

EASTERN SHORE BIKE PLAN UPDATE 2014



**"Cyclers see considerable more of this beautiful world than any other class of citizens. A good bicycle, well applied, will cure most ills this flesh is heir to."
~ Dr. K. K. Doty**

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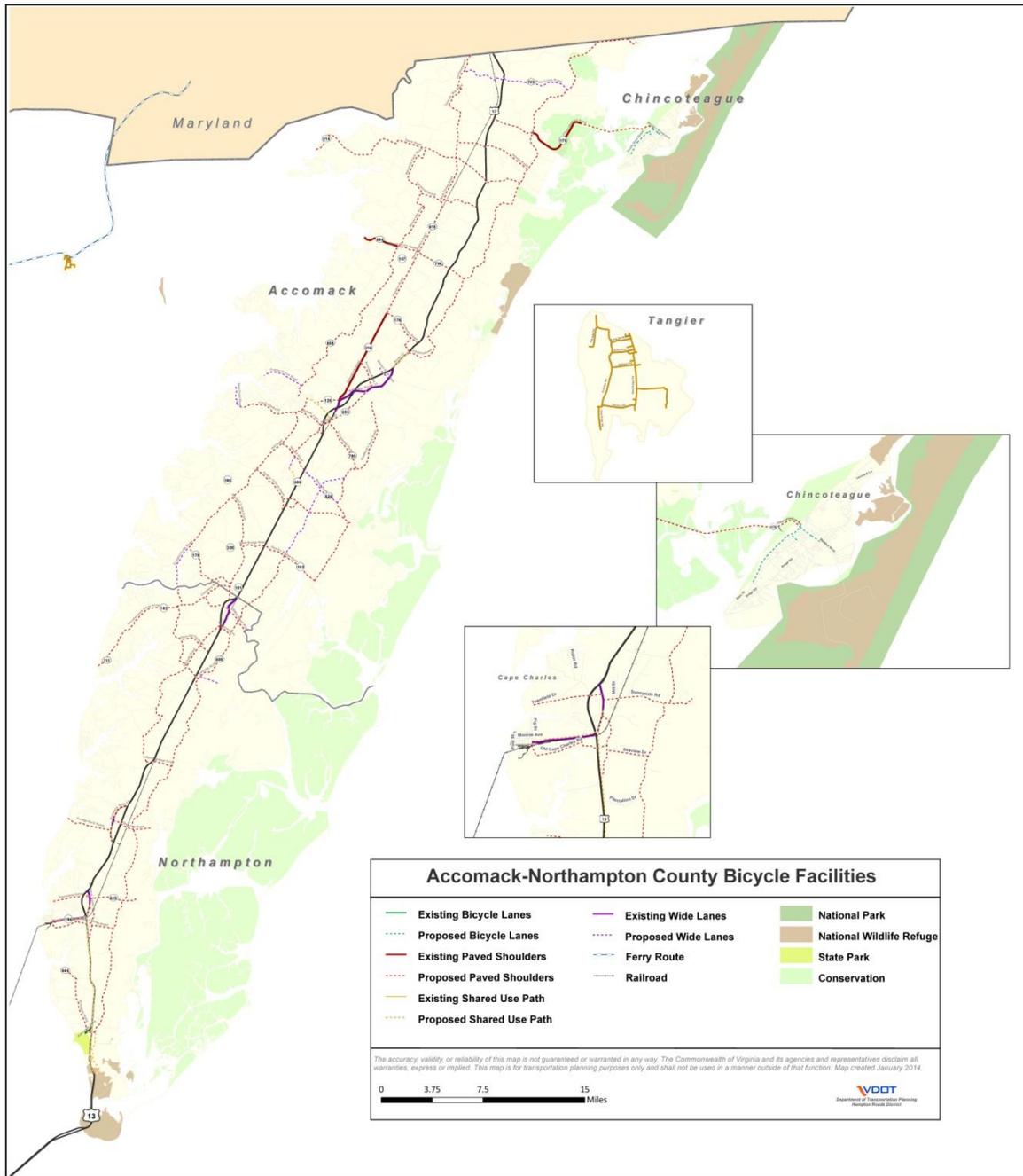
Prepared by
Eastern Shore of Virginia Bicycle Committee
Technical Transportation Advisory Committee
Accomack-Northampton Planning District Commission

Adopted
2014

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and
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Disclaimer
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EASTERN SHORE BICYCLE FACILITIES MAP



Map 1, Eastern Shore Bicycle Facilities Map

TABLE OF CONTENTS

Table of Contents	4
Terms & Acronyms.....	
Executive Summary	7
Index of Maps	8
Index of Tables, Figures and / or Charts.....	8
Introduction.....	8
Purpose of Plan	9
Planning Process	9
VDOT Bicycle Plan Requirements & Policy	10
Federal Guidelines.....	11
EASTERN SHORE OF VIRGINIA	11
Eastern Shore Bicycle Facility Vision.....	12
BICYCLE FACILITY PLANNING AND DEVELOPMENT.....	13
Design Bicyclist.....	14
Group A - Advanced Bicyclists:	14
Group B - Basic Bicyclist:	14
Group C - Children:.....	14
Bicycle Facility Design	15
Facility Types	16
Shared Lanes	16
Wide Outside Lanes	16
Paved Shoulders	16
Bicycle Lanes	17
Shared Use Path	17
Other Bicycle Facilities.....	18
EXISTING CONDITIONS.....	18
Trip Origins and Destinations.....	19
Significant Activity Centers	20
Ridership Data	21
Inventory of Existing Facilities	21

Current Traffic & Geometric Data	22
Bicycle Safety Data	24
Identified Deficiencies & Barriers.....	25
Opportunities	27
Recommended Bike Facility Types for the Eastern Shore	27
Proposed Bicycle Facilities	28
End Facility Treatments.....	41
Maintenance.....	41
Signage/Wayfinding	41
Integrating Bicycling into Other Transportation Modes	41
Transit/Ferry	42
Prioritization Process and Timeline	42
Cost Estimates.....	43
Implementation	44
Facility Design: Guidance and Strategies.....	45
Bicycle Facility Development.....	45
Funding	46
Supporting Agencies, Partnerships and Programs.....	47
Existing Programs and Events.....	47
Plan Evaluation	49
Appendices.....	51
Stakeholders Public Input.....	52
Bicycle Planning Committee Vision and Actions	52
Results of County Bicycle Planning Workshops.....	52

TERMS AND ACRONYMS

AADT – Average Annual Daily Traffic

AAIP – Accomack Airport Industrial Park

AASHTO – American Association of State and Highway Transportation Officials

A-NPDC – Accomack-Northampton Planning District Commission

CBES – Citizens for a Better Eastern Shore

CTB – Commonwealth Transportation Board

ESCC – Eastern Shore Community College

ESVNWR – Eastern Shore of Virginia National Wildlife Refuge

FHWA – Federal Highway Administration

MAP-21 – Moving Ahead for Progress in the Twenty-first Century

MPO – Municipal Planning Organization

MS – Multiple Sclerosis

MUTCD – Manual on Uniform Traffic Control Devices for Streets and Highways

PDC – Planning District Commission

SRTS – Safe Routes to School

VDOT – Virginia Department of Transportation

EXECUTIVE SUMMARY

The Accomack-Northampton Planning District Commission (A-NPDC), in conjunction with the Virginia Department of Transportation (VDOT), provides this 2014 Bicycle Plan update to identify current facilities and specify where additional bicycle facilities are needed. Throughout the Commonwealth, bicycling is popular for both transportation and recreation. Residents and visitors to the Commonwealth travel by bicycle in all parts of the state, riding on urban streets and along rural roads; and using the bike lanes, shared use paths, and bike routes that are available. The benefits of bicycling are many – economic, social, health and environmental – and the Eastern Shore is eager to provide more viable bicycling options for its citizens and the tourists that it seeks to attract to the area. In 2004, the Commonwealth Transportation Board (CTB) adopted the *Policy for Integrating Bicycling and Pedestrian Accommodations* (the *Policy*). The *Policy* gave a framework for VDOT to accommodate bicyclists and pedestrians in its funding, design, construction, operation, and maintenance of Virginia’s transportation network. In 2011, VDOT produced a *State Bicycle Policy Plan*. This updated 2014 Bike Plan is intended to provide a framework for A-NPDC and VDOT to set goals and targets, inventory existing facilities, determine priorities, and improve conditions that support multi-modal transportation options and address the needs of Eastern Shore bicyclists. The 2014 Bike Plan is a living document to be updated periodically and referenced by VDOT in planning road maintenance improvements or new construction, and by community stakeholders to evaluate its effectiveness, and to identify new opportunities.

“Ride as much or as little, or as long or as short as you feel. But ride.”
~ Eddy Merckx



INDEX OF MAPS

Map 1, Eastern Shore Bicycle Facilities Map	3
Map 2, Accomack County Bicycle Facilities Map.....	32
Map 3, Map of Suggested Bicycle Loop in Accomack County	33
Map 4, Town of Chincoteague and Tangier Island Bicycle Facilities Maps.....	36
Map 5, Northampton County Bicycle Facilities Map.....	39
Map 6, Suggested Northampton County Bicycle Loops and Spurs Map	40

INDEX OF FIGURES, TABLES, AND CHARTS

Figure 1, Bicyclists Exploring Chincoteague Island	15
Figure 2, Diagram of Wide Curb Lane.....	16
Figure 3, View of Paved, 6-foot Shoulder.....	17
Figure 4, Diagram of Shoulder Striping Improvements	17
Figure 5, Diagram of Bicycle Lane	17
Figure 6, Bicyclist, Pedestrians, and Motor Scooter on Tangier Island Path	18
Figure 7, Eastern Shore Bicyclist on Road with Unpaved Shoulder and Nearby Ditch.....	21
Figure 8, Bicyclists at Assateague National Seashore Park	21
Figure 9, Bicyclists on Southern Tip Bike & Hike Trail that Originates at the Eastern Shore of Virginia National Wildlife Refuge	23
Figure 10, Bicyclists Read Interpretive Signs Provided by the Eastern Shore of Virginia National Wildlife Refuge	48
Table 1, Accomack County’s Existing Bicycle Facilities	22
Table 2, Northampton County’s Existing Bicycle Facilities	22
Table 3, Bicycle Crashes in Virginia, 2009-2013	24
Table 4, Eastern Shore Crash Data, 2009-2013.....	24
Table 5, Planning-Level Cost Estimates for Bicycle Accommodations (September 2011, VDOT)..	44
Chart 1, Accomack County Bicycle Facilities Chart.....	29
Chart 2, Chincoteague/Tangier Bicycle Facilities Chart	34
Chart 3, Northampton County Bicycle Facilities Chart	37

INTRODUCTION

With low traffic volumes and flat terrain, bicycling is a popular mode of transportation and recreation on the Eastern Shore of Virginia. Bicyclists are seen daily throughout the Shore riding to work, to school, and for exercise and recreation. STAR Transit buses, equipped with bicycle racks, enable riders to pedal to and from bus stops and travel long distances by bus in between. A seasonal ferry carries passengers and bicycles from Onancock to Tangier Island, with connections to Reedville, VA and Crisfield, MD. Bicycling is very popular on Chincoteague and Assateague, and the Town of Chincoteague adopted a bicycle plan and has been actively developing bicycle facilities.

Since it began over 21 years ago, the annual *Tour Between the Waters*, sponsored by the Citizens for a Better Eastern Shore (CBES), grew from fewer than 100 bicyclists to around 1,000 participants. The three-year old *Le Tour de Shore*, sponsored by the Eastern Shore Chamber of Commerce, grew from 80 -115 bicyclists. The National Multiple Sclerosis (MS) Society's *Bike MS: Virginia's Ocean to Bay Ride* takes place the end of May and attracts 600-850 bicyclists. The now defunct *Chesapeake Bay Bridge Tunnel Bike Tour* attracted up to 5,000 bicyclists each year. An increasing number of bicycling tourists are visiting the Eastern Shore to participate in organized tours and vacation packages offered by private businesses.

PURPOSE OF PLAN

Bicycles are considered vehicles and allowed to use most of Virginia's roads, however, not all roads meet VDOT's minimum 24-foot pavement width standard for bicycle route designation. Few Eastern Shore roads qualify for bicycle route designation. This plan identifies and prioritizes suitable Eastern Shore bicycle routes, so they can be improved as funding becomes available.

To be eligible for Virginia Department of Transportation (VDOT) funding, a local government must adopt a bicycle facilities plan. In 2004, the Eastern Shore Bicycle Plan, prepared at the request of the Accomack County and Northampton County Boards of Supervisors, enabled the Eastern Shore to qualify for these funds. Chincoteague updated its bicycle plan in May 2013. Other Eastern Shore Towns interested in developing bicycle facilities are encouraged to prepare and adopt bicycle plans as well.

PLANNING PROCESS

The original Eastern Shore of Virginia Bicycle Plan was developed by the Eastern Shore of Virginia Bicycle Committee, with technical assistance from the Accomack-Northampton Planning District Committee's (A-NPDC) Transportation Technical Advisory Committee. A-NPDC conducted Bicycle Planning Workshops in each county in 2000 to engage the public's participation, and presented a draft at public workshops in July 2003. The A-NPDC approved the Plan in November 2003; Accomack County and Northampton County Boards of Supervisors and Eastern Shore Town Councils approved the Plan in March 2004.

In 2010, the A-NPDC Transportation Technical Advisory Committee updated the plan's priorities to advance implementation. To re-order previously identified projects and priorities and to solicit new ones, A-NPDC conducted a new set of public workshops in both counties. The April 2011 update featured revised 2009 data, named roads, and specified next steps.

This 2014 bicycle plan update, requested by VDOT, reflects new considerations in the bicycle planning process, consistent with VDOT's State Bicycle Policy Plan, adopted in September 2011. A-NPDC again held public workshops in Accomack and Northampton Counties in May 2014 to garner public comments. Map 1 shows the entire existing and proposed Eastern Shore Bicycle network.

VDOT BICYCLE PLAN REQUIREMENTS & POLICY

The 2014 Eastern Shore Bicycle Plan update is intended to comply with VDOT's publication, the "*Virginia Department of Transportation Policy for Integrating Bicycle and Pedestrian Accommodations*" policy. The policy provides the framework through which VDOT accommodates bicyclists, pedestrians, pedestrians with disabilities, and motorized transportation modes to plan, fund, design, construct, operate, and maintain Virginia's transportation network as a safe, effective, and balanced multi-modal system.

For purposes of this policy, an "accommodation" is defined as any facility, design feature, operational change, or maintenance activity that improves the environment in which bicyclists and pedestrians travel. Accommodation examples include the provision of bike lanes, sidewalks, and signs; the installation of curb extensions for traffic calming; and the addition of paved shoulders.

The Virginia Department of Transportation (VDOT) initiates all highway construction projects with the presumption that the projects inherently accommodate bicycling and walking.

Factors that support the need to provide bicycle and pedestrian accommodations include, but are not limited to, the following:

- project is identified in an adopted transportation or related plan
- project accommodates existing and future bicycle and pedestrian use
- project improves or maintains safety for all users
- project provides a connection to public transportation services and facilities
- project serves areas or population groups with limited transportation options
- project provides a connection to bicycling and walking trip generators such as employment, education, retail, recreation, and residential centers and public facilities
- project is identified in a Safe Routes to School program or provides a connection to a school
- project provides a regional connection or is of regional or state significance
- project provides a link to other bicycle and pedestrian accommodations
- project provides a connection to traverse natural or man-made barriers
- project provides a tourism or economic development opportunity

Project development for bicycle and pedestrian accommodations follow VDOT's project programming and scheduling process, and a concurrent engineering process. VDOT encourages localities' participation in concurrent engineering activities to guide project development, underscoring the importance of each locality devising its own bicycle plan.

FEDERAL GUIDELINES

The Federal Highway Administration (FHWA) supports the following Four E's of Cycling: Engineering, Education, Encouragement, and Enforcement.

Engineering — Successful bicycle networks begin by planning and designing safe facilities, as well as incorporating ancillary elements into the design of residential and commercial developments.

Education — Education includes the coordinated distribution of information regarding existing facilities and their role in the overall system. This information should be pertinent to riders of all levels. Education also should convey the "rules of the road" to ensure bicyclists and motorists follow established rules while operating on or adjacent to existing facilities.

Encouragement — Even with well-engineered facilities and ample education, people still need to be encouraged to bike, whether it be through special events, riding groups, public advertising campaigns, health promotions, or local cycling media, and websites.

Enforcement — Proper use and full value of the bicycle network hinges on the enforcement of laws pertaining to the interaction between motorists and cyclists.

Rather than relying on facilities development alone, this comprehensive "4E" approach to bicycle planning integrates an important process of program development to help solve bicycle problems, build awareness, and encourage bicycling for short trips. The 4E's concept also energizes participation and cooperation with agencies such as schools, police departments, recreational, and private parties to work in conjunction with local planning and public works agencies to improve bicycle facilities in the community and make bicycling considerations an inherent part of governing. A fifth "E" – evaluation – is also necessary to measure success, correct errors, and make needed adjustments for future achievements.

EASTERN SHORE OF VIRGINIA

The Eastern Shore of Virginia, located on the southern tip of the Delmarva Peninsula, is comprised of Accomack County, Northampton County, and 19 incorporated towns. The Eastern Shore, accessible from mainland Virginia via the Chesapeake Bay Bridge Tunnel and from the Eastern Shore of Maryland via U.S. Route 13, is approximately 70 miles long, ranges

from 5 to 15 miles wide, and is approximately 800 square miles. The 2010 Census cited the Eastern Shore's population at approximately 46,000.

