Goals



- = Increase bicycling rates in Montgomery County.
- = Create a highly connected, convenient and low-stress bicycling network.
- = Provide equal access to low-stress bicycling for all members of the community.
- = Improve the safety of bicycling.

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EXISTING BICYCLE-SUPPORTIVE PROGRAMS

A description of the major bicycle-supportive programs in Montgomery County is provided below.

Annual Bikeways Program



This program plans, designs, and constructs bikeways, trails, and wayfinding signs that cost less than \$1,000,000. The current implementation schedule includes construction of shared use paths on Avery Road (FY17-18), Rockville Pike at Strathmore (FY18-20), Washington Grove Connector (FY21-22), and Emory Lane (FY21-22). The program employees a Bikeways Coordinator.

Bicycle Pedestrian Priority Areas Program



This program designs and constructs bicycle and pedestrian capital improvements in the 28 Bicycle-Pedestrian Priority Areas (BiPPAs) identified in County master plans. Implementation of projects in the Silver Spring CBD BiPPA began in FY16. Implementation of projects in the Grosvenor, Glenmont, Wheaton CBD, Veirs Mill Road/Randolph Road, Flower Avenue/Piney Branch Road, Piney Branch Road/University Boulevard, and Takoma-Langley Crossroads BiPPAs will begin in FY17. This program employees a BiPPA Program Manager.

Capital Bikeshare



This program administers and operates the Capital Bikeshare program in Montgomery County. There are currently 57 bikeshare docks in the County in the Bethesda, Chevy Chase Lake, Friendship Heights, Life Sciences Center, Rockville, Shady Grove, Silver Spring, and Takoma Park, with additional docks planned in White Flint and Wheaton. Free memberships are available for those who meet income eligibility requirements under a program called MCLiberty. The program employees a Bikeshare Program Manager.

Montgomery County Bicycle Action Group



The Montgomery County Bicycle Action Group (MCBAG) was created in 1996 to gain input from citizens interested in bicycling issues. The group meets monthly and advises the Montgomery County Department of Transportation on current issues, programs and projects relating to bicycling in Montgomery County.

Safe Routes to School Program





This program is intended to increase walking and bicycling to school through engineering, education, enforcement, and encouragement. The program employees a Safe Routes to School Coordinator.

NEW BICYCLE-SUPPORTIVE PROGRAMS

This section recommends several new bicycle-supportive programs that are likely to have the greatest effect at advancing the goals of the Bicycle Master Plan. Each program includes a description, indicates the Bicycle Master Plan goals that the program will advance, and identifies the lead agency and supporting agencies.

Engineering

Neighborhood Greenway Program







Description: Implements the neighborhood greenways recommended in the Bicycle Master Plan by: 1) developing a marketing approach to convey the community-wide benefits of neighborhood greenways, 2) developing a menu of treatments (see the Bicycle Facility Toolkit included in the appendix to this plan), 3) conducting a legislative and regulatory assessment to determine barriers to implementing successful neighborhood greenways, and 4) constructing the network.

Justification: Neighborhood greenways are a cost-effective way to providing low-stress bicycle neighborhoods through communities.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

Bicycle Parking Program





Description: Increases the supply of short-term and long-term bicycle parking and replaces substandard bike racks with those that conform to industry standards. In addition, this program will develop a bicycle parking implementation plan focused on commercial areas, transit stations, schools, recreation centers, libraries, other public facilities, and multi-family dwelling units. The program will maintain a geospatial inventory of public and private short-term and long-term bicycle parking and a continuous assessment of bicycle parking shortages based on the analysis in Appendix X. The program will develop an online bike rack request website. It will be led by a Bicycle Parking Coordinator.

Justification: Montgomery County has a shortage of bicycle parking, as shown in Appendix X. When people cannot park their bicycles they are discouraged from bicycling for non-recreational trips.

