

Cecil County, Maryland Bicycle Master Plan



Plan Purpose

The Cecil County Bicycle Plan seeks to foster an environment that is inviting, safe, and convenient to bicycling for transportation, recreation, and fitness. A decade has passed since the 2002 Maryland Bicycle and Pedestrian Access Master Plan was developed and outlined recommendations for all counties across the state. This Plan re-examines and updates recommendations for Cecil County, identifies where further bike investments should be made, and presents policies and programs to support bicycle infrastructure. This Plan is intended to guide the implementation process that requires cooperation between the County, Towns, the State and adjacent counties on coordinated planning and development efforts.

Vision and Goals

The Plan’s goals follow a “Five E’s” approach as a way to frame the bicycle issues and take a holistic planning approach.

Goal 1: Planning/Engineering

Develop a coordinated bike network that is safe, accessible, convenient, and provides intermodal connections.

Goal 2: Education

Teach children and adults safe bicycling techniques and motor vehicle operations.

Goal 3: Encouragement

Increase bicycle usage by establishing a positive image of bicycling in the community that will foster bicycle-oriented lifestyles and businesses.

Goal 4: Enforcement

Provide enforcement of traffic laws related to bicycling.

Goal 5: Evaluation

Periodically examine and quantify the implementation progress and make adjustments where necessary.

Planning Process

The Cecil County Bicycle Plan Advisory Committee (CCBPAC) was formed to guide the development and reach consensus on the plan’s programs, policies, and projects. The CCBPAC consists of a variety of stakeholders including county planning staff, state and local representatives, and members of the public.

Partners

- Cecil County Department of Public Health
- Cecil County Department of Planning and Zoning
- Cecil County Municipal Governments
- Cecil County Department of Tourism
- Cecil County Parks and Recreation
- East Coast Greenway Association
- Lower Susquehanna Heritage Greenway Association
- Maryland State Highway Administration (SHA)
- Maryland Department of Natural Resources (DNR)
- Maryland Department of Planning (MDP)
- Maryland Transit Authority (MdTA)
- Maryland Department of Transportation (MDOT)
- Wilmington Area Planning Council (WILMAPCO)

Community Involvement

Community involvement from a broad spectrum of residents encourages diversity of opinions and ideas, and is needed for a bike network intended to serve a diverse group of cyclists. The community is invited to help the development of the Plan through workshops, forums, and the advisory committee. Learn more online at www.wilmapco.org/bikececil.



On MD 7, East of NE Isles Dr in North East



The “E’s” of Bike Planning

Engineering alone will not comprehensively address bicycling issues throughout the County-- infrastructure must be balanced with non-infrastructure strategies. As result, the proposed bicycle plan will be organized to address the five “E’s” of bicycle planning: engineering, education, encouragement, enforcement, and evaluation.

Engineering is the **accommodation** of bicycle facilities including signs, striping, signals, pavement markings, and other traffic control devices, as well as bike parking.

Education is **teaching cyclists of all ages** how to ride safely with traffic, as well as teaching motorists how to share the road safely with cyclists.

Encouragement is how Cecil County and its communities will **promote bicycling**. This involves spreading messages about benefits and opportunities to bicycle that result in changed behaviors, such as increased bicycling. Promotional programs generate positive visibility to bicycling as a viable means of transportation. Some encouragement programs include **Bike to Work Day**, **Safe Routes to School**, and **Ciclovía**.

Enforcement creates a bridge between the law enforcement and bicycling communities. Parallel to education efforts, enforcement programs are needed for safety by **motivating change in specific behaviors** of cyclists and motorists.

Evaluation examines **implementation** of the bicycle plan and the next steps for improvement. This consists of **measuring the changes** in the amount of cycling taking place, the crash and injury rates, and actions that are carried out to improve these numbers. This component also collects feedback from users on new bike facilities and programs.



Targeting unsafe cycling behaviors, such as cyclists running a stop sign and wrong-way riding (above), helps reduce common crashes and related injuries.



