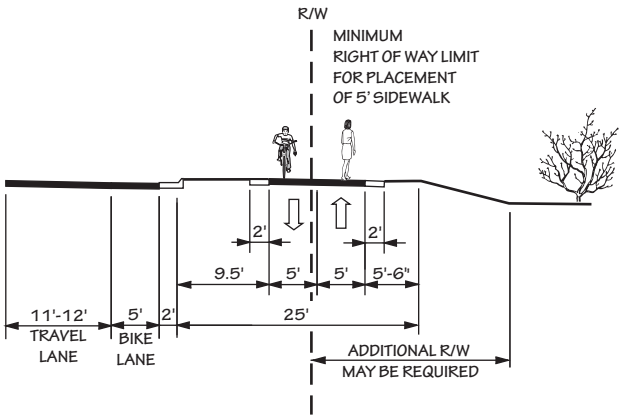
MULTI - USE PATH
ADJACENT TO RIGHT OF WAY OR SEPARATE PATHWAY

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 11.

- **LOS A**: Describes primarily free flow conditions. The motorist experiences a high level of physical and psychological comfort. The effects of minor incidents of breakdown are easily absorbed. Even at the maximum density, the average spacing between vehicles is about 528 feet, 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 feet, 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 feet, 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 feet, or 9 car lengths.
- **LOS E**: Describes operation at capacity. Operations at this level are extremely unstable, because there are virtually no usable gaps in the traffic stream. Any disruption to the traffic stream, such as a vehicle entering from a ramp, or changing lanes, requires the following vehicles to give way to admit the vehicle. This can establish a disruption wave that propagates through the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate any disruption. Any incident can be expected to produce a serious breakdown with extensive queuing. Vehicles are spaced at approximately 6 car lengths, leaving little room to maneuver.
- **LOS F**: Describes forced or breakdown flow. Such conditions generally exist within queues forming behind breakdown points.

Figure 11 - Level of Service Illustrations

Level of Service A
Driver Comfort: High
Maximum Density:
12 passenger cars per mile per lane

Level of Service B
Driver Comfort: High
Maximum Density:
20 passenger cars per mile per lane

Level of Service C
Driver Comfort: Some Tension
Maximum Density:
30 passenger cars per mile per lane

Level of Service D
Driver Comfort: Poor
Maximum Density:
42 passenger cars per mile per lane

Level of Service E
Driver Comfort: Extremely Poor
Maximum Density:
67 passenger cars per mile per lane

Level of Service F
Driver Comfort: The Lowest
Maximum Density: more than 67 passenger cars per mile per lane

Appendix F
Traffic Crash Analysis

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

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

Severity	Severity Index
Low	<6.0
Average	6.0 to 7.0
Moderate	7.0 to 14.0
High	14.0 to 20.0
Very high	>20.0

Table 4 depicts a summary of the crashes occurring in Pamlico County between June 30, 2006 and June 30, 2009. The data represents locations with 5 or more crashes. The 'Total' column indicates the total number of crashes reported within 150 feet of the intersection during the study period. The severity listed is the average crash severity for that location.

Table 4 demonstrates that the intersection of NC 55 and NC 306 had a total of twelve crashes from 6/30/2006 to 6/30/2009. This intersection had the most crashes than any other intersection with NC 55 during that same period. The intersections of NC 55 and SR 1131, NC 55 and SR 1204, NC 55 and SR 1344, and the intersection of NC 55 and SR 1005 all had five crashes each during this same type period.

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, or other intersections of concern, contact the Division Traffic Engineer. Contact information for the Division Traffic Engineer is included in Appendix A.