The Eastern Shore boasts a well-known fishing and farming heritage, and is a popular vacation destination for those seeking fishing, hunting, boating, natural areas, quaint villages, undeveloped beaches, and quiet back roads for bicycling and sightseeing. Chincoteague Island, home to the famous wild ponies, hosts millions of visitors year-round who are attracted to the pristine scenic areas, natural wildlife, and recreational wonders of Chincoteague National Wildlife Refuge and Assateague National Seashore. Other Eastern Shore towns, including Parksley, Onancock, Accomac, Wachapreague, Eastville, and Cape Charles, offer restaurants, lodging, museums, and historic districts to tourists who come to explore our region's natural and cultural heritage. Tangier Island, in the middle of the Chesapeake Bay, is accessible via a seasonal passenger/bicycle ferry from Onancock, VA, Reedville, VA, or Crisfield, MD.

EASTERN SHORE BICYCLE FACILITY VISION

To encourage public involvement in developing the original 2004 plan, A-NPDC hosted Bicycle Planning Workshops for the Eastern Shore of Virginia Bicycle Committee and residents of Accomack and Northampton Counties.

At the Bicycle Committee Workshop, participants articulated a vision for Eastern Shore bicycle facilities and drew up actions to achieve the vision. At each county workshop, participants honed the vision statement and identified the places to connect with bicycle facilities. The following Vision Statement is based on the workshop results. A complete summary of all the workshop results is located in Appendix A.

Eastern Shore bicyclists envision a safe, designated bicycle route with, at a minimum, paved shoulders, from Maryland to Kiptopeke. The bicycle route will showcase the Eastern Shore's scenic beauty and rich history, and connect towns and communities with schools, businesses, and recreation facilities.

There will be designated bicycle routes on the Bayside and Seaside, paved shoulders on the Chincoteague Causeway, improved access along and across U.S. Route 13, and a separate bicycle trail from Cape Charles to the Eastern Shore National Wildlife Refuge.

If the Eastern Shore Railroad right-of-way ever becomes available, there will be a rail trail from Maryland to Cape Charles. Access across the Chesapeake Bay Bridge Tunnel, via shuttle buses, will be available. Bicycle maps and safety education will be provided, as well as bicycle safety signs and bicycle racks.

At the public workshops held in both counties, the public channeled its vision to set the following goals and objectives to implement the bicycle plan:

Goal: Improve bicycling access on the Eastern Shore of Virginia

OBJECTIVES

- Develop a comprehensive Eastern Shore system of bicycle routes;
- Improve marking, signage, and mapping of existing and future bicycle facilities;

Goal: Enhance bicycle safety

OBJECTIVES

- Decrease hazards confronting bicyclists and increase roadway capacity for motor vehicles;
- Develop an Eastern Shore bicycle map with traffic laws and safety guidelines;
- Implement a program of bicycle safety and enforcement.

Goal: Encourage bicycle facility development

OBJECTIVES

- Expand the Eastern Shore bicycle system as state road improvement budgets allow;
- Incorporate the implementation and maintenance of the Eastern Shore's bicycle system into the VDOT six-year plan;
- Implement a minimum of one bicycle facility development project each year.

Goal: Improve and diversify the Eastern Shore's tourism economy

OBJECTIVES

- Promote tourism by enhancing the awareness of bicycle accessibility to the Eastern Shore's natural and historic points of interest;
- Promote at least one bicycle special event each year.

"There is nothing, absolutely nothing, quite so worthwhile as simply messing about on bicycles." ~ Tom Kunich

BICYCLE FACILITY PLANNING AND DEVELOPMENT

Bicycles are considered vehicles in Virginia and, therefore, they are permitted on all roads except interstates and certain controlled access highways as determined by resolution from the Commonwealth Transportation Board (CTB). Unfortunately, most Eastern Shore roads originally were not designed to safely accommodate motor vehicles and bicycles at the same time, resulting in potentially dangerous conflicts. As motor vehicles encounter bicycles on narrow roads, traffic slows, and/or drivers move into the oncoming lane to pass bicycles, posing a threat to themselves and oncoming traffic. Many bicyclists understandably feel unsafe under these conditions and avoid riding.

Effective planning and development of bicycle facilities allows a free flow of motor vehicles and safe bicycling. Design standards for a "proper" bicycle facility take into consideration the type of bicyclist, road width, traffic volume, and average vehicle speed. To plan proper bicycle facilities, standards have been developed to ensure the needs of the "design bicyclist" are met by the "facility design".

DESIGN BICYCLIST

Transportation engineers apply the Design Bicyclist concept to match the type of bicycle facility design to the needs of three types of bicyclists: Advanced, Basic, and Children, described as follows:

GROUP A - ADVANCED BICYCLISTS: These are usually the most experienced riders who can operate under most traffic conditions and prefer direct access to destinations via existing streets and highways. Advanced cyclists ride in higher traffic volumes and speeds. Most cyclists in this category prefer shared roadways instead of striped bike lanes and paths however, they require sufficient road width to reduce the need for motor vehicles or bicycles to alter position when passing.

GROUP B - BASIC BICYCLIST: These casual or new adult and teenage riders are less confident of their ability to operate in traffic without special provisions for bicycles, such as marked lanes. They require low-speed, low-traffic streets or designated bicycle facilities, such as multiuse paths or bike lanes.

GROUP C - CHILDREN: These are pre-teen riders whose cycling skills are limited and their use of roadways is initially monitored by parents. Generally, they keep to neighborhood streets. Eventually they ride on their own to schools, parks, stores, and other neighborhoods. They need to ride on residential streets with low motor vehicle speeds and volumes; on roads with well-defined separation of bicycles and motor vehicles; or on separate bike paths.



Figure 1, Bicyclists Exploring Chincoteague Island

Because Groups B and C have similar needs, engineers often combine these in a design bicyclist model to create two broad classes: Group A, Advanced riders, and Group B/C, Basic/Children bicyclists.

Bicycle facilities design should meet the needs of the least skilled bicyclist expected to use the facility. Long-distance Eastern Shore bicycle facilities design should address the needs and capabilities of Group A bicyclists. Bicycle facilities in and around towns and recreation facilities should be designed for Group B/C bicyclists, who typically ride no more than 3-5 miles.

BICYCLE FACILITY DESIGN

Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) —FHWA’s MUTCD constitutes a standard, and failure to comply with the MUTCD can result in denial of federal funds, as well as additional liability in the event of a crash. The MUTCD establishes standards for signage, striping, markings, signals, islands, and traffic work zone devices (e.g., cones and barricades). It provides information on which symbols may be used on signs, and when sign text can vary from the standard. The color, width, types, and applications of striping are defined in detail. It also provides dimensions and shapes for pavement markings and lettering.

American Association of State Highway and Transportation Officials (AASHTO) – The American Association of State Highway and Transportation Officials (AASHTO) develops guidelines for bicycle facility design that are reviewed and adapted by the federal and state government. VDOT adopted bicycle facilities standards based on AASHTO recommendations. The following quote from the [AASHTO Guide for Developing Bicycle Facilities](#) illustrates the need and VDOT’s commitment to develop bicycle facilities:

To varying extents bicycles will be ridden on all roads where they are permitted. All new highways, except those where bicyclists will be legally prohibited, should be designed and constructed under the assumption that they will be used by bicyclists. Bicycle safe design practices should be followed to avoid the necessity for costly subsequent improvements.

Bicycle facilities developed on existing and new roads, depending on the situation can include shared lanes, wide outside lanes, paved shoulders, designated bicycle lanes, and separate shared use paths. If a designated bicycle facility cannot be developed due to lack of space, limited widening of the road improves conditions for bicyclists. When no other option exists, any improvement of road width benefits bicyclists and motorists.

VDOT Planning and Design Guidelines — VDOT’s manual provides design standards and guidelines for bicycle facilities. The document clarifies standards to be used in designing bicycle facilities. Bicycle facility design guidelines are in VDOT’s *Road Design Manual*, Volume 1 Appendix A, Section A-5.

FACILITY TYPES

SHARED LANES Shared lanes are streets and highways with no special provision for bicyclists. Shared lanes usually are 12 feet wide with no shoulders. Cars are only able to pass bicyclists safely by crossing the centerline. In low traffic volumes areas with average speeds less than 30 MPH, shared lanes are adequate for Group A riders, and are normally adequate for Group B/C riders if the lanes are at least 12 feet wide.

WIDE OUTSIDE LANES Wide outside lanes are wider than 12 feet. Also referred to as a “shared lane” or a “wide curb lane,” these facilities provide extra width in the outermost travel lane on either single- or multi-lane roadways to accommodate cyclists. A wide outside lane of 14 feet is needed to prevent the bicyclist and motorist from coming into conflict, or changing lanes. Wide outside lanes are favored by Group A riders, but are only suitable for Group B/C riders on residential or low volume streets. Lane widths much greater than 14 feet may encourage the undesirable operation of two motor vehicles in one lane, especially in urban areas, and are not recommended. In situations where more than 15 feet of lane width exists, consideration should be given to striping bike lanes or shoulders. Wide outside lanes are most appropriate on travel routes with moderate traffic volumes and higher speeds and are suitable for cyclists who are comfortable riding with the flow of regular traffic. While these routes can be ridden by all cyclists, they are most often preferred by Group A cyclists.

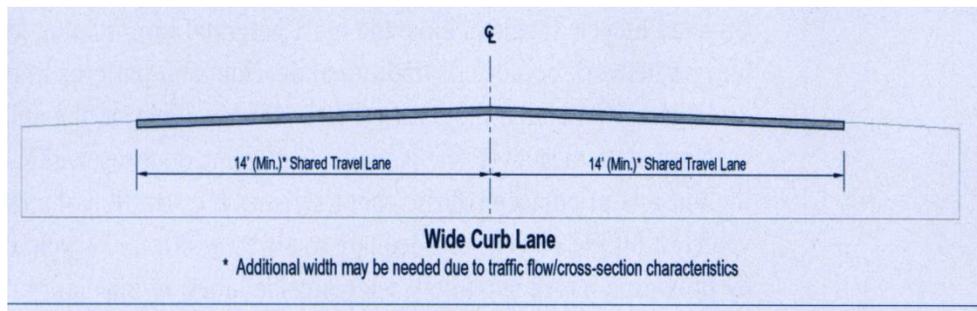


Figure 2, Diagram of Wide Curb Lane

PAVED SHOULDERS Paved shoulders are often the best way to accommodate bicyclists, especially in rural areas. Shoulders should have a minimum width of 4 feet. If average vehicle speeds exceed 40 MPH and traffic volume is greater than 2,000/day, the shoulder should be 6 feet wide.



Figure 3, View of Paved, 6-foot Shoulder

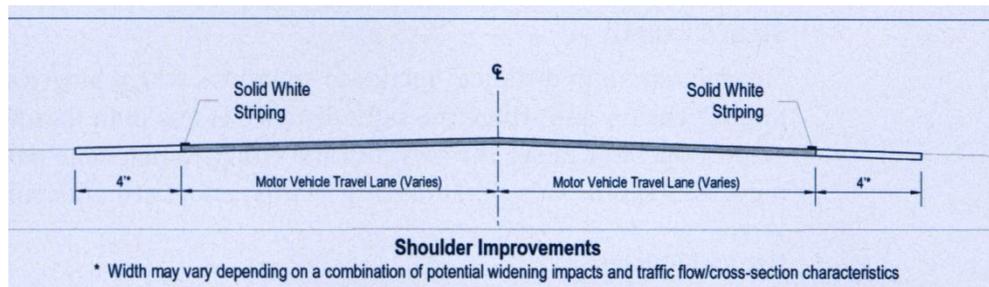


Figure 4, Diagram of Shoulder Striping Improvements

BICYCLE LANES Bicycle lanes are a part of the roadway designated for bicycles by striping, signing, and pavement markings. This type of facility is an exclusive-use area adjacent to the outermost travel lane. The recommended bicycle lanes width is 4 feet with gutter pan and curb; 5 feet with adjacent on-street parking; and 6 feet where substantial truck traffic is present or vehicle speeds exceed 50 MPH. Bicycle lanes are best suited for basic and intermediate cyclists, especially when average speed exceeds 40 MPH and traffic volumes are high. Striped bike lanes are one of the facilities of choice for Group B/C riders because they offer a greater measure of visibility and physical separation from vehicles not achievable with wide outside lanes.

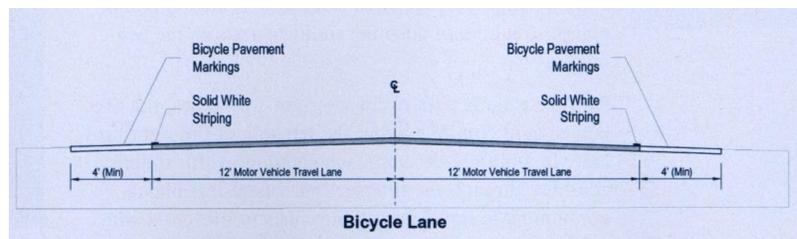


Figure 5, Diagram of Bicycle Lane

SHARED USE PATH Shared use paths are separated from the roadway and/or right-of-way by open space or other barriers. This facility type provides a high-quality bicycling experience in an environment protected from motorized traffic. They are best suited for Group B/C riders. Two-way bicycle paths should be at least 10 feet wide. This facility type is not recommended for construction where frequent curb cuts and intersections could increase potential conflict points between vehicles and cyclists.



Figure 6, Bicyclist, Pedestrians, and Motor Scooter on Tangier Island Path

OTHER BICYCLE FACILITIES Other bicycle facilities can include greenways. A greenway is a linear parcel of land set aside to preserve open space. Greenways are generally located in floodplain areas and along wooded stream corridors unsuitable for development. Greenway and park trails are typically 8 to 10+ feet wide, and may or may not be paved.

“Nothing compares to the simple pleasure of riding a bike.”

~ JOHN F. KENNEDY

EXISTING CONDITIONS

A crucial step in the bike planning process is to examine the existing transportation system, and the major origin and destination points within the locality. The examination needs to include a review of the significant activity centers, existing bicycle facilities, the existing roadway system, and planned roadway improvements.

SIGNIFICANT ACTIVITY CENTERS

Activity centers are locations where a significant number of bicycle trips start or may potentially start (origins), and locations that may draw a significant number of bicyclists (destinations). Key activity center examples include:

- Residential areas — neighborhoods, especially those with large populations of children and college students
- Schools, community colleges— bicycles are a common mode of transportation for many elementary, middle, and high school students, as well as college students
- Commercial centers — shopping centers, malls and plazas, downtown areas, and other commercial locations are common trip destinations
- Employment areas — even if there are not currently a large number of bicycle commuters, large employment areas and industrial parks could be included as destinations to encourage bicycle commuting to NASA at Wallops, Tyson and Perdue;
- Public facilities — parks, libraries, community colleges, municipal buildings, and other public service facilities
- Modal transfer stations — bus stops, commuter parking lots, ferry landings that may serve as trip destinations for the commuting bicyclist
- Unique features — historic, natural, and scenic points in the community for consideration such as the nature preserves and state parks, and the wildlife refuges at Chincoteague and Kiptopeke.

“Bicycles are the indicator species of a community, like shellfish in a bay.”

~ P. Martin Scott

TRIP ORIGINS AND DESTINATIONS

Examining locations of Eastern Shore bicycle trip origins and destinations provides a basis to determine logical bicycle routes. Most bicycle trips originate where people live or visit, and concentrate in and around towns, communities, motels, inns, campgrounds, and bicycle rental shops. Trip destinations are often places of work, stores, post offices, government offices, schools, churches, libraries, parks, harbors, wharves, and museums. Major Eastern Shore trip origins and destinations include the following locations:

ACCOMACK COUNTY

ORIGIN/DESTINATION

Maryland Route 12
 Captain's Cove/Greenbackville
 Chincoteague
 Chincoteague National Wildlife Refuge
 NASA Wallops Island
 Assateague Island National Seashore
 Saxis
 Tyson Foods
 Hallwood
 Guard Shore Wildlife Management Area
 Bloxom
 Parksley
 Accomac
 Perdue
 Onancock
 Harbor
 Tangier Island
 Onley
 Melfa
 Harborton
 Wachapreague
 Quinby
 Belle Haven
 Seaside/Bayside Roads

REASON/ACTIVITY

Connects to Maryland bicycle facility
 Retirement community/scenic views
 Harbor, lodging, campgrounds, schools, services
 Bicycle and nature trails
 Major employer
 Bicycle trail to ocean beach
 Harbor, scenic views, wildlife area
 Food processing plant
 Services
 Scenic views, wildlife
 Services, campground
 Services, railroad museum, schools
 Historic district, services, library, County offices, court
 Food processing plant
 Historic district, museum, harbor, lodging, services Onancock
 Tangier Ferry, kayaking outfitter services
 Harbor, scenic views, services, ferry terminal, tours
 Services, lodging, YMCA, future hospital, school
 Services, community college, airport, industrial park
 Scenic views
 Harbor, lodging, services
 Services, scenic views
 Services, scenic views
 Views of marshes, barrier islands, back bays



NORTHAMPTON COUNTY

ORIGIN/DESTINATION

Exmore
 Willis Wharf
 Silver Beach
 Nassawadox
 Machipongo
 Eastville

REASON/ACTIVITY

Lodging, services, railroad museum
 Harbor, services, scenic views
 Summer community, YMCA Camp
 Services, current hospital, medical offices, lodging
 Museum, school
 Historic district, services, County Park, offices, court

Smith Beach	Summer community
Savage Neck Dunes Natural Area Preserve	Trails, dunes, scenic views, beach
Cheriton	Services, campground
Oyster	Harbor, scenic views, County Park
Cape Charles	Historic district, harbor, trail, museum, lodging, services, beach
Kiptopeke State Park	Beach, trails, scenic views, camping
Eastern Shore of VA National Wildlife Refuge	Trails, scenic views
Chesapeake Bay Bridge Tunnel	Parking and Ride, restrooms, transit service to Virginia Beach

RIDERSHIP DATA

Currently, ridership data is not available. Counters are needed to track usage at popular bicycling origin sites such as Chincoteague, Assateague, Cape Charles, and at the Southern Tip Bike and Hike Trail at the Eastern Shore of Virginia National Wildlife Reserve (ESNWR).