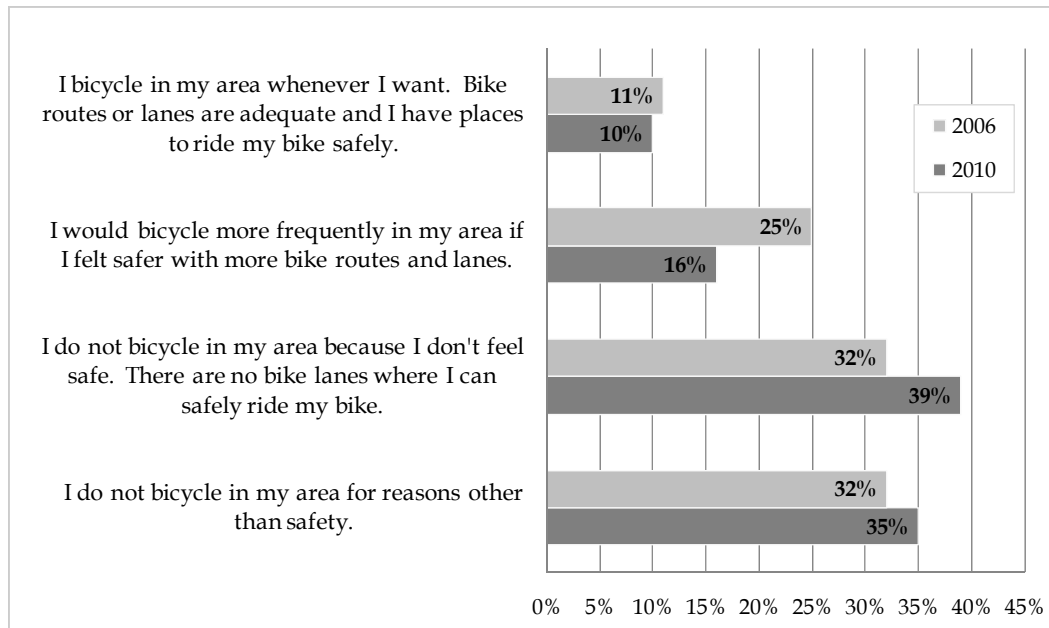
Encouragement programs reinforce bicycling as a viable means of transportation.



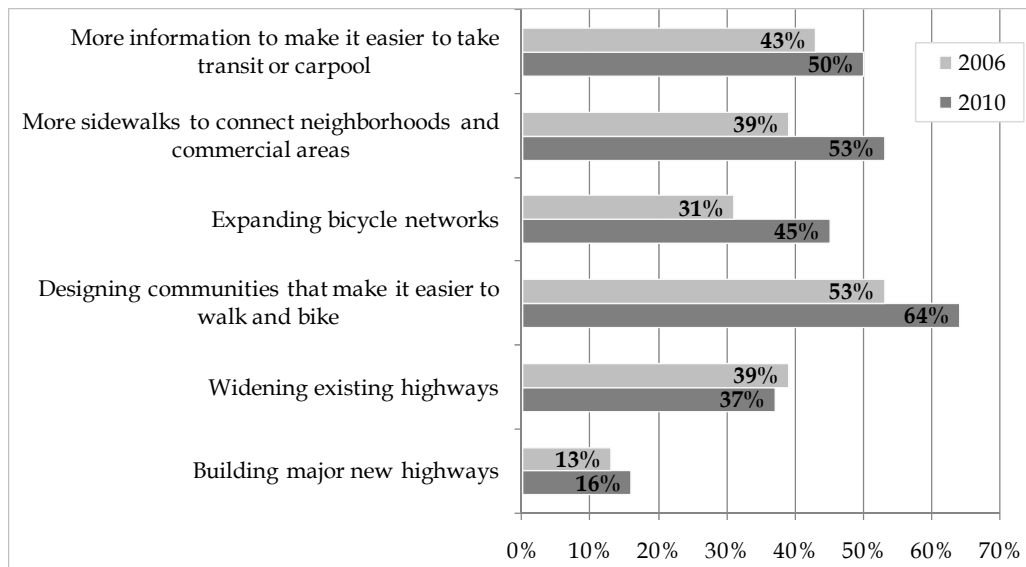
Public Opinion Survey Results

Along with current policies and needs analysis, this plan is also directed by citizen comments received through the public outreach process and surveys.