Table 4 - Crash Locations*

Map Index	*Intersection*	*Average Severity*	*Total Crashes*
1	NC 55 and NC 306	8.55	12
2	NC 55 and SR 1131(Chair Rd)	5.44	5
3	NC 55 and SR 1204 (Old NC 55)	5.44	5
4	NC 55 and SR 1344 (Cooper Rd)	2.48	5
5	NC 55 and SR 1005 (Kershaw Rd)	3.96	5

*Data obtained using the NCDOT – TEAAS (Traffic Engineering Accident Analysis System Software)

Appendix G
Bridge Deficiency Assessment

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

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

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

A bridge is considered **deficient** if it is either structurally deficient or functionally obsolete.

Structurally deficient means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is "structurally deficient" does not imply that it is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected and repaired/replaced at an appropriate time to maintain its structural integrity.

A **functionally obsolete** bridge is one that was built to standards that are not used today. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand or to meet the current geometric standards, or those that may be occasionally flooded.

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

Table 5 - Deficient Bridges

County	Number	Bridge Number	Route	Across	Division	Year Built	Structurally Deficient****	Functionally Obsolete*****	SR*	SV**	TTST***
PAMLICO	14	680014	SR1005	BEARD CREEK	02	1964	SD	No	38.0	24	28
PAMLICO	16	680016	SR1324	FORK OF BAY RIVER	02	1966	SD	No	32.8	24	27
PAMLICO	18	680018	SR1316	TRENT CREEK	02	1971	SD	No	51.8	33	36
PAMLICO	24	680024	NC 304	NORTH PRONG OF BAY RIVER	02	1954	SD	No	27.2	Not Posted	Not Posted
PAMLICO	28	680028	SR1005	FORK OF BEARD CREEK	02	1964	SD	No	30.4	17	21
PAMLICO	31	680031	NC 304	VANDEMERE CREEK	02	1955	SD	No	37.0	20	28
PAMLICO	36	680036	NC 55	SO. PRONG BAY RIVER	02	1960	No	FO	43.9	35	41
PAMLICO	38	680038	NC 55	TRENT CREEK	02	1960	SD	No	14.2	35	Not Posted
PAMLICO	40	680040	NC 304	BEAR CREEK	02	1961	SD	No	48.8	20	29
PAMLICO	42	680042	NC 304	GALE CREEK	02	1951	SD	No	37.5	19	26
PAMLICO	43	680043	NC 55	TRENT CREEK	02	1960	SD	No	47.8	Not Posted	Not Posted
PAMLICO	44	680044	NC 304	CANAL	02	1961	SD	No	32.5	18	26
PAMLICO	67	680067	SR1204	SOUTH PRONG BAY RIVER	02	1921	No	FO	77.9	Not Posted	Not Posted

Deficient Bridges Legend for Table 5

***SR--**Bridge Sufficiency Rating *****TTST--**Truck Tractor Semi-Trailer ****SV--**Single Vehicle

The Sufficiency Rating Formula is a method of evaluating factors, which indicate a bridge's sufficiency to remain in service. The result of the formula is a percentage in which 100 percent represents an entirely sufficient bridge and zero percent represents an entirely insufficient or deficient bridge. The sufficiency rating is never less than 0 or more than 100.

States annually submit to the Federal Highway Administration (FHWA) all of the required information for each bridge. The FHWA uses these numbers to determine the sufficiency rating.

A bridge must be classified as deficient in order to qualify for Federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges within Pamlico County are listed in Table 5; the locations of the functionally obsolete and structurally deficient bridges are shown in Figure 8.

A ****structurally deficient (SD) bridge is closed or restricted to lighter vehicles because of at least one deteriorating structural component. While not necessarily unsafe, these bridges may have limits for speed and weight.

A *****functionally obsolete (FO) bridge has older design features, and while it is not unsafe for all vehicles, it may not adequately accommodate current traffic volumes, and vehicle sizes and weights. These restrictions are one contributing element to traffic congestion. They also pose such inconveniences as school buses or emergency vehicles taking lengthy detours.