Figure 7, Eastern Shore Bicyclist on Road with Unpaved Shoulder and Nearby Ditch

“Don’t buy upgrades, ride up grades.” ~ *Unknown*

INVENTORY OF EXISTING FACILITIES

Existing bicycle facilities on the Eastern Shore of Virginia consist of bicycle paths at the Eastern Shore of Virginia Natural Wildlife Reserve at Kiptopeke, Chincoteague National Wildlife Refuge and Assateague National Seashore, and segments of the State highway system.



Figure 8, Bicyclists at Assateague National Seashore Park

Due to narrow pavement width and high-posted speeds, most of the Eastern Shore roads do not meet VDOT standards for accommodating bicycles. The following facilities do meet basic standards and could be designated as bicycle routes:

Accomack Existing Facilities

Route	Facility Type	AADT	Posted Speed	Road Width
Rt. 175 (Chincoteague Road) from Rt. 679 (Fleming Road) to Chincoteague Causeway	Paved Shoulders	7,900	45/55	34 ft
Rt. 2113 Maddox Boulevard from the traffic circle to Museum of Chincoteague Island/McDonalds	Paved shoulders with bike lane markings	5344	25	36 ft (?)
Rt. 2113(1) Maddox Boulevard from the Museum to Sheepshead Creek	Elevated concrete boardwalk over marsh along northeast side only	5344	25	24 ft
Rt. 2113 (1) Maddox Boulevard from Deep Hole Road to the traffic circle.	Pavement striping on travel lane edge creates 1-3 ft wide bike accommodation on both sides of the roadway	9079	25	Varies
Rt. 2104 Deep Hole Road from Maddox Boulevard to Hallie Whealton Smith Drive	8' wide asphalt multi-use trail	2100	25	30'
Rt. 316 (Greenbush Road) from Rt. 176 (Parksley Road), Parksley to Business Rt. 13, Tasley	Paved Shoulders	3,000	25/55	34 ft
Business Rt. 13 from Accomac to Onley	Wide Lanes	3,400	35/55	30 ft

Table 1, Accomack County's Existing Bicycle Facilities

Northampton Existing Facilities

Route	Facility Type	AADT	Posted Speed	Road Width
Business Rt. 13 in Exmore	Wide Lanes	2,500	25/55	30 ft
Business Rt. 13 in Eastville	Wide Lanes	1,700	25/55	30 ft
Business Rt. 13 in Cheriton	Wide Lanes	2,300	25/55	30 ft
Rt. 184 (Stone Road) from Cape Charles to Business Rt. 13 North	Wide Lanes	3,900	25/55	30 ft
Rt. 704 (Kiptopeke Drive), Kiptopeke State Park Entrance Road	Bicycle Lanes	240	25	48 ft
Southern Tip Bicycle and Hiking Path	Shared Use Path	N/A	N/A	14 ft

Table 2, Northampton County's Existing Bicycle Facilities

CURRENT TRAFFIC & GEOMETRIC DATA

In designating potential routes and the appropriate facilities for bicyclists, it is important to consider the geometric data, or existing roadway characteristics such as road width, shoulder width, shoulder treatments for drainage, and vehicle usage, including heavy vehicle usage. For example, a multiuse path might be a more appropriate facility than striping a bike lane along a high volume roadway heavy vehicle traffic, especially if it is located close to a school. Current design standards do not allow striped bike lanes where other physical characteristics are present, such as the open drainage ditches commonly seen along Eastern Shore roads.

The majority of bicycling on the Eastern Shore is recreational, and occurs mostly along rural back roads, in towns, and on the few existing bike paths by individual riders, and organized and ad hoc bicycle groups. Annual events like the *Tour Between the Waters*, The Eastern Shore Chamber of Commerce's *Le Tour de Shore*, and the National Multiple Sclerosis (MS) Society's *Bike MS: Virginia's Ocean to Bay Ride* continue to grow in popularity and attract bicyclists from outside the region.



Figure 9, Bicyclists on Southern Tip Bike & Hike Trail that Originates at the Eastern Shore of Virginia National Wildlife Refuge

In a rural area like the Eastern Shore, the long distances between where people live and where they work or shop can often be a disincentive for people who want bicycle to commute to work or shop. Current volumes may not reflect actual demand because potential bicyclists are deterred by dangerous conditions, high speeds, or extended gaps in the network, and perceive the distance is too great or unsafe to make by bicycle.

BICYCLE SAFETY DATA

The Division of Motor Vehicles provides a clearinghouse of statistics for crashes involving bicycles. From 2009 to 2013, a total of 14 crashes between motorists and bicyclists occurred on the Eastern Shore. Statewide, 3,576 total crashes occurred in that five-year period.

Year	# Crashes	% all Crashes	# Fatalities	% All Fatal Crashes	# Injured	% Injury Crashes
2009	643	0.6	11	1.6	607	1.0
2010	641	0.6	12	1.7	621	1.0
2011	749	0.6	6	0.8	730	1.2
2012	804	0.7	11	1.5	790	1.2
2013	739	0.6	8	1.2	716	1.1
TOTAL	3,576		48		3,464	

Table 3, Bicycle Crashes in Virginia, 2009-2013

Table 4 (below) summarizes relevant crash data for the Eastern Shore. These crashes represent only those reported to the police. An average year sees close to 10 fatalities and 693 serious injuries in Virginia. Most crashes on the Eastern Shore between bicyclists and motorists occur at intersections.

County/Town	Date	Time	Day	Location	Crash Severity
Accomack	7/2/2009	18:40	Thursday	Rt. 779	Injury crash
Accomack	6/8/2013	20:36	Saturday	Rt. 13, South	Injury crash
Accomack	8/25/2013	20:20	Sunday	Rt. 679	Fatal crash
Northampton	9/13/2009	07:06	Sunday	Rt. 13 Lankford Highway	Injury crash
Northampton	6/28/2013	14:52	Friday	SR 684	Injury crash
Northampton	12/16/2013	17:58	Monday	Rt. 642, Bayview Circle	Injury crash
Northampton	9/21/2009	15:55	Monday	Plum Street, Cape Charles	Injury crash
Northampton	5/25/2013	20:50	Saturday	3595 Willis Wharf Road	Pedestrian injury
Chincoteague	9/3/2011	07:46	Saturday	Main Street, Chincoteague	Injury crash
Chincoteague	9/3/2011	07:46	Saturday	Main Street, Chincoteague	Injury crash
Chincoteague	6/14/2012	21:00	Thursday	Chicken City Rd., Chincoteague	Injury crash
Chincoteague	8/24/2012	09:03	Friday	Pension Street, Chincoteague	Injury crash
Chincoteague	9/22/2012	10:35	Saturday	Deep Hole Road, Chincoteague	Injury crash
Chincoteague	6/26/2013	12:25	Wednesday	3481 Main Street, Chincoteague	Injury crash

Table 4, Eastern Shore Crash Data, 2009-2013

State law does not require bicyclists to wear a helmet; however several jurisdictions implemented that particular law for bicyclists under a certain age. No localities within Accomack and Northampton Counties have adopted this law.

The design of bicycle facilities needs to be treated as any other transportation project, with personal and traffic safety as key design elements. Every person riding a bicycle on a highway is subject to provisions of the Code of Virginia section on motor vehicles, and has rights and duties applicable to the driver of a vehicle unless a provision clearly states otherwise. Bicyclists must obey all traffic signs, signals, lights, and markings, and they

must ride with the flow of traffic on the right side of the highway. Safety is a critical facet of any plan and encompasses education, enforcement, encouragement, and design facilities.

Safety concepts, such as safe intersection treatments, must guide the development of all bicycle facilities. Also, the bicyclist needs to be educated about safe bicycling practices. Finally, personal security issues need to be addressed, especially when dealing with shared use paths. Appropriate landscaping, lighting, safety call boxes, and frequent patrols are common measures to improve bicycling safety and security.

IDENTIFIED DEFICIENCIES & BARRIERS

Connections between homes and schools, recreation centers, employment areas, and shopping destinations need to be continually assessed. Deficiencies also need to be addressed on a regional level. The Eastern Shore's current bicycle network is limited and disjointed at this stage in development. Coordinated, regional projects can provide a template upon which other facilities can be built to systematically close the gaps and extend the bicycle network the entire length of the Eastern Shore peninsula.

CHALLENGES

The Chesapeake Bay is a natural barrier to connectivity between the Eastern Shore and the Virginia mainland where an extensive network of established trails exists, including the Bluegrass to Beaches Trail that ends in Hampton Roads. Bicycles are not allowed on the Chesapeake Bay Bridge Tunnel, although a shuttle system is available for touring bicyclists. Challenges include:

- Narrow rural roads with unpaved shoulders, open ditches, storm water pooling, steep slopes, and motorists traveling at high speeds;
- Lack of shoulder maintenance or repaving creates a greater hazard that leaves a height disparity between the road and the shoulder.
- Hostile motorists unwilling to share the road with bicyclists, and/or motorists are not sufficiently aware of the possible presence of bicyclists due to lack of signs and adequate education and enforcement;
- Very few off-road or shared-use paths for inexperienced bicyclists;
- Many older streets lack sufficient right-of-way to build new bike and pedestrian facilities.
- Crossing Route 13 poses safety threats and hampers safe access from one side of the highway to the other. Minimal crossing opportunities limit safe accessibility from east to west and stifle bicyclists' ability to connect to other points of interest.
- Right-of-way costs and utility relocation hinder the feasibility of bicycle and pedestrian facility construction.
- At-grade railroad crossings can be difficult for bicyclists and pedestrians to negotiate.
- Current land use, property ownership, and construction present challenges to establish or maintain connectivity of shared use, off-road bike paths.
- Bicycle facility projects are not inexpensive; projects need to be prioritized based on safety history; motor vehicle, bicycle, and pedestrian traffic volumes; cost; location; and ease of implementation.

According to the FHWA, to define qualitative and quantitative variables in determining performance criteria as desirable and effective, the following factors need to be taken into account to plan and set priorities:

Accessibility: Accessibility is the ease that a bicyclist can travel the distance between origin and destination. Residential areas or high priority sites like schools, shopping centers, business centers, or parks should be afforded reasonable access.

Directness: The desire to use a bicycle facility is influenced by how direct and how much time it takes to travel a path to a desired destination.

Continuity: Bicycle network plans should attempt to minimize gaps and missing links. Where a gap exists, it should not expose the bicyclist, especially B/C riders to unpleasant or dangerous roadways where there are high traffic volumes or high speeds with only a narrow outside lane to navigate on in order to reach a more bike-friendly path.

Route attractiveness: A bike path's attractiveness is enhanced by separation from motor traffic, the presence of visual aesthetics, and/or a sense of security from real or perceived threats to safety. Visibility and therefore, security for bicyclists are increased when a path is near homes or businesses. In stretches where the path is dark, lighting gives riders a greater sense of security in using the path.

Low conflict: A well-designed path should seek to minimize a bicyclist's encounters with unleashed dogs and motor vehicles.

Cost: The costs to establish, construct, provide way-finding signs, safe crossing mechanisms, and maintain the bicycle system need to be factored into the design and implementation plan.

Ease of implementation: The amount of available space, and existing traffic operations and patterns affect how difficult or easy it is to implement changes.

CONTINUITY MULTI-JURISDICTIONAL COORDINATION

FHWA's university course on bicycle planning states that "(C)ities and towns with good bicycle and pedestrian plans can have a very positive impact on bicycling and walking conditions." Long term bicycle plans inherently cross jurisdictional boundaries. By collaborating and coordinating, local jurisdictions can assure proposed trails and bikeways achieve continuous, coherent results. Jurisdictions need to identify the policies and legal barriers that might hamper implementation of bicycle improvements (including zoning and subdivision regulations), and develop strategies to overcome barriers.

Establishing a unified, regional, prioritized approach is important for another critical reason: funding. Towns that effectively do their homework are more likely to qualify for the

bicycle accommodation project funding that ultimately enhances the quality of life for their citizens, and enables them to attract tourism and the dollars tourists bring to a community.

OPPORTUNITIES

Bicycling and walking accommodations serve as unique transportation links between historic, cultural, scenic, and recreational sites, providing support to tourism activities and economic development. Projects along existing or planned tourism and recreation corridors should include bicycle accommodations. Again, coordination and cooperation with economic development organizations, as well as with other agencies such as State and National Park Services, is essential for continuity.

RECOMMENDED BIKE FACILITY TYPES FOR THE EASTERN SHORE

It is important to note that the resulting map may not be a representation of where bicyclists are, but instead is a reflection of where bicyclists wish to go. Understanding both existing and projected demands is helpful to evaluate and prioritize bicycle facilities. Actual travel patterns of bicyclists (especially the non-commuter) are heavily influenced by their perception of safety and personal security. When people perceive bicycling conditions are uncomfortable, unsafe, or threatening, they may choose an alternate route from a preferred one, a different travel mode, or decide not to make the trip at all.

The following recommendations build on the facilities and events that already allow citizens to safely and confidently use their bicycles for recreational and utilitarian trips. The expectation is for the Eastern Shore to achieve higher levels of success serving its citizens. Recommendations start with facility improvements to enhance and expand the bicycle network across both counties, underpinned by education, encouragement, and enforcement programs. The two general bicycle facilities types are classified as: shared use paths (off-road), and on-road accommodations. While roads and shared use paths are both important to bicycle travel, the on-road facilities are key because the existing road network is already established, more extensive, and provides access to most attractions.

A key part of the planning process is to identify the travel corridors that bicyclists most often use, known as “desire lines”, to connect a neighborhood or areas where trips originate to those destinations that attract a significant number of bicyclists. Adjustments may be needed when considering trips to schools and the community college, and to parks, beaches, scenic sites, and other recreational areas. Specific routes are identified to be designed or adapted in order to create a network of on-road bicycle facilities that accommodate Group B/C bicyclists and provide safe access to key destinations on the Shore.

“Work to eat. Eat to live. Live to bike. Bike to work.” ~ *Unknown*

PROPOSED BICYCLE FACILITIES

CHART 1, ACCOMACK COUNTY BICYCLE FACILITIES CHART

Existing Paved Shoulder

ID	Name	Width	Speed	AADT	Description
100	Route 175	34	45/55	6,500	Route 175 (Chincoteague Rd) from Route 679 (Fleming Rd) to Chincoteague Causeway
102	Route 684				Route 684 (Guard Shore Rd) from Route 658 (Winterville Rd) to Shore Line
104	Route 316	34	25/55	4,000	Route 316 (Greenbush Rd) from Route 176 (Parksley Rd), Parksley to Business Route 13, Tasley

Existing Wide Lanes

ID	Name	Width	Speed	AADT	Description
200	Business Route 13	30	35/55	3,600	Business Route 13 from Accomac to Onley

Proposed Paved Shoulder

ID	Name	Width	Speed	AADT	Description
400	Route 705	16-20	55	350	Route 705 (Holland Road) from MD State Line to Route 706 (Tunnels Mill Road)
402	Route 706	18	55	180	Route 706 (Tunnels Mill Road) from Route 705 (Holland Road) to Route 693 (Neal Parker Road)
404	Route 175	18-36	25/55	6,200-7,100	Route 175 (Chincoteague Road) from Route 13, T's Corner, to Chincoteague Island
406	Route 702	22-40	55	1,600	Route 702 (Horsey Road) from Route 693 (Neal Parker Road) to Route 679 (Atlantic Road), Atlantic
408	Route 693	16-20	55	790	Route 693 (Neal Parker Road) from Route 706 (Tunnels Mill Road), Withams to Route 692 (Hallwood Road), Hallwood
410	Route 695	20-22	35/55	1,200	Route 695 (Saxis Road) from Saxis to Temperanceville to Route 679 (Atlantic Road)
412	Route 701	16	55	150	Route 701 (Wessells Farm Road) from 695 (Saxis Road) to 692 (Savannah Road), Hallwood
414	Route 692	16-40	55	1,200	Route 692 (Savannah Road) from Route 701 (Wessells Farm Road) through Hallwood to Route 13
416	Route 690	16-18	55	130	Route 690 (White's Crossing) from 692 (Savannah Road) to 658 (Winterville Road)
418	Route 658	16-30	55	2,400	Route 658 (Winterville Road) from 690 (White's Crossing) to Route 179 (Market Street), Onancock
420	Route 779	18-20	35/55	2,400	Route 779 (Mears Station Road) from Route 692 (Hallwood Road), Hallwood, to Route 187 (Shoreman Drive), Bloxom
426	Route 187	18-20	35/55	910-2,600	Route 187 (Guilford Road) from Route 658 (Winterville Road), Bloxom, to Route 679 (Mitchell/Nelsonia Roads), Modest Town (Metompkin Road)
428	Route 316	20-32	25/55	1,100-4,000	Route 316 (Hopeton Road) from 187 (Mitchell Road). Bloxom to Business Route 13, Tasley
430	Route 176	22	25/55	3,300-3,900	Route 176 (Parksley Road) from Parksley to Route 13, Fisher's Corner (Royal Farms)
432	Route 667	16	55	170	Route 667 (Old County Road) from Route 176 (Parksley Road) to Route 661 (John Cane Road)

