# 2016 Countywide Park Trails Plan Amendment Public Hearing Draft

FEBRUARY 3, 2016

M-NCPPC Montgomery Parks | montgomeryparks.org

Park Planning and Stewardship Division | parkplanningandstewardship.org

Park and Trail Planning Section | parkplanning.org

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#### **Abstract**

This plan amendment provides a comprehensive update to the 2008 Countywide Park Trails Plan (CWPTP). The plan recommends a new framework called Loops and Links that aims to deliver trails in close proximity to areas of highest population. The plan discusses trail and bikeway policy history, explains why the plan is being updated, incorporates a more inclusive and transparent planning process, utilizes a more effective technology-based methodology to evaluate trail alignments early in the planning process, and recommends implementation priorities.

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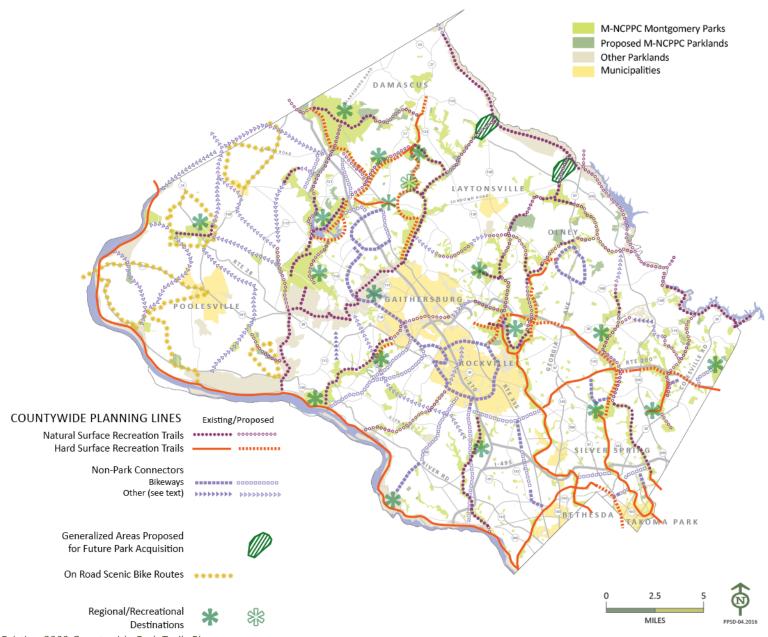


Figure 1 - The Existing 2008 Countywide Park Trails Plan

# **Executive Summary**

The purpose of this amendment is to update the *2008 Countywide Park Trails Plan (2008 CWPTP)*. The following objectives are addressed by this plan amendment:

Incorporate the latest thinking on long range park planning. Analysis and input from the *Vision 2030 Strategic Plan for Parks and Recreation in Montgomery County, MD, 2011 (Vision 2030)* suggested rethinking assumptions about trail user types and service delivery with an emphasis on locating more multi-use trails near highest density of users.

Address implementation difficulties. The Department has encountered numerous problems implementing some of the original Plan's recommendations. The amended plan is based on more detailed analysis upfront to ensure recommendations are realistic and implementable.

Organize the plan more logically and strategically. The plan has been reorganized and restructured in a manner that makes it easier to read and understand. It also will allow easier tracking of plan implementation. Redundancies have been eliminated and trail corridors that currently overlap have been regrouped geographically in a more logical manner.

Resolve the issue of allowable uses. Since the *2008 CWPTP* was approved, some recommendations on user types have been challenged by trail users. The amended Plan recommends guidance for when limited use of natural surface park trails may be appropriate.

Develop a strategy to address the role of park trails as recreational versus transportation facilities. There remains considerable interest in the cycling community to identify hard surface park trails as transportation bikeways. The amended Plan recommends classifying certain trails as transportation-oriented, certain trails as having both a recreation and transportation function, and most trails as having primarily a recreation function.

This comprehensive amendment updates the methodologies, tools and strategies used for planning and implementing major park trail systems throughout the county resulting in:

- a Plan that is more achievable and sustainable overall
- a Plan that ensures all trails are built as sustainably as possible
- a Plan that serves as many trail users as is feasible and possible
- a Plan that maximizes Levels of Service for future trails based on identified user needs and desires, and based on existing and projected population density calculations

Highlights of the amended plan include recommendations to:

- build more natural surface trails downcounty in the more urban areas
- build sustainable trails suitable for multiple user groups (hiking, mountain biking and equestrian)
- complete gaps in the regional trail system to make trail experiences continuous
- create series of loop trails closer to where people live, rather than focusing on longer-distance, cross-county trail experiences; and,
- provide a variety of trail experiences, both "destination trails" to which residents would be willing to drive for a longer experience



(Insert photos)

# Introduction

# **Purpose**

The purpose of this amendment is to update the *2008 Countywide Park Trails Plan (2008 CWPTP)* to better take into account the following issues and topics:

### **Population Growth**

Planners now have improved data for areas of the county likely to experience increases in population. With these data, planners can better plan for where the county needs more trails and also where the county needs to invest in making existing trails more usable. Planners can also better understand how people actually use and gain access to park trails, looking at connections to and between communities.

#### Master, Sector and Functional Master Plan Amendments

The Countywide Park Trails Plan is amended each time a new master, sector or functional plan is approved and adopted. This plan amendment comprehensively updates trail planning recommendations to incorporate policy changes over the past 17 years.

### **Public Opinion, Attitudes and Needs**

Survey results from *Vision 2030* and the *2012 PROS Plan* revealed the popularity of trails. With these new data, planners can plan and design a trail network that better meets the needs of current residents and project the needs of future residents. - see Appendix 1 - Vision 2030 Survey Results

#### **Environmental and Natural Resource Conditions**

Mapping and data have greatly improved over the past 17 years. Planners have more accurate data on the location of sensitive natural areas and cultural resources, which leads to improved analysis and enhanced decision making. This data informs decisions about which trails and trail segments make sense to build, and which trails should be removed from the plan and the future trail network.

### Operational Budget Impacts (OBI) and Public Safety

Park planners and park managers can also now more effectively evaluate and project the costs of operating and maintaining park trails, anticipate potential public safety issues, and generally identify the costs of park trails to taxpayers, including design and construction, daily operations and maintenance.

### **Accommodating Recreation and Transportation**

Most hard surface park trails in Montgomery County have been designed for, and are primarily used for, recreation. Residents and visitors use park trails for leisurely strolls, walking a dog, biking for fitness, running, and more. Increasingly, these same trails are also a means by which residents travel to work, the grocery store, the community center, or a friend's house. Hard surface park trails can accommodate all types of users, and that's what makes them so popular. For more information, see the section regarding <a href="Trails-As-Transportation Policy">Trails-As-Transportation Policy</a> recommendations later in this plan.

# **Scope of the Amendment**

This plan includes recommendations for park trails that:

- Are located on M-NCPPC parkland, as well as those on public lands of other agencies that support the plan's goals
- Link major parks, destinations therein, and adjacent communities
- Are longer distance and offer longer experiences
- Are important components of a regional network
- Complement the 2005 Countywide Bikeways Functional Master Plan, which represents the county's vision for transportation bikeways of countywide significance.

This plan amendment does NOT address:

- Recreational park trails located solely within a recreational or regional park (e.g., Little Bennett or Wheaton Regional Parks)
- Recreational park trails located solely within local or neighborhood parks (e.g., Redland Local Park)
- Park trails that are largely programmed for natural and cultural interpretation (e.g., nature centers, historic sites)
- Specially-marked trails (e.g., Heart Smart Trails)
- Trails on lands owned/controlled by other land management agencies, unless such agencies support the CWPTP vision (e.g., Washington Suburban Sanitation Commission does not support multi-use trails on its reservoir lands)
- Unsanctioned (aka "people's choice") trails and trail networks
- Trails on private lands (e.g., trail easements across farms in the Agricultural Reserve)

This plan amendment addresses park trails of regional, countywide significance. It is not inclusive of all trails on county parkland.

# **Planning Process and Public Outreach**

The Planning Board approved the plan amendment's Objectives, Outreach Strategy and Schedule in October 2011. A Trails Working Group (TWG) was then formed to provide guidance and advice to staff and inform the plan amendment's analysis and recommendations. The Trails Working Group consists of members from trail user groups as well as environmental stewardship advocates. The Trails Working Group provided an excellent forum to allow these user groups to debate controversial issues and reach consensus on plan recommendations prior to public meetings or work sessions with the Planning Board. The membership of the TWG is detailed in Appendix 9

In addition to the Trails Working Group, county residents and trail users were kept informed of the plan's progress via a project web page, public meetings, and briefings to the Countywide Recreational Advisory Board, the Montgomery County Bicycle Action Group, and Conservation Montgomery. The Planning Board was also briefed on the Preliminary Service Delivery Strategy in 2012. More detailed information about the plan process and outreach is in Appendix 14 - The Plan Process and Public Outreach

# Background

Hard surface and natural surface park trails are well-used by residents and visitors alike for recreation, transportation, as well as physical and mental health/fitness. Trails through wooded, shaded parks offer ample opportunities to experience nature, observe wildlife, identify birds and trees, and soak in the scenery. Trails can be a destination, as well as a route to or through an area.

Public surveys conducted during the *2012 PROS Plan* identify park trails as among the most popular and most used facilities in the park system. The survey also revealed that residents want more trails, particularly closer to where they live and/or work, and that residents highly value park natural areas. - see Appendix 1 - Vision 2030 Survey Results

Park trails and natural areas go hand-in-hand within the M-NCPPC Montgomery Parks system. Park trails are gateways to natural areas; they are the means by which park users typically access and enjoy natural areas.

Park trails also have been shown to improve both physical and mental health. Active recreational activities such as walking, biking and running strengthen muscles and the cardiovascular system, while the sights, sounds and smells of nature offer a respite from the stresses of daily life.

And finally, trails are often used for transportation, especially downcounty in more urban areas where residents bike and walk along trails for commuting to work, shopping, or traveling to local destinations such as neighborhood parks, community centers and libraries.

# **Trails Types**

Two main types of trails can be found in M-NCPPC Montgomery Parks, hard surface and natural surface.

### Hard Surface Trails

Hard surface trails are built using asphalt, concrete or compacted gravel and can accommodate all users, including people with disabilities. These trails are typically 8-12' wide and were either built before modern design standards were established or generally conform to American Association of State Highway and Transportation Officials (AASHTO) Bicycle Design Standards to the extent practicable.

### Natural Surface Trails

Natural Surface trails have a surface consisting of dirt, soil and other natural materials and are intended to primarily accommodate people on foot, people on mountain bikes, and people on horses.

### **Natural Resource-Based Recreation**

Depending on the context, trail use may be considered natural resource-based recreation or facility-based recreation. The 2012 PROS Plan defines natural resource-based recreation as "any leisure activity conducted outdoors that is dependent on a particular element or combination of elements in the natural environment. These elements cannot be easily duplicated by human effort." Natural resource-based recreation includes a vast range of pursuits including bicycling, hiking, running, and horseback riding, bird watching, nature photography, wildlife viewing, kayaking, rowing, canoeing, and fishing. In contrast, facility-based recreation may be defined as any leisure activity

dependent on a fabricated facility. Fabricated facilities can generally be provided anywhere, assuming the availability of space and funds for development. Examples of facility-based recreation including baseball, soccer, basketball and tennis, among many others.

### **Trail Users**

In order to appropriately plan an enjoyable, safe and efficient trail network, it is important to know for whom trails are designed, and the types of experiences they enjoy. For the purposes of this plan, there are generally three types of trail user groups: 1) those on foot (hikers, walkers); 2) those on wheels (bicyclists primarily); and 3) those on horseback. There are subcategories of each user group, but generally all trail users in Montgomery County fall within one of these three groups. Motorized vehicles are not permitted on park trails, except as required for maintenance and public safety, or as defined under Americans with Disabilities (ADA) law. - see Appendix 11

### Hikers, Walkers and Runners

Trail users who travel on-foot include hikers, walkers and runners. These trail users travel using human-powered locomotion and require only a pair of shoes or boots. Hiking and walking are considered "gateway" outdoor activities; many outdoor enthusiasts begin their lifelong enjoyment of recreating outdoors and enjoying natural areas by going on a hike, a leisurely walk or a run. These natural resource-based activities require minimal investment and time, and minimal experience or ability.

# Cyclists and Mountain Bikers

Traveling on wheels (non-motorized) is a popular way to enjoy park trails. Most wheeled park users are bicyclists, and can generally be grouped into two main types: transportation and recreation. Often the two types overlap; a trip to work or the grocery store, for example, can be enjoyable. Recreational cyclists are on a park trail for exercise, adventure or social reasons. These cyclists often enjoy natural surface trails and many mountain bikers also seek challenging terrain, difficult obstacles, rigorous experiences and scenic vistas. Transportation cyclists include those who are on a park trail in order to travel from home to a destination (e.g., work, school, store, community center).

# Equestrians

Montgomery County has a large equestrian community. People on horses are one of the historically prominent park trail user types. Traveling on horseback is a popular way to enjoy natural surface trails. In addition to numerous park trails open to horses, a widespread network of trails and facilities on private lands also exists, including easements. Woodstock Equestrian Park was designed and constructed primarily to serve equestrians.

### Persons with Disabilities

Some trails users have a physical, cognitive or emotional disability. A disabled trail user may have a vision or hearing impairment, a physical limitation or an emotional issue. Some of these users may travel on-foot, some on wheels, and some on horseback. Persons with disabilities may be a subset of any of the above types of trail users (hikers, bicyclists, equestrians), but often have different needs and design requirements. The Americans with Disabilities Act (ADA) requires architectural (structural) and

programmatic accommodations for recreational facilities and services. The design and alteration of hard surface and natural surface trails are based on the guidelines established in the Architectural Barriers Act Accessibility Standards for Outdoor Developed Areas on federal properties which Montgomery Parks has adopted as a Best Practice. See Appendix 11 - American for Disabilities Act Information for laws and policies governing the accommodation of persons with disabilities on park trails.