Use of Bicycle Facilities in Cecil County



Perceived Effectiveness of Improvements to Reduce Congestion in Cecil County



Source: WILMAPCO Public Opinion Surveys



Existing Conditions

Cecil County is not considered bicycle-friendly. Residents have noted that they do not ride their bicycles more frequently due to lacking facilities. Despite having designated bicycle routes, bicycle travel throughout the County is low along roadways and commonly occurs along sidewalks.

Major thoroughfares in the County are difficult for bicyclists due to vehicle speeds, traffic volumes, and lack of dedicated road space for cyclists. Automobile-oriented development makes convenient and safe access to commercial and retail sites less practical by bicycle. The County lacks bicycle racks for short- and long-term needs.

While the County promotes a variety of outdoor activities, bicycling is not consistently encouraged through programs, nor is bicycle safety information provided. Generally, cyclists have been seen riding without helmets and proper hand signals, and motorists are not well aware of cyclists. Law enforcement of share-the-road and bicycle related violations is not emphasized.



US 40, west of Landing Lane

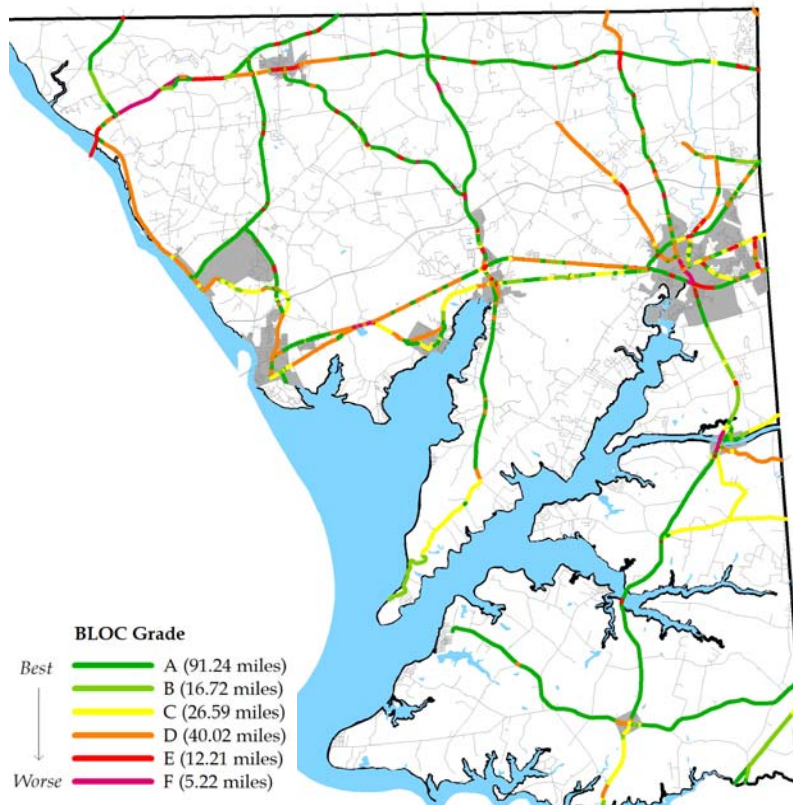


Md 273 through Rising Sun



Old Turkey Point Rd., southbound

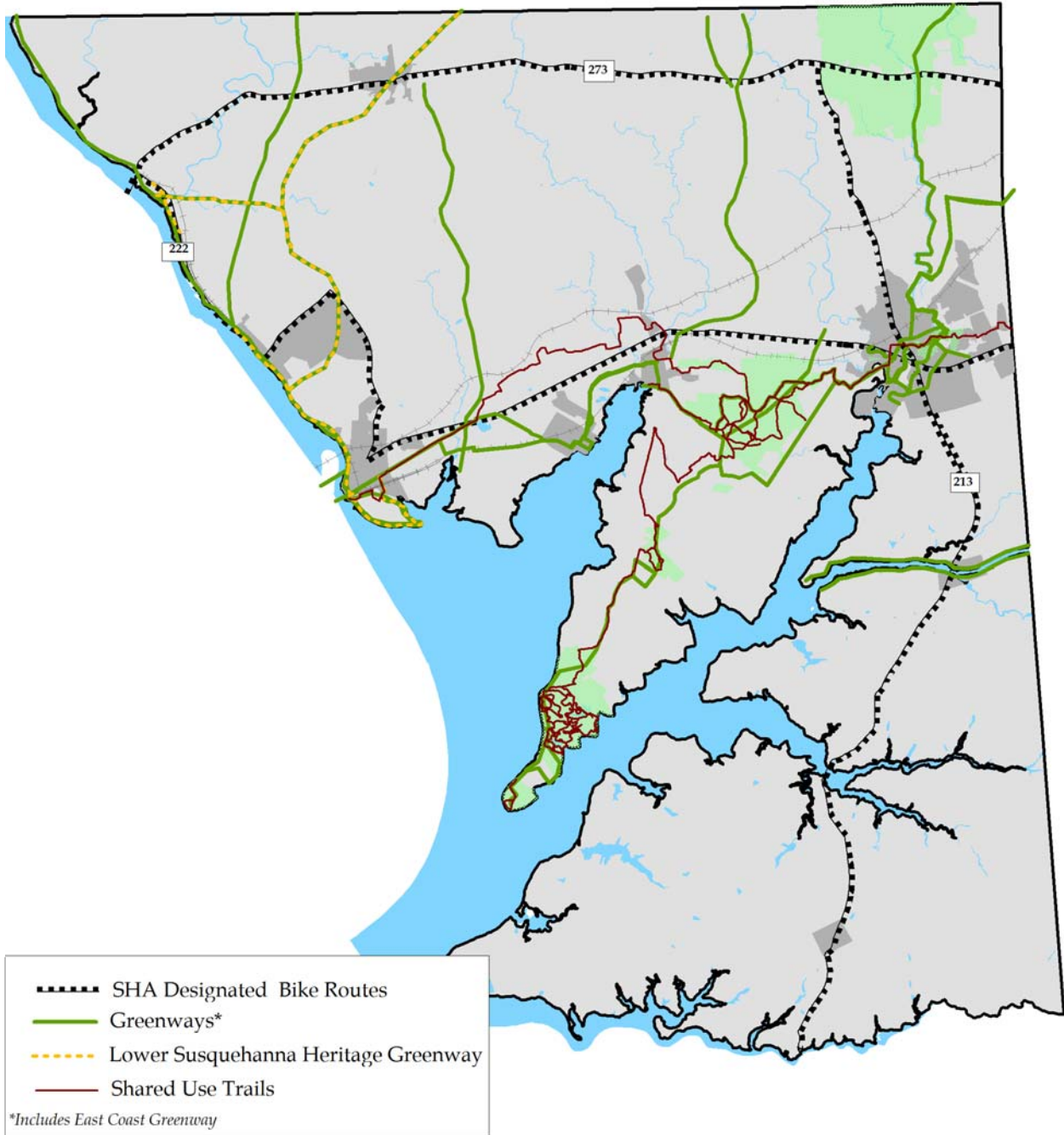
2011 Bicycle Level of Comfort (BLOC)



The BLOC model considers a variety of factors that affect the comfort of bicyclists such as existing traffic volumes and travel speed. Arterials in the northern portion of the County scored acceptably. While many roadways are grade A or B, intersections are not as satisfactory. Many of the worse intersections for bikes are dispersed along US 40 and lie outside of incorporated areas.



Regional and State Bicycle Networks





Opportunities in Cecil County

Chesapeake and Delaware (C & D) Canal Trail • <http://www.nap.usace.army.mil/Projects/CD>

The 2006 C & D Canal Recreation Study proposed 16.5 miles of multi-use trail on the north side of the canal from Delaware City, DE to Chesapeake City, MD. Currently, nine miles is planned for construction within Delaware--from Delaware City to St. Georges, or Summit Marina if funding allows. This is an ideal opportunity to continue the trail into Cecil County. However, state and local funding and maintenance challenges must be resolved.



