BICYCLE STATEMENT MONTGOMERY COUNTY SIERRA CLUB

INTRODUCTION

More people in Montgomery County are choosing to get around by bike, whether to save money on gas, for exercise, or because it's fun. Bicycling isn't just a great form of recreation but a great transportation option as well: one that can help ease congestion, reduce pollution and improve public health. In the United States, half of all trips taken each day are less than five miles long, a comfortable distance for bicycling, yet more than 60% of all trips under a mile are made by car today.

Why is that? In many parts of Montgomery County, **bicycling is often difficult or dangerous**. Many neighborhoods and destinations are difficult to reach on bike due to a lack of paved paths, changes in topography, or barriers such as streams, highways and busy surface streets, and active rail lines. In addition, sharing busy roads with fast-moving cars and trucks often intimidates potential bicycle users.

With Capital Bikeshare coming to Montgomery County, we need to make bicycling **accessible**, **convenient and safe** for all age groups and skill levels. Better bicycling conditions will create a virtuous cycle of more biking and walking, in turn leading to less driving, cleaner air, an enhanced sense of community, and fitter citizens.

In this document, we look at six principles that policymakers, community leaders, planners and transportation engineers should follow in order to encourage more bicycling in Montgomery County:

MAKE A COMPLETE NETWORK: Bicycle lanes and paths should connect to each other and to major destinations like schools, transit stations and job centers, making them a reliable way to get around.

BE CONTEXT-APPROPRIATE: A network with different kinds of bicycle facilities will best be able to fit into different neighborhoods.

PROVIDE COMFORT: Bicyclists will be more likely to use the network if it provides multiple route options, is easy to navigate, and has conveniences like secure parking.

SAFETY: Bicyclists will feel safe on facilities that are well maintained, well-lit, and have "eyes on the street" to watch over them.

ENGAGE THE PUBLIC: Making community members part of the bicycle planning process will build public support for bicycling while showing that bicyclists are valued and respected by the county.

EDUCATION: All road users, whether they are cyclists, pedestrians or drivers, should understand their rights and responsibilities and the rights and responsibilities of others.



The Capital Crescent Trail should be extended to its planned terminus in Silver Spring, (Photo by Dan Reed)

MAKE A COMPLETE NETWORK

Bicycle lanes and paths should be **part of a larger network** that connects to major destinations, such as town centers, Metro stations, and schools. This allows more residents the option to get around on a bike. It also provides more alternatives to driving, while allowing those who cannot or do not drive to get around more easily.

Here are a few places where connections in our bicycle network could be improved:

- The **Bethesda Trolley Trail** should be extended south to downtown Bethesda and the Capital Crescent Trail, and north to Rockville Town Center and the City of Rockville's Millennium Trail.
- The **Capital Crescent Trail** should be extended east to downtown Silver Spring, where it can connect to the Metropolitan Branch Trail and complete the regional "bicycle beltway."
- The Intercounty Connector Trail west of Muncaster Mill Road and between Layhill Road and Columbia Pike should be completed, either along the ICC itself or using local roads, such as Fairland Road or Bonifant Road.
- Bicycle routes should be designated on

streets parallel to busy roads, like Georgia Avenue, to provide an alternative way for bicyclists uncomfortable or unwilling to ride in heavy traffic.

BE CONTEXT-APPROPRIATE

Montgomery County has many different kinds of neighborhoods, and there is no one solution for providing them with bicycle routes. A combination of different kinds of bicycle facilities will allow the network to respond to the wants and needs of each community.

Here are some examples of bicycle facilities that could be built in Montgomery County:

- Sharrows are street markings that tell drivers to expect bicyclists and share the road with them. A sharrow depicts a bicycle with two arrows. These work well on narrow, low-speed streets where there isn't room for a separate bicycle lane, or on roads where bicycle traffic is expected to be light.
- **Bike boulevards** are streets that prioritize bicycle traffic over car traffic. For instance, drivers may be required to stop for bicyclists at an intersection, or may be forbidden to make certain turns or movements that bicyclists are allowed. Bike boulevards may



Sharrows, like these in Seattle, let drivers know to share the street with bicyclists. (Photo by Dan Reed)

use physical barriers to "choke" the street, making it narrower and forcing drivers to slow down. They are well suited for lowspeed streets in residential neighborhoods, particularly near major activity centers where through traffic may be discouraged. When located within a quarter-mile of major arterial streets, they can provide a safer alternative route for bicyclists.

- **Bike lanes** are dedicated lanes for bicyclists marked with a solid white line. They give bicyclists their own space on the street. These are appropriate on most streets, though they should be wide enough (at least 5 feet wide) so bicyclists do not drift into another lane. When this isn't possible, a sharrow may be more appropriate.
- Cycle tracks are bike lanes separated from other traffic by a physical barrier, such as a low curb. Ideally they are placed between a row of parked cars and the sidewalk, creating an additional buffer between bicyclists and car traffic. Occasionally, cycle tracks are level with the sidewalk. Cycle tracks are most effective on arterial streets in urban areas where heavy car and bike traffic are expected, such as along Wisconsin Avenue.
- **Grade-separated paths** in overpasses or underpasses allow bicyclists to cross difficult barriers. They're most appropriate



Cycle tracks, like this one in New York City, separate bicyclists from other traffic. (Photo by Dan Reed)

in places where an at-grade crossing is unsafe or physically impossible, such as across a highway or river, or where signalized crossings are far apart. They can fill significant gaps in the bicycle and pedestrian network.