# The 2008 Plan Today

The 2008 Countywide Park Trails Plan (2008 CWPTP) established a solid vision and foundation for policy of park trails of countywide significance, which are long-distance park trails that connect to regional and recreational parks and other major park and recreation destinations.

Countywide trails are distinct from park trails that form smaller loops completely within a park, or simply connect to a school or other local destination.

Eight (8) long-distance, cross-county corridors are a significant focus of the current plan. This broad brush vision identified trails and greenways intended to connect the Potomac River with the Patuxent River (natural surface), and the Lower County trail network with the Upper County trail network (hard surface). - see Figure 2 - The 2008 CWPTP Trail Planning Corridors

While innovative for its time, the current plan postponed important analysis about feasibility and implementation until later in the planning process. Analysis conducted during subsequent trail corridor planning often revealed that some connections would be difficult or impossible to build

due to high cost, lack of land ownership (or poor likelihood of acquiring the land) or adverse impacts to cultural or natural resources. Many trails the public expected to be delivered remain unbuilt, resulting in significant gaps in the countywide park trail network.

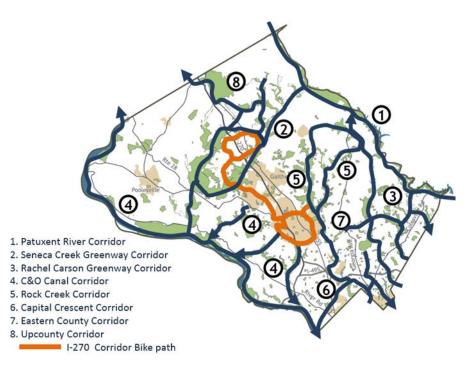


Figure 2 - The 2008 CWPTP Trail Planning Corridors

The current plan also identified trails on lands for which M-NCPPC Montgomery Parks has no authority or control such as WSSC lands, private land (easements), and on-road scenic bike routes in the Agricultural Reserve. This has caused problems with implementation and public expectations.

# **Existing Hard Surface Park Trails**

The existing countywide hard surface park trail network primarily consists of hard surface trails that have been built in stream valley parks, including the Rock Creek Trail, Sligo Creek Trail, Magruder Branch Trail, Paint Branch Trail and Matthew Henson Trail. It also includes the popular Capital Crescent Trail that was built in a railbanked corridor, as well as trails built by developers on land dedicated to M-NCPPC as parkland, such as the Clarksburg Greenway Trail and the North Germantown Greenway Trail. Figure 3 - 2008 CWPTP Status of Hard Surface Park Trails

Collectively, the existing hard surface trail system serves high to moderate density areas including Bethesda, Silver Spring, Wheaton, Rockville, Takoma Park, Aspen Hill, White Oak, White Flint, Clarksburg and Damascus.

Upper County areas have a lower level of trail service, and currently rely on park trails located solely within South Germantown Recreational Park and Black Hill Regional Park. Similarly, eastern county residents are served mostly by trails solely in Martin Luther King, Jr. Recreational Park and Fairland Recreational Park

(Insert photos)

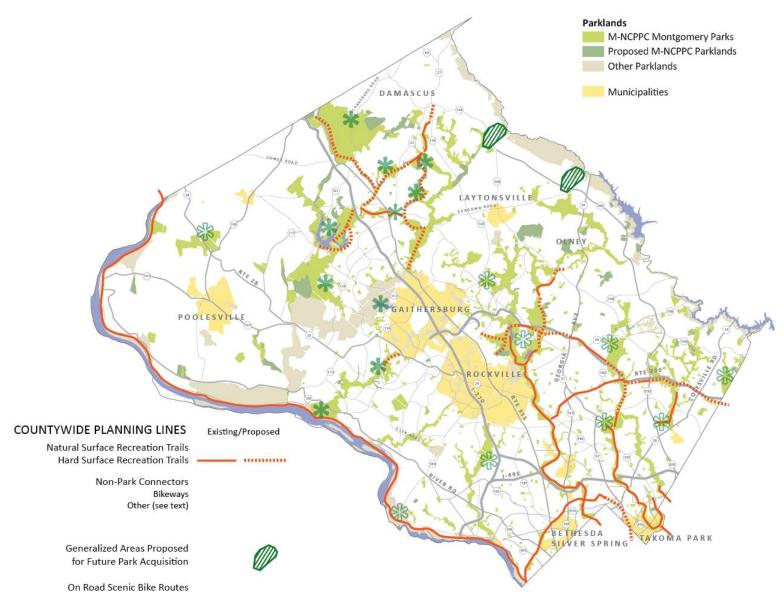
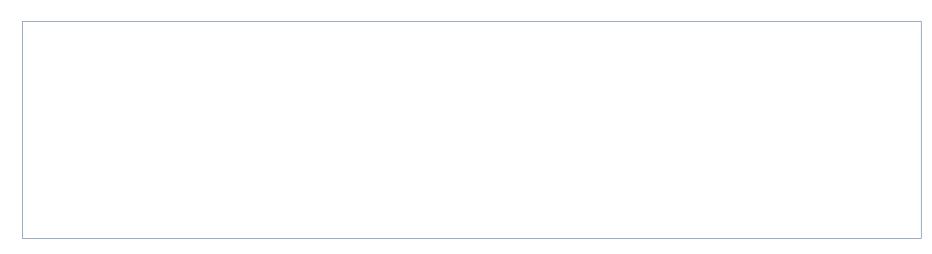


Figure 3 - 2008 CWPTP Status of Hard Surface Park Trails

# Existing Natural Surface Park Trails

The existing network of countywide natural surface park trails largely follows stream valley parks, and include the Cabin John Trail, Rachel Carson Greenway Trail, Northwest Branch Trail, Muddy Branch Trail, Seneca Greenway Trail, and the Upper Rock Creek Trail (North Branch and Main Stem). - see Figure 4 - 2008 CWPTP Status of Natural Surface Park Trails



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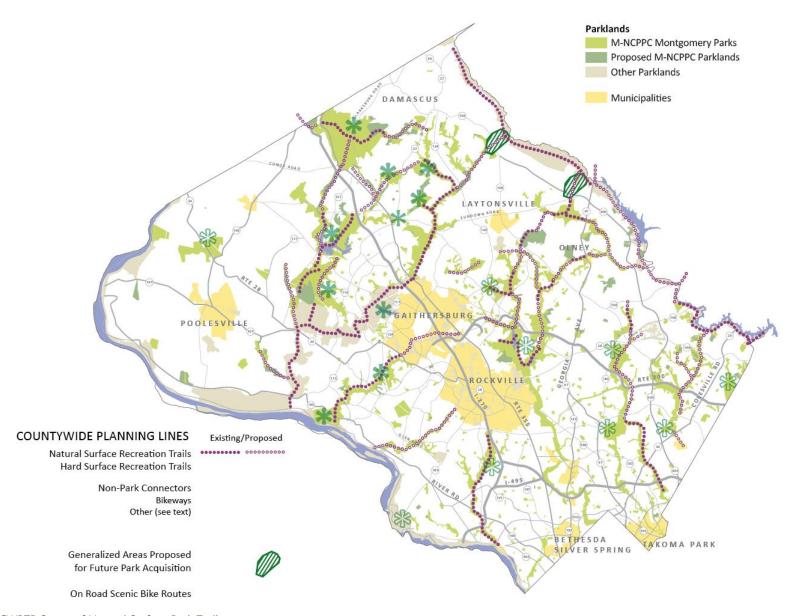


Figure 4 - 2008 CWPTP Status of Natural Surface Park Trails

# Countywide Trails Managed by Other Agencies

Trails managed by other government agencies are critical to overall countywide connectivity. The C&O Canal Towpath runs the length of the county's western boundary along the Potomac River and offers connections to numerous countywide park trails, including the Capital Crescent Trail, the Muddy Branch Trail, and the Seneca Greenway Trail. The towpath is part of the C&O Canal National Historic Park and is owned and operated by the National Park Service. The segment of the Seneca Greenway Trail south of MD 355 passes through Seneca Creek State Park, and therefore is owned and operated by the Maryland Park Service. While M-NCPPC does not own or operate these trails, they are vital to countywide trail connectivity and the state supports including these trails in this plan. see Figure 5 - Countywide Trails Managed by Other Agencies, and Non-Park Bikeway Connectors

### Existing Non-Park Bikeway Connectors

Several existing non-park countywide bikeways are critical to the overall network of recreational paths and bikeways. The Georgetown Branch Trail is probably the most prominent and popular, offering vital downcounty connections to both the Rock Creek Trail and the Capital Crescent Trail. The Bethesda Trolley Trail is another very important bikeway, linking Rockville with Bethesda. Segments of the ICC Bike Path offer important connections to existing and proposed park trails in mid-county. And finally, the shared use path along segments of Midcounty Highway, Great Seneca Highway and Snowden Farm Parkway offer valuable links in Clarksburg and Gaithersburg- see Figure 5 - Countywide Trails Managed by Other Agencies, and Non-Park Bikeway Connectors

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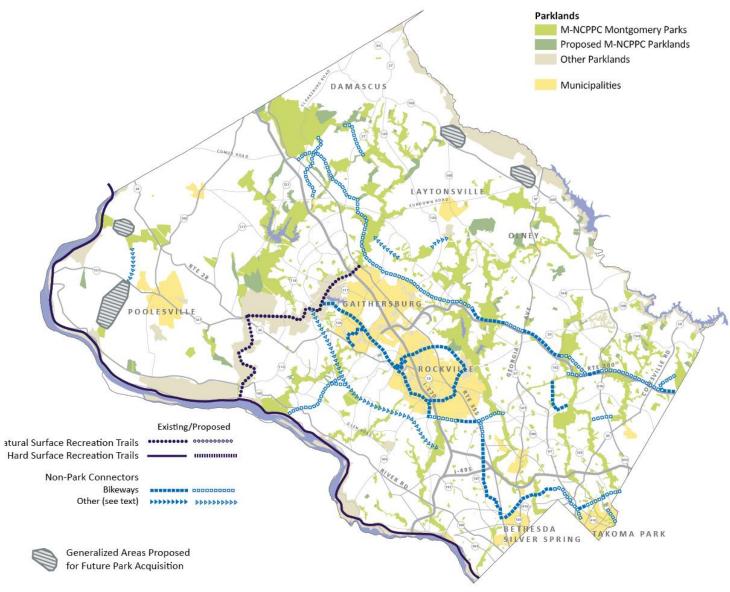


Figure 5 - Countywide Trails Managed by Other Agencies, and Non-Park Bikeway Connectors

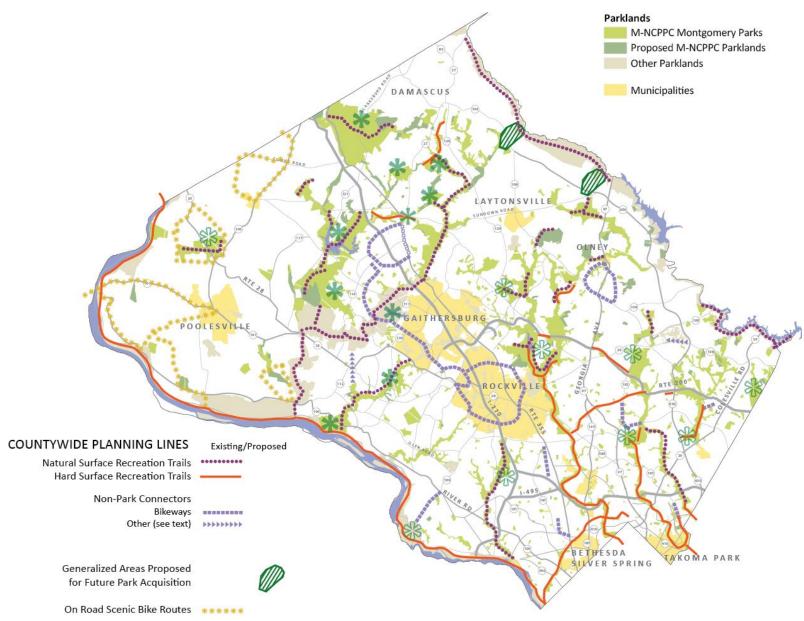


Figure 6 - 2008 CWPTP Existing Park Trails and Non-Park Connectors

# **Policy History**

The county park trail system dates back to the Commission's early development of the down-county stream valleys and associated parkways during the 1930s through 1950s. *The 1964 General Plan* ("Wedges and Corridors") further identified stream valleys as "wedges" worthy of protection from land development, many of which became parkland. As the county grew, many of these stream valleys accommodated sewer and water lines and trails were often built on top of the water and sewer lines, including the Rock Creek Trail, the Sligo Creek Trail and the Paint Branch Trail to name just a few.

All master planning in Montgomery County is guided by the *1964 General Plan* and its subsequent 1993 amendment - the *General Plan Refinement*. These documents provide guidance for land use, housing, transportation, environment and community facilities, which include parks, trails, and recreation facilities. Bikeways, by contrast, fall under the transportation category. Because there is significant overlap between park trails and bikeways, however, in terms of how they are used by residents, it is very important to coordinate the park trails network with the bikeways network. Both types of facilities are used for active recreation, and to a lesser extent, both are used for transportation. Prior to the initial Countywide Park Trails Plan in 1998, hard surface park trails were identified as bikeways for purposes of public policy. After 1998, public policy for hard surface park trails and bikeways were covered under separate master plans.

The 1978 Master Plan of Bikeways was the first functional master plan to recommend a countywide network of bikeways, for both transportation and recreation. While the focus of the plan was transportation cycling along

county and state roadways, many recreational bikeways were identified to pass through stream valley parks.