View of Proposed Canal Trail from MD 213 Bridge

East Coast Greenway • www.greenway.org

The East Coast Greenway (ECG) is a planned 3,000-mile off-road urban trail that will connect cities and towns from Calais, Maine to Key West, Florida. The route is planned through Cecil County, before continuing north to Wilmington, DE and south to Baltimore, MD. Today, the only built section in Cecil County is through Perryville.



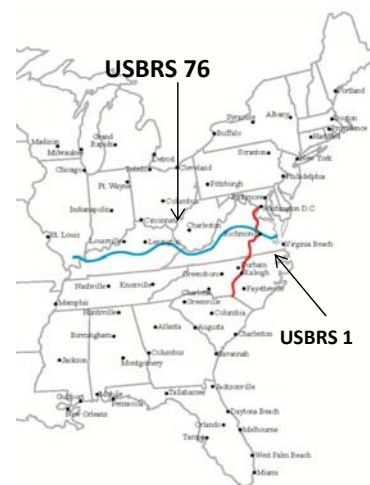
Lower Susquehanna Greenway Heritage Trail •

www.hitourtrails.com

The Lower Susquehanna Heritage Greenway (LSHG) aims to stimulate economic activity by developing linkages between land and water recreational trails along both banks of the Susquehanna River. The LSHG has planned 40 miles of trails connecting Harford and Cecil Counties, of which 22 miles are complete. Existing greenways in the Perryville and pathways in Port Deposit are part of the LSHG.

U.S. Bicycle Routes • www.adventurecycling.org/usbrs

The U.S. Bicycle Route System (USBRS) is a proposed national network of bicycle routes that span multiple states and are of national and regional significance. These routes are nominated for national designation by State Departments of Transportation (DOTs) and designated by AASHTO. MDOT is currently considering an U.S. Bicycle Route 1 alignment through Cecil County.





Needs Assessment

Issues, Opportunities, and Constraints

Intersections

US 40 at MD 213, MD 272, and MD 222

Corridors

MD 222/ 275

MD 272

US 40

Bridges

Hatem Bridge

MD 213 Bridges

Through Elkton

Through Chesapeake City

Over Bohemia River



US 40, west of Mechanics Valley Rd.



MD 213 through Chesapeake City

Countywide Needs

1. Enhance **visual cues** to increase motorists' awareness of bicyclists on the roadway.
2. Improve **crossing conditions** at intersections (i.e. bicycle detection and/or bicycle-only phases at signalized crossings).
3. Improve bicycle **way-finding signage**.
4. Create **education programs** to familiarize motorists, cyclists, and pedestrians of laws, safe behavior, and how to share the road. Ex. Bike to Work Day Program.
5. Establish **enforcement programs** that foster safe behaviors by motorists and cyclists.
6. Improve non-motorized **access to transit** to help build transit ridership. Improve bicycle-transit integration at major transit stops.
7. Provide **connectivity** to commercial, educational, natural, historic, and cultural resources.
8. Ensure routes are **accessible** to disadvantaged populations (zero-car households and low-income).
9. Provide adequate **bike parking** at activity centers and destinations.
10. Identify **environmentally-friendly** bike designs that support the County's environmental preservation efforts.
11. **Allow** bicycle travel on the Hatem Bridge.