Providing additional bike parking will increase bicycling, reduce theft, and reduce improper use of trees and other street infrastructure for bicycle parking.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Department of General Services, Montgomery County Planning Department

Expanded Safe Routes to School Program





Description: Creates a capital funding program for the Safe Routes to School program to increase the safety of walking and bicycling to school. This program focuses on reducing travel speeds around public schools by implementing traffic calming measures and constructing walkways and bikeways to create a "very low" level of traffic stress for people bicycling and an equivalent experience for people walking. The program will assess traffic speeds, evaluate the appropriateness of posted speed limits, identify gaps in the walking and bicycling network, and install bicycle parking in and around public schools.

Justification: Many schools do not have adequate bicycling facilities connecting public schools to neighborhoods. In addition, while almost 80 percent of schools have bicycling parking, less than 10 percent of schools have sufficient bicycle parking and bike racks that meet industry standards.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Public Schools, Montgomery County Police Department, Montgomery County Planning Department

Bikeway Debris Clearance



Descriptions: Establishes a program for removing debris from bikeways. Priorities may include bikeways in commercial areas, surrounding transit stations, and major connections between activity centers.

Justification: Ensuring clear and navigable bikeways improves safety and accessibility.

Lead Agency: Montgomery County Department of Transportation

Education

Public School Bicycle Education







Description: Incorporates bicycle training and safety education in Montgomery County public school curricula, including elementary, middle and high school.

Justification: Many adults are deterred from bicycling because they did not learn how to ride a bicycle as a child. Additionally, children are great advocates for supporting bicycling. Learning rules of the road in the bicycling context as young children better prepares them to be safer drivers in the future.

Lead Agency: Montgomery County Public Schools

Supporting Agency: Montgomery County Department of Transportation

Bicycle Facility Education



Description: Educates motorists, pedestrians and bicyclists on safe use of new bicycle facilities. Among other things, this program would create public service announcements, provide information, and conduct onsite trainings so that all roadways users know how to safely navigate new bicycle infrastructure.

Justification: Montgomery County is installing new forms of bicycle infrastructure that many members of the community are unfamiliar with.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Police Department

Enforcement

Vision Zero Rapid Response Task Force



Description: Creates a rapid response task force that convenes after a bicycling fatality or serious injury occurs to discuss the crash and determine whether action needs to be taken to address the causes of the crash. When action is taken, the outcomes will be evaluated and adjusted as needed.

Justification: An iterative learning process is needed to ensure that roadway improvements are successful at enhancing safety.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Multiple

Evaluation

Prepare a Bicycle Master Plan Monitoring Report



Description: Prepares a biennial report to the County Council that tracks progress toward advancing the Bicycle Master Plan's goals and objectives and summarizes new bicycle infrastructure and changes to County bicycling program and policies.

Justification: Provides transparency and accountable implementation of the Bicycle Master Plan.

Lead Agency: Montgomery County Planning Department

Supporting Agency: Montgomery County Department of Transportation, Montgomery County Public

Schools

Establish a Bicycle Count Program



Description: Conducts pre- and post-implementation studies of new bicycle infrastructure projects to track the frequency at which they are being used, installs permanent bicycle counters at key locations to track the growth of bicycling over time, collects annual counts at multiple locations, and conducts counts at locations of high crash rates. Data collected from this initiative will inform the biennial monitoring report.

Justification: Tracks the bicycling trends in the County and provides a measure of exposure when analyzing bicycle safety.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

Encouragement

BikeMontgomery Outreach Program



Description: Encourages more people to bicycle in Montgomery County through outreach and community building. Among other things, the program will organize a Bicycle Ambassador program, maintain an online bicycling forum, conduct bicycling events such as bike rodeos and thematic bike rides and conduct tours of new bicycle infrastructure.

Justification: Programs such as the DC Bike Ambassador program and the BikeArlington have helped to expand the amount of bicycling in the County by creating a strong bicycling community.