Attempts to develop master plans for park trails, specifically, did not occur until 1991 with the staff draft of the *Planning Guide to Park Trails*. This plan was the first to address natural surface trails (as opposed to hard surface trails, aka "bikeways" at the time). In 1997, the Planning Board reviewed a staff draft of the *Master Plan of Countywide Bikeways and Trails*. This plan was an attempt to simultaneously update the *1978 Master Plan of Bikeways* and also develop the first comprehensive park trails master plan, including both hard surface and natural surface. The Planning Board's review of this plan uncovered many policy conflicts and problems with attempting to address both transportation bikeways and recreational park trails in the same planning process. As a result, the Planning Board requested a separate master plan for bikeways and a separate master plan for park trails.

In 1998 the Planning Board approved the first edition of the *Countywide Park Trails Plan*. And, in 2005, the Planning Board and County Council approved & adopted the *Countywide Bikeways Functional Master Plan*. The Countywide Park Trails Plan has been amended numerous times since then, but this plan amendment is the first comprehensive update since the original 1998 plan.

## **Guiding Documents**

The update to the master plan has been guided by the following documents

*Vision 2030* evaluated the supply and demand for park trails countywide, as well as the relative importance of park trails to households as compared to other park facility types.

2012 PROS Plan analyzed and recommended an approach to delivery of park trails in a way that ensures geographic parity and maximizes the number of people served by a park trail near where they live.

The 1978 Master Plan of Bikeways established the initial vision for both bikeways in transportation rights-of-way and bikeways on parkland in Montgomery County.

The 2008 Countywide Park Trails Plan included recommendations for both hard surface and natural surface park trails of "countywide significance." It comprehensively recommended changes to the "bikeways on parkland" portion of the 1978 Master Plan of Bikeways. However, since the park trails plan is not approved by the County Council, nor adopted by the Commission, many bikeways that were removed in the park trails plan technically remain public policy until and unless the County Council amends them.

The 2005 Countywide Bikeways Functional Master Plan (CBFMP) includes recommendations for on-road and off-road bikeways in transportation rights-of-way, but did not address "bikeways on parkland" portion of the 1978 Master Plan of Bikeways. see Appendix 12 - Countywide Bikeways Functional Master Plan Map

While both the *Countywide Park Trails Plan* and the *Countywide Bikeways Functional Master Plan* created solid foundations for separately dealing with bikeways and park trails, there remains an overlap in master planning and countywide policy that has caused some problems. Most notably, neither plan specifically recommended deleting "bikeways on parkland" (recommended in the *1978 Master Plan of Bikeways*). These are bikeways - where they've been built - that are now considered hard surface park

trails, and are operated and maintained by Montgomery Parks rather than by a transportation agency. This dynamic between transportation bikeways and hard surface park trails is discussed later in the chapter regarding Plan Recommendations and will be addressed by the forthcoming amendment to the Master Plan of Bikeways, currently underway.

# Methodology and Analysis

As noted in the Introduction, digital mapping technology and data have greatly improved over the past 17 years. More accurate data leads to improved analysis and enhanced decision making. This section of the plan discusses the improved methodology and analysis that results, which leads to recommendations about which trails and trail segments make sense to build, and which trails should be removed from the plan and the future trail network.

This plan amendment was developed by first identifying which trail segments from the current plan had not yet been built (Figure 7). The Trails Working Group and staff evaluated whether unbuilt segments were feasible, implementable, cost-effective and would strike the right balance between enhancing trail-based recreational opportunities while protecting the corridors through which the trail segment passes. Striking the right balance between recreation and stewardship is a key part of the mission of M-NCPPC Montgomery Parks.

Each segment was evaluated in detail to determine why it had not yet been built and whether or not it could realistically still be implemented. In order to analyze the feasibility and suitability of each unbuilt segment, new decision making matrices were developed in consultation with the Trails Working Group, for both hard surface and natural surface trails.

Each link or gap was evaluated in detail using the Resource Atlas, a Geographic Information System (GIS) tool that shows sensitive environmental and cultural resources. More information about the Resource Atlas is in the following section titled <a href="Environmental and Cultural Resources Evaluation">Environmental and Cultural Resources Evaluation</a>.

Trails Working Group meetings were attended by both trail user group representatives as well as the plan's project management team. Collectively, decisions were reached for each link or gap whether to retain it as a recommendation in the plan or to remove it, based on decision making criteria and associated discussions by staff and the Trails Working Group. The final decision making matrices for implementation trouble spots for both hard and natural surface trails are detailed in Appendix 3

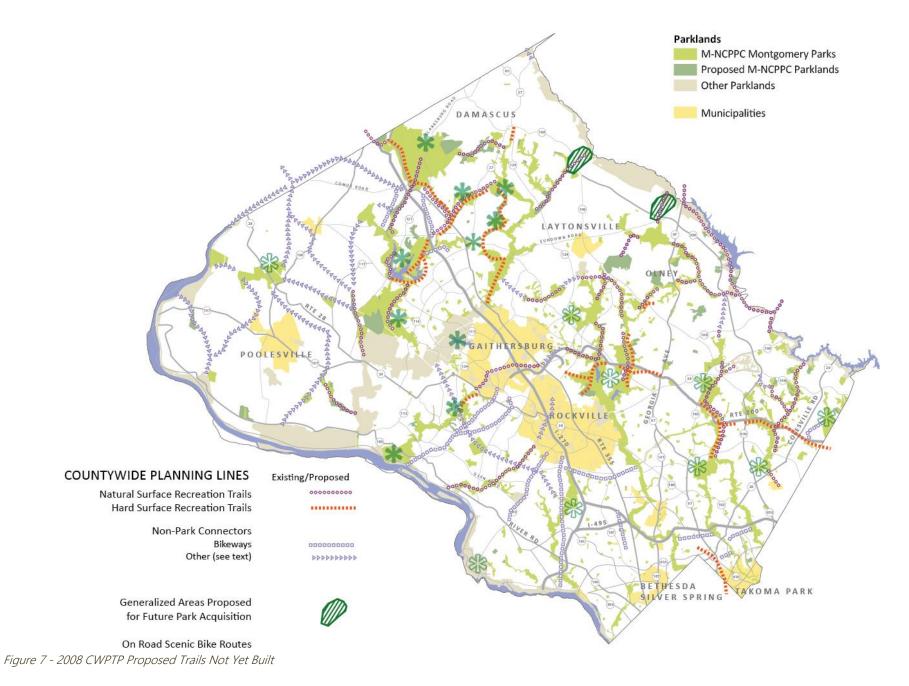
The trail network identified in this plan amendment represents what park planners, trail user group representatives and stewardship representatives believe can realistically be built in the future, assuming adequate funding for facility planning, design and construction. This leads not only to practical expectations, but also more efficiently and effectively uses public tax dollars.

## **Decision Making Criteria**

In addition to the Resource Atlas planners analyzed trail level of service. Evaluating levels of service means comparing the geographic distribution of existing and planned trails with the current and projected geographic distribution of residents. Are existing and planned park trails proximate and accessible to where people live and work, both now and also 15-20 years from now?

Vision 2030 surveys, for example, reveal that trails are among the most popular and well-used recreational facilities in Montgomery County. Residents want more trail-based recreational opportunities closer to where they live. - see Appendix 1 - Vision 2030 Survey Results

While a minority of trail users continue to want half-day or day-long experiences, the majority of trail users seek shorter experiences, closer to home and that require shorter travel distances to reach.



A1 - 22

This information in-part, for example, led to recommendations to identify new natural surface trails (or to sanction existing "people's choice" trails) down-county as well as to retain hard surface trails Upper County wherever feasible. The down-county has a lower level of service for natural surface trails. Most sanctioned natural surface trails are located in the northern area of the county. New natural surface trails are needed in the County's southern communities to increase the level of service to better meet current and/or projected demand for trails in down-county urban or urbanizing areas. Likewise, the upper county has a lower level of service for hard surface trails. Retaining recommendations for hard surface trails as well as key non-park bikeway connectors are deemed important to meet the needs of growing communities such as in Clarksburg and surrounding areas. This additional analysis aids in devising a prioritization or service delivery strategy for building out the trail network over time.

### Decision making criteria included:

- Impacts to environmentally sensitive resources
  - Floodplains, wetlands, stream buffers, steep slopes, erodible soils, habitats of rare, threatened and endangered species, protected by *Article 66B of the Maryland Code* and the Commission's *Environmental Guidelines for Land Development*
- Can be built sustainably
  - Trail alignment can avoid removing significant trees, or impacting tree root zones
  - Trail alignment can avoid or minimize loss of wildlife habitat
  - For natural surface trails, trail alignment can be designed to shed water and not cause soil erosion (or avoid highly erodible soils)

- Land acquisition opportunity to bypass constrained areas
  - Parcels of land adjacent to existing parkland can be identified for purchase to expand parkland boundaries, in order to avoid or minimize impacts to sensitive resources
- Relative cost to keep on parkland and mitigate impacts
  - Land acquisition costs to purchase new parkland
  - Construction costs to avoid resources (e.g., long bridges; retaining walls on steep slopes)
  - Construction costs to minimize impacts (e.g., boardwalks)
- Availability of suitable alternatives to bypass constrained areas
  - Availability of existing or planned sidewalks, bike paths or low volume roadways to route trail users for short distances to connect trail segments
- Connects to regional or recreational park or other regional destination
  - Other regional destinations might include federal or state parkland, central business districts, Metro or MARC stations or major employment or commercial centers
  - Connections to local destinations such as schools, community centers, etc.
  - Also may connect to a major bikeway (e.g., ICC Bike Path)
- Terrain suitable for all trail user groups
  - Terrain and/or environmental conditions can accommodate all user groups (e.g., weight of a horse)
- Impacts a Biodiversity Area, Best Natural Area, high quality forest, or cultural/historic resource
  - Parkland is designated as a biodiversity area, defined as
     "Significant natural communities that enhance the biodiversity

- of the County. These areas contain one or more of the following natural resources:
- Populations of rare, threatened, endangered or watchlist plants or animals,
- Unusual or unique types of habitat,
- Examples of high quality or otherwise significant natural communities, or
- Plant or animal species with importance to the County or locality.
- Parkland is a designated Best Natural Area, defined as having "large wetlands, high quality aquatic resources and forests, diverse native vegetation, uniquely spectacular topography and bedrock formations and/or unique habitats that are scarce and/or fragile."
- Parkland has high quality forest
  - Large specimen trees
  - Forest Interior Dwelling (FID) species habitat
- Parkland has cultural or historic resources on parkland
  - Presence of historic structures and associated environmental setting
  - Known archaeological site nearby

# Environmental and Cultural Resources Evaluation Resource Atlas

Analysis and recommendations in the approved and adopted *Countywide Park Trails Plan* dates back to 1998, and was written without the benefit of current data and modern digital mapping technology. This plan amendment benefits from a new Geographic Information System (GIS)-based analytical tool developed by park staff

called the Resource Atlas. A sample Resource Atlas map of the Paint Branch Stream Valley Park in White Oak is located in Appendix 2 - Resource Atlas Mapping.

The Resource Atlas, a Geographic Information System (GIS) tool developed by the Department of Parks, combines GIS layers of the environmentally sensitive areas defined in *Environmental Guidelines:* Guidelines for Environmental Management of Development in Montgomery County, Best Natural Areas and Biodiversity Areas as defined in PROS 2012, and cultural and archaeological resources and associated settings as defined in a number of publications including, but not limited to, the Montgomery County Master Plan for Historic Preservation.

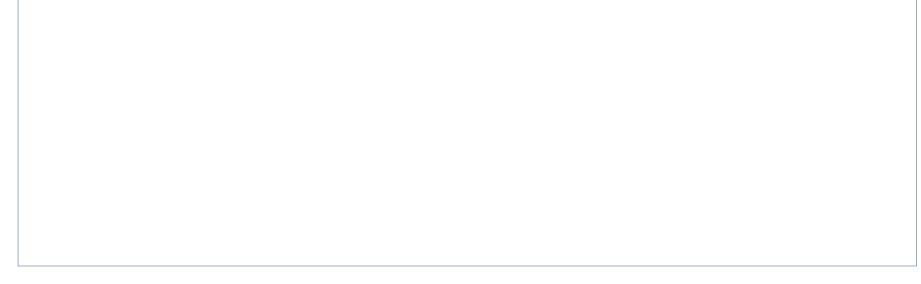
The resulting Resource Atlas maps allow users to quickly and thoroughly assess environmentally sensitive areas, cultural resources, and existing infrastructure present on a site. This enables department natural resource staff, park planners, and operations staff to more effectively determine potential environmental and cultural conflicts allowing them to refine plans, make informed decisions, and even model future developmental impacts to parkland at a very early planning stage.

In the context of the Countywide Park Trails Plan Amendment, the Resource Atlas is used to evaluate proposed trail alignments and select routes to either avoid impacting natural and cultural resources altogether, or to select alignments that minimize impact to these resources; all while still providing the desired connectivity to existing infrastructure. Prior to the development of the Resource Atlas, this type of GIS analysis was very cumbersome and often did not include all possible datasets. By leveraging the agency's GIS

resources more efficiently, the Resource Atlas delivers improved, more well-informed plans.

### More Realistic Recommendations

The use of new tools such as the Resource Atlas and the Level of Service analysis led to recommendations for the new plan that are implementable, assuming adequate funding. The recommendations that follow represent a new plan framework for trails that can be realistically built, while removing segments that cannot and/or should not be built due to high cost, unavoidable impacts to sensitive resources, lack of current land ownership, or the unlikelihood of obtaining the land in the future.



(Insert photos)

# Recommendations

### A New Plan Framework

The 2008 plan organized the areas of the county by trail corridors and stream valley parks. Because most countywide park trails follow streams and stream valleys, it was a logical way to organize the plan. The old framework, however, did not account for shorter, close-to-home experiences.

This plan amendment proposes a network for which Montgomery Parks has a primary role in implementation and focuses largely on trails on county parkland. Where the plan amendment deviates from county parkland, concurrence from other land or facility operators/managers has been secured.