Many factors are included in the ratings (Structural Adequacy and Safety, Serviceability and Functional Obsolescence, Essentiality for the Public). The sufficiency rating does not necessarily indicate a bridge's ability to carry traffic loads. It helps determine which bridges may need repair or replacement, not which bridges could collapse.

Appendix H
Public Involvement

**Flyers Distributed to Announce Public Drop-in Sessions,
Newspaper Publication Announcing Public Meetings to Present
Proposed Road Improvements,
and
Results of Survey Conducted to Obtain Public Feedback Regarding
Transportation Issues in Pamlico County**

Why?
To Present the Draft Plan, take comments and answer questions

Welcome!

Pamlico County
Comprehensive Transportation Plan
Public Informational Drop-In Sessions
September 17th, 2009
3:00 - 5:00 p.m. and 6:00 - 8:00 p.m.

Please be sure to:

- ✓ Pick up copies of the brochures
- ✓ Take a moment to look over the maps
- ✓ Talk with NCDOT and County representatives
- ✓ Ask questions!
- ✓ Offer comments!

**THANK YOU FOR JOINING US
THIS EVENING!**

Pamlico County

Comprehensive Transportation Plan (CTP)

Public Drop-in Workshops

Come review the draft plan! The CTP is an unfunded vision plan that identifies roadway, public transportation, bicycle, and pedestrian improvements that will be needed in Pamlico County over the next 30 years.

When?

September 17th, 2009
3 pm to 5 pm
and
6 pm to 8 pm

Where?
The Pamlico County Courthouse
202 Main Street
in the Kitchen

Draft Maps are also available for review in the Planning and Economic Development Office

Contact Person:

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The Pamlico News

A Good Year for Farming

•Page B1

Look for Your Sticker in the September 30th Issue

•Page A10

Thirty Years of Proposed Road Improvements on Display Thursday at Courthouse

BAYBORO - A draft of the plan showing proposed improvements for Pamlico County over the next 30 years will be on display Thursday at the Pamlico County Courthouse. Members of the public are asked to make suggestions about the plan.

Robert Will of the Down East Rural Planning Organization said that "we're definitely going to have the improvements in the future." Will explained that creation of the plans was funded by the DOT and no money was provided by the county, only volunteer work.

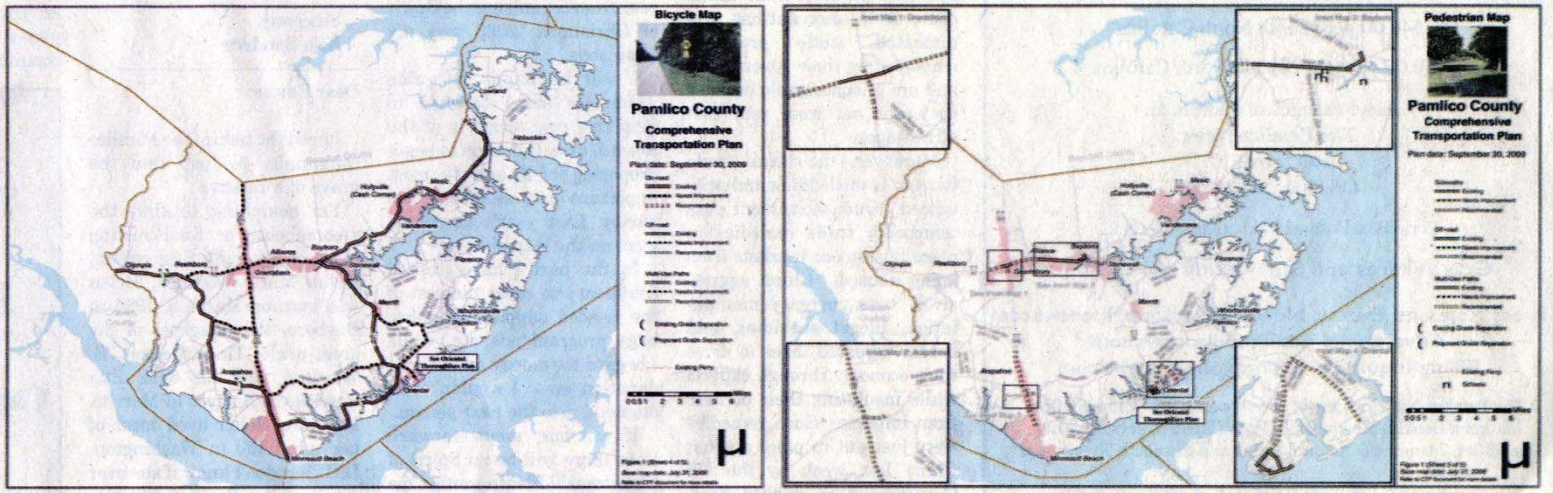
Will said that the individual projects don't have funding yet, but the plans will be recommended to the State Transportation Improvement Program and the program may fund the work.