CCo. Library - functionally obsolete bike rack

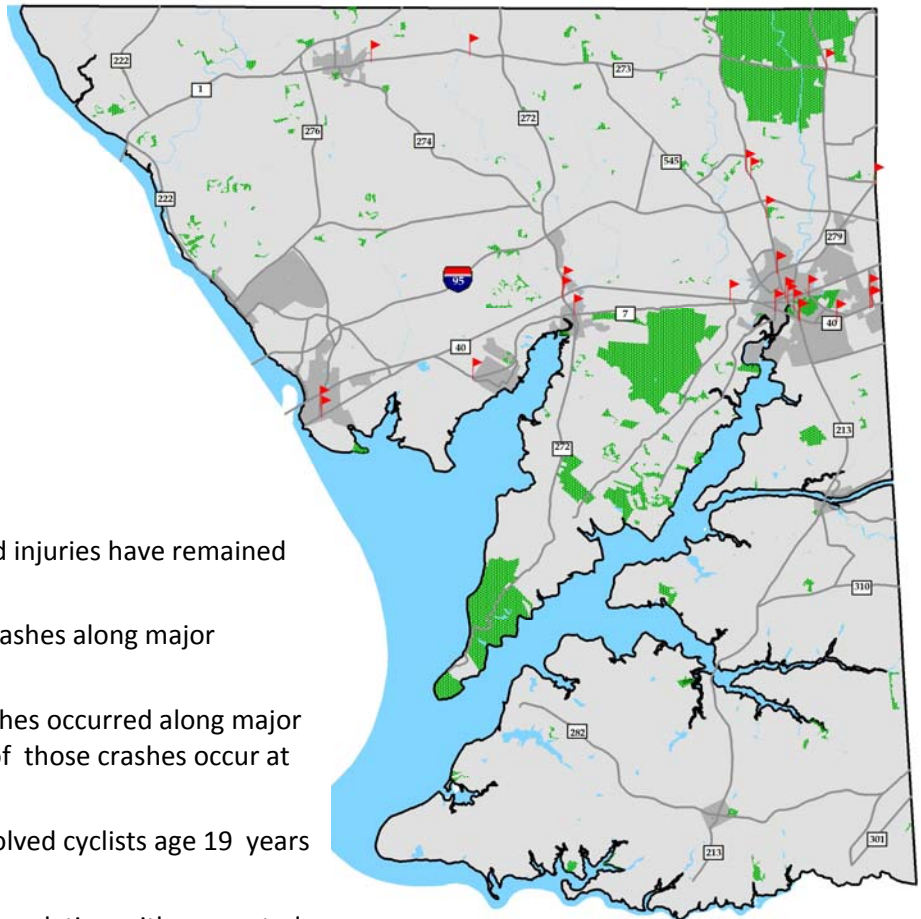
*Not numbered in order of priority



Bicycle Crash Summary

Both statewide and county bicycle crashes have steadily dropped since 2000. Cecil County experienced a total of 16 bicycle crashes in 2000, which dipped to 10 in 2009. Assessing bike crashes can address safety concerns and target enforcement along bicycle routes and corridors with high rates of bicycle crashes. Targeting unsafe cycling behaviors, such as wrong-way riding, helps reduce common crashes and injuries.

Bicycle Crashes along Arterial Roads, 2005-2009



Key Findings

- Since 2005, bike crashes and injuries have remained steady.
- More than 80% of bicycle crashes along major arterials resulted in injuries.
- Seventy-five percent of crashes occurred along major arterials, and close to 50% of those crashes occur at intersections.
- Sixty percent of crashes involved cyclists age 19 years or younger.
- Bike crashes demonstrate correlation with congested corridors in the County, such as US 40 and MD 213.

Collisions Involving Bicyclists by Major Arterial, 2005-09

	Total Bicycle Crashes	Bicycle Intersection Crashes	Bicyclists Injured	Bicyclist Fatalities
MD 213	9	7	9	0
MD 222	1	0	1	0
MD 272	2	1	1	0
MD 273	3	2	3	0
MD 279	2	1	2	0
MD 7	3	2	2	0
US 40	14	2	12	0
Total	34	15	30	0

Collisions Involving Bicyclists by Location, 2005-09

	Total Bicycle Crashes	Bicycle Intersection Crashes	Bicyclists Injured	Bicyclist Fatalities
Cecilton	0	0	0	0
Charlestown	0	0	0	0
Chesapeake City	0	0	0	0
Elkton	20	12	10	0
North East	1	0	1	0
Perryville	4	3	2	0
Port Deposit	0	0	0	0
Rising Sun	1	0	1	0
Municipal Total	26	15	14	0
Countywide	45	20	26	0



Bicycle Network Identification

The bicycle network will comprise all of the locations throughout the County and its eight municipalities, where specific improvements have either already been made or are proposed in the future to accommodate bicycles.

To develop a complete bicycle network of on- and off-road facilities, four main considerations helped determine the selected routes to fill in missing gaps:

- **Safety/ low-conflict**
- **Route directness**
- **Accessibility**
- **Cost, public acceptance, implementation**

The proposed on-road bicycle network will be categorized based on connectivity to countywide or local destinations of significance. The purpose and selection criteria for county and local bike routes are listed below.