With the benefit of improved tools such as modern GIS technology, and changes in environmental stewardship policy, this plan amendment conducts the more detailed planning and resource analysis earlier in the process, which leads to a more realistic and achievable trail network, one that is more cost-effective, usable, accessible and sustainable. The park trail network connects to and complements existing park trail and bikeway networks in surrounding jurisdictions, as well as Montgomery Village and the cities of Rockville and Gaithersburg.

### Loops & Links

This plan amendment proposes a new framework for the countywide park trails network. "Loops and Links" identifies four large existing and nearly complete "hybrid" loops, while simultaneously recommending park trail,

bikeway and sidewalk connectors between these loops and major parks and other regional destinations. Figure 8 - Proposed New Destinations Map.

Hybrid loops include existing and proposed hard surface and/or natural surface trails on county parkland and other public lands. Where necessary to help fill critical gaps in the overall system or to link to major destinations, the new framework also includes a few existing or proposed regional bikeways and occasionally sidewalks and low volume roads (see Figure 10 - Proposed New Loop & Link Trail Network). This proposed countywide park trail system is both realistic and implementable, because it has been analyzed using the new and improved methodology and analysis discussed in the previous chapter.

Loops and Links focuses on continuous "circuit" trail user experiences and also the park trails, key regional bikeways or sidewalks that connect loops and links with major regional destinations. The system also establishes smaller "stacked loops." With stacked loops, trails users can have shorter or longer trail experiences without retracing their routes. This type of park trail system offers a variety of loop experiences, both long and short.

Figure 10 - Proposed New Loop & Link Trail Network, identifies four (4) major loops which are discussed in more detail in section *Trail Planning Areas*.

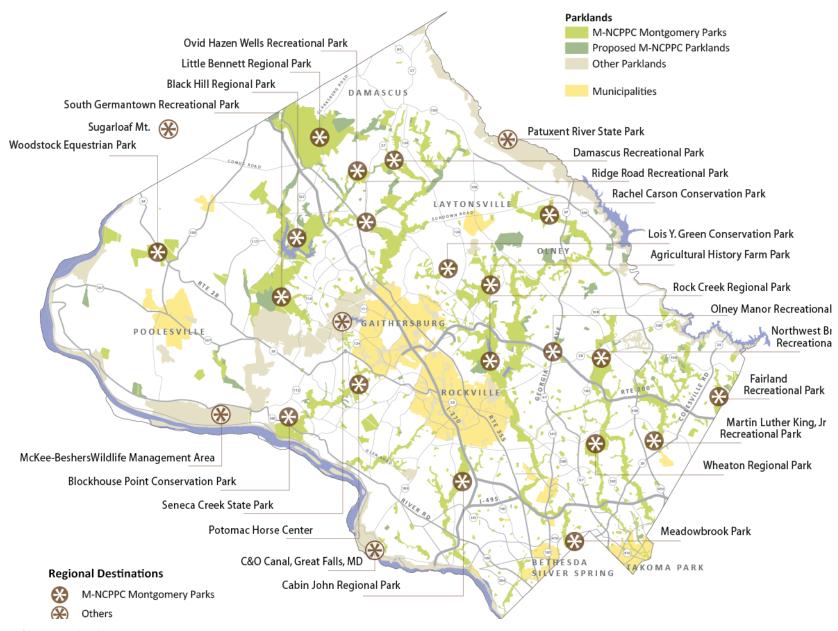


Figure 8 - Proposed New Destinations Map

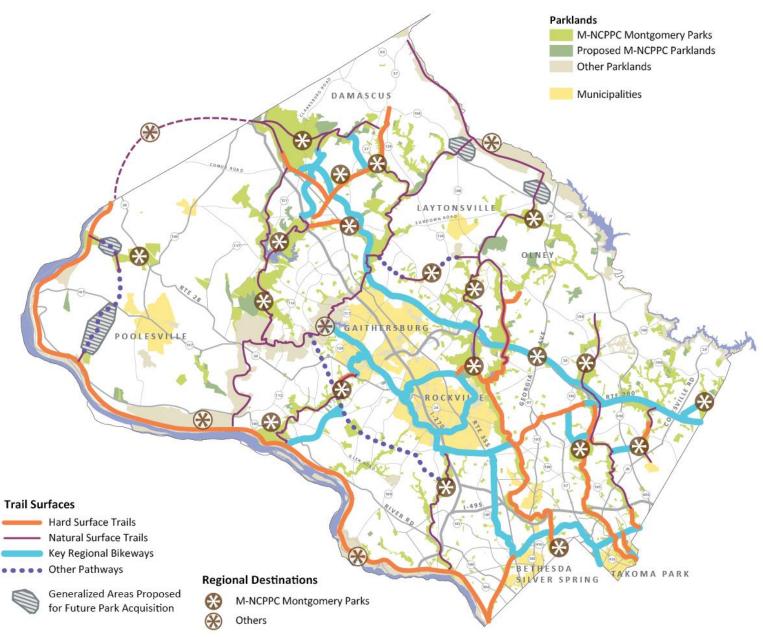


Figure 9 - Proposed Loop & Link Trail Network by Trail Surface Types

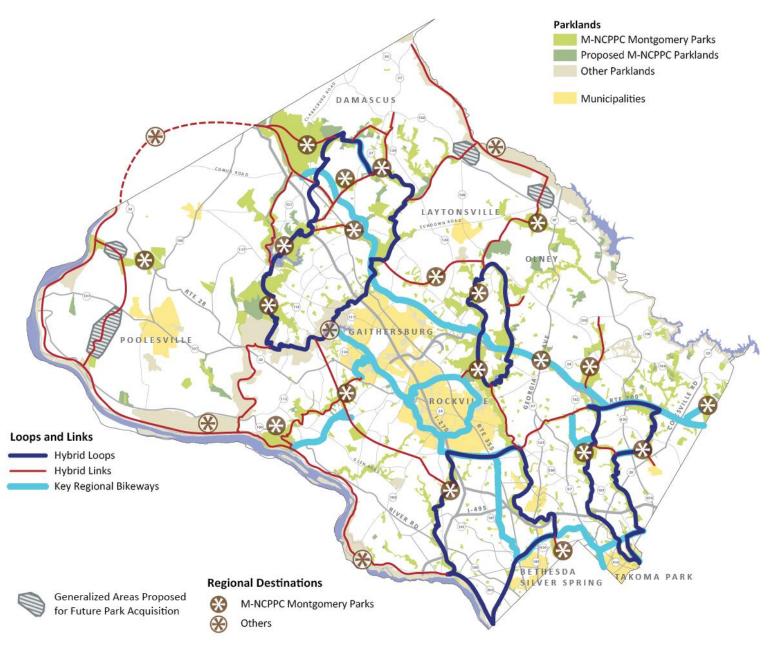


Figure 10 - Proposed New Loop & Link Trail Network

# Trail Planning Areas

For the purposes of this plan amendment, the county has been divided into the following four (4) trail planning areas, corresponding to a new plan framework called Loops and Links. - Figure 11

- 1. Upper County
- 2. Mid County
- 3. Eastern County
- 4. Lower County

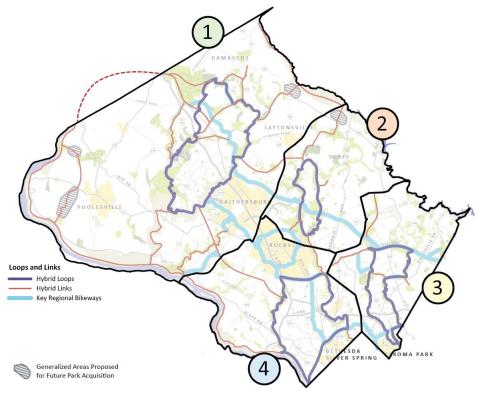


Figure 11 - New Trail Planning Areas

### **Upper County**

The Upper County Loop and Links network is intended to serve residents in Potomac, Gaithersburg, Germantown, Clarksburg and Damascus. It includes the 65-mile MoCo EPIC route, and identifies connections to it. The MoCo EPIC route - created by the Mid-Atlantic Off-Road Enthusiasts (MORE) - includes the Seneca Greenway Trail, the Hoyles Mill Trail and the Muddy Branch Trail, plus numerous smaller park trails as well as on-road bikeways and/or sidepaths. This network of trails offers connections to major recreational destinations such as Little Bennett Regional Park, Black Hill Regional Park, Seneca Creek State Park, Ovid Hazen Wells Recreational Park, Damascus Recreational Park, Ridge Road Recreational Park and South Germantown Recreational Park. - Figure 12

#### M-NCPPC PARK TRAILS

U-01 Little Bennett Regional Park

- U-01.01 Purdum Trail

- U-01.02 Hard Cider Trail

- U-01.03 Froggy Hollow Trail

- U-01.04 Logger's Trail

- U-01.05 Western Piedmont Trail

- U-01.06 Soper's Branch Trail

- U-01.07 355 / Day Use Area Trail

U-02 Clarksburg Greenway Trails

- U-02.01 North Germantown Greenway Trail

U-03 Ovid Hazen Wells RP - Damascus RP Link

U-04 Damascus Trail Link

U-05 Magruder Branch Trail

U-06 Patuxent West Link

U-07 Seneca Creek Greenway Trail

U-08 Montgomery Village Link West

U-09	Lois Y.	Green	Farm	Conservation	Park

- U-09.01 Two Farms Loop
- U-09.01 Hadley Farms Connector
- U-10 Muddy Branch Greenway Trail
- U-11 Blockhouse Point Conservation Park
  - U-11.01 Muddy Branch Greenway Trail

#### U-12 Woodstock Equestrian Park Trails

- U-12.01 Wasche Field Loop
- U-12.02 Farm Road Trail
- U-12.03 Stone Barn Loop
- U-13 Hoyles Mill Trail
- U-14 Black Hill Regional Park
  - U-14.01 Hoyles Mill Trail
  - U-14.02 Cabin Branch Trail
  - U-14.03 Hard Rock Trail
  - U-14.04 Cool Spring Run Trail
- U-15 Ten Mile Creek Greenway Trail

#### **NON-PARK OWNERSHIP**

- U-16 Montgomery Village Link East
- U-17 Woodstock North Link
- U-18 Woodstock South Link
- U-19 Sugarloaf West Link
- U-20 Sugarloaf East Link
- U-21 Observation Drive Link

#### **State Park Trails**

- U-22 Patuxent River State Park
- U-23 Seneca Greenway Trail
- U-24 Schaeffer Farm trails
  - U-24.04 Seneca Ridge Trail

#### Pepco

U-25 Pepco Potomac Corridor Trail

#### **National Park Service Trails**

U-26 C&O Canal Towpath

#### **Bikeways, Paths and Sidewalks**

- U-27 MidCounty Highway Bike Path
- U-28 Great Seneca Highway Bike Path
- U-29 Lakelands Trail Bike Path
- U-30 Travilah Road Bike Lane
- U-31 Clarksburg Road Bike Path

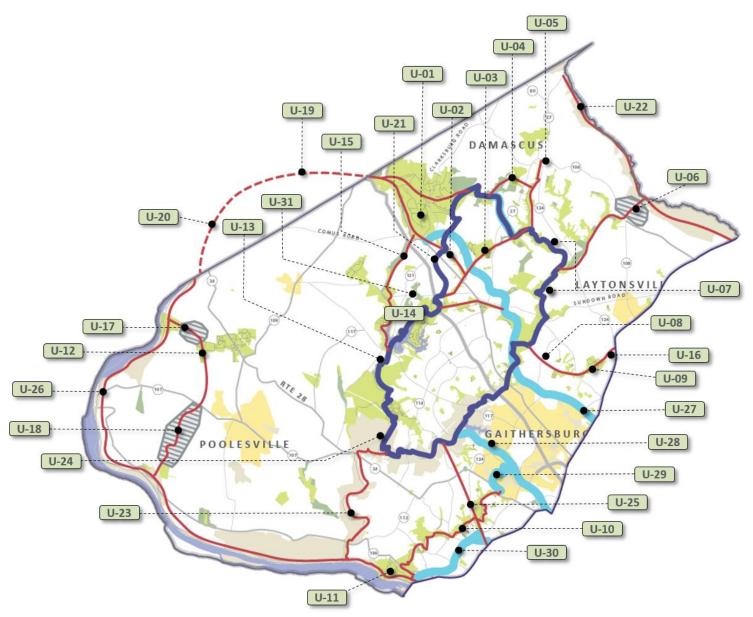


Figure 12 - Upper County Loops and Links

### **Mid County**

The Mid County Loops and Links network serves residents in Aspen Hill, Olney, Derwood and Rockville. It includes countywide park trails such as the Lake Frank Trail, North Branch Trail, and the Upper Rock Creek Trail. This network of trails offers connections to major recreational destinations that include Rock Creek Regional Park and the Agricultural History Farm Park. - Figure 13

### M-NCPPC PARK TRAILS

M-01 Blue Mash Trail

M-02 Rachel Carson Conservation Park

- M-02.01 Rachel Carson Greenway Trail

- M-02.02 River Otter Trail

- M-02.03 Fox Meadow Loop

M-03 Patuxent East Link

M-04 Upper Rock Creek Trail

M-05 Norbeck Grove Trail

M-06 North Branch Trail

M-07 Rock Creek Regional Park Trails

- M-07.01 Lakeside Trail

- M-07.02 Lake Frank Connector

- M-07.03 Westside Trail

M-08 Rock Creek Hiker-Biker Trail

M-09 Millennium Trail Link

### **NON-PARK OWNERSHIP**

M-10 Blue Mash Link

M-11 Montgomery Village Link

### Bikeways, Paths and Sidewalks

M-12 ICC Bike Path, SP-40

M-13 Emory Lane, SP-32

M-14 Millennium Trail, SP-51

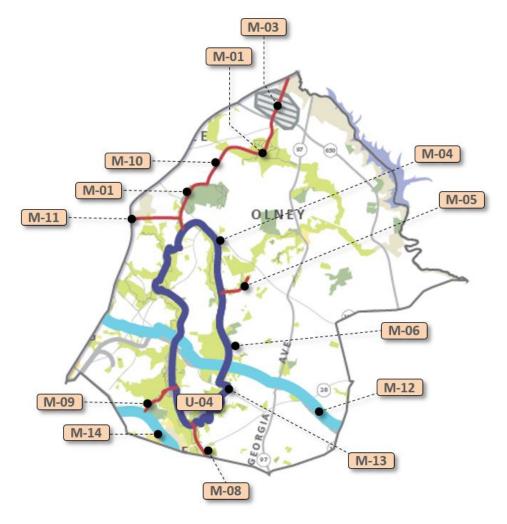


Figure 13- Mid County Loops and Links

### **Eastern County**

The Eastern County Loops and Links network serves residents in Silver Spring, Takoma Park, White Oak, Burtonsville and Cloverly. It includes countywide park trails such as the Paint Branch Trail, Sligo Creek Trail, Rachel Carson Greenway Trail, Matthew Henson Trail, and Northwest Branch Trail. It also includes key regional bikeways including the ICC Bike Path. This network of trails offers connections to major recreational destinations that include Martin Luther King, Jr. Recreational Park, Wheaton Regional Park, Northwest Branch Recreational Park (future) and Fairland Recreational Park. - Figure 14