434	Route 661	16	55	230	Route 661 (Johnson Road) from Route 666 (Fox Grove Road) to Route 667 (Old County Road)
436	Route 666	16	55	180	Route 666 (Fox Grove Road) from Route 679 (Metompkin) to Route 661 (Johnson Road)
438	Route 764	18-20	25/55	2,100	Route 764 (Accomac Road) from Greenbush to Accomac via Courthouse Road
440	Route 126	22	35/55	3,800	Route 126 (Fairgrounds Road) from Route 179 (Market Street), Onancock, to Business Route 13 Tasley
442	Route 638	20-24	55	4,900	Route 638 (Cashville Road) from Route 641 (Broadway Road) to Route 718 (Hill Road), Onancock
444	Route 638	20-24	55	4,400	Route 638 (Badger Lane) from Route 718 (Hill Road), Onancock, to Route 609 (Redwood Road), Onley
446	Route 609	16-18	55	2,200	Route 609 (Church Road) from Business Route 13, Accomac, to Route 626 (Airport Road)
448	Route 718	22-24	35/55	3,800	Route 718 (Hill Road) from 179 (Market Street), Onancock to Route 620 (Warehouse/Hollies Church Road)
450	Route 716	20	55	300	Route 716 (Warrior Drive) from Route 609 (Redwood Road) to Route 13, Nandua High School
452	Route 718	18	35/55	1,700	Route 789 (Locustville Road) from Onley to Locustville
454	Route 605	18-22	25/55	1,500	Route 605 (Drummondtown/Bradford's Neck Road) from Accomac to Quinby
456	Route 626	22-40	35/55	1,200	Route 626 (Airport Road) from Route 718 (Savageville Road) to Route 13, Melfa
458	Route 620	18-20	35/55	390	Route 620 (Hollies Church Road) from Route 718 (Savageville/Bobtown Roads) to Route 13, Keller
460	Route 623	16	55	240	Route 623 (Adam's Crossing Road) from 620 (Hollies Church Road) to Route 13, Keller
462	Route 180	18-24	35/55	1,200	Route 180 (Harborton Road) from Harborton to Wachapreague
464	Route 696	18	35/55	1,200	Route 696 (Keller Fair Road) from Route 13 to Route 180 (Wachapreague Road), Keller
466	Route 718	22-28	35/55	3,000	Route 178 (Warehouse/Hollies Church Road) from Route 620 (Boston/Craddockville/Shields Bridge Roads) to Route 13, Belle Haven
468	Route 609	18-24	35/55	1,500	Route 609 (Michael's Hall Road) from Route 178 (Bobtown/Savageville Road), Pungoteague, to Route 178 (Shield's Bridge Road), Belle Haven
470	Route 614	16-18	35/55	1,700	Route 614 (Shell Bridge Road) from Route 609 (Big Pine Road) to Route 13, Painter
472	Route 182	20	55	1,100	Route 182 (Quinby Bridge Road) from Mappsburg (Seaside Road) to Quinby
474	Route 602	16-18	55	820	Route 602 (Cemetery Road/Lee Street) from Route 178 (Big Pine Road) to Northampton County Line
476	Route 600	20	55	670	Route 600 (Seaside Road) from Route 182 (Quinby Bridge Road, Mappsburg) to Northampton County Line

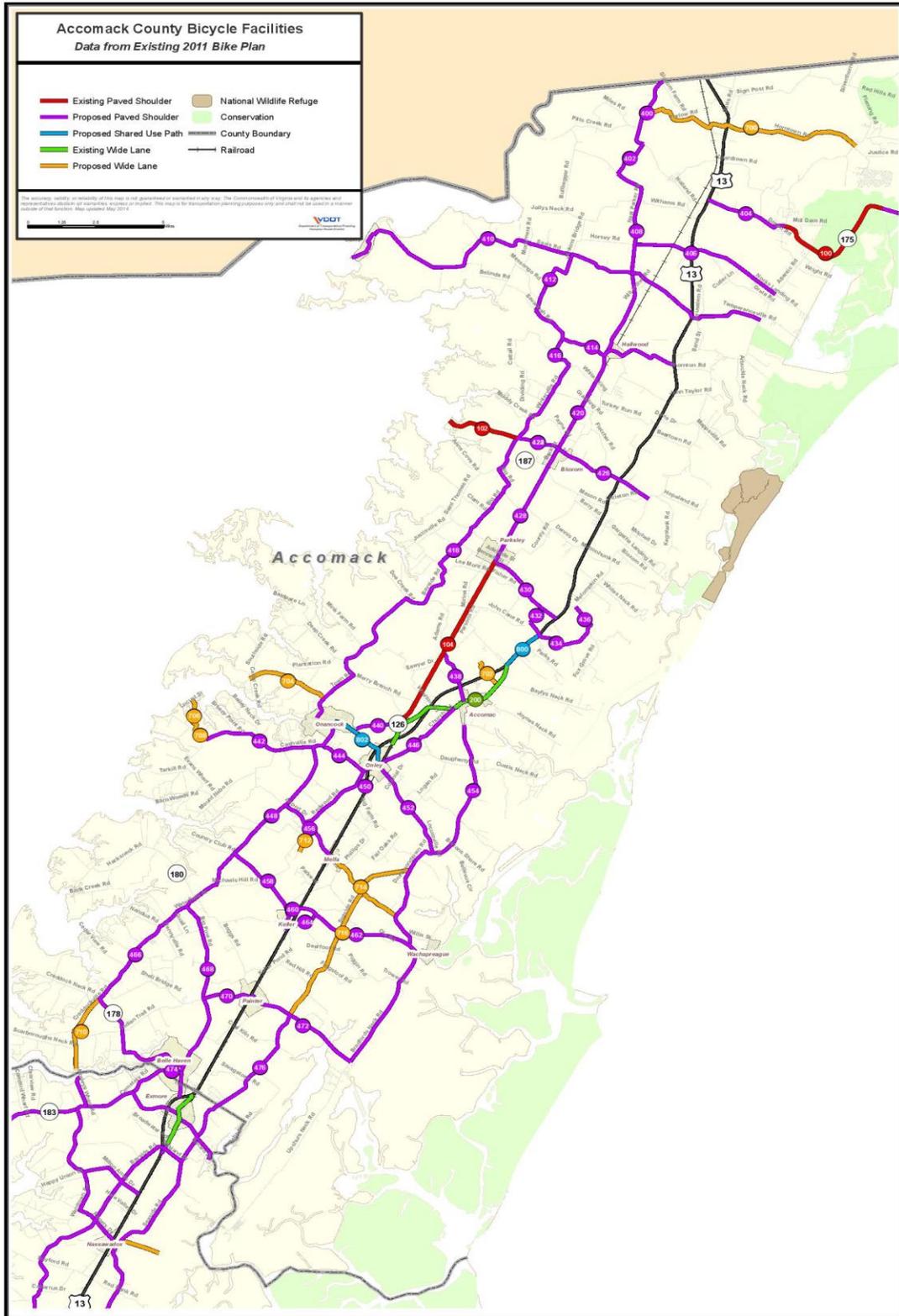
Proposed Wide Lanes

ID	Name	Width	Speed	AADT	Description
700	Route 709	16-36	55	990	Route 709 (Pitts Creek Road) from Route 705 (Holland Road) to Route 709 (Horntown Road) Route 679 (Fleming Road), Horntown
702	Route 662	20	55	570	Route 662 (Baylys Neck Road) from Perdue Farms to N. Business 13, Accomac
704	Route 653	16-18	55	530	Route 653 (Poplar Grove Road) from Route 777 (Cedar Creek Road), Poplar Cove, to Route 658 (Town Road), Onancock
706	Route 767	16-18	55	270	Route 767 (East Point Road) from East Point to Route 641
708	Route 641	16	55	680	Route 641 (Broadway Road) from 767 (East Point Road) to Route 638 (Cashville Road)
710	Route 615	16-18	35/55	1,200	Route 615 (Craddockville Road) from Route 178 (Boston Road) to Davis Wharf
712	Route 818	20-50	35/55	90	Route 818 (Terminal Road) from Route 626 (Airport Drive) to Eastern Shore Farmers Market
714	Route 624	16-20	35/55	240	Route 624 (Mapp/Pickpenny Roads) from Melfa to Route 605 (Drummondtown Road)
716	Route 600	16-18	55	470	Route 600 (Seaside Road) from Route 605 (Drummondtown Road) to Route 182 (Quinby Bridge Rd)

Proposed Shared Use Path

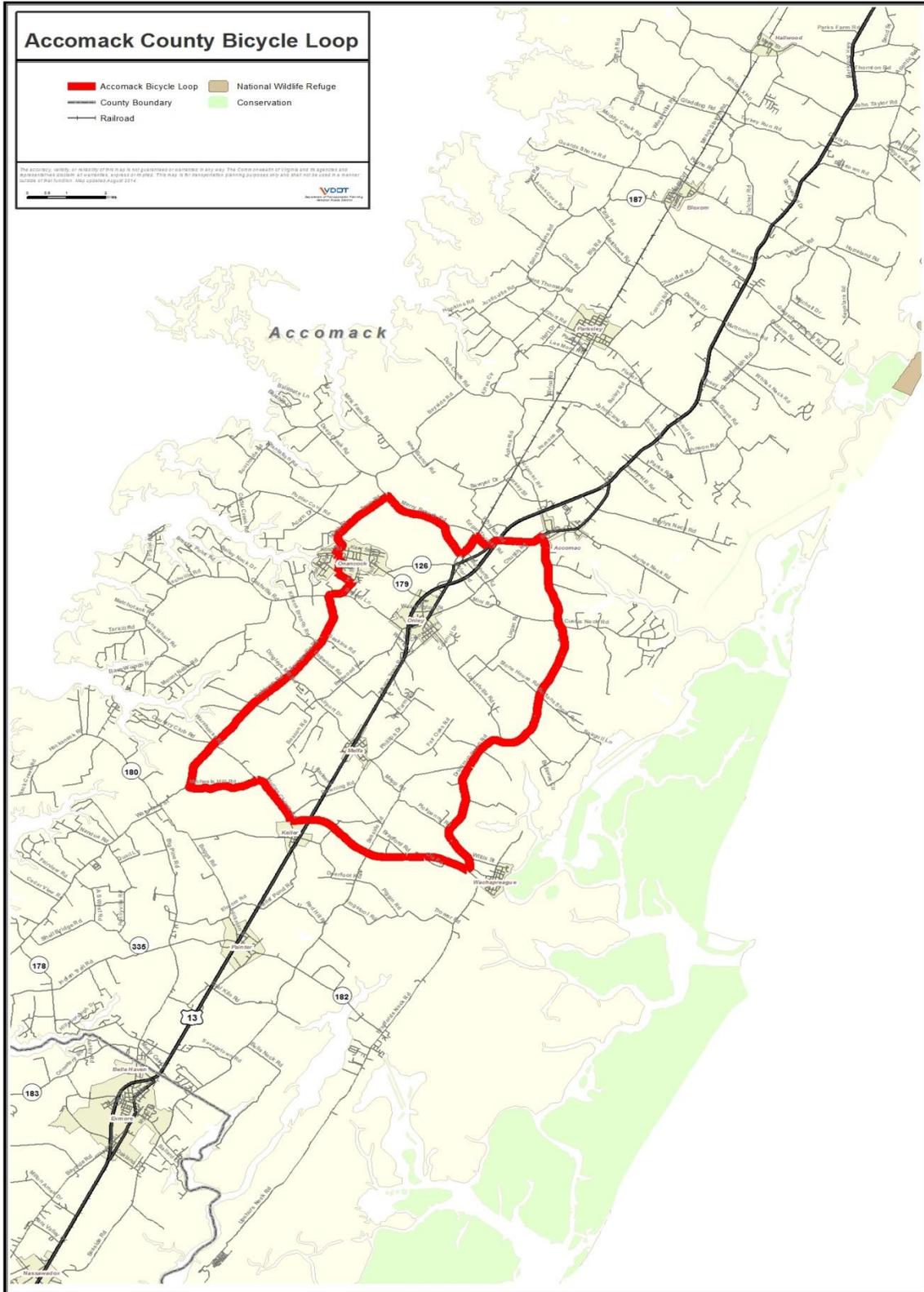
ID	Name	Width	Speed	AADT	Description
800	Route 13	60	55	19,000	Route 13 from Route 661 (John Cane Road) to N. Business 13, Accomac
802	Route 179	48	35/55	7,700	Route 179 (Market Street) from Route 718 (Hill Street), Onancock to Business Route 13, Onley

ACCOMACK COUNTY BICYCLE FACILITIES MAP



Map 2, Accomack County Bicycle Facilities Map

MAP OF SUGGESTED BICYCLE LOOP IN ACCOMACK COUNTY



Map 3, Map of Suggested Bicycle Loop in Accomack County

CHART 2, CHINCOTEAGUE/TANGIER BICYCLE FACILITIES CHART

Chincoteague Proposed Bike Lanes

ID	Name	AADT	Description
600	North Main Street	2,200	Route 1623 (Main Street) from Route 1 (Maddox Blvd) to (Taylor Street)
602	North Main Street	7,300	Route 1623 (Main Street) from Route 175 (Chincoteague Rd) to Route 3 (Church Street)
604	Maddox Boulevard	7,100	Route 1 (Maddox Blvd) from Route 1623 (Main Street) to Route 8 (Pension Street)
606	Maddox Boulevard	9,100	Route 1 (Maddox Blvd) from Route 8 (Pension Street) to Route 2 (Chicken City Road)
610	Church Street	4,800	Route 3 (Church Street) from Route 1623 (Main Street) to Route 6 (Willow Street)
612	South Main Street	5,100	Route 1623 (Main Street) from Route 3 (Church Street) to Route 4 (Bunting Road)
614	South Main Street	3,000	Route 1623 (Main Street) from Route 4 (Bunting Road) to Route 5 (Beebe Road)

Tangier Existing Shared Use Path

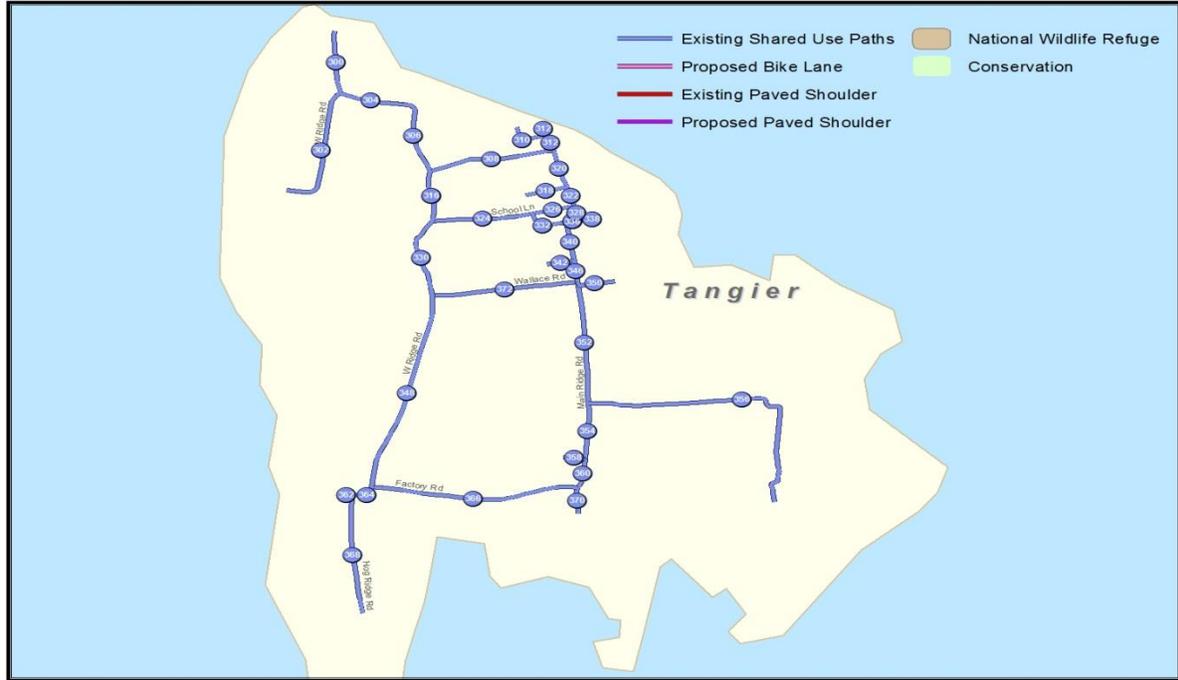
ID	Name	AADT	Description
300		45	Route 1315
302	West Ridge Rd	410	Route 1305 (West Ridge Road)
304	West Ridge Rd	410	Route 1305 (West Ridge Road)
306	West Ridge Rd	410	Route 1305 (West Ridge Road)
308	Lang Bridge Rd	270	Route 1312 (Lang Bridge Road)
310	Parsonage Ln	100	Route 1310 (Parsonage Lane)
312	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
312	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
314	West Ridge Rd	410	Route 1305 (West Ridge Road)
316	West Ridge Rd	410	Route 1305 (West Ridge Road)
318	Rayville Ln	80	Route 1311 (Rayville Lane)
320	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
322	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
324	School Ln	370	Route 1306 (School Lane)
326	School Ln	370	Route 1306 (School Lane)
328	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
328	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
330	West Ridge Rd	410	Route 1305 (West Ridge Road)
332	Old School Ln	280	Route 1307 (Old School Lane)
334	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
336	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
338	Post Office Rd	70	Route 1314 (Post Office Road)
340	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
342	Twin John Ln	4	Route 1313 (Twin John Lane)
346	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
348	West Ridge Rd	410	Route 1305 (West Ridge Road)
350	Wallace Rd	100	Route 1304 (Wallace Road)
352	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
354	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
356		190	Route 1302
358	Parker Ln	110	Route 1309 (Parker Lane)
360	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
362		390	Route 1308