Will said the main purpose of the Thursday workshops is to solicit public input resulting in a final edition that will go to the county commissioners for approval.

Even if the plans are approved by the county commissioners, the plan may still change based on future development that might not match the current projections. "It's not set in stone," Will said; "the plan could change five years from now."

"We're really looking to improve the transportation infrastructure of the county,"

On Thursday, there will be Public Drop-in Workshops from 3-5 p.m. and 6-8 p.m. at the Pamlico County Courthouse to discuss the new Pamlico County Comprehensive Transportation plan created by the Transportation Planning Branch of the North Carolina Department of Transportation and the Down East Rural Planning Organization.



Pamlico County Comprehensive Transportation Plan (CTP)
Survey Results

1. In what community of Pamlico County do you live? (Please check only one box.) If you do not live in a municipality/town please check the name of the municipality/town closest to which you live.

		Response Percent	Response Count
Alliance		6.7%	5
Arapahoe		**13.3%**	**10**
Bayboro		10.7%	8
Florence		1.3%	1
Grantsboro		10.7%	8
Hobucken		0.0%	0
Lowland		1.3%	1
Mesic		4.0%	3
Minnesott Beach		10.7%	8
Olympia		5.3%	4
Oriental		**21.3%**	**16**
Pamlico		8.0%	6
Reelsboro		2.7%	2
Stonewall		2.7%	2
Vandemere		0.0%	0
Whortonsville		1.3%	1
Other (please specify)	4		
answered question	**75**		
skipped question	**3**		

2. How many people live in your household, including yourself?

People in Household		Response Percent	Response Count
1		9.3%	7
2		**50.7%**	**38**
3		12.0%	9
4		10.7%	8
5		10.7%	8
6		5.3%	4
7		0.0%	0
8		1.3%	1
9		0.0%	0
10		0.0%	0
More than 10		0.0%	0
answered question	**75**		
skipped question	**3**		

3. Do you own a vehicle?

		Response Percent	Response Count
Yes		**94.7%**	**71**
No		5.3%	4
answered question	**75**		
skipped question	**3**		

4. Are you concerned with safety or crash problems in your area?

		Response Percent	Response Count
Yes		**52.6%**	**40**
No		47.4%	36
answered question	**76**		
skipped question	**2**		

5. Is truck traffic a problem in your area?

	Response Percent	Response Count
Yes	26.7%	20
No	**73.3%**	**55**
answered question	**75**	
skipped question	**3**	

6. Do you use the Minnesott-Cherry Branch Ferry or the Aurora-Bayview Ferry as a method of transportation?

	Response Percent	Response Count
Yes	**73.7%**	**56**
No	26.3%	20
answered question	**76**	
skipped question	**2**	

If YES, how frequently?