### M-NCPPC PARK TRAILS

- E-01 Rachel Carson Greenway Trail Link
- E-02 Paint Branch Trail
- E-03 Northwest Branch Wheaton Link
- E-04 Northwest Branch / Rachel Carson Greenway Trails
- E-05 Long Branch Trail
- E-06 Sligo Creek Trail
- E-07 Wheaton Regional Park Trails
  - E-07.01 future trails
- E-08 Matthew Henson Trail

### NON-PARK OWNERSHIP

- E-09 Paint Branch Trail North Extension
- E-10 Paint Branch Trail South Extension
- E-11 Silver Spring Green Trail, Piney Branch Road
- E-12 Metropolitan Branch Trail

### Bikeways, Paths and Sidewalks

- E-13 Robey Road, SP 22
- E-14 ICC Bike Path, SP-40
- E-15 Jackson Road, EB-9
- E-16 Long Branch Glenside Drive
- E-17 Sligo Wheaton Connector
- E-18 E. Randolph Road, SP-26
- E-19 Layhill Road, BL-18 and sidewalks
- E-20 Bonifant Road, DB-43
- E-21 Notley Road, SP-76
- E-22 Springbrook Drive
- E-23 Driveways in Layhill Local Park

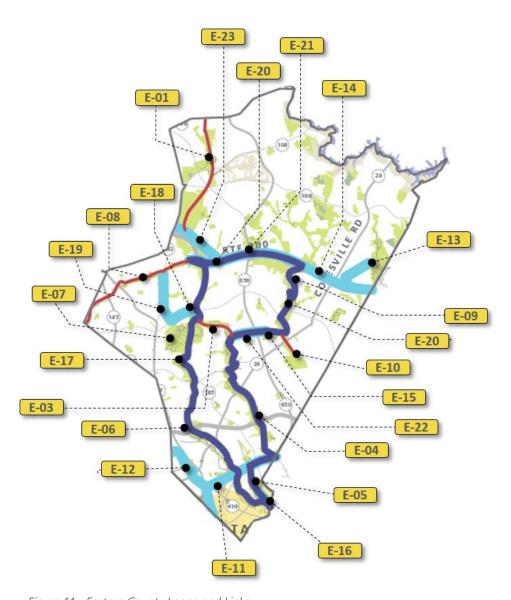


Figure 14 - Eastern County Loops and Links

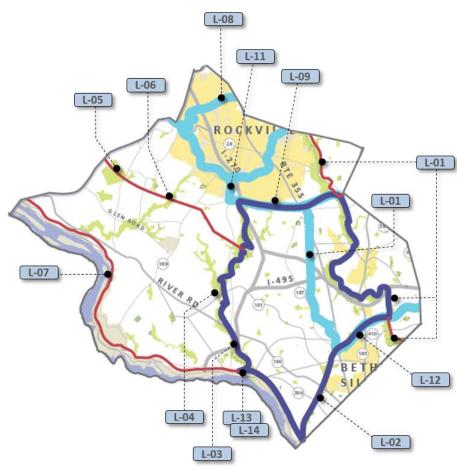


Figure 15 - Lower County Loops & Links

### **Lower County**

The Lower County Loops and Links network serves residents in Potomac, Bethesda, Chevy Chase, Rockville and Aspen Hill. It includes major countywide park trails such as Cabin John, Capital Crescent and Rock Creek, as well as the C&O Canal Towpath and key regional bikeways such as the

existing and planned segments of the pathway along Montrose Parkway. This network of trails offers connections to major recreational destinations such as C&O Canal National Historical Park, Cabin John Regional Park, and Rock Creek National Park. - Figure 14 - Eastern County Loops and Links

### M-NCPPC PARK TRAILS

- L-01 Rock Creek Hiker-Biker Trail
- L-02 Capital Crescent Trail, SP-6
- L-03 Cabin John Stream Valley Trail
- L-04 Cabin John Regional Park
  - L-04.01 Cabin John Stream Valley Trail
- L-05 Serpentine Barrens Conservation Park
  - L-05.01 Pepco Potomac Corridor Trail

#### NON-PARK OWNERSHIP

### Pepco

L-06 Pepco - Potomac Corridor Trail

### **National Park Trails**

L-07 C&O Canal Towpath

### Bikeways, Paths and Sidewalks

- L-08 Millennium Trail, SP-51
- L-09 Montrose Parkway, SP-50
- L-10 Bethesda Trolley Trail
- L-11 Seven Locks Road, DB-3
- L-12 Georgetown Branch Trail, SP-6
- L-13 Little Falls MacArthur Boulevard Link
- L-14 MacArthur Boulevard shared use path, DB-1

### **Major Regional Links**

The plan also identifies major regional links. - Figure 10

- C&O Canal Towpath, DC to Frederick County
- Muddy Branch Trail, City of Gaithersburg to C&O Canal Towpath
- Seneca Greenway Trail, Seneca Creek State Park to C&O Canal Towpath
- Links between Woodstock Equestrian Park and C&O Canal Towpath
- Broad Run stream valley in Legacy Open Space Master Plan
- Various local rustic and scenic roads
- Links between Little Bennett Regional Park and C&O Canal Towpath, passing in-part through Frederick County to/through Sugarloaf Mountain
- Ten Mile Creek Greenway
- Magruder Branch Trail
- Seneca Greenway Trail, county parkland to Patuxent River State Park
- Link through (and/or parallel to, along roads or utility corridors)
   Patuxent River State Park
- Link from Upper Rock Creek Loop to Patuxent River State Park, passing through Rachel Carson Conservation Park
- Rock Creek Trail, connecting Upper Rock Creek Loop with Lower County Loop
- Matthew Henson Trail
- Paint Branch Trail in Prince George's County, linking Fairland Recreational Park with regional trail network

### **Key Regional Bikeways**

And finally, the Loops & Links Framework identifies key regional bikeways of countywide significance, some of which form parts of the hybrid loops. - Figure 10

- ICC Bike Path (SP-40)
- Midcounty Highway (SP-70)
- Georgetown Branch Trail (SP-6)
- Metropolitan Branch Trail (SP-12)
- Bethesda Trolley Trail (SP-41)
- Seven Locks Road (DB-3)
- Rockville's Millennium Trail (SP-51)
- Great Seneca Highway (SP-63)
- Montrose Parkway (SP-50)
- Silver Spring Green Trail (SP-10)
- Robey Road (SP-22)
- Travilah Road (SP-57)

In a few locations, the plan also identifies segments of existing sidewalks to fill critical gaps and improve pedestrian safety (for hikers, walkers and persons with disabilities).

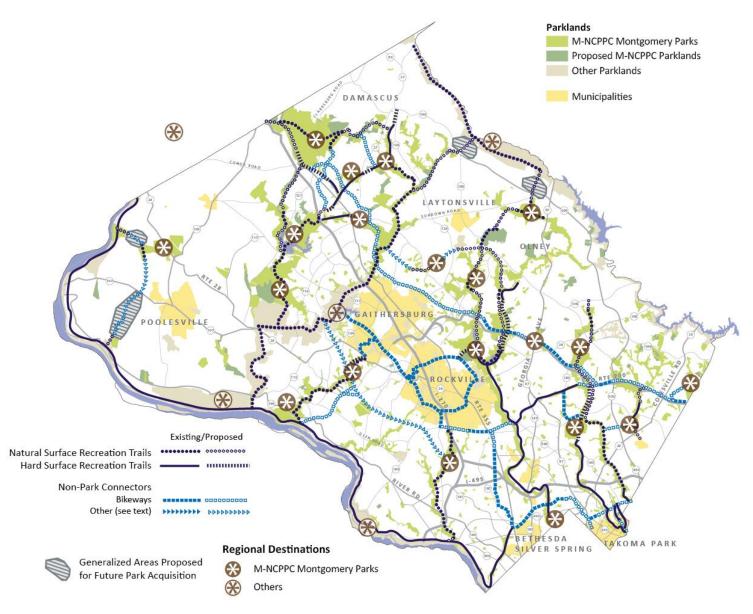


Figure 16 - Status of Trails in the New Loops & Links Framework

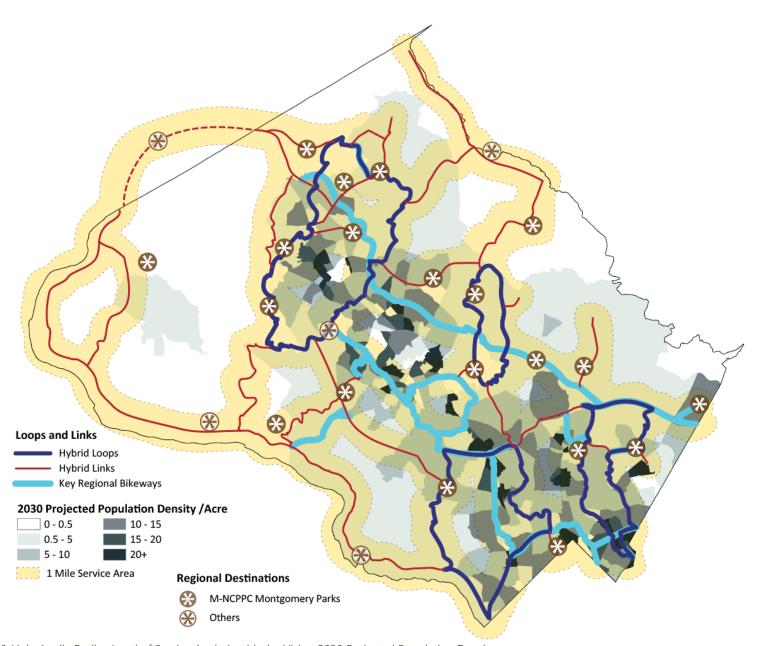


Figure 17 - Loops & Links 1-mile Radius Level of Service Analysis with the Vision 2030 Projected Population Density

### **Level of Service Performance**

Vision 2030 and the 2012 PROS Plan recommended targeting future park facility investments on areas with the highest existing population densities, as well as the areas likely to grow significantly over the next 15-20 years. Accordingly, the Loops & Links system is designed to offer the highest level of service in the areas of highest density.

The Loops & Links system offers a very high level of service to existing and future county residents. When fully built-out, sixty-eight percent (68%) of residents will live within 1-mile of a loop or link and nearly one hundred percent (100%) will live within 3 miles. When regional bikeway connectors are included, 85% of residents will be located within 1 mile, and nearly 100% will be located within 3 miles. Under both scenarios, 100% of residents are served within 5 miles. - See Figure 16, Figure 17 and Figure 18

### Gaps in Service

The Level of Service Analysis shows that nearly 100 percent of the county's population in 2030 will be served by a loop, link or regional bikeway as part of the Loops and Links framework. Some areas of the county will not be well-served by it. For these areas, trail user needs will be met by more locally-serving trail and/or bikeway segments. - see Figure 19

### Potomac Area

This plan amendment recommends removing a continuous natural surface trail in Watts Branch Stream Valley Park. This leaves a fairly large area unserved by the countywide park trails network. Serpentine Barrens Conservation Park is nearby and offers a stacked loop natural surface trail system for hiking. Additionally, "people's choice" trails are

available in Watts Branch for local use; some trails are sustainable and are eligible for "sanctioning."

### Agricultural Reserve

In this area of the county, there is strong demand for equestrian trails as well as recreational road cycling. Many trails and trail easements on private land are available for equestrian use. This area of the county also has numerous low volume, low speed rustic roads that are ideal for recreational cycling.

### **Montgomery Village Area**

Lois Y Green Conservation Park is nearby and offers several miles of natural surface trails. In addition, numerous pathways are available for walking and biking on village lands. Residents in this area also are within 3 miles of either the Upper Rock Creek Loop or the Seneca Creek Greenway Trail.

		Loops a	nd Links	Loops, Lir Bike	•	
DISTANO	Œ	POPULATION	% TOTAL POPULATION	POPULATION	% TOTAL POPULATION	
.25 m	nile	248,117	25.53%	384,900	39.61%	
.5 n	nile	394,826	40.63%	575,731	59.25%	
1 n	nile	666,588	68.59%	829,089	85.32%	
3 m	iles	968,754	99.69%	968,941	99.71%	
5 m	iles	971,777	100.00%	971,777	100.00%	

Figure 18 -Level of Service Performance

### **Upper Paint Branch**

This plan amendment recommends eliminating the continuous trail along the Patuxent River on WSSC lands. This leaves the Burtonsville area underserved. There are numerous unsanctioned trails on parkland that parallel various Paint Branch streams and tributaries. This plan amendment recommends an Upper Paint Branch Limited Area Plan to evaluate these trails to determine which ones can be added to the formal, sanctioned park trail network. Additionally, WSSC lands along the Patuxent River offer trails for hiking and equestrians, but are no longer included in this plan as county policy.