Tangier Existing Shared Use Paths

ID	Name	AADT	Description
364			
366	Factory Rd	270	Route 1303 (Factory Road)
368	Hog Ridge Rd	70	Route 1305 (Hog Ridge Road)
370	Banny's Rd	390	Route 1301 (Banny's Road)
372	Wallace Rd	100	Route 1304 (Wallace Road)
300		45	Route 1315
302	West Ridge Rd	410	Route 1305 (West Ridge Road)
304	West Ridge Rd	410	Route 1305 (West Ridge Road)
306	West Ridge Rd	410	Route 1305 (West Ridge Road)
308	Lang Bridge Rd	270	Route 1312 (Lang Bridge Road)
310	Parsonage Ln	100	Route 1310 (Parsonage Lane)
312	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
312	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
314	West Ridge Rd	410	Route 1305 (West Ridge Road)
316	West Ridge Rd	410	Route 1305 (West Ridge Road)
318	Rayville Ln	80	Route 1311 (Rayville Lane)
320	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
322	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
324	School Ln	370	Route 1306 (School Lane)
326	School Ln	370	Route 1306 (School Lane)
328	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
328	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
330	West Ridge Rd	410	Route 1305 (West Ridge Road)
332	Old School Ln	280	Route 1307 (Old School Lane)
334	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
336	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
338	Post Office Rd	70	Route 1314 (Post Office Road)
340	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
342	Twin John Ln	4	Route 1313 (Twin John Lane)
346	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
348	West Ridge Rd	410	Route 1305 (West Ridge Road)
350	Wallace Rd	100	Route 1304 (Wallace Road)
352	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
354	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
356		190	Route 1302
358	Parker Ln	110	Route 1309 (Parker Lane)
360	Main Ridge Rd	390	Route 1301 (Main Ridge Road)
362		390	Route 1308
364	West Ridge Rd	410	Route 1305 (West Ridge Road)
366	Factory Rd	270	Route 1303 (Factory Road)
368	Hog Ridge Rd	70	Route 1305 (Hog Ridge Road)
370	Banny'S Rd	390	Route 1301 (Banny's Road)
372	Wallace Rd	100	Route 1304 (Wallace Road)

TOWN OF CHINCOTEAGUE AND TANGIER ISLAND BICYCLE FACILITIES MAPS

Chincoteague and Tangier Bicycle Facilities



Map 4, Town of Chincoteague and Tangier Island Bicycle Facilities Maps

CHART 3, NORTHAMPTON COUNTY BICYCLE FACILITIES CHART

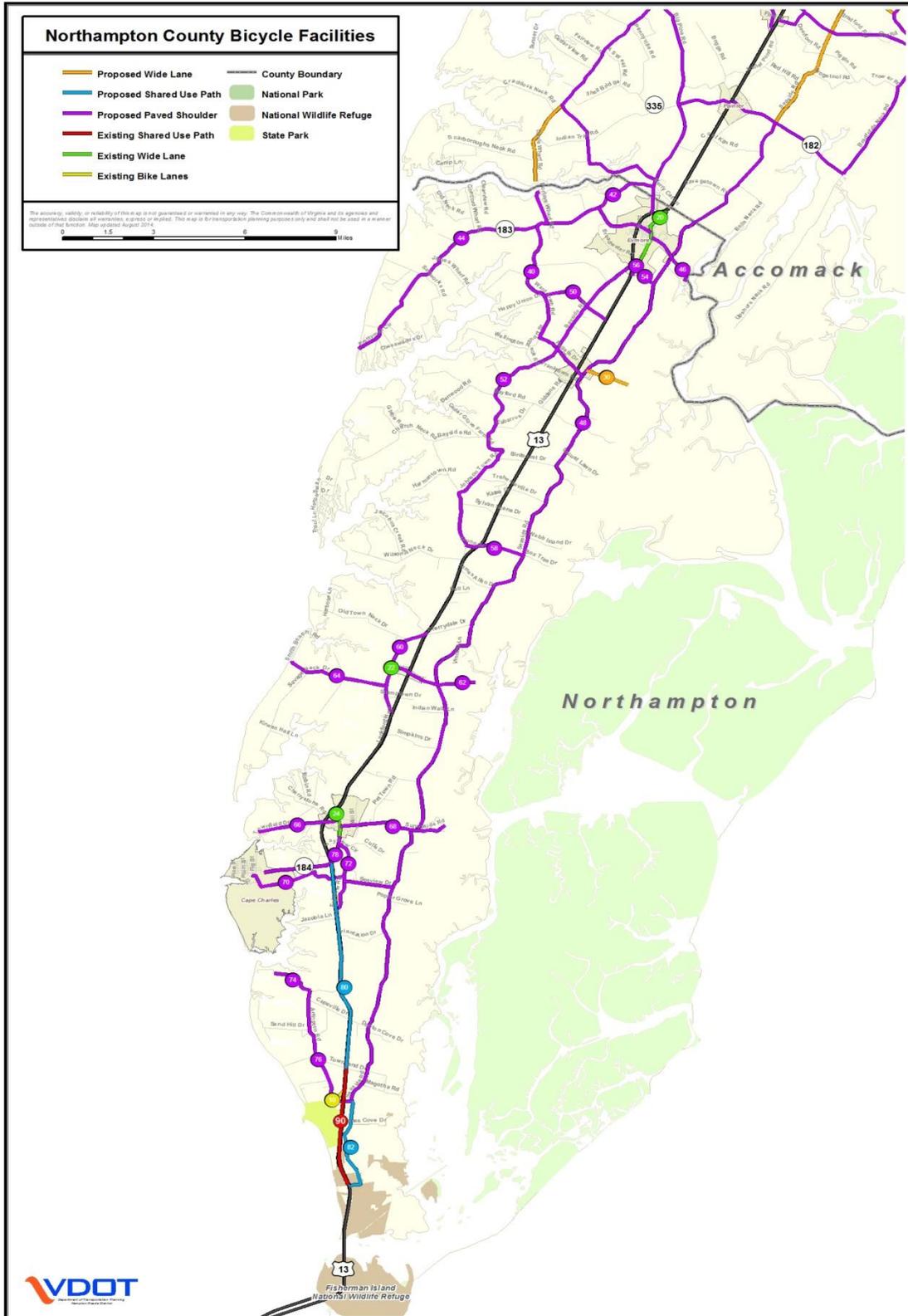
Existing Bicycle Lanes					
ID	Name	Width	Speed	AADT	Description
10	Kiptopeke State Park	48	25	120	Route 704 (Kiptopeke Drive), Kiptopeke State Park Entrance Road
Existing Wide Lanes					
ID	Name	Width	Speed	AADT	Description
20	Busn Route 13 Exmore	30	25/55	2,300	Business Route 13 in Exmore
22	Busn Route 13 Eastville	30	25/55	2,000	Business Route 13 in Eastville
24	Busn Route 13 Cheriton	30	25/55	2,600	Business Route 13 in Cheriton
26	Route 184	30	25/55	3,400	Route 184 (Stone Road) from Cape Charles to Business Route 13 North
Proposed Wide Lanes					
ID	Name	Width	Speed	AADT	Description
30	Route 608	16	55	90	Route 608 (Brownsville Road) from Route 600 (Seaside Road) to Brownsville
Proposed Paved Shoulder					
ID	Name	Width	Speed	AADT	Description
40	Route 606	18-20	35/55	1,600	Route 606 (Morley's Wharf/Wardtown Road to Route 610 to 609, Franktown Road) from Morley's Wharf to Route 600 (Seaside Road), Nassawadox
42	Route 602	18	25/55	570	Route 602 (Cemetery Road/Lee Street) from Route 183 (Occohannock Neck Road) to Accomack County Line
44	Route 183 / Route 613	20	25/55	1,900	Route 183 (Occohannock Neck Road) from Silver Beach to Exmore
46	Route 603	22-40	25/55	1,200	Route 603 (Willis Wharf Road) from Exmore to Willis Wharf
48	Route 600	12-20	35/55	960	Route 600 (Seaside Road) from Accomack County Line to Kiptopeke
50	Route 605	16-18	35/55	270	Route 605 (Milton Ames Drive/Brickhouse Road) from Route 606 (Wardtown Road) to Route 13
52	Route 618	16-22	35/55	1,700	Route 618 (Bayside Road) from Route 13 Exmore, to Young Street to Route 627 (Machipongo Drive), Machipongo
54	Route 604	22	25/55	1,100	Route 604 (Oakland Drive) from Route 13 to Route 600 (Seaside Drive)
56	Business Route 13	33	35/55	2,300	Business Route 13
58	Route 627	16-20	25/55	430	Route 627 (Machipongo Drive) from Route 618 (Bayside Road via Young Street) to Route 600 (Seaside Road)
60	Business Route 13	33	35/55	2,000	Business Route 13 in Eastville
62	Route 631	16-32	25/55	1,400	Route 631 (Willow Oak/Indiantown Road) from Business Route 13, Eastville, to Indiantown Park
64	Route 634	18-20	55	920	Route 634 (Savage Neck Road) from Route 666 (Smith Beach Road) to Business Route 13
66	Route 680	18-32	35/55	980	Route 680 (Townfield Drive) from Cherrystone to Business 13, Cheriton

68	Route 639	18-32	35/55	2,200	Route 639 (Sunnyside Road) from Cheriton to Oyster
70	Route 642	16-22	25/55	1,100	Route 642 (Old Cape Charles/Seaview Roads) from Cape Charles to Route 600 (Seaside Road)
72	Route 684	32	25/55	4,100	Route 684 (Bayview Circle/Fairview Road) from Business Route 13 to Route 13
74	Route 644	18-20	25/55	80	Route 644 (Custis Tomb Road) from Custis Tomb to Route 645 (Arlington Road)
76	Route 645	20-22	55	460	Route 645 (Arlington Road) from Route 644 (Curtis Tomb Road) to Route 600 (Seaside Road)
78	N. Busn Route 13	32	35/55	2,200	Business Route 13

Proposed Shared Use Path

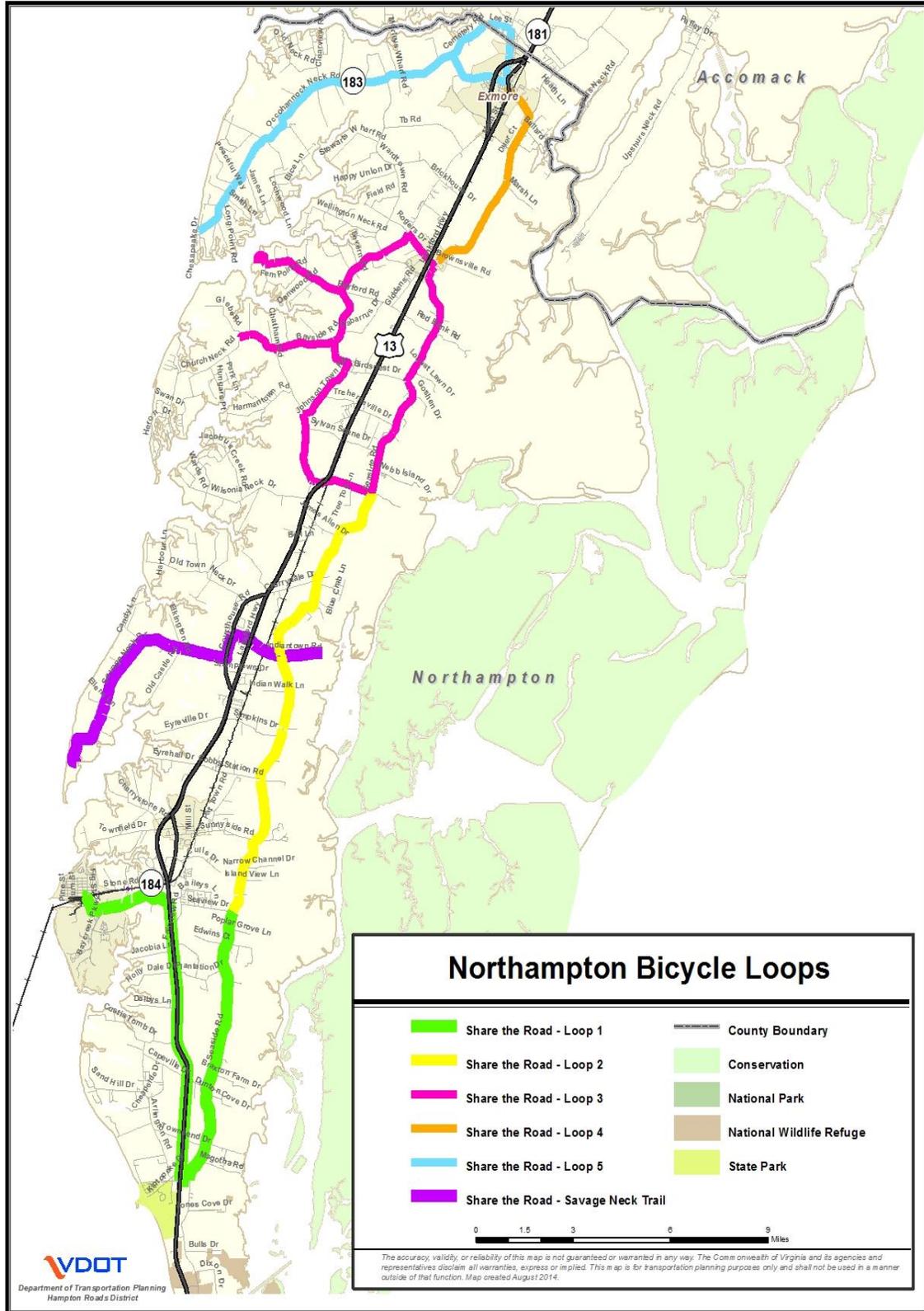
ID	Name	Width	Speed	AADT	Description
80	Shared Use Bike Path	10	N/A	N/A	From Cape Charles to Eastern Shore of Virginia National Wildlife Refuge
82	Route 600	N/A	N/A	N/A	Route 600 (Seaside Road) to CBBT Parking Lot

NORTHAMPTON COUNTY BICYCLE FACILITIES MAP



Map 5, Northampton County Bicycle Facilities Map

SUGGESTED NORTHAMPTON COUNTY BICYCLE LOOPS AND SPURS MAP



Map 6, Suggested Northampton County Bicycle Loops and Spurs Map

END FACILITY TREATMENTS

Ancillary facilities such as secure bicycle parking, bicycle lockers, maintenance stations and even shower and locker facilities at the workplace contribute to the success of a bicycle network. Many bicyclists decide not to commute to work because once there, they lack secure bike storage and are unable to shower and change clothes. Providing shower and locker room facilities at office and commercial spaces helps encourage bicycling.

Secure bicycle parking is also a necessity. Bicyclists are understandably concerned about possible theft of or vandalism to their bicycles, and want to protect their bicycles from rain damage and other environmental conditions. Typical parking facilities range from a simple rack to a separate covered area designated exclusively for bicycle use. The bike rack or locker placement should also be highly visible, such as near storefronts, in use zones, or in well-lit areas in order to protect the bicyclist's safety.

Localities can encourage bicycle use by including requirements in their local ordinances to ensure bicycle parking is provided at new development sites. Providing bike racks at transit stops such as the ferry, or near heavily used areas and destinations such as the hospital and community college also encourages bicycle use. Special pamphlets, made available at tourist information sites and transit kiosks, can inform riders about accessible bike locations and serve as a means to boost bicycle use and market bicycle tourism to the region.

MAINTENANCE

By Virginia state law, bicyclists possess the same rights and responsibilities as motorists on all non-controlled access roadways. Roadways should be maintained with bike safety in mind by removing debris, patching cracks and ridges at pavement edges, replacing drainage grates with bike-friendly grates, and ensuring utility covers are flush with the roadway.

Scheduled maintenance of roadways with bicycle facilities should be upgraded to once per month. Quarterly rides to assess the current condition of bike routes and facilities and to identify potential needed improvements to the cycling environment need to be implemented. Additionally, consider increasing investments to repave and restripe streets in order to relatively quickly and inexpensively improve surface quality and the availability of adequate bikeway facilities.

SIGNAGE AND WAYFINDING

Safety, directional, and informational signs are a necessity to develop a user-friendly bicycle network. The MUTCD offers direction on how to provide the proper signage for bike routes. On the Eastern Shore, VDOT and the Town of Chincoteague are responsible for posting signage on local and state bike routes. Bike route signs need to be supplemented with time and distance signs to help riders locate destinations along or near the route.

INTEGRATING BICYCLING INTO OTHER TRANSPORTATION MODES

TRANSIT/FERRY

Integrating bicycling with other transportation modes, particularly public transit, benefits the entire transportation network. Bicycles have a significant complementary effect on communities' transit systems when the proper facilities and policies are in place, resulting in increased ridership, as well demonstrated in the U.S., Europe, and Asia. Bicycles provide the on-demand, door-stop service that most bus and rail systems can't. On the other hand, buses and trains travel faster and farther than most bicyclists. The bicycle/transit combination has a synergistic, positive effect that amplifies the market area served and the effectiveness of each transportation mode. Strategically placed Park and Ride facilities help complement bicycle facilities by giving bicyclists and motorists mode transfer opportunities.

STAR Transit's program supports a multi-modal transportation system. The local transit provider, STAR Transit, operates on demand service, and each vehicle is outfitted with bike racks for riders. Continuous monitoring and working with regional transit providers helps ensure bicyclists' needs are met, both on board the transit vehicles and near transit stops.

PRIORITIZATION PROCESS AND TIMELINE

SHORT TERM (3-5 YEARS)

- Erect "Share the Road" signs along rural roads such as Bayside and Seaside Roads;
- Complete Phases II, III of the Southern Tip Bike & Hike Trail to entrance to Cape Charles;
- Pave and stripe existing shoulders, and erect signs alerting motorists to bicyclists; using the same roads;
- Seek Safe Routes to School (SRTS) grant for the Phase III Southern Tip Trail extension segment that passes near Kiptopeke Elementary School;
- Construct aesthetically pleasing overpass across Route 13 to serve dual purpose: convey bicyclists across busy Rt. 13 highway safely, and advertise the shared use bike path to tourists transiting through the Eastern Shore;
- Narrow lanes on Rt. 184 (Stone Road) at entrance to Cape Charles to accommodate a bike shoulder lane;
- Construct paved lanes into Chincoteague for bicyclists (could also be accessed by emergency vehicles when necessary to get to accident victims on bridge);
- Work with appropriate authorities to enforce leash laws so dogs don't create a safety hazard to bicyclists, and with VDOT to remove litter from shoulder lanes and paths;
- Negotiate an easement agreement with RR in Cape Charles to extend the proposed Southern Tip Bike & Hike Trail to connect with the Town's proposed trail system;
- Add a shared use path or at least, a paved shoulder along Church Road in conjunction with upcoming repaving and construction.