Minnesott- Cherry Branch

Every Day	Once a Week	Two/Three Times	Once Per Week	Once Every 6 Per Month	Once a Year Months	Response Count
1.8%	21.8%	14.5%	**34.5%**	27.3%	0.0%	55
(1)	(12)	(8)	**(19)**	(15)	(0)	

Aurora-Bayview

Every Day	Once a Week	Two/Three Times	Once Per Week	Once Every 6 Per Month	Once a Year Months	Response Count
0.0%	5.6%	0.0%	16.7%	**38.9%**	**38.9%**	18
(0)	(1)	(0)	(3)	**(7)**	**(7)**	

answered question	**55**
skipped question	**23**

7. To improve traffic flow on any road, we must: (Please check the box that describes the importance of the following strategies.)

	Strongly Agree	Agree	No Sure	Disagree	Strongly Disagree	Response Count
A. Build additional traffic lanes	21.4% (15)	**30.0% (21)**	22.9% (16)	14.3% (10)	11.4% (8)	70
B. Control the number of driveways, cross streets and left turn lanes	10.3% (7)	**38.2% (26)**	32.4% (22)	8.8% (6)	10.3% (7)	68
C. Make improvements to intersections or better traffic signal timing	31.4% (22)	**37.1% (26)**	18.6% (13)	5.7% (4)	7.1% (5)	70
answered question			**72**			
skipped question			**6**			

8. Do you find that you often have to go out of your way to get to your destination because the most direct route is too congested with traffic or is prone to flooding?

	Response Percent	Count	Response
Yes	25.3%		19
No	**74.7%**		**56**
answered question	**75**		
skipped question	**3**		

9. On what roads or in what areas would you like to have IMPROVED ACCESS to and from?

	Response Percent	Response Count
Alliance	17.5%	10
Arapahoe	14.0%	8
Bayboro	**42.1%**	**24**
Florence	3.5%	2
Grantsboro	22.8%	13
Hobucken	7.0%	4
Lowland	8.8%	5
Minnesott Beach	24.6%	14
Olympia	3.5%	2
Oriental	31.6%	18
Reelsboro	5.3%	3
Stonewall	5.3%	3
Vandemere	10.5%	6
Whortonsville	5.3%	3
NC 304	10.5%	6
NC 55	35.1%	20
NC 306	35.1%	20
answered question	**57**	
skipped question	**21**	

10. How important are the following GOALS?

	Very Important	Somewhat Important	Not Sure	Somewhat Not Important	Not Important	Response Count
A. INCREASED TRANSPORTATION CHOICES: More and safer opportunities to walk and/or bike to destinations	**53.3% (40)**	38.7% (29)	4.0% (3)	0.0% (0)	6.7% (5)	75
B. INCREASED PUBLIC TRANSPORTATION OPTIONS: Bus service to destinations; Park-n-Ride lots to facilitate carpooling, vanpooling, and transit service	**36.0% (27)**	29.3% (22)	12.0% (9)	9.3% (7)	13.3% (10)	75
C. FASTER AUTOMOBILE TRAVEL TIMES: Higher speed roads with more lanes and fewer intersections, more connector roads, less congestion	10.8% (8)	25.7% (19)	23.0% (17)	13.5% (10)	**27.0% (20)**	74
D. COMMUNITY AND RURAL CULTURE PRESERVATION: Keeping businesses in downtown areas preservation of existing buildings and neighborhoods, maintaining the rural culture and landscape	**49.3% (37)**	33.3% (25)	8.0% (6)	6.7% (5)	4.0% (3)	75
E. ENVIRONMENTAL PROTECTION: Minimizing the impact on wetlands, streams, and wildlife areas; reducing air pollution	**49.3% (37)**	38.7% (29)	6.7% (5)	2.7% (2)	2.7% (2)	75
F. ECONOMIC GROWTH: Building or improving roads and railways to attract new businesses and to allow existing businesses to expand	**49.3% (37)**	38.7% (29)	6.7% (5)	2.7% (2)	2.7% (2)	75
G. SERVICE OF SPECIAL NEEDS: Better transportation services for poor, elderly, and disabled residents	**51.4% (37)**	26.4% (19)	15.3% (11)	4.2% (3)	4.2% (3)	72
H. ACCESS: Better connection to employment, medical facilities, and higher education facilities	**44.0% (33)**	38.7% (29)	6.7% (5)	6.7% (5)	4.0% (3)	75

answered question	**75**
skipped question	**3**

11. The new transportation plan will include recommendations for new pedestrian, bicycle, and mass transit facilities. Would you use the following transportation facilities if they were built or improved?