Lead Agency: Montgomery County Department of Transportation

Countywide Wayfinding Plan





Description: Implements a countywide wayfinding plan that directs bicyclists to major destinations, including commercial areas, transit stations, and major public facilities. This plan would identify key destinations, low-stress routes, and a consistent, legible, and branded protocol for communicating those elements to bicyclists. The plan will be updated every few years.

Justification: With an emerging bicycling network that is not fully connected, wayfinding is needed to direct bicyclists to low-stress bikeways.

Lead Agency: Montgomery County Department of Transportation

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EXISTING BICYCLE-SUPPORTIVE POLICIES

A description of the major bicycle-supportive policies in Montgomery County is provided below.

Urban Road Code Areas



The Montgomery County Code specifies maximum standards for lane widths (10 feet) and curb radii (15 feet) on urban roads. Narrower streets and curb radii improving bicycling by slowing the speed of traffic and can provide space for bikeways.

Vision Zero Policy



Montgomery County has adopted a policy of zero transportation-related fatalities and has charged the County Executive with establishing: 1) a date by which to achieve zero deaths, 2) a set of activities that County agencies will take to implement a Vision Zero Action Plan, and 3) a set of recommended policy changes at the state and local levels.

Development Approval



The Maryland-National Capital Park and Planning Commission (M-NCPPC) reviews all development proposals and site plans for consistency with master plans and zoning code requirements. Projects may be required to dedicate land for transportation facilities, construct bikeways on the site, and provide bicycle parking, showers and changing facilities.

PROPOSED BICYCLE-SUPPORTIVE POLICIES

This section recommends several new bicycle-supportive policies that are likely to have the greatest effect at advancing the goals of the Bicycle Master Plan. Each policy includes a description, indicates the Bicycle Master Plan goals that the policy will advance, and identifies the lead agency and supporting agencies.

Roadway Laws & Policies

Reducing Posted Speed Limits



Description: Seek authority to lower the "default" speed limit to as low as 20 mph and reduce the lowest possible speed limit to 15 mph in Montgomery County.

Justification: A 2011 study showed that while the risk of serious injury is only 10% when a pedestrian is hit by a car going 16 mph, it rises to 25% at 23 mph and 50% at 31 mph. Furthermore, while the risk of death is only 10% when a pedestrian is hit by a car going 23 mph, it rises to 25% at 32 mph¹.

Replace the Contributory Negligence Rule



Description: Pursue replacement of the "contributory negligence" rule.

Justification: Maryland is one of only four states with "contributory negligence" rules², which means that if a bicyclist (or driver) contributed to a crash in any way, they have no right to claim damages from the other party, even if that person was the primary cause of the accident. If all parties involved in the crash agree that the cyclist behaved perfectly and the driver was completely at fault, the cyclist will be able to recover compensation. However, if the cyclist was at fault to any degree, or if the insurer or a police officer believes the cyclist was at fault through misunderstanding or misapplying the law, the cyclist will not be able to recover compensation for injuries suffered in the crash, even if the crash was only 1% the bicyclist's fault. Most states follow a "comparative negligence" rule, which means that the party that is least at fault can receive damages offset by their percent at fault for the crash.

Lead Agency: Montgomery County Department of Transportation, Montgomery County Planning Department

Repeal of Mandatory Use Law



Description: Pursue removal of TR § 21-1205.1(b)(2), which requires bicyclists to ride in marked bicycle lanes.

Justification: There is a legacy of poor bike lane design in Montgomery County, including narrow bike lanes, bike lanes that end short of intersections, bike lanes that are placed to the right of right turning traffic or parking lanes with high turnover. Until safe bicycle facilities are ubiquitous in Montgomery County, bicyclists should have the right to decide where it is safe to bicycle.