Countywide Bike Routes

Emphasize bike routes of countywide significance that connect to or are located in the County's growth areas.

- Largest share of long-distance bicycle traffic in the county for transportation and recreation
- Access to transit services, education and commercial uses, and municipalities

Criteria* for Countywide Bike Routes

- North-south/ west-east connectivity
- Access to destinations of countywide significance
- Cross-jurisdictional connectivity
- Inclusion in county or regional plans

Local Bike Routes

Emphasize bike routes that are located in incorporated areas.

- Largest share of short-distance bicycle traffic in Towns for transportation and recreation
- Access to destinations such as local parks, schools, transit stops, libraries and community centers

Criteria* for Local Bike Routes

- Access to key local destinations and points in the County
- Connections to existing or planned bicycle facilities
- Linkages to transit services
- Inclusion in local plans

*Must meet one or more

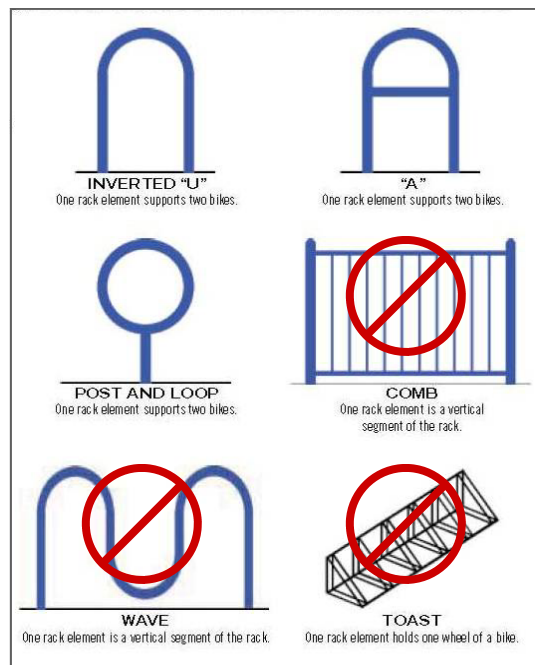


Proposed Bicycle Parking

Bicycle parking is a key element of the bicycle network; secure parking at end-trip locations is essential to making a trip possible. After a broad bicycle parking inventory is completed, the Plan will list bicycle parking locations considered to complement the proposed bicycle network. Bicycle parking should accommodate short- and long-term storage needs. Short-term parking serves sites such as grocery shops, libraries, and parks, whereas long-term sites serve transit hubs, park-and-rides, and employment sites. Some bike parking locations in Cecil County will include rail stations, transit transfer points, education, employment and retail centers, museums, and community centers.

Tell Us:
What other specific locations would you like to see bicycle parking?

The Preferred Bike Rack supports the bicycle frame on at least two separate points of the frame, and allows a U-shaped rack to secure both wheels and the frame to the bike rack.