A. SIDEWALKS

Answer Options	Response Percent	Response Count
YES	52.6%	40
NO	19.7%	15
MAYBE	27.6%	21
answered question		**76**
skipped question		**2**

B. OFF ROAD TRAILS OR GREENWAYS FOR WALKING & BIKING?

Answer Options	Response Percent	Response Count
YES	45.2%	33
NO	17.8%	13
MAYBE	37.0%	27
answered question		**73**
skipped question		**5**

C. ON-ROAD BICYCLE FACILITIES SUCH AS BIKE LANES AND WIDE-SHOULDERS?

Answer Options	Response Percent	Response Count
YES	53.4%	39
NO	27.4%	20
MAYBE	19.2%	14
answered question		**73**
skipped question		**5**

D. BUS SERVICE AROUND YOUR AREA?

Answer Options	Response Percent	Response Count
YES	28.9%	22
NO	42.1%	32
MAYBE	28.9%	22
answered question		**76**
skipped question		**2**

E. COMMUTER RAIL?

Answer Options	Response Percent	Response Count
YES	16.4%	12
NO	60.3%	44
MAYBE	23.3%	17
answered question		**73**
skipped question		**5**

E. PARK-N-RIDE LOTS? (Parking areas at transit stations or bus stops to facilitate the use of public transportation and carpooling).

Answer Options	Response Percent	Response Count
YES	24.7%	18
NO	38.4%	28
MAYBE	37.0%	27
answered question		**73**
skipped question		**5**

12. What are other transportation issues in your area?

Answer Options	Response Count
	28
answered question	**28**
skipped question	**50**

13. What is your age group?

Answer Options	Response Percent	Response Count
Under 18	0.0%	0
18-24	6.8%	5
25-34	17.8%	13
35-44	15.1%	11
45-54	23.3%	17
55-64	24.7%	18
65-74	9.6%	7
Over 74	2.7%	2
answered question		**73**
skipped question		**5**

14. What was your household income last year?

Answer Options	Response Percent	Response Count
Below $15,000	5.7%	4
$15,000-$29,999	14.3%	10
$30,000-$39,999	12.9%	9
$40,000-$53,799	27.1%	19
$53,800-$70,000	18.6%	13
Above $70,000	21.4%	15
answered question		**70**
skipped question		**8**

15. What is your ethnic background?

Answer Options	Response Percent	Response Count
Caucasian (White)	84.7%	61
African American (Black)	11.1%	8
Native American	1.4%	1
Hispanic	1.4%	1
Asian	0.0%	0
Other	1.4%	1
answered question		**72**
skipped question		**6**

16. What is your zip code?

Answer Options	Response Percent	Response Count
28560	10.8%	7
28509	9.2%	6
28510	15.4%	10
28529	10.8%	7
28537	0.0%	0
28552	7.7%	5
28515	12.3%	8
28571	26.2%	17
28583	3.1%	2
28587	0.0%	0
28556	4.6%	3
Other (please specify)		4
answered question		**65**
skipped question		**13**

17. How long have you lived in Pamlico County?

Answer Options	Response Percent	Response Count
Less than 1 year	7.1%	5
Less than 5 years	17.1%	12
6-10 years	20.0%	14
11-20 years	20.0%	14
21-30 years	8.6%	6
31-40 years	11.4%	8
41-50 years	0.0%	0
Over 50 years	15.7%	11
answered question		**70**
skipped question		**8**