LONG TERM (5-20 YEARS)

- New shared use path (separate from Redwood Rd and Rt. 13) to link the towns of Accomac and Onancock (near the hospital and proposed library) to the YMCA and the Community College;
- Once established, extend the Onancock/ESCC shared use path to Keller and then west to the towns of Pungoteague and Harborton, and east to Wachapreague;
- Create a shared use path or at least striping along Rt. 179 into Onancock where there is currently no sidewalk and pedestrians and bicyclists have to use the road;
- Create path from the Maryland border through Atlantic via Fleming Road/Nock's Landing;
- Make it a priority to create a full length Eastern Shore bike trail that extends from the southern tip to the Maryland border, features high activity destination loops along the way to serve commuters and recreational bicyclists, and connects the Eastern Shore's trail to the existing "Beaches to Bluegrass Trail" across the Bay;

COST ESTIMATES

Construction costs are influenced by many as they have direct bearing on the type and amount of materials needed for construction. Among these factors are

- Type and length of facility
- Surface treatment: asphalt, crushed stone, other
- Number, length, and type of bridge structures (including boardwalks)
- Topographic or soil conditions
- Setting: urban, suburban, rural
- Need for survey
- Environmental requirements: NEPA, wetland permitting, etc.
- Public involvement
- Right-of-way acquisition
- Utility relocation
- Plan development and type of plans needed
- Drainage
- Signage, including development of special route signs if desired
- Pavement markings
- Need for traffic control devices, such as signals

Bicycle Facility Accommodation	Base Cost
Bicycle Lane (4' wide lane on left & right sides)	\$435,100/Mile

Wide Curb Lane (2' additional pavement on left & right sides)	\$217,600/Mile
Paved Shoulder (4' wide shoulder on left and right sides)	\$376,600/Mile
Shared Use Path (10' wide paved asphalt path)	\$719,100/Mile
Sign Panel	\$34.50 /Square Foot
Sign Post 4x4 wood or U-channel	\$9.40/ Linear Foot
Thermoplastic Pavement Line 4"	\$1.30 / Linear Foot
Sample Sign with Post (Bicycle Diamond with Share the Road)	\$300

Table 5, Planning-Level Cost Estimates for Bicycle Accommodations (September 2011, VDOT)

IMPLEMENTATION PRIORITIES

To coordinate and implement the plan's goals and priorities, Accomack and Northampton Counties, and towns within the counties, need to be actively involved and work in concert with community leaders, bicycling enthusiasts, residents, VDOT, and the A-NPDC. The following Bicycle Facility recommendations are based on the work of the Eastern Shore of Virginia Bicycle Committee, the A-NPDC, the Transportation Technical Advisory Committee (TTAC), and Eastern Shore residents who submitted suggestions, attended workshops, and public meetings in 2004, 2011, and 2014.

1. *Pave shoulders* on the Route 175 Chincoteague Causeway.
2. Develop a *designated Seaside Bicycle Route with paved shoulders* from Maryland Route 12 to the Chesapeake Bay Bridge Tunnel Parking lot, using Route 679 (State Line Road, Fleming Road), Route 175 (Chincoteague Road), Route 798 (Atlantic Road), Route 666 (Fox Grove Road), Route 661 (Johnson Road), a *shared use path* along Route 13, Business Route 13, Route 605 (Drummondtown Road), Route 182 (Quinby Bridge Road), and Route 600 (Seaside Road);
3. Develop a *shared use path* between Onancock, Onley, and Accomac;
4. Pave shoulder on Route 600 (Savageville/Bobtown Road);
5. Create a *shared use path* from the new Riverside Hospital in Onley to the YMCA, the Eastern Shore Community College (ESCC), and the Accomack Airport Industrial Park (AAIP);
6. Develop a *shared use path* from Cape Charles to Cheriton;
7. Develop a *designated Bayside Bicycle Route with paved shoulders* from Route 695 (Saxis Road) in Makemie Park heading south to Machipongo using Route 693 Neal Parker road), Route 779 (Mears Station Road), Route 316 (Hopeton/Greenbush Roads), Route 126 (Fairgrounds Road), Route 179 (Market Street), Route 718 (Hill Street, Bobtown Road), Route 178 (Shield's Bridge Road), Route 602 (Lee Street/Cemetery Road), Route 183 (Ocohanock Neck Road), Route 606 (Wardtown Road to Franktown), Route 618 (Bayside Road south from Franktown), and Route 627 (Young Street/Machipongo Drive/Box Tree Drive).
8. *Pave shoulders* on Route 695 (Saxis Road) from Route 679 to Saxis;
9. Continue developing the *shared use path* from the Eastern Shore of Virginia National Wildlife Refuge (ESVNR), with *safe access across Route 13* to Stone Road at the entrance to Cape Charles;

10. Develop a *shared use path* to connect AAIP, Eastern Shore Community College, and the Eastern Shore Farmer's Market with Route 818 (Terminal Drive).
11. Improve bicycle *access along and across U.S. Route 13* at all major intersections;
12. *Promote connectivity* by highlighting Tangier Island tour boats from Onancock and Reedville, VA and Crisfield, MD as bicycle-friendly facilities.
13. Meet with the Bay Coast Railroad to discuss the possibility of *developing a rail/trail along the railroad access road*.

FACILITY DESIGN: GUIDANCE AND STRATEGIES

BICYCLE FACILITY DEVELOPMENT

Bicycle facilities can be developed using several methods, including local government capital improvements, VDOT road improvements, and private development. Bicycle facilities can also be secured through rights-of-way purchase, donation, and dedication through land development ordinances.

Planned roadway improvements are an important element of implementing a comprehensive bicycle network. Improvements may be ready for immediate implementation with funding mechanisms in place. In some cases, a minor enhancement to a planned highway or street improvement can significantly improve bicycle accommodation within a roadway corridor. Several planning tools are available to help identify planned roadway improvements in a given locality, including: regional transportation plans developed by a county; the Planning District Commission; a local comprehensive plan; or a capital improvement plan.

Because bicycling is essential to increase mobility for residents and to attract tourists, new roadway construction not identified on the current plan should include accommodations for bicyclists as an integral part of the planning and design process. A decision to not accommodate bicyclists and make the roads safer for them should be an exception and not the rule. New construction and reconstruction projects on roads should include adding paved shoulders to give bicyclists a safer place to ride, and to enhance the Eastern Shore's ability to promote its bicycle network to tourists. Integrating bicycle facilities into larger projects when they are being constructed is less expensive than retrofitting after construction and helps ensure the roadways do not create barriers to bicycling.

Local government and town planners have a unique opportunity to make the Eastern Shore more bike-friendly by making a commitment to incorporate bicycle planning into their mandates and programs. A-NPDC and VDOT will work in concert with local governments and towns to develop, coordinate, and refine the bicycle network design implementation throughout their planning processes to ensure consistency and uniform standards are applied to projects across jurisdictions.

FUNDING

According to VDOT, all aspects of bicycle facility planning and implementation require varying amounts of financial and human resources. The ultimate cost to build and maintain bicycle facilities varies tremendously depending on the type of facility, the complexity of the project, the degree to which volunteer labor is used, and many other factors. Besides the planning, design, construction, and maintenance components, there are also costs associated with programs aimed at promoting bicycling and ensuring a safe bicycling experience: bicycle education, encouragement, and enforcement programs.

For VDOT to consider using highway construction funds to construct bicycle facilities, each of the following VDOT Participation Conditions must be met.

- The bicycle facility is designed to meet current AASHTO and/or VDOT guidelines;
- The bicycle facility is located or designed pursuant to a bicycle plan that has been adopted by the local jurisdiction, planning district commission (PDC) or municipal planning organization (MPO), or is part of the Interstate Bicycle Route system;
- The bicycle facility will have sufficient use in relation to cost to justify expenditure of public funds, or it is a significant link in a bicycle system that is needed for route continuity.

VDOT initiates construction of a bicycle facility only at the request of the local government that is affected.

VDOT set a goal to spend 2 percent of the paving budget in each VDOT Construction District to provide paved shoulders. Paving unpaved shoulders creates a safer roadway for all users. Localities that maintain their own streets may use a portion of their maintenance payments toward bicycle and pedestrian accommodations. A minimum 2-foot paved shoulder may be provided on roadway sections that are on the paving schedule if they meet one of the following criteria:

- (1) The road is identified in an adopted transportation plan as a bicycle facility and no appropriate accommodation exists;
- (2) The roadway is identified in a traffic engineering study as presenting a safety hazard for bicycles and pedestrians;
- (3) The locality requested a paved shoulder for the roadway and VDOT agrees that provision of a paved shoulder is appropriate; or
- (4) Paving the shoulder provides a connection between existing facilities.

The revised *Asset Management Best Practices Manual* can be reviewed at: <http://www.virginiadot.org/programs/bk-documents.asp> (1) “Asset Mgmt Best Practices Manual 12.5” (2) “Asset Mgmt Best Practices Manual 4.10” (3) “Asset Mgmt Best Practices Manual 12.9”

Transportation Alternatives Program (TAP) Funds — The Transportation Alternatives Program (TAP), authorized by the Moving Ahead for Progress in the 21st Century Act (MAP-21), provides funds for on- and off-road bicycle facilities along corridors not served by roadway networks, Safe Routes to Schools (SRTS), infrastructure projects that enhance mobility, and recreational trails.

Highway Safety Improvement Program (HSIP) — The Federal Highway Administration's (FHWA) Highway Safety Improvement Program (HSIP) provides infrastructure project funds for countermeasures (and accommodations) to reduce fatalities and injuries on both VDOT and locally maintained roads. Funds are available through a competitive project proposal process for low-cost bicycle and pedestrian safety treatments.

Healthy Community Grants — The Healthy Community Wellmark Foundation provides financial support for projects that promote safe and accessible venues for bicycling, Safe Routes to School, and community amenities that facilitate bicycling, such as bicycle racks or lockers.

Community Development Block Grant Funds — The Community Development Block Grant Program, funded by the U.S. Department of Housing and Urban Development, provides grants that improve community facilities and services for low and moderate income persons.

Pavement Rehabilitation Program — VDOT's resurfacing projects can include placement of a minimum 2-foot wide paved shoulder when resurfacing routes that have non-hard surfaced shoulders and are specified in an adopted bike plan, particularly where there are safety hazards. VDOT's goal is to spend two percent of the pavement maintenance funds to pave shoulders during overlay projects.

Recreational Trails Program — The Recreational Trails Program (RTP) supports and maintains recreational trails and facilities throughout Virginia with matching grants, requiring that 30 percent of trail program funds are for non-motorized uses and 40 percent for multiple-use trails that serve recreational purposes and trail corridor sharing.

It is important for localities to take an active and proactive role in providing bicycle accommodation with roadway improvement projects because VDOT will not construct bicycle facilities without the local governments' approval and support. Perhaps the best, most important indicator of support is a bicycle plan adopted by the local governing body.

SUPPORTING AGENCIES, PARTNERSHIPS AND PROGRAMS

EXISTING PROGRAMS AND EVENTS

Both localities and local institutions sponsor programs and events to encourage residents to cycle in the area and recognize the amenities available to them.

SAFE ROUTES TO SCHOOL

The Safe Routes to School program was created to assist interested localities, schools and non-profit groups to make bicycling and walking to school both safer and more appealing to children. In addition to teaching children about safety, the program helps identify routes for bicycle and pedestrian travel and recommends improvements to ensure a safe biking and walking environment. The aim of this program is to encourage students, teachers, and parents to walk or bike to school rather than drive.

COORDINATION WITH NATIONAL, STATE, AND LOCAL PARK AGENCIES

VDOT policy encourages providing non motorized access to parks. Park agencies have been key partners in the planning, development and management of bicycles facilities throughout the Commonwealth. Active participation from the park services on the Eastern Shore, as already evidenced with the development of the Southern Tip Bike & Hike Trail is necessary in order to further develop the Eastern Shore's bicycling facilities network.



Figure 10, Bicyclists Read Interpretive Signs Provided by the Eastern Shore of Virginia National Wildlife Refuge Along the Southern Tip Bike & Hike Trail

**"It is by riding a bicycle that you learn the contours of a country best."
~ Ernest Hemingway**

PUBLIC HEALTH

The growing national concern about obesity and fitness is an important consideration when planning bicycle facilities. The Virginia Department of Health recognizes the value of safe bicycle facilities for recreation and transportation and their potential role in improving physical fitness.

A growing concern of community leaders and planners alike is how healthy our communities will be in the future. Education, infrastructure, health, and public safety needs are critical challenges at the local level. Transportation and mobility are also key elements of the livability

index. Open space and recreational opportunities are other important elements. Bicycle and pedestrian facilities are consistently recognized as effective strategies to create more healthy communities, improve safety, and better the quality of life in localities that have embraced them. Partnership with the local Health community is essential.

LAW ENFORCEMENT

Law enforcement is needed to ensure the safety of pedestrians, bicyclists, and motorists. The local Police Departments help by sponsoring a variety of programs ranging from drug education to seat belt use. Encouraging the local police departments to do the same for bicycle safety may also encourage safe use of bicycles for both adults and children and encourage interaction within the community.

EDUCATION AND SAFETY PROMOTION

Education is essential to bicycle safety. Bicycle maps with bicycle regulations, safety tips, school bicycle safety programs, and public bicycle events are effective ways to promote bicycle safety. The local community can provide cost-effective methods to distribute educational resources in developing and promoting bicycle programs. Law enforcement officials, local bicycle shops, local bicycle clubs, educators, church organizations, public health professionals, local media, and other community groups can offer resources to the area as it strives to establish a broad-based bicycle safety education campaign.

All users have a responsibility to use roadways in a safe manner. If bicyclists or motorists behave unsafely, their actions should be discouraged through police enforcement. However, while discouraging inappropriate and unsafe behavior is important, it is equally as important to encourage appropriate behavior. Safety incentive programs should be encouraged.

Several jurisdictions in Virginia require that every person fourteen years of age or younger wear a protective helmet whenever riding or being carried on a bicycle on any highway, sidewalk, or public bicycle path. Adopting a similar regulation may be beneficial if large numbers of younger riders are compelled to use paved shoulders along rural roads and near fast-moving traffic.

PLAN EVALUATION

EVALUATION OF FACILITIES CONSTRUCTION

To make this Bike Plan a living document, A-NPDC and VDOT will undertake a periodical, evaluation of key bicycle performance measures to document progress, accomplishments, and make needed adjustments. The following key benchmarks will be evaluated:

- Levels of bicycling: Install bike counters to get baseline usage quarterly at most popular sites (Southern Tip and Chincoteague National Wildlife Refuges)

- Safety and health: Report on safety and health improvements noted
- Policies: Identify current policies and cite any new federal and state policies
- Funding: Report on grants and funds sought
- Infrastructure and design: Delineate new bike accommodations installed
- Connecting to transit: Report on any new transit connections or options
- Education and encouragement: Cite education and enforcement efforts with schools and local law enforcement
- Bike parking: Indicate any new bicycle parking facilities installed
- Law enforcement and crash analysis: Provide updates on law enforcement measures and crash data
- Promotion: Identify efforts to promote the Eastern Shore as a world class bicycling region, links with other bike trails
- Economic benefits: Cite any new business or economic developments that arise from the presence or increase in bicycling facilities

Working in concert with VDOT, A-NPDC will track the projects implemented, provide updates to the Transportation Technical Advisory Committee (TTAC), and include a brief summary of accomplishments in its annual report to VDOT.

DOCUMENTATION OF BICYCLE EVENTS AND ACTIVITIES

The Eastern Shore currently hosts the following three annual bicycling events:

- *Le Tour de Shore*, sponsored by the Eastern Shore Chamber of Commerce
- *Bike MS: Virginia's Ocean to Bay Ride*, sponsored by the National Multiple Sclerosis (MS) Society
- *Tour Between the Waters*, sponsored by Citizens for a Better Eastern Shore (CBES)

Other annual events and festivals on the Eastern Shore may be venues to provide promotional materials and informational materials when and as they become available. The Southern Tip Bike & Hike Trail does host fourth and sixth graders from Kiptopeke Elementary School to walk the 2.6 miles of the existing Southern Tip Bike and Hike Trail.

NEXT STEPS

To implement the updated Bicycle Plan, the following steps are recommended:

- Adoption of the 2014 Bicycle Plan by both counties and incorporated towns;
- Formation a new Bicycle Committee consisting of stakeholders (ESVBA Bicycle Committee, Tourism Commission, Health Department, County Sheriffs, Town Police, Healthy Communities, Bay Coast Railroad, The Nature Conservancy, Road Scholars, bike event planners, A-NPDC, others) who collaborate to implement specific recommendations;
- Include bicycle facilities in Highway Corridor Overlay District Designations;

- Research possible funding opportunities to develop bicycle facilities;
- Explore “trail with rail” feasibility with Bay Coast Railroad;
- Coordinate with VDOT to narrow roads, re-stripe or add new striping for bike lanes;
- Research how to estimate projects costs;
- Develop a website for bicycling on the ESVA.