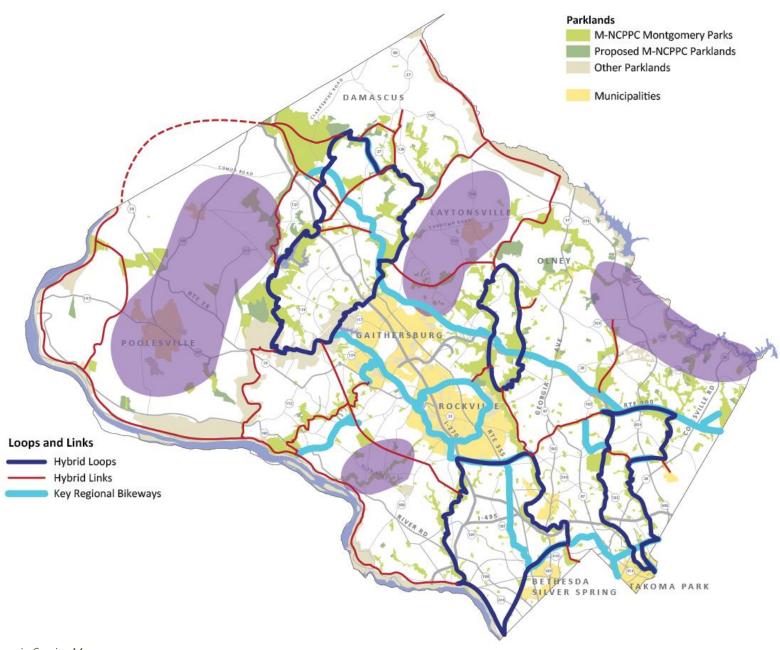


Figure 19 - Gaps in Service Map

### Which Trails to Retain or Remove

The Trails Working Group focused on evaluating Implementation Difficulties. These are trail segments identified in the 2008 Plan that had not yet been built or pursued due to various challenging issues. Using Resource Atlas maps, each trail segment was evaluated according to:

- Impacts to sensitive resources
- Opportunities to bypass sensitive resources
- Current or likely future land ownership
- Relative cost to construct

Based on these criteria, the group determined which segments remain feasible and worthwhile to pursue. Eighteen trail segments were evaluated, discussed and debated by the Trails Working Group. Below is a summary of the Implementation Difficulties, including the decision to retain or delete it from the plan.

- Figure 20 Northern and Southern Regions Implementation
   Difficulties
- Figure 21 2008 CWPTP Trail Lines to be Deleted by the Plan Amendment
- Appendix 3 Trail Implementation Difficulties Evaluation Matrix
   Charts

There are three possible outcomes for each segment.

- The trail segment does not have adverse impacts and is retained
- The trail segment has adverse impacts, is removed, but a bikeway or sidewalk provides the connection or additional parkland can be purchased to avoid the area

• The trail segment has adverse impacts, but is retained because it offers a high level of service

For the trails recommended to be removed by this plan amendment that are managed by other public agencies, the Planning Board may consider adding these trails back into this plan if land use or land management policies of these other public management agencies change.

# Hard Surface Park Trails Retain

- North Branch Trail, Bowie Mill Local Park to Bowie Mill Road (north of Preserve at Rock Creek).
- Adverse impacts to resources, but will connect Olney residents with countywide park trail network.
- Northwest Branch Trail, Wheaton Regional Park to Matthew Henson Trail (through Poplar Run).
- Links a major regional trail with a major regional park.
- Upper County Trail Link, Ovid Hazen Wells Recreational Park to Damascus Recreational Park.
- Links a major park in Clarksburg with a major park and regional trail in Damascus.

### Remove from Plan

- Crabbs Branch Link to Rock Creek Regional Park.
   Adverse natural resource impacts. Suitable alternative available.
   Existing/proposed bikeway along Needwood Road offers similar connection.
- Paint Branch Trail, Martin Luther King Jr. Recreational Park to Old Columbia Pike. Adverse Natural Resource Impacts. Pursue natural surface trail instead to link high density area with major park destination.

- Paint Branch Trail, Old Columbia Pike to Prince George's County Existing parkland does not exist, and is unlikely to be added in the future (U.S. Food and Drug Administration campus)
- Seneca Creek Greenway Trail MD 355 to Goshen Recreational Park
  - Narrow parkland cannot accommodate both a hard surface and a natural surface trail. Building the hard surface trail would likely eliminate long stretches of the natural surface trail.
- Upper County Trail Link, Goshen Recreational Park to Damascus Recreational Park
  - Adverse natural resource impacts in a narrow stream valley park
- Upper County Trail Link, Little Bennett Regional Park to Frederick County
  - Hard surface park trail would not connect to existing or proposed hard surface trail in Frederick County. Pursue natural surface trail instead.

# Natural Surface Park Trails Retain

- Patuxent River Trail, through Patuxent River State Park.
   Part of important connection between the Upper County and Mid County Loops, and also links to a state park.
- Rachel Carson Greenway Trail, Hawlings River to Rachel Carson Conservation Park
   Important link between people's choice trails in Hawlings River with the conservation park.
- Rachel Carson Greenway Trail, link to Patuxent River State Park
- Part of important connection between the Upper County and Mid County Loops, and also links to Patuxent River State Park.

- Seneca Greenway Trail link to Patuxent River State Park
   Part of important connection between the Upper County and Mid
   County Loops, and also links to a state park.
- Ten Mill Creek Greenway Trail.
   Links two major regional parks in the Clarksburg area
- Upper Rock Creek, Blue Mash Trails to Rachel Carson Conservation Park
   Part of important connection between the Upper County and Mid County Loops, and also links to a state park.
- Upper Rock Creek Trail, Muncaster Road to North Branch Completes the Mid County Loop, linking a population center with the countywide park trail network

### Remove from Plan

- East County Link, Fairland Recreational Park to Burtonsville Challenging terrain, adverse impacts to natural resources
- Patuxent River Trail, through lands controlled by the Washington Suburban Sanitary Commission
   WSSC does not support including a continuous natural surface trail along the river on land it owns, operates and controls.
- Rachel Carson Greenway Trail, MD 108 to Hawlings River Insufficient existing parkland. Low likelihood of adding parkland in this area. Low density population.
- Watts Branch Trail, Rockville to C&O Canal Towpath
   Adverse impacts to natural resources. Narrow stream valley park.
   Pursue locally-serving trails where possible to build them
   sustainably.

#### **Implementation Difficulties Implementation Difficulties Northern Parks Division Northern Parks Division** Natural Surface Trails Hard Surface Trails 1. Fairland Rec. Park to Burtonsville 1. Crabbs Branch connector 2. North Branch Trail 2. Rachel Carson Greenway, Northwest Branch Rec. Park 3. Ovid Hazen Wells & Damascus Recreational Park connector 3. Rachel Carson Greenway, North of Sandy Spring 4. Goshen & Damascus Recreational Park 4. Rachel Carson Greenway, b/w Rock Creek Park and 5. Seneca Greenway Trail Patuxent River SP - North of MD 355 6. Little Bennett Regional 5. Seneca Greenway Trail Park to Sugarloaf/ Frederick to Patuxent River State Park County 6. Upper Rock Creek Trail, Muncaster Road to North Branch 7. Upper Rock Creek Trail Blue Mash to Rock Creek Park 8. Ten Mile Creek Greenway **Implementation Difficulties Southern Parks Division** Hard Surface Trails Northwest Branch Trail Paint Branch Trail Natural Surface Trails Watts Branch Trail Paint Branch Trail

Figure 20 - Northern and Southern Regions Implementation Difficulties

### Other Plan Deletions

This amendment explicitly deletes the following trail segments and bikeways from the 2008 plan.

### Scenic bikeways in the Agricultural Reserve

The scenic bikeways included in the Current Plan addressed a need for identifying recreational bikeways in the rural areas of the county. Denoted as yellow asterisk symbols on the 2008 plan map, these bikeways are deleted from the plan. To the extent feasible for countywide park and park trail connectivity, this plan amendment focuses on completing a trail network on parkland. The 2005 Countywide Bikeway Functional Master Plan now addresses the needs of bikeways in this area of the county, and therefore it is no longer appropriate to include these facilities in the Countywide Park Trails Plan.

### Other Bikeways

Several bikeways on or along roads were included in the plan to link park trail with park trails or park trails to major destinations. Denoted as square purple dashes in the Current Plan map, the following bikeways are deleted from the plan because they are not included in the Loops and Links framework, and also because they are in the *2005 CBFMP*.

- Falls Road (MD 189)
- Seven Locks Road
- Frederick Road (MD 355) in Germantown
- Father Hurley Boulevard (MD 27)
- Middlebrook Road
- Olney Bikeway Loop
- Local bikeway extension of Long Branch Trail (north of MD 320)

### Trail easements in the Agricultural Reserve

Numerous trail easements on private land were included in the plan to offer connectivity in the rural area of the county. Denoted as purple triangle symbols on the 2008 map, all trail easements on private land are deleted from the plan. These easements are important connections for equestrians, but since this plan focuses on trails on parkland and bikeways in transportation rights-of-way, and also because this plan is primarily interested in making investments in trails in areas where trails serve large number of people, it is no longer appropriate to include trails across private land in the plan. While M-NCPPC continues to have a role in certain trail easements recorded as part of subdivision activity in the past, these trail easements are not part of the Loops and Links framework and it is no longer appropriate to include them in the plan.

# Relationship Between Plan Amendment and Trail Corridor Plans

Because this plan amendment involved detailed analysis of site conditions for proposed trails using the Resource Atlas, Trail Corridor Plans will no longer be needed. Existing Trail Corridor Plans remain countywide policy, except as amended by this plan. Once this plan is approved and adopted by the Planning Board, either a facility plan or a planning study will be conducted for each trail or trail segment. M-NCPPC, Montgomery Parks will employ all four CIP categories (see Appendix 6) to implement this plan. For more detailed information on the relationship between this plan and trail corridor plans, see Appendix 8.

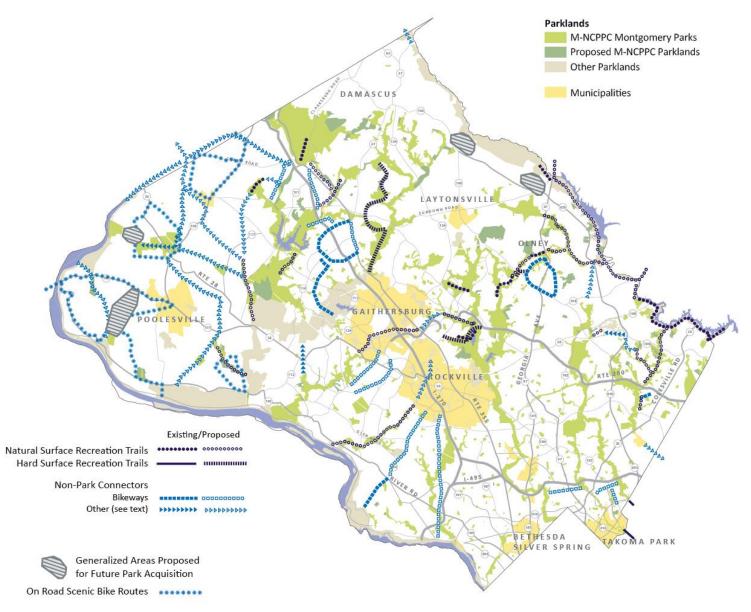


Figure 21 - 2008 CWPTP Trail Lines to be Deleted by the Plan Amendment

### Other Recommendations

### Sustainable Trails

A major goal of this plan amendment is to align and build natural surface trails in a way that minimizes disturbances to natural, cultural and historic resources. The Department's Natural Surface Trails Program aims to construct (and reconstruct) all natural surface trails as sustainably as possible.

Well designed, sustainable natural surface trails:

- Support current and future use with minimal impact to the area's natural systems.
- Produce negligible soil loss or movement while allowing vegetation to inhabit the area.
- Recognize that pruning or removal of certain plants may be necessary for proper maintenance.
- Do not adversely affect the area's animal life.
- Accommodate existing use while allowing only appropriate future
- Require little rerouting and minimal long-term maintenance.

More detailed information regarding sustainable trails is located in Appendix 7

### Trail User Designations

This plan amendment recommends, where appropriate and consistent with current or planned programming, all natural surface trails designed and built sustainably should be open to all non-motorized trail user groups.

All trails have impacts to natural resources. Sustainable natural surface trails are capable of accommodating all user groups – hikers, mountain bikers and horses – in such a way that minimizes impacts to natural resources. When trails are sustainably built, used in a responsible manner, and monitored and maintained according to current M-NCPPC Department of Parks standards, this plan purports that hikers and mountain bikers have the same impacts to the trail tread. Horses, because of their weight and wider gait, have potentially more impact than hikers and mountain bikers.

Programming that may preclude multi-use include nature centers and also historic/cultural trails such as the Underground Railroad Experience Trail. Additionally, there may be trails where limited use is warranted to provide a unique experience for a particular user group, or where parks have been established as limited use. Examples include bicycle skills areas as well as Woodstock Equestrian Park. For these parks or facilities, limited use is considered acceptable. And finally, there are certain trails or parks for which hiking-only is appropriate, including trails near Little Bennett Regional Park campground as well as trails used for natural, cultural or historic interpretive programming.

### Trails as Transportation Policy

As noted previously, this plan affirms that hard surface park trails are primarily recreational facilities, and should be identified and designed to serve recreational users, while recognizing their transportation utility. This plan proposes two categories of hard surface park trails:

- Park trails in transportation rights of way and/or constructed using transportation funding, joint role = transportation and recreation; and
- Hard surface park trails on parkland, primary role = recreation.