Source: APBP Bicycle Parking Guidelines

Bicycle Parking Types

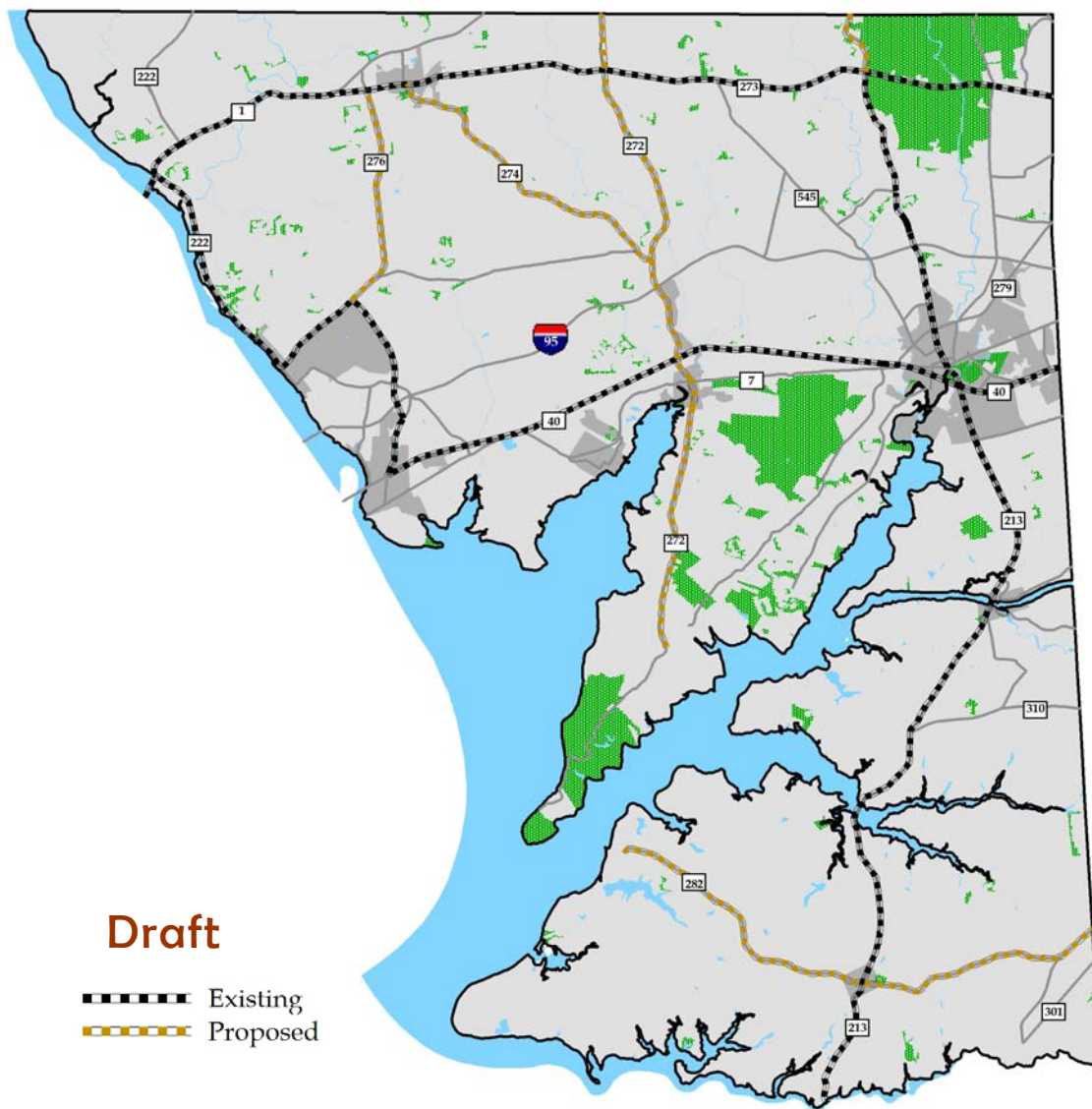
Parking Type	Advantages	Disadvantages	Best Use
Bike rack	Inexpensive, flexible	Lacks weather and theft protection	Short-term
Bike locker	Weather and theft protection	More costly than bike racks; Not suitable for occasional users	Long-term
Restricted bike area	Weather and theft protection; less expensive than lockers	Need to provide keys or key cards	Employment sites



Proposed On-Road Countywide Bike Routes

Using the selection criteria for countywide bicycle routes, the following routes to facilitate longer distance bicycle trips were selected. Making bicycle improvements along major thoroughfares will connect Towns and communities to activity centers and into the County's designated growth area.

These routes will also provide important inter-jurisdictional connections into adjacent counties to reach places such as Newark, Middletown, Havre de Grace, Aberdeen, Galena, Nottingham and Oxford.





Key Bicycling Destinations

The comprehensive bicycle network should provide access to key destinations throughout Cecil County. Residents and visitors should be able to safely and conveniently reach places by bicycle such as education and employment centers.

In addition to providing bicycle access to key destinations, Cecil County desires to focus the most bicycle improvements within the County's designated growth area (identified on the County's future land-use map as high to medium mixed-use, employment, or Town). This area largely comprises the central portion of the County and encompasses a bulk of Priority Funding Areas (areas where the County wants to direct state investment).