“Brains before beauty, wear your helmet!” ~ *Unknown*

APPENDICES

APPENDIX A BICYCLE PLANNING COMMITTEE VISION AND ACTIONS

APPENDIX B RESULTS OF COUNTY BICYCLE PLANNING WORKSHOPS

APPENDIX C 2014 BIKE PLAN UPDATE: STAKEHOLDERS PUBLIC INPUT

APPENDIX A

Bicycle Planning Committee Vision and Actions

Vision: **What Eastern Shore bicycle facilities do you envision by 2010?**

- *All STAR Transit buses carrying bicycles.*
- *Bicycle facilities on Seaside and Bayside with STAR Transit connections.*

- *Bicycle facilities that preserve scenic character, not make roads into speedways.*
- *Bicycle trailhead facilities with parking, lockers, phones, vending machines.*
- *A designated bicycle route from Maryland to Kiptopeke (at least paved shoulders with signs directing people to towns, businesses, campgrounds, etc.)*
- *Bicycle access to schools, Eastern Shore Community College, and industrial parks (there are no shoulders on U.S. Route 13 in Melfa and two bicyclists have been injured there).*
- *A rails-to-trails project along the Eastern Shore Railroad right-of-way.*
- *Bicycle facility requirements in site plan review for commercial development and subdivisions.*
- *An Eastern Shore Bicycle Plan that is consistent with the Hampton Roads District and State Bicycle Plans.*
- *Bicycle facilities linking adjacent towns (e.g. Accomac, Onley, Onancock).*
- *Kiptopeke State Park and Eastern Shore National Wildlife Refuge connected with a bicycle facility.*
- *Kids receiving bicycle safety education in schools.*
- *Motorists being more courteous to bicyclists due to bicycle education.*
- *Increased individual mobility through bicycling.*
- *Increased awareness of how bicycle facilities can develop a sense of community.*
- *Clearly identified heritage tourism destinations.*
- *Old carriage roads preserved for bicycling.*
- *Bicycle facilities are connected to Eastern Shore Heritage Trail.*
- *Straighter roads for bicycling.*

APPENDIX A

(Bicycle Planning Committee Vision and Actions, continued)

BICYCLE COMMITTEE PLANNING VISION AND ACTIONS

Actions: **What actions do we need to take to achieve our vision for Eastern Shore bicycle facilities in 2010?**

- *Develop the Eastern Shore Bicycle Plan.*
- *Inventory potential bicycle routes and destinations.*
- *Grade existing roads (width, traffic) to identify improvements.*
- *Identify different types of bicycle users in different areas.*
- *Identify corridors to connect, and prioritize.*
- *Check comprehensive plans for planned development, schools, and conflicts.*
- *Ask the Tourism Commission what people want to do when they visit Shore.*
- *Identify bicycle facility improvements.*
- *Identify bicycle corridor scenic/historic preservation needs.*
- *Let elected officials and community leaders know that we're developing a plan so they understand and support the Bicycle Plan when it is completed.*
- *Have comprehensive plans support/incorporate bicycle plan.*
- *Educate the public about bicycle facilities.*
- *Get public support for bicycle facilities.*
- *Hold "leadership rides" with elected officials and community leaders to develop understanding and support for bicycle facilities.*
- *Conduct highest-and-best-use analysis of proposed bicycle facilities to maximize use of grant money.*

APPENDIX B

County Bicycle Planning Workshops

ACCOMACK WORKSHOP 10/11/00

Vision: **What Eastern Shore bicycle facilities do you envision by 2010?**

- *Connections between:*
 - Onancock, Tasley and Accomac*
 - Onancock, 4 Corners, Onley*
 - Onancock and YMCA*
 - Onancock and ESCC/Industrial Park (Farmers Market)*
 - Onley and Accomac*
 - Belle Haven and Exmore*
- *Paved shoulders on Chincoteague Causeway (175)*
- *Paved shoulders on U.S. Route 13*
- *Safe bicycle access across U.S. Route 13*
- *Bicycle facilities on Seaside and Bayside Roads*
- *A bicycle facility from Maryland State Line to Kiptopeke*
- *Safety for kids on bikes*
- *Bike safety education (AAA, Bike Rodeo, Safe Kids Coalition)*
- *Bike safety signs*
- *Connecting paths in trouble spots*
- *Bike facilities that showcase Eastern Shore assets (historic, scenic, towns)*
- *Bike facilities coordinated with Heritage Trail*
- *Update State Bicycle Guide with new map*

APPENDIX B

(County Bicycle Planning Workshops, continued)

ACCOMACK WORKSHOP 10/11/00

Origins/Destinations: **What Eastern Shore places should be linked by bicycle facilities?**

- *Onancock-Onley-Accomac-Tasley*
- *Maryland and Kiptopeke*
- *Campsites:*
 - Sanford (Saxis Road)*
 - Sandpiper Cove*
 - Guard Shore*
 - Virginia Landing*
- *Roads 24' and greater*
 - U.S. Route 13 and Business Route 13*
 - Route 175*
 - Route 180*
 - Route 184*
 - Route 179*
- *Heritage Trail destinations*
- *Bike Ferry*
- *YMCA w/o crossing Route 13*
- *Eastern Shore Community College*
- *Harborton-Wachapreague-Quinby*
- *Chincoteague*
- *Saxis Wildlife Management Area*
- *Stores*
- *Schools*
- *Parks, refuges, state park*
- *Major employers (Tyson, Perdue, NASA)*
- *Virginia Welcome Center*
 - Rest areas, bathrooms*

APPENDIX B

(County Bicycle Planning Workshops, continued)

DRAFT (2003) BICYCLE PLAN PUBLIC MEETING RESULTS

Presentations on the draft Eastern Shore of Virginia Bicycle Plan were given at public meetings in Accomack County and Northampton County during July 2003. Participants were asked for comments about the draft plan. They were then asked to identify on a map the most desirable projects for bicycle facility improvements on the Eastern Shore of Virginia. Participants were asked to identify a preferred bicycle route from Maryland to Kiptopeke. The following comments and results were received at the meetings.

ACCOMACK COUNTY PUBLIC MEETING, JULY 22, 2003

Public Comments (Accomack):

- Need a mapped bicycle route like the View Trail 100 in Maryland.
- Go to the ESRR now and discuss paving the “coal road” as a bicycle facility.
- Find out how much bicyclists spend per day. In the 1970’s and 1980’s, it was 25 cents per mile. CBES estimates that bicyclists spend \$60 per day.
- The annual Seagull Century (100 mile) ride around Salisbury, MD attracts 7,000 riders.
- Need more bicycling events to attract more riders. More riders equal more money.
- The plan should recognize and plan for different groups of bicyclists, including long-distance riders, bicycle clubs (from Baltimore, Washington and Norfolk), local riders, families, and workers.
- The Eastern Shore’s flat land and scenic beauty make for excellent bicycling.
- Need options for commuters. If proposed routes developed, there would be good options.
- There is nowhere else on the East Coast with such good bicycling.

APPENDIX B

(County Bicycle Planning Workshops, continued)

Eastern Shore Bicycle Facility Priorities (Accomack):

1. Route 175 Chincoteague Causeway, Paved Shoulders (6)
2. Cape Charles to ESV National Wildlife Refuge, Shared Use Path (5)
3. Onancock to Onley, Shared Use Path (4)
4. Routes 798 (Mill Dam/Atlantic roads) and 679 (State Line/Fleming/Metompkin roads) from Rt. 175 to Rt. 13, Paved Shoulders (3)
5. Route 695 (Saxis Road) from Sanford to Saxis, Paved Shoulders (2)*
6. Route 789 (East Main Street/Locustville Road) from Bus. Rt. 13/Onley to Rt. 605 (Drummondtown Road) to Locustville, Paved Shoulders (2)*
7. Rtes. 718 (Hill Street/Shield's Bridge Road) & 178 from Rt. 179 (Market Street) from Onancock to Rt. 13/Belle Haven, Paved Shoulders (2)*
8. Route 600 (Seaside Road) in Northampton County, Paved Shoulders (2)*
9. Route 679 (Fleming/Metompkin) from MD Route 12 (Snow Hill Road) to Rt. 175, Paved Shoulders (1)*
10. Route 695 (Saxis Road) from Rt. 13 to Rt. 679. Paved Shoulders (1)*
11. U.S. Route 13 from Rt. 662 (Baylys Neck Road) to Bus. Rt. 13, Shared Use Path (1)* (previous version listed Rt. 661?)
12. Route 609 (Church Road/Pennsylvania Avenue) from Bus. Rt. 13/Accomac to Rt. 789 East Main Street/Locustville Road) in Onley, Paved Shoulders (1)*
13. Route 653 (Poplar Cove Road) from Rt. 658 (Town Road) from Onancock to Poplar Cove, Wide Lanes (1)*
14. Route 605 (Drummondtown Road) from Bus.13 in Accomac to Rt. 182 (Mappsburg/Quinby Bridge Road) to Quinby, Paved Shoulders (1)*
15. Route 618 (Bayside Road) from Rt. 13 in Hadlock to Rt. 13 in Machipongo, Paved Shoulders (1)*

(1) Indicates number of votes. * Indicates tie with same number of votes.

APPENDIX B

(County Bicycle Planning Workshops, continued)

Accomack Workshop 01/31/11

- *Suggested a land swap between the old railroad bed owned by The Nature Conservancy so a trail between Kiptopeke and Cape Charles could be closer to Route 13.*
- *AADT numbers – please check for updates since 2004.*
- *Look into getting scenic by-way markers or Share the Road signs, especially near incorporated towns. These could be a way to inexpensively mark a bike route.*
- *Hold bicycle rodeos to stress the importance of helmets (location could be Old Onancock School). Solicit Health Department participation.*
- *Help to promote scheduled rides such as MS150 and CBES yearly events.*
- *Put the bicycle maps into town plans as they are updated.*
- *Look into Rails with Trails programs and funding. An ideal scenario would be to build a bicycle trail adjacent to the railroad (siding road) from Cape Charles to the Maryland line. (www.railstotrails.org/toolbox) 202-974-5102 lindsay@railstotrails.org*
- *Make maps of bicycle trails that could be distributed by the B&Bs, Tourism Commission and visitor centers.*
- *Work with YMCA and others to make more livable communities – ACHIEVE grant goals.*
- *Onancock: signage is key, but VDOT can't produce bike signs if the road doesn't meet required specifications (research current specifications)*
- *Health Department gave out helmets previously, check on current status.*
- *Safety training needed. Many ride on wrong side of road facing traffic.*
- *Restripe vehicle lanes to be narrower so a bicycle lane is created. VDOT employee stated that it costs as much to remove paint as it does to repaint.*
- *Kayak trails should be incorporated with bike trails.*
- *VHB developed estimated project costs – check back with them for an update (Chris DeWitt).*
- *Revisit Mr. Foster, Bay Coast Railroad, for bike trail development and railroad issues.*
- *Check on ANEC right-of-ways to check for possible bike trails.*
- *Contact Riverside Shore Memorial Hospital to propose including bike facilities at new site.*
- *Bed and breakfast inns could network to provide bike maps with disclaimers.*
- *The Tourism Commission could work with Maryland on development ESVA/MD bike maps.*
- *The plan needs ways to collaborate with Department of Health, Tourism, etc. to find alternative for funding.*
- *Create an ESVA Bike website that different groups could link to that provides basic information, maps, safety information, disclaimers, etc.*
- *Create a bike loop from Onancock to Accomack and back through Onley to Onancock.*

APPENDIX B

(County Bicycle Planning Workshops, continued)

NORTHAMPTON WORKSHOP 10/12/00

Vision: **What Eastern Shore bicycle facilities do you envision by 2010?**

- *Bicycle facilities on Seaside and Bayside Roads*
- *Separate, paved bicycle path on Seaside and Bayside Roads*
- *Separate, paved bike path along railroad right-of-way*
- *Tie to Heritage Trail and Birding Trail*
- *Rail trail between Cape Charles-Kiptopeke-Eastern Shore NWR*
- *Strategically placed bicycle racks at towns, beaches, and parks*
- *Well designed bicycle route signs including Heritage Trail and Birding Trail*
- *Bicycle brochure/map with repair information*
- *Lighting for night use*
- *Bicycle safety education*
- *Law enforcement*
- *Driver education about bicycles*
- *Safer bicycle access on U.S. Route 13*
- *Dog-free bicycling*
- *Recreational bicycle track*
- *Promote existing bicycle trails*

APPENDIX B

(County Bicycle Planning Workshops, continued)

DRAFT BICYCLE PLAN PUBLIC MEETING RESULTS

Presentations on the draft Eastern Shore of Virginia Bicycle Plan were given at public meetings in Accomack County and Northampton County during July 2003. Participants were asked if they had comments about the draft plan. They were then asked to identify on a map the most desirable projects for bicycle facility improvements on the Eastern Shore of Virginia. Participants were then asked to identify a preferred bicycle route from Maryland to Kiptopeke. The following comments and results were received at the meetings.

NORTHAMPTON COUNTY PUBLIC MEETING, JULY 24, 2003

Public Comments (Northampton):

- Need a rail trail from Cape Charles to Kiptopeke.
- Need a Shared Use Path from Cape Charles to Cheriton.
- Need a designated bicycle route from Eastville to ESV National Wildlife Refuge.
- Need a safe U.S. Route 13 crossing at Kiptopeke State Park.

Eastern Shore Bicycle Facility Priorities (Northampton):

1. Route 600 (Seaside Road) from Route 601 (County Line) to U.S. Route 13, Paved Shoulders (17)
2. Cape Charles to Cheriton, Shared Use Path (9)
3. Route 175 Chincoteague Causeway, Paved Shoulders (5)
4. Cape Charles to ESV National Wildlife Refuge, Shared Use Path (4)
5. Onancock to Onley to Accomac, Shared Use Path (3)
6. U.S. Route 13 from Route 662 (Baylys Neck Road – was 661 on previous plan) to Business Route 13, Shared Use Path (2)
7. Accomack Industrial Park/ESCC to Route 818 (Terminal Drive), Shared Use Path (1)*
8. Route 180 (Pungoteague Road) from Route 178 (Shield's Bridge Road) to Harborton Rd to Harborton(1)*
9. Route 178 (Boston Road) from U.S. Route 13 to Route 615 (Davis Wharf Road) (1)*
10. Route 600 (Seaside Road) from Route 182 (Mappsburg/Quinby Bridge Road) to Northampton County Line, Paved Shoulders (1)*
11. Business Route 13 in Eastville, Paved Shoulders (1)*
12. Route 634 (Savage Neck Drive) from Business Route 13 to Smith Beach (1)*
13. Chesapeake Bay Bridge Tunnel Shuttle Bus (1)*

(1) Indicates number of votes. * Indicates tie with same number of votes.

Preferred Eastern Shore of Virginia Bicycle Route (Accomack and Northampton):

- Route 679 (State Line/Fleming roads) from Maryland Route 12 to Route 175 (Chincoteague Road)
- Route 175 (Chincoteague Road) to Route 798 (Mill Dam/Atlantic roads)

- Route 798 (Atlantic Road) to Route 679 (Fleming Road)
- Route 679 (Metompinkin Road) to Route 666 (Fox Grove Road)
- Route 666 (Fox Grove Road) to Route 661 (Johnson Road)
- Route 13 Shared Use Path from Route 661 (Johnson Road) to Business Route 13
- Business Route 13 to Route 605 (Drummondtown Road)
- Route 605 (Drummondtown/Bradford's Neck roads) to Route 182 (Quinby Bridge Road)
- Route 182 (Quinby Bridge Road in Mappsburg) to Route 600 (Seaside Road)
- Route 600 (Seaside Road) to U.S. Route 13 at Eastern Shore National Wildlife Refuge.

Origins/Destinations:

What Eastern Shore places should be linked by bicycle facilities?

- *Kiptopeke and Chincoteague*
- *Connect into towns*
- *Link natural resource and historic sites*
- *Link recreation sites, beaches and parks*
- *Link bay and ocean*
- *Campgrounds*

APPENDIX B

(County Bicycle Planning Workshops, continued)

NORTHAMPTON WORKSHOP 01/10/2011

- Safety training needed in schools, violators need consequences – enforcement.
- Make “...information and planning of special events” a responsibility of Tourism Commission (Section 8.B.1 above)
- Contact county sheriffs and town police chiefs to implement 8.B.5 Safety Education and Law Enforcement
- Bicycle brochures could be developed that include historical stops.
- 8.C.1-12. Suggest prioritizing tasks by putting an estimated dollar value next to them – look for “low hanging fruit.”
- Breakup 8.C.2 for shorter and more attainable segments.
- Add 641 – Broadway Landing.
- Add Savage Neck Road to Bicycle Plan.

APPENDIX C

2014 BIKE PLAN UPDATE: STAKEHOLDERS PUBLIC INPUT

ACCOMACK PUBLIC WORKSHOP MAY 20, 2014 (THREE ATTENDEES)

When they repave those roads, such as on Merry Cat, VDOT could post a sign that says “Low Shoulder” at those places where they put asphalt on top of asphalt, because it end up *creating* a hazard.

Obtain favorable trail route information from recreational bikers, CBES, and Tour de Shore planners.

It is important to make it a priority to be able to ride the length of the Eastern Shore peninsula to Maryland, and to have safe loops for recreational and existing activities that work for local bikers.

Put something in between Onancock and Onley, because once the hospital is in, it would be good to have something that allows bicyclists to (15 minutes) access that area.

If doing something (reconstruction) with Church Rd., turning it into a shared use path between those three towns (Onancock, Onley and Accomack) would capture a lot of people who use that (17 min) route.

For the tons of people who use 179 (Market Street in Onancock), there’s no shoulder, no sidewalk. That road is dangerous for bicyclists.

It may be relevant that Onancock has made some agreement with the hospital regarding water from the water tower to take advantage of the construction work on the water supply to also include a shared use path.

It would be fabulous if there was a multi-use or shared use route that goes from Onancock all the way down to the Community College.

On the Eastern Shore, low or no shoulders, nowhere to go (ditches alongside the road), unattended dogs that chase bicyclists, litter, and motorists driving at high speed are all factors that make it more dangerous and likely to crash on the Eastern Shore.

Dogs running loose are a real issue; they can be a real problem.

It would be better for VDOT to do something well that would allow/encourage families to actually use a bike path, than have several paved shoulders that people are reluctant to use.

Construct spurs or loops off the path to provide bicycle accommodations to popular destinations.

Take advantage of the right of way for the sewer line that runs/winds its way from Onancock to the ESCC.

Build a new path that parallels Redwood Rd (which is narrow, no shoulders and therefore dangerous) – the County owns the road and could get all the way to the Airport.

Once there's a bike path to the Accomack Airport Industrial Park/ESCC, then the path could go down to Keller then go across Route 13 to Wachapreague.

For the road crossing, for instance at Stone Road into Cape Charles, we need to ask for an attractive, esthetically pleasing overpass that is safe and helps advertise the bike path, and then people won't be opposed to the idea.

Negotiate easements with the railroad for a rails to trails or rails with trails possibilities.