Lead Agency: Montgomery County Department of Transportation, Montgomery County Planning Department

Conduct a "Rules of the Road" Assessment



Description: Conduct an analysis of State and County laws, policies, and regulations to identify gaps and inconsistencies in the legal framework supporting bicycling. Address those gaps and inconsistencies

¹ Tefft, Brian C., *Impact Speed and a Pedestrian's Risk of Severe Injury or Death*, AAA Foundation for Traffic Safety, Washington, DC, September 2011.

² The Maryland Court of Appeals adopted the doctrine of contributory negligence in 1847 in Irwin v. Sprigg.

through changes to legislation, policies, and regulations. Examples include when each mode of transportation (car, bike, pedestrian) has the right-of-way in bikeways, traffic lanes, and intersections.

Justification: State and County laws, policies, and regulations are unclear and often inconsistent.

Lead Agency: Montgomery County Department of Transportation, Montgomery County Planning Department

Replace the State's Marked Bike Lane Policy



Description: Pursue replacement of the Maryland State Highway Administration's marked bike lane policy with one that is consistent with achieving a low-stress bicycling network.

Justification: The marked bike lane policy requires that all road projects that involve widening or new construction install marked bike lanes, and that marked bike lanes should be considered as part of all activities that disturb the paved roadway area, disturb the adjacent curb line, or adjust the line striping shall be reviewed for bicycle accommodations. It is detrimental to achieving a low-stress bicycling network on most state highways in Montgomery County. While conventional bike lanes are appropriate in some locations, they are uncomfortable for many adults on roads with 4 or more lanes of traffic or on roads with a 35-mph speed limit or higher.

Lead Agency: Maryland State Highway Administration

Design Standards and Practices

Establish Level of Traffic Stress Targets



Description: Establish a "low" traffic stress target countywide and a "very low" traffic stress target within the vicinity of schools, libraries, parks, and recreation centers.

Justification: A "low" level of traffic stress is appropriate for most adults and a "very low" level of traffic stress is appropriate for most children.

Lead Agency: Montgomery County Council

Update Road Design Standards



Description: Update the County's road design standards to include all bicycle facility types outlined in the Bicycle Facility Toolkit, including, separated bike lanes, buffered bike lanes, advisory bike lanes, neighborhood greenways, shared streets, and protected intersections. Remove obsolete bikeways, such as wide outside lanes.

Justification: Montgomery County road design standards include only three types of bicycle facilities recommended in the Bicycle Master Plan: conventional bike lanes, shared use paths, and bikeable shoulders.

Lead Agency: Montgomery County Department of Transportation

Establish Separated Bikeways as the Preferred Bikeway Facility Types on Higher Stress Roads



Description: Establish separated bikeways (separated bike lanes and sidepaths) as the preferred bicycle facility classification on roads with target traffic speeds exceeding 25 mph, with traffic volumes anticipated to exceed 6,000 vehicles per day, and on commercial streets with on-street parking.

Justification: Separated bikeways, including separated bike lanes and sidepaths, are comfort to more people than conventional bike lanes on higher stress roads.

Lead Agency: Montgomery County Department of Transportation

Establish Protected Intersections as the Preferred and Default Intersection Types



Description: Establish protected intersections as the <u>preferred</u> type of intersection treatment at all intersections with separated bike lanes, including where separated bike lanes cross roads with conventional bike lanes, shared use paths, and shared roads.

Justification: Protected intersections improve safety for all modes of transportation by slowing traffic and consolidating conflicts to a single point that can be eliminated through signalization.

Lead Agency: Montgomery County Department of Transportation



Develop a Shared Lane Marking Policy



Description: Develop a policy for the use of shared lane markings, also known as sharrows, that indicates when these pavement markings are appropriate. This could include low-volume and low-speed streets, such as Neighborhood Greenways, where sharrows reinforce bicyclists' right to bicycle in the center of the lane and can serve a wayfinding function. Additionally, the sharrow policy could also be used on an interim basis on streets master-planned for other bicycle facilities that serve a critical network function in connecting major destinations, but where implementation of the master-planned bicycle facility may be a long way off.