Given their different primary roles, each of these facility types is designed, managed, operated and maintained differently. For example, hard surface park trails in stream valley parks do not receive the same level of maintenance as shared use paths or trails in transportation rights-of-way. This reflects both budget limitations (e.g., snow clearing along remote stretches of stream valley park trails) and a variety of environmental concerns (e.g., de-icing trails adjacent to streams). Salts and de-icers eventually are washed into streams and are toxic to aquatic life such as fish, aquatic insects and amphibians. These chemicals also can be toxic to trees and shrubs, disrupting uptake of nutrients. A pilot snow clearing program - without the use of salts/chemicals - was started along the Capital Crescent Trail in 2014. The effectiveness of this program is still under evaluation as of late December 2015.

# Park Trails in Transportation Rights of Way and/or Constructed Using Transportation Funding

The Capital Crescent Trail is located in a rail-banked corridor which is owned by the Montgomery County Department of Transportation, but is operated and maintained as a park trail. It was partially funded with state and federal transportation grants, the most recent improvement being the bridge over River Road. The Matthew Henson Trail, located in the former right-of-way of the Rockville Facility (highway), was funded under Go Montgomery! a transportation program. These trails or trail segments are heavily used for commuting and short trips during weekdays, and are primarily used for recreation on weekends. (Joint Role: Transportation and Recreation)

### Hard Surface Park Trails on Parkland

The majority of the county's hard surface park trails are located in stream valley parks, such as Rock Creek, Sligo Creek, and Magruder Branch. Many of these trails were built decades ago and were intended to serve trail-based recreational needs including walking, running, biking, and nature appreciation.

Given their age, these trails typically do not meet modern design standards for bikeways. They were also built in areas that today are considered environmentally sensitive. These areas include non-tidal wetlands, stream buffers, 100-year floodplains and steep slopes. Although these trails may offer some transportation benefits, their main purpose is recreation. (Primary Role: Recreation)

# Implementation

### Criteria

This plan proposes new criteria for determining implementation priorities for remaining, yet-unbuilt segments of the Loops and Links framework. - see Figure 22 - Park Trail Implementation Priorities Chart.

The new criteria include:

### Population density within 1 mile.

A trail segment receives one of the following scores based on population density

- High density = 3
- Medium density = 2
- Low density = 1

### Return on investment

A trail segment receives one of the following scores depending on anticipated number of trail users served relative to cost to construct.

- High = 3
- Medium = 2
- Low = 1

### **Connectivity to Destination Priorities**

A trail segment receives one of the following scores depending on whether it connects to another regional trail, a regional or recreational park, major recreation facility such as a swim center or recreation center, transit hub or employment center.

- Yes = 1
- No = 0

### **Geographic parity**

A trail segment receives one of the following scores if: hard surface in upper county communities; or natural surface in lower county communities. (Vision 2030 identified a lower level of service for hard surface trails in Upper County and natural surface trails in Lower County)

- Yes = 1
- No = 0

### Parkland ownership

A trail segment receives one of the following scores depending on how much of the trail will be built on existing county parkland

- All parkland = 3
- Some parkland = 2
- No parkland = 1

Based on these new criteria, following are the proposed top 5 priorities, in order, for both hard surface and natural surface trails.

### **Priorities**

# Top 5 Implementation Priorities for Countywide Hard Surface Trails

- 1. Northwest Branch Trail (Score=10)
- 2. Wheaton Regional Park Through-Trail (10)
- 3. Muddy Branch Trail (8)
- 4. Magruder Branch Trail (7)
- 5. Ovid Hazen Wells Recreational Park-Damascus Recreational Park Link (7)

# Top 5 Implementation Priorities for Countywide Natural Surface Trails:

- 1. Paint Branch Trail Extension South (Score=11)
- 2. Sligo Creek Trail Wheaton Regional Park Link South (9)

- 3. Paint Branch Trail Extension North (8)
- 4. Rachel Carson Greenway Trail North (8)
- 5. Cabin John Trail Link to C&O Canal Towpath (7)

Figure 22 - Park Trail Implementation Priorities Charts

TRAIL SEGMENT NAME	LIMITS (TO/FROM)	SCORE	COMMENTS
HARD SURFACE TRAILS			
1 Northwest Branch Trail	Wheaton Regional Park to Matthew Henson Trail	10	Depends on Montgomery County Dept. of Transportation CIP; requires a new shared use path along Kemp Mill Road, as well as trail route signs along Kemp Mill Road, E. Randolph Road (north side sidewalk), and Tivoli Lake Boulevard. Route includes a new park trail on dedicated parkland through Poplar Run (developer funded)
Wheaton Regional Park Through- Trail	Southern Boundary to Kemp Mill Road	10	To be studied as part of Wheaton Regional Park Master Plan; connects Sligo Creek Trail with Northwest Branch Trail
3 Muddy Branch Trail	MD 28 to Quince Orchard road	8	Existing natural surface trail currently provides service to this area
4 Magruder Branch Trail	Current trail terminus to Damascus Town Center	7	Mostly on existing parkland, but requires some land acquisition near the town center.
5 Ovid Hazen Wells Recreational Park-Damascus Recreational Park Link	Recreational Park to Recreational Park (and Magruder Branch Trail)	7	Awaiting subdivision activity in vicinity of MD 27
6 Rock Creek Trail - Millennium Trail Link	Gude Drive to Lake Needwood	6	Awaiting land transfer (Gude Landfill)

	TRAIL SEGMENT NAME	LIMITS (TO/FROM)	SCORE	COMMENTS
Ν	ATURAL SURFACE TRA	ILS		
1	Paint Branch Trail Extension South	MLK Jr Recreational Park to Old Columbia Pike	11	Previously a hard surface trail recommendation; connects White Oak communities to Martin Luther King, Jr Recreational Park and Paint Branch Trail
2	Sligo Creek Trail - Wheaton Regional Park Link South	Colt Terrace Neighborhood Park to Tennis Bubble	9	Being studied as part of Wheaton Regional Park Master Plan; involves crossing Arcola Avenue mid-block
3	Paint Branch Trail Extension North	Fairland Road to ICC	8	Connects to/through Countryside Neighborhood Park
4	Rachel Carson Greenway Trail North	Wheaton Regional Park to Woodlawn Manor Special Park	8	Current high priority in Natural Surface Trail Program CIP; links numerous cultural and historic resources
5	Cabin John Link to C&O Canal Towpath	Cabin John Local Park to C&O Canal Towpath	7	Not on county parkland, but instead on federal parkland and/or along federal roadways
6	Blue Mash Links	Rachel Carson Conservation Park to Upper Rock Creek Trail Loop	4	Natural surface trails within Blue Mash exist, but links to north and to the south not yet
7	Patuxent Link East	Rachel Carson CP to Patuxent River State Park	4	Requires some land acquisition, particularly north of MD 650.  Mountain bikes are not currently permitted to pass through State Park Wildlands Area; mountain bike connectivity proposed along PEPCO lands instead
8	Patuxent Link West	Current terminus of Seneca Greenway Trail to Patuxent River State Park	4	Requires additional parkland acquisition, particularly north of MD 108
9	Sugarloaf Link East	Little Bennett Regional Park to Sugarloaf Mountain	4	Portion in Montgomery County only. Crossing I-270 will be challenging. Trail links to a proposed trail in the Frederick County Bikeways and Trails Plan, ultimately connecting to Sugarloaf Mountain

LIMITS (TO/FROM)	SCORE	COMMENTS
RAILS		
East Link to West Link	3	Ribbons of trails (for horses and hikers) exist through the wildlands area; but not one designated trail yet.
Sugarloaf Mountain to C&O Canal Towpath	3	Supported by the Frederick County Bikeways and Trails Plan. Links C&O Canal Towpath with Sugarloaf Mountain, and could pass through Montgomery County in Dickerson area, likely along low volume rural roads
Woodstock Special Park to C&O Canal Towpath	3	Likely to be implemented largely along low volume rural roads
Woodstock Special Park to C&O Canal Towpath	3	Also likely to be implemented largely along low volume rural roads, but also via existing and future parkland acquisition recommended by Legacy Open Space Master Plan
	East Link to West Link  Sugarloaf Mountain to C&O Canal Towpath  Woodstock Special Park to C&O Canal Towpath  Woodstock Special Park to C&O Canal	East Link to West Link 3  Sugarloaf Mountain to C&O Canal 3 Towpath  Woodstock Special Park to C&O Canal 3 Towpath  Woodstock Special Park to C&O Canal 3

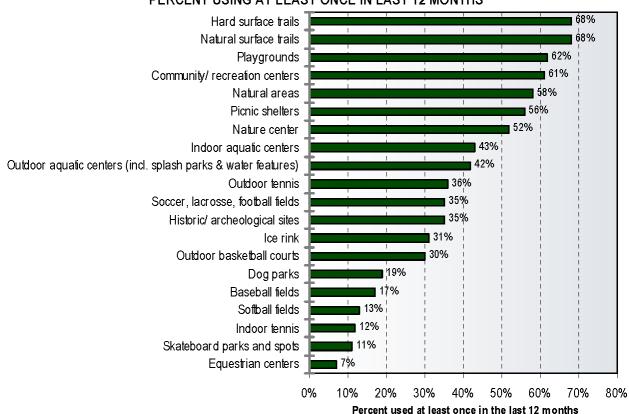
# Appendix

# **List of Appendices**

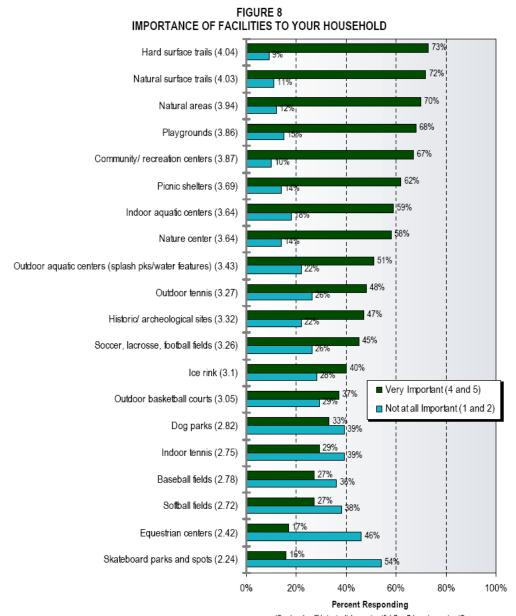
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Appendix 1 - Vision 2030 Survey Results Vision 2030 Figure 4 - Current Usage

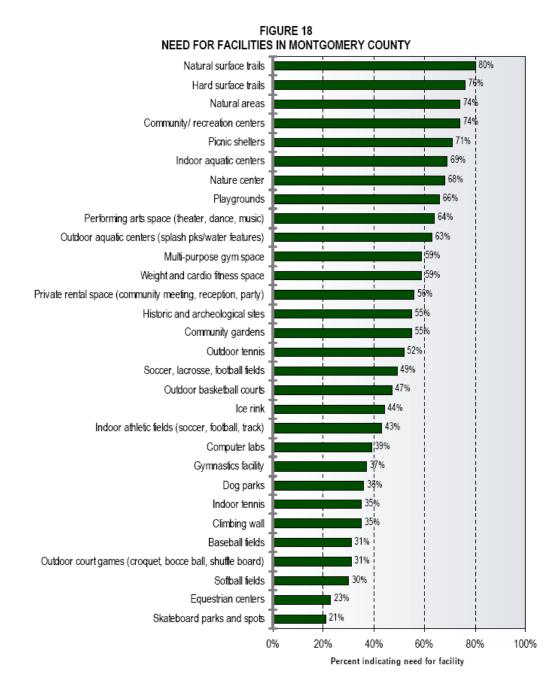
FIGURE 4
CURRENT USAGE OF COUNTY FACILITIES
PERCENT USING AT LEAST ONCE IN LAST 12 MONTHS



Vision 2030 Figure 8 - Importance of Facilities to Your Household



Vision 2030 Figure 18 - Need for Facilities in Montgomery County



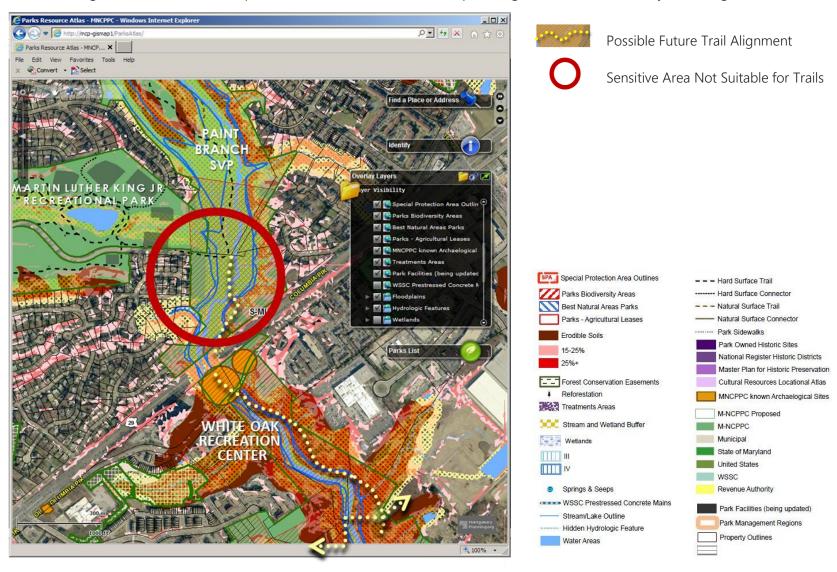
Vision 2030 Figure 20 - Importance of Adding, Expanding, or Improving Facilities

IMPORTANCE OF ADDING, EXPANDING, OR IMPROVING FACILITIES Natural surface trails (3.93) Hard surface trails (3.9) Playgrounds (3.88) Natural areas (3.83) Picnic shelters (3.66) Indoor aquatic centers (3.65) Community/ recreation centers (3.72) Performing arts space (theater, dance, music) (3.57) Outdoor aquatic centers (splash pks/water features) (3.62) Weight and cardio fitness space (3.56) Multi-purpose gym space (3.53) Nature center (3.51) Private rental space (meeting, reception, party) (3.39) Community gardens (3.41) Outdoor tennis (3.35) Soccer, lacrosse, football fields (3.4) Computer labs (3.23) Indoor athletic fields (soccer, football, track) (3.24) Historic and archeological sites (3.18) Outdoor basketball courts (3.19) Ice rink (3.09) Dog parks (2.98) Indoor tennis (3.01) Gymnastics facility (3.02) ■ Very Important (4 and 5) Baseball fields (2.97) ■ Notatall Important (1 and 2) Climbing wall (2.89) Outdoor court games (croquet, bocce ball, shuffle board) (2.84)Softball fields (2.91) Skateboard parks and spots (2.56) Equestrian centers (2.57) 0% 20% 40% 60% 80% 100% Percent Responding (Scale: 1 = "Not at all important" / 5 = "Very important")

FIGURE 20

### Appendix 2 - Resource Atlas Mapping

Resource Atlas maps are used to evaluate proposed trail alignments and select routes to either avoid impacting natural and cultural resources altogether, or to select alignments that minimize impact to these resources; all while still providing the desired connectivity to existing infrastructure. Below is a sample.