Use signs and striping on the paved shoulders – as an inexpensive, quick safety mechanism – to alert drivers/motorists and make them aware that the lane is there for bicyclists/bicycle traffic. For instance, “Cashville Rd is so flat – and cars travel so fast – you take your life in your hands when you ride on Cashville Rd.

Signage is a big part of this and needs to be addressed

Align with Healthy Communities' concepts in their promotion efforts to encourage people to use their bike and walk more.

Make a shared use path that goes all the way to the beach.

Access via a shared use or a designated bike path to connect Onancock/Onley/Accomac would be ideal. Also, ideal would be a path that connects the library, the hospital, and the Community College.

Just repaved along Deep Creek Rd where there is/was gravel easement; may not be such a high priority.

Check with Accomack County as to whether the hospital has to provide an easement for a right of way.

A Cape Charles Town Council member has mentioned interest in seeing that there is a bike path along Rt. 184 for bicyclists to come into the town of Cape Charles.

There's a CC master trails plan...if there's a possibility for the shared use path coming into 184, if ...??? Currently, the plans stop where the museum is located just before one gets into town, slightly west of the water tower. There are wide shoulders there already.

Right now the south side of Mason is pretty much owned by the RR until you get to the grocery store. The new owner could be approached and might be receptive to dedicate because he's about trying to beautify the town.

Currently, there is no bicycle access into Chincoteague “unless you're crazy” (although the new bridges were built wide enough to accommodate a bike path.)

Make sure a bike path from Onancock to the ESCC also provides access to the YMCA.

Create a preferred loop for a shared use path or paved shoulder roads with signage to these popular destinations.

APPENDIX C

(2014 Bike Plan Update: Stakeholders Public Input, continued)

NORTHAMPTON PUBLIC WORKSHOP MAY 22, 2014 (TWELVE ATTENDEES)

There is concern about bikes sharing the roads with cars, and would prefer a dedicated bike path. Even a bike lane alongside a road is still exposed.

Economic development is what drives the engine. There are millions of biking enthusiasts; even Route 13 has a stripe up the side. We need to promote what we have now. "I'm all for a bike lane if we can afford one... (but initially), promote the incredible flat scenery on websites and in public relations materials".

The point is, the Eastern Shore has what it takes to attracts bicyclists to come here, but we're not doing the job. Putting up share the road signs at the south and north ends of Rt. 600 on both ends of the Bayside roads, would get the message out to the public that we *love* bicyclists.

(Create or post on) Website, signs, info in the Tourism Center rack cards,

Tie into national bike route system(s), show quiet back roads that tie into long-distance bicyclists. It makes the road safer to have more and more bicyclists because it will make the cars (motorists) more used to seeing and accommodating bicyclists. It would be nice on the map for all the roads that meet minimum traffic standards to let out-of-towners know which ones would be good to bicycle on.

On Rt 13, you see car after car after car with families that aren't looking for a 30 or 60 mile ride. They are looking for a short ride for families where they can stop and take a nice 2-3 hour bike ride, then go for lunch.

The A group (Advanced bicyclists) riders are looking for the challenging, longer routes.

We have got to attract, and have a mindset that we are going to bring bicycling business to the Eastern Shore.

Ask the Supervisors to cough up the bucks to do something.

Show the economic benefits to the Supervisors so they can see why it would be good to make bicycling improvements here.

Go with the mindset that we are going to make some money, so spend some money.

There's a network of trails that dirt bikers use that was created by three guys. If three guys set their trails up, why can't government and VDOT do the same for bicyclists?

Northampton needs to buy it, and "we need to cough up the money" to do this.

Don't rely on VDOT; get the local people to buy in.

Give something in the plan to chew on and create some specific objectives in Northampton.

Focus on posting ("Share the Road" and other bicycling) signage and striping as a specific, easy, and relatively inexpensive objective to get accomplished with this plan.

APPENDIX C

(2014 Bike Plan Update: Stakeholders Public Input, continued)

A-NPDC received the following comments and recommendations on-line about the bike plan:

>>Hi Susan ...

Honestly I'm not that interested in Northampton County unless I'm doing a guided ride and then I feel safer anyway so whatever people have said I'm in support.

Of course it would be great to have the bike path all the way up the Shore, adding to the one that exists there. But when I first saw that trail I honestly was very disappointed that it was not put into a populated area for people to use for commuting like to the grocery store or something. I'm very much in favor of people bicycling on a regular basis and not just for recreation.

I am very interested in people having the capacity to commute by bicycle to their job/work, or to the store for a functional use as well as recreation!! I am a cyclist of the seaside in that I find it less populated. I regularly ride Locustville to Wachaprague to Quinby. I generally avoid the Bayside Road now but I used to ride that road regularly. Now the traffic, the speed cars go and the lack of shoulders discourages me.

Even on the Seaside one time I had a bad wreck because I went off the side of the road and it was a significant drop, not beveled at all, and i couldn't pull wheel back up because of the size of the pavement edge.

I hope these comments are helpful. I'm happy to do any writing regarding this subject that you would like. Personally been long distance cycling on Shore for 15 years now. I've been seriously cycling for 40 years. Thank you for your effort and time.

Sincerely <<

>> yes i must have missed the publicity for the meetings in may...I am very interested..thanks for sending the list..CBES said there was a plan to have a bike path (is that the proposed shared use section?) from Kiptopeke State Park to downtown Cape Charles...Is that correct? Doesn't sound like that in the info you sent me...also maybe better for the bikers to take the roads vs. using a new paved shoulder of a road .. especially since most of our back roads are really humped in order for maximum water runoff..almost have to ride in the middle of the road. also drivers could use a little "bike etiquette"..Think DMV has a pamphlet that is good..or DID have one..

the list mentions (proposed shared use path) again which I assume is a real bike trail..."from cape charles to Eastern shore national wildlife refuge....we already have the two and a half miles of bike path from the refuge north.....continue with that to cape charles..that would be great.....sure don't see a need for route 600 to CBBT parking lot.....the parking lot adjoins the wildlife refuge....and already have a bike path from there..the one previously mentioned..

overall would say..save your money paving shoulders on back roads....continue the bike path from the wildlife refuge north for 2 1/2 miles and take it into the town (historic) of cape charles....maybe at some point you could take it further up the road and eventually cover the length of the shore... that would be a good start...

our CBES bike ride covers back roads and the bikers have been fine with it..no one has ever suggested we should pave the shoulders..think the worst thing they encounter, other than the wind,...is crossing the highway....we encourage them to keep the maps and return to the shore....most of the people we have now are from away..we used to have a lot of locals riders in it..maybe the new one (chamber of commerce) has more locals?

that Brownsville rd is fine now..no need to do anything there..no traffic etc. like most of the "proposed paved shoulder " areas you mention..yes, sure do think that would be a waste of time and money.....put it all in one good bike path and advertise it etc. we want bike tourism and we won't get it with a hodgepodge of little paved shoulders..these tourists can ride on pristine bike paths in many states in the U.S...even with special bridges built just for bikes..they don't need to come here to ride on backroad "shoulders"..which are really dangerous....

under "existing wide lanes"...it would be great to have a bike path from rt .13 into cape charles..for walkers also..that would be perfect and I would bet would be used a lot..as long as there is a safe connection to the strip mall on 13....

hope I am reading the table correctly...yes, for sure .. continue the 2 and a half bike path north from the wildlife refuge to cape charles.. . people have been using the short one we have now...and scrap the rest....put all the money or whatever into this long routesorry think i am repeating myself!! thanks for info etc. <<

>>I ... don't know what "share the road" means? is that where you intend to pave the shoulders on 600 the seaside road? then that would preclude using that money to have a real bike trail parallel to 13 on old rr right of way?and it would also postpone even thinking about it if the powers that be think the 66 widening is sufficient???? there is little traffic on most of our back roads and the signs yu mentioned and more driver /bike education should be helpful with that endeavor....then put all the eggs in toward the FULL bike trail goal....no halfway measures....there are quite a few foreign bikers that come through here also..and that would be better an safer for them..also ..by letting them stay near a parallel rt. 13 REAL bike trail they would have access to restaurants, and local people..also...

Is this what Virginia is doing all over the state? sort of "bandaid" faux bike trails? vs. the real thing? what ABOUT AROUND CHARLOTTESVILLE? JUST CURIOUS. THANKS .<<

>> Dear Ms. Simon,

I am writing to provide my support for improved/enhanced cycling trails and facilities throughout the Eastern Shore of Virginia. I have cycled many of the rural roads and trails in both Accomack and Northampton Counties and find the cycling to be enjoyable, refreshing and an excellent form of exercise. I have also cycled to various events on the Shore, instead of using my motor vehicle. In addition to cycling on the Eastern Shore of Virginia, I have completed long-range cycling trips on designated bike trails [Great Allegheny Passage (<http://www.atatrail.org>), C&O Canal Towpath (<http://www.thecandocanal.com/>), among others]. The Shore is blessed with flat terrain, gorgeous views, rural communities & roads, places of natural and historic significance and friendly people. The area beckons for an integrated system of trails and roads to accommodate cyclists from the State line to the CBBT. Cycling is gaining significance with the high cost of gas and people looking for alternative

forms of transportation and recreation. I think the area has what it takes to be another ‘Virginia Creeper’ – but the area needs to be developed for cycling (shared use paths, widened shoulders), B&Bs and camping areas need to be integrated into a bike map, as well as restaurants, grocery stores and bike maintenance shops.

The beginnings of a wonderful Shore-wide bike trail have been completed with the Southern Tip Bike & Hike Trail (<https://www.trailink.com/trail/southern-tip-bike--hike-trail.aspx>). A **priority** of this bike plan should be made to continue this trail on the former railroad right-of-way from Cedar Grove Drive into the town of Cape Charles. Keeping the bike trail on the former railroad right-of-way (ROW) has many advantages, including getting cyclists off of the narrow rural roads and onto land which is owned by The Nature Conservancy and which TNC is keen to have developed into a biking and walking trail. The ROW is also adjacent to Kiptopeke Elementary School – thus providing safe access for students to cycle to school safely (page 9, Vision Statement; page 12, #1). Having a safe dedicated trail near homes, schools, and businesses on the southern tip of the peninsula will encourage families to be more active and to lead healthier lifestyles. This trail could dovetail into the walking trail system in Cape Charles and would lead long-distance cyclists into town where restaurants and accommodations are located.

Routes could be developed which incorporate trails on the Eastern Shore of Virginia and Chincoteague National Wildlife Refuges, Kiptopeke State Park, various Natural Area Preserves, Wildlife Management Areas and the Birding and Wildlife Trail in both counties. There are so many interesting and beautiful areas on the Shore, that a cyclist could spend an easy week here exploring – and then come back the following year for another week to explore different areas. Although we have the lands to accomplish this goal, we don’t have an organized map, website and promotion of the area (at this point) to make this area blossom as a cycling hub.

A few basic comments on the current bike plan:

Page 1 – Intro: add dedicated bike trail on the Eastern Shore of Virginia National Wildlife Refuge

Page 1 – Intro: delete CBBT as a current event (perhaps changing this former event to showing there is a ‘biking interest’.)

Page 11 – add the Southern Tip Bike & Hike Trail to existing facilities

Page 11 – correct name of refuge from Eastern Shore National Wildlife Refuge to Eastern Shore of Virginia National Wildlife Refuge (correct name throughout document). Add bike trail to amenities at the refuge.

Build the bike trail on the old Railroad ROW north from Sting Ray's Restaurant to Kiptopeke Elementary School (see Vision Statement, page 9; Needs Assessment, page 12 #1 and #3; Proposed Bicycle Facilities, page 21 #21; and pages 31, 34 and 35 reference a shared use path between Cape Charles and the tip of the Peninsula). There is one reference where a shared use path is not recommended (page 24, #5). This is contradictory to the Vision Statement and numerous comments made over the years on developing the trail on the old ROW. I think the trail being placed on the old ROW makes the trail concept much more appealing and is in keeping with a vast majority of comments over the years. I strongly recommend the bike trail remain on the former railroad ROW.

Another matter which eventually should be addressed is the amount of trash along the road edges in both counties. It is a major detraction to the area. I was encouraged when Accomack County purchased a machine to handle roadside trash. I will be interested in seeing how effective it is keeping the roadsides clean in the coming years.

Thank you for the opportunity to comment on the bike plan.
Sincerely,<<

>>As a fairly serious bicyclist living on the Eastern Shore, I look forward to any improvements that can be made to improve the safety of cycling here. I think state highway 175 leading to Chincoteague is an area that needs immediate attention. I do not think shoulders along this high speed (55mph) narrow road is the answer. The elevated bike/ped trail along Beach Road near the Assateague Channel was developed as a demonstration of a safe, independent route for bicyclists and pedestrians that can be developed in a wetland environment with only minor impact to the environment. While an expensive project it could possibly be combined with a sewer project allowing it to resolve a couple of serious problems and also attract money from different money streams. <<

>>Hello Sue,
I just now learned about the bike plan and tonight's meeting. I'm really happy and excited to know this is underway! Can you please pass on my strong support. My husband and I do lots of biking, and know many others who would do much more if there were good bike paths. As director of the nature-based SPARK family learning program, I'm constantly encouraging families to do more biking; what stops them is the lack of safe bike trails. I'm sure that "if you build it, they will come".
Keep up the great work!
Sincerely,<<

>>Thanks for the information. It seems several years back I went to the same update meeting. There was no money available and the road structures on the ES don't lend themselves to improvement because of road widths. I came away from that meeting still believing the ES has untapped potential. My work with the Chamber creating the Tour de Shore and riding the Between the Waters Ride is clear evidence that quality rides are possible.. <<

>>...While at the meeting, we members of the public suggested it would be nice to have a map of where CURRENTLY are found the best and worst roads for cycling (in the opinion of local cyclists who use them). Such a map would help neophytes and tourists and might also help VDOT identify particularly bad spots they could work on to increase safety. Elaine Meil, the Executive Director, who was sitting in on our meeting, said that technically this would not be

very hard to do. Apparently VDOT already has all the road segments in its mapping system. They would only need somebody to tell them what the quality of each segment was from a cyclist's perspective, and then they could generate a map.

Hope you find all this interesting.

Cheers, <<

>>It's so nice to see that work is being done on enhancing the bike-ability of the Eastern Shore, since it's a fabulous place to ride. And the plan really looks good.

I've just got one thing to add. As a resident of Chincoteague, it sure would be nice if there was a way to safely ride a bicycle on the Causeway. There's so much wonderful biking here, but given the speeds that the traffic goes, and the fact that so many areas of the Causeway have no shoulder, it's really not safe to ride over. It would be great if a shoulder could somehow be added where there is none.

And.....there has to be some way to enforce the leash laws, especially in the more rural areas of Accomack County. I've been chased more times than I can count, and many of these dogs don't give up.

Thanks. This is a great start!<<

>>Dear Susan,

Here are some quick comments re: the bike plan.

- I am writing to provide my complete support for improved cycling trails and facilities throughout the Eastern Shore of Virginia. The Eastern Shore is a beautiful place to explore by bicycle and with sufficient resources and public support, the Shore can serve as a safe and enjoyable riding location venue for day trippers as well as folks passing through on extended rides.
- Form a bicycle plan advisory committee to spearhead plan.
- Extend the existing shared use bike trail that begins at the Eastern Shore of VA NWR to at least Cape Charles and as resources allow, continue to extend the path northward. The key to extending the path in Northampton Co. is to place it on the old Railroad right of way (ROW). In doing so, it will have greater appeal to users given the nationwide success of the rails to trails program.
- Develop safe bicycling routes on rural roads in both counties by expanding shoulders and posting appropriate signage. The advisory committee can help with the planning of this effort.
- Have all Eastern Shore communities install bike racks near restaurants, stores, hotels etc.
- Provide safe bike crossings across Hwy. 13 by putting in additional lights that get activated with a push of a button by bicyclists.

Can't think of anything else....

Thanks for letting me comment Susan! Cheers – <<

>>I am writing in support of the extension of bike trails throughout the Eastern Shore. I just returned from a weekend in Ocracoke and rode their beautiful, wide bike trail from the National Seashore Campground to town. The trail was being utilized by many others and added a great, healthy activity to the menu of options for tourists. It obviously also offers a great activity option for those who live there, for entertainment and for the maintenance of one's health.

Thank you for working on this issue for the citizens of the shore. Cape Charles, VA<<

Regarding the proposed "Group A" Loop in Accomack

>>Hi Susan,

Only a couple of comments from this casual cyclist.

1. If I were doing the Accomack County loop, I would go out Courthouse Ave/Accomac Rd. (764) to Sawyer Dr. to New Branch Rd to get to Bayside Rd. The route down Bus 13 and through Tasley to get to Merry Branch Rd. has a lot more traffic and offers little in the way of Eastern Shore scenery.

2. On the southern part of that loop, from Bobtown Rd. it uses Michaels Hill Rd (called Michael's Hall Rd) on VDOT's list. If you are going south toward Pungoteague (in any kind of vehicle, not just a bicycle), the left turn onto Michael's Hill is extremely hazardous because one cannot see to the right until almost the moment you must turn . A note may want to be given to VDOT to put up "Watch for Cyclists" signs on Bobtown Rd on both sides of that intersection.

I hope the budget will allow VDOT to do some of this stuff. It's a rare day that I don't see an out-of-state car in Onancock with bikes on the back. People are coming here expecting to cycle, and we need to help them do it safely. Cheers,<<

>>The first thing that comes to mind for me when thinking of bike trails on the Eastern Shore is that we should be working like crazy to continue the trail that comes out of the Refuge and goes almost to Kiptopeke. There is an abandoned railroad right of way that continues all the way up to the Cape Charles light, and then the current RR ROW goes into Cape Charles.

Connecting Cape Charles to the State Park and the Refuge is a huge opportunity, and this is one place where the route is obvious, the work has started, and the payoff is immediate both in terms of tourism use and improved quality of life for residents of the area. It creates a viable transportation option for our poorer populations as well as an exceptional amenity for everyone.<<