• Overpasses and underpasses **must be as convenient for bicyclists as crossing at-grade**. A 1998 study from the Institute of Transportation Engineers found that 70% of users would use a bridge or tunnel only if it took the same amount of time as crossing at-grade.

PROVIDE COMFORT

Bicyclists will be more likely to use the network if it provides multiple route options, is easy to navigate, and has conveniences like secure parking and repair stations.

- The bicycle network should **be redundant**, or offer multiple ways of getting from one place to another. This gives users more choices and helps to serve different origins and destinations. For instance, where the Rock Creek Trail crosses over Veirs Mill Road in Rockville, bicyclists and pedestrians have the option to cross the street at a crosswalk or on a bridge.
- Bike facilities should have **parking for bicycles** especially at trailheads, major destinations such as transit stations. The busiest bike routes may require additional amenities, such as secured bike stations with restrooms and a concession stand. Parking for cars may also be necessary, especially in outlying areas where transit may not be available.
- Wayfinding is important. Pedestrians and cyclists are more likely to use a bike route if they know where it goes. Clear and frequent signage, preferably in English and Spanish, is essential.
- Bike facilities can also be **local gathering**



These wayfinding signs in Washington, D.C. direct bicyclists to different destinations and say how far each one is. (Photo by District Department of Transportation)

places. In Boulder, Colorado, the city created little plazas at each end of a bicycle and pedestrian underpass. Not only do they give bicyclists and pedestrians places to stop and rest, but they help visually and physically connect the University of Colorado to a busy shopping district on the other side of the intersection.

• Bicycle paths **must be maintained as well as our road network**. They must be paved or repaved when the need arises and regularly cleared of snow or other obstructions.

SAFETY

Above all, the bicycle network must feel safe to all users, through regular maintenance, good lighting, and responsive design.

- **Good lighting** improves visibility and discourages criminal activity. It's especially useful for bike commuters, who may be traveling after dark during the winter.
- Paths should not be "channeled" using high fences or walls like on the Capital Crescent Trail in Bethesda, which can invite crime and feel claustrophobic.
- A **bike box** can protect cyclists at busy intersections. This is a stopping area for bicyclists placed between the stop line for

cars and the crosswalk. It gives bicyclists a safe place to wait at a stoplight and allows bicyclists to get a head start on drivers when the light turns green.

- Proper drainage and regular maintenance can keep these spaces looking pristine. Vandalism should be removed or repaired quickly to discourage further destructive behavior. Broken glass should be frequently removed as well to prevent flat tires and injury.
- All paths, but especially overpasses and underpasses, **must have good sight distances**, allowing users to see what's going on around them.
- Bicycle facilities **should be visible from surrounding areas**, providing more "eyes on the street" that can deter destructive behavior.

ENGAGE THE PUBLIC

Making community members part of the bicycle planning process will build public support for bicycling while showing that bicyclists are valued and respected by the county.

• Have a **transparent planning process**, where county residents can participate and understand why these investments are being made and how they'll benefit from



Little plazas on either side of this underpass in Boulder, Colorado keep it busy, good sightlines keep it safe. (Photo by BeyondDC.com)

them. Public input will ensure that new bicycle facilities meet the community's wants and needs.

- **Provide visual simulations** of proposed facilities and show examples of other successful bike projects around the country and world to allay concerns about safety and aesthetics.
- Design and planning choices, from location to material finishes, should **make a statement** about how bicyclists are valued. Even when built on a budget, bike facilities should be designed for safety, social value, environmental preservation and even economic benefits.

EDUCATION

All road users, whether they are cyclists, pedestrians or drivers, should understand their rights and responsibilities and the rights and responsibilities of others. In addition, the general public must see walking and biking as legitimate forms of transportation. This can be accomplished with an educational campaign focused on the rights of all road users, on safe travel habits and on the benefits of biking and walking.

- Teach bicycle and pedestrian safety in the driver's education curriculum, ensuring that young people know how to safely interact with all road users as drivers and can be more responsible bicyclists and pedestrians.
- Candidates for a driver's license should be required to answer and pass questions about bicycle and pedestrian safety.
- Incorporate bicycle and pedestrian safety into Montgomery County Public Schools' curriculum as well, potentially in physical education classes or in the health classes currently taught in 5th, 8th and 10th grades.



Bike racks, like this one in Baltimore, can make a public statement about the value of bicycling. (Photo by Dan Reed)

CONCLUSION

Bicycling can be a fun and easy way to get around Montgomery County, but current conditions make it difficult to do so. While bicycling isn't for everyone, there are opportunities to make it more attractive for a larger segment of the community than the one that currently bicycles for transportation.

By following the guidelines set out in this document, community leaders, policymakers and planners can create a safer, more inviting bicycle network. Though the improvements discussed may seem simple on their own, together they can help improve public health, reduce pollution, and ease congestion.

FOR MORE INFORMATION

Sierra Club Montgomery County Group, Maryland Chapter montgomery.group@maryland.sierraclub.org maryland.sierraclub.org/montgomery/

Prepared by Dan Reed reeddbk@gmail.com justupthepike.com

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