# Appendix 3 - Trail Implementation Difficulties Evaluation Matrix Charts NATURAL SURFACE TRAILS Implementation Difficulties Decision Making Matrix

			-						_					
TRAIL SEGMENT	EXISTING OR PROPOSED	SENSITIVE AREAS CODE <sup>1</sup>	BEST NATURAL AREA (BNA) OR BIODIVERSITY AREA (BDA) <sup>2</sup>	CULTURAL, HISTORICAL AND ARCHAEOLOGICAL ISSUES CODE	LAND ACQUISITION OPPORTUNITY TO BYPASS CONSTRAINED	RELATIVE COST TO KEEP ON PARKLAND & MITIGATE	HIGH CURRENT OR PROJECTED POPULATION DENSITY? (Y, N) (BASED ON	IS THE TRAIL A DESTINATION EXPERIENCE	CONNECTIONS TO REG OR REC PARKS OR OTHER MAJOR REC DESTINATION	TERRAIN SUITABLE FOR ALL USERS?	IMPROVES VISION 2030 LEVEL OF SERVICE (CURRENTLY UNDERSERVED	; ! DISCUSSION	KEEP IN MASTER PLAN	PRIORITY FOR IMPLEMENTATION (H, M, L)
Fairland Recreational Park north to Burtonsville	Р	F, SB, SS			NO	Н	YES	NO	YES	NO	YES	Narrow stream valley with steep slopes and difficult terrain north of Fairland Recreational Park. Trail would not have a logical northern terminus. Alternatives along public streets are available to connect Fairland Rec. Park with Burtonsville.	NO	NO
Paint Branch Trail, MLK Jr. Recreational Park to U.S. Food and Drug Administration Campus	P	F, W, SB, SS	BDA	Н	YES	М	YES	NO	YES	YES	YES	Highly constrained stream valley. A sustainable trail route on parkland will be difficult; additional parkland will be needed from adjoining land likely to redevelop. Connection to White Oak Recreation Center via local roads.	YES	YES
Rachel Carson Greenway Trail - Northwest Branch Recreational Park to Norbeck Road	P	F, SB, SS			NO	H	NO	NO	YES	YES	YES	Fills gap in long distance trail. Gap caused by land use. Trail will need to be routed carefully to avoid impacts to golf course. Trail route may pass through Blake HS property	YES	YES
Rachel Carson Greenway Trail - North of Sandy Spring	P	N, A	N, A	N, A	NO	Н	NO	NO	NO	N, A	NO	Major trail gap in low density area of county. Demand likely not high for this connection, plus existing parkland is scattered and implementation via subdivision highly unlikely	NO	NO
Rachel Carson Greenway Trail - Link from Rachel Carson CP to Patuxent	Р	N, A	N, A	N, A	YES?	Н	NO	YES	YES	NO	NO	Primarily would serve as a link in equestrian trail system. Should it be a sanctioned park trail? Is trail demand sufficient to justify land acquisition? Link is identified in Legacy Open Space Master Plan.	YES	NO

TRAIL SEGMENT	EXISTING OR PROPOSED	SENSITIVE AREAS CODE <sup>1</sup>	BEST NATURAL AREA (BNA) OR BIODIVERSITY AREA (BDA) <sup>2</sup>	CULTURAL, HISTORICAL AND ARCHAEOLOGICAL ISSUES CODE	LAND ACQUISITION OPPORTUNITY TO BYPASS CONSTRAINED	RELATIVE COST TO KEEP ON PARKLAND & MITIGATE	HIGH CURRENT OR PROJECTED POPULATION DENSITY? (Y, N) (BASED ON	IS THE TRAIL A DESTINATION EXPERIENCE	CONNECTIONS TO REG OR REC PARKS OR OTHER MAJOR REC DESTINATION	TERRAIN SUITABLE FOR ALL USERS?	IMPROVES VISION 2030 LEVEL OF SERVICE (CURRENTLY UNDERSERVED	  -  - 	KEEP IN MASTER PLAN	PRIORITY FOR IMPLEMENTATION (H, M, L)
Seneca Greenway Trail - Connection to Patuxent River State Park	Р	F, <sup>SB</sup> ,	BDA	Н	NO	М	NO	YES	YES	N, A	NO	This links the Seneca Greenway Trail with the trail system in Patuxent River State Park. Demand is forecast to be low, but this is the remaining gap in a river-to-river cross-country trail. Identified in Legacy Open Space Master Plan.	YES	NO
Ten Mile Creek Greenway	Р	F, SB, W		Н	YES	M	NO	NO	YES	YES	YES	Connects Black Hill Regional Park with Little Bennett Regional Park. County owns most of land in stream valley (jail). Some land ownership gaps exist, but trail is realistic. Could be part of MoCo Epic route when complete.	YES	NO
Upper Rock Creek Trail - Muncaster Road to North Branch	P	F, W, SB			NO	M	NO	YES	YES	YES	YES	Gap caused by lack of parkland ownership. Route trail briefly on private driveway to bypass sensitive areas	YES	YES
Upper Rock Creek Trail - Link between Blue Mash and Rachel Carson Conservation Park	P	N, A	N, A	N, A	NO	Н	NO	YES	YES	YES	NO	Gap caused by lack of parkland ownership. Subdivision activity unlikely. Land acquisition (or easement on private land) and, or route along county roads may be only way to complete connection.	YES	NO
Watts Branch Trail - entire length	P	F, W, SB	YES		NO	Н	NO	NO	YES	NO	NO	Narrow stream valley that is environmentally constrained. Sustainable trail alignment infeasible.	NO	NO

<sup>&</sup>lt;sup>1</sup> Per Article 66B of the Maryland Code <sup>2</sup> Per 2005 Land Preservation, Parks and Recreation Plan, page V-14

### HARD SURFACE TRAILS Implementation Difficulties Decision Making Matrix

THAT SOM THE			pc.				J D C CISI	011 1110	9	0. 6. 17.					
TRAIL SEGMENT	EXISTING OR PROPOSED	SENSITIVE AREAS CODE <sup>1</sup>	BEST NATURAL AREA (BNA) OR BIODIVERSITY AREA (RDA) <sup>2</sup>	CULTURAL, HISTORICAL AND ARCHAEOLOGICAL ISSI JES CODE	LAND ACQUISITION OPPORTUNITY TO BYPASS CONSTRAINED AREAS	RELATIVE COST TO KEEP ON PARKLAND & MITIGATE IMPACTS? (H, M, L)	HIGH CURRENT OR PROJECTED POPULATION DENSITY? (Y, N) (BASED ON ZONING)	IS THE TRAIL A DESTINATION EXPERIENCE	CONNECTIONS TO REG OR REC PARKS OR OTHER MAJOR REC DESTINATION	HIGH NUMBER OF TRANSPORT-ATION USERS EXPECTED	SUITABLE ALTERNATIVE ROUTES VIA EXISTING OR PROPOSED BIKEWAY, SIDEWALK	IMPROVES VISION 2030 LEVEL OF SERVICE (CURRENTLY UNDERSERVED AREA	DISCUSSION	KEEP IN MASTER PLAN	IMPLEMENTATION PRIORITY
East County - Link from Wheaton Regional Park to Matthew Henson Trail	Р	F, W, SB, SS	BDA		YES	L	YES	YES	YES	YES	NO		Links two regional trails - Sligo Creek Trail and Matthew Henson Trail. Will be partially built by Poplar Run, Indian Springs developer. Link between Randolph Road and Wheaton Regional Park remains.	YES	YES
Seneca Greenway Trail	P	F, W, SB	BDA		NO	Н	YES	YES	YES	YES	YES		Narrow stream valley, popular natural surface trail exists that would likely be compromised to build hard surface trail.	NO	NO
Paint Branch Trail - Martin Luther King Jr. Recreational Park to Old Columbia Pike	P	F, SB, SS	BDA		NO	Н	YES	NO	YES	YES	NO		Area is environmentally constrained. Pursue natural surface trail instead.	NO	NO
Rock Creek - Crabbs Branch Link	P	F, W, SB, SS	BDA		NO	Н	YES	NO	YES	YES	YES		Intended to link Rock Creek Regional Park with Shady Grove metrorail station. Highly constrained stream valley. Alternative connections along county roads are planned that serve the same need.	NO	NO
Rock Creek - North Branch Trail, Preserve at Rock Creek to Bowie Mill Road		F, W, SB			NO	Н	NO	YES	YES	YES	YES		Will connect Olney to Rock Creek Trail system, and thus also the regional trail system.	YES	YES
Upper County Trail Link - Ovid Hazen Wells Recreational Park to Damascus Recreational Park	Р	F, W, SB		Н	YES	L	NO	YES	YES	NO	NO		Align trail through adjacent properties to avoid sensitive areas. Implement trail as part of future subdivision activity.	YES	NO
Upper County Trail Link, Goshen Recreational Park to Damascus Recreational Park	Р	F, SB, SS	BDA		YES	Н	NO	YES	YES	NO	NO		Links two recreational parks. Serves as a link to Magruder Branch Trail. Land acquisition needed.	NO	NO

Upper County Trail Link -	Р	F,	BNA	NO	Н	NO	NO	YES	NO	NO	NO	Intended to link Little Bennett Regional N	0	NO
Little Bennett Regional		SB,										Park with Sugarloaf Mountain. Not		
Park to Frederick County		W,										enough demand to warrant impacts		
trail system		SS										and land acquisition needs.		
(destination: Sugarloaf)														

F=Floodplain, SB=Stream Buffer, SS=Steep Slopes, W=Wetlands, HES=Highly Erodible Soils, RTE=Rare, Threatened and Codes for Sensitive Areas. **Endangered Species** 

Best Natural Area (BNA)=Large areas of contiguous, high quality forest, marsh or swamp. Known presence of rare, threatened and endangered species, generally more than 100 acres, relatively little evidence of past I and-use disturbance, few or no exotic or invasive plant species. Best examples of unique plant community types in Montgomery County. High quality wetlands, including those of Special State Concern. Aquatic communities rated as good or excellent in the Countywide Stream Protection Strategy. Special Trout Management Areas as noted in COMAR Title 08. Areas of exceptional scenic beauty.

Biodiversity Area (BDA)=Areas of contiguous, high quality forest, marsh or swamp. Known presence of rare, threatened and endangered species, relatively little evidence of past land use disturbance, and few or no exotic or invasive plant species. Generally, represent the best examples of unique plant community types found in Montgomery County. Areas of exceptional scenic beauty.

Codes for Cultural, Historical and Archaeological Issues as defined by the Locational Atlas and, or the Master Plan for Historic Preservation. Includes environmental setting. C=Cultural, H=Historical, A=Archaeological

<sup>&</sup>lt;sup>1</sup> Per Article 66B of the Maryland Code <sup>2</sup> Per 2005 Land Preservation, Parks and Recreation Plan, page V-14

Appendix 4 - Implementation Priorities Map

(Embed chart in document)

Appendix 5 - The New Trail Planning Process Insert description here...

- Loops and Links framework
- Implementation Priorities
- Facility Planning
- Construction

## Appendix 6 - Understanding the CIP Process

M-NCPPC has four kinds of PDFs...

- 1. A level of effort that designs and builds new hard surface trail segments including links
- 2. A level of effort that renovates hard surface trails
- 3. A level of effort that designs, builds, and/or renovates natural surface trails
- 4. Stand-alone projects for large, expensive trails

## Appendix 7 - Sustainable Natural Surface Trail Guidelines

### **Trail Assessment Study**

- Uses Countywide Park Trails Plan, Trail Corridor Plan, Park Master Plan, or Operation and Use Plan for guidance on user designation and access points and destinations.
- Involves analysis and comparison of alternative alignments.
- Allows staff to identify and steward key natural and cultural resources. (2005 PROS/LPPRP, chapter V, page 14)
- Involves input from staff throughout the Department.
- Identifies permitting requirements.
- Provides cost estimate for construction and operation.

### Our Philosophy of Sustainable Trails

- Supports current and future use with minimal impact to the area's natural systems.
- Produces negligible soil loss or movement while allowing vegetation to inhabit the area.
- Recognizes that pruning or removal of certain plants may be necessary for proper maintenance.
- Does not adversely affect the area's animal life.
- Accommodates existing use while allowing only appropriate future use.
- Requires little rerouting and minimal long-term maintenance.
  - Adopted from the National Park Service, Rocky Mountain Region, January 1991

### **Design Standards**

1. Trail grade should not exceed half of the grade of the sideslope that the trail traverses.

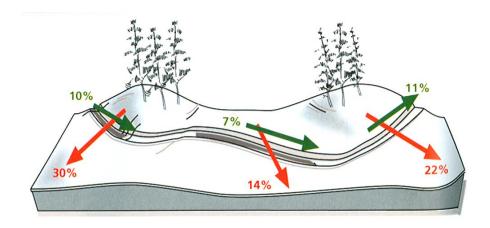


Figure 23- The Half Rule

2. An average trail grade of 10% or less is most sustainable.