Justification: Montgomery County does not have a policy that specifies when it is appropriate to use shared lane markings.

Lead Agency: Montgomery County Department of Transportation

Develop Bicycle Parking Standards for County Facilities





Description: Establish short-term bicycle rack standards for use at County facilities based on those outlined in the Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines. Train County inspectors to ensure bike parking is installed correctly.

Justification: Public buildings should model best practices in the use of bicycling parking, however, Montgomery County continues to install substandard short-term bicycle parking racks at County facilities.

Lead Agency: Montgomery County Department of Permitting Services

Reassess Road Code Urban Area Boundaries



Description: Assess the existing road code urban area boundaries to determine if additional areas should be classified as urban based on existing zoning and proximity to major existing and planned transit stations. The road code urban area designation reduces the design speed of roads by narrowing traffic lanes and reducing turning radii.

Justification: There are several areas in the County that are not currently designated as urban, even though they are designated with mixed-use or high density residential zoning. Over time, designating additional areas as urban will help to encourage more walking and bicycling, as narrower traffic lanes and slower designs speeds creates a safer and more comfortable walking and bicycling environment. Narrowing traffic lanes can also provide additional space for bikeway infrastructure.

Lead Agency: Montgomery County Planning Department

Enhance Trail Crossings at Major Roads



Description: Comprehensively evaluate intersections where trails intersect with roadways. Where major County trails, including the Rock Creek, Capital Crescent Trail, Sligo Creek Trail, Matthew Henson Trail, and the Bethesda Trolley Trail, cross roads exceeding three lanes of traffic and 30 mph, the trail crossing will either be traffic calmed by removing lanes and reducing the design speed of the road, realigned to an existing signalized intersection, grade separated, or controlled through signalization.

Justification: The potential for serious injury or fatalities is greater where major trails cross multilane and high speed roads.

Lead Agency: Montgomery County Department of Transportation and Montgomery County Department of Parks

Maintenance

Develop a Prioritized Map for Snow Removal from Bikeways



Descriptions: Establish priorities for snow removal from bikeways. Priorities may include bikeways in commercial areas, surrounding transit stations, and major connections between activity centers.

Justification: Snow is an impediment to safe bicycling. Furthermore, during snow events, people are sometimes more willing to walk or bike than they are willing to drive. Ensuring clear and navigable bikeways improves accessibility.

Lead Agency: Montgomery County Department of Transportation

Develop Debris Clearance and Snow Removal Procedures from Separated Bike Lanes



Description: Develop an approach to clearing snow and debris from separated bike lanes.

Justification: Standard street sweeping and plowing vehicles cannot fit in all separated bike lanes, which can be as narrow as 5 feet.

Lead Agency: Montgomery County Department of Transportation

Develop Protocols for Bicycle Facility Closures and Detours



Description: Develop a protocol for bikeway closures and detours that ensures that comparable bikeways are provided to the extent possible, that adequate signing is provided to communicate the detour to bicyclists, and that the public is provided adequate notice of the detour.

Justification: Adequate bicycle facilities should be maintained when bikeway closures and detours are needed.

Lead Agency: Montgomery County Department of Transportation

Development Approvals

Updates to Zoning Code



Description: Amend the Zoning Code to improve the bicycle parking and end-of-trip bicycle facility requirements.

Justification: While the Zoning Code was updated in 2014, additional changes are needed to clarify existing requirements and to meet industry best practices, including requirements for long-term bicycle parking and bicycle repair stations.

Lead Agency: Montgomery County Planning Department

Bicycling to School

Revise the Bicycle to School Policy



Description: Develop a schoolwide policy that permits children to bicycle to school.

Justification: School principals retain the authority to determine when students can bicycle to school and many prohibit bicycling.

Lead Agency: Montgomery County Public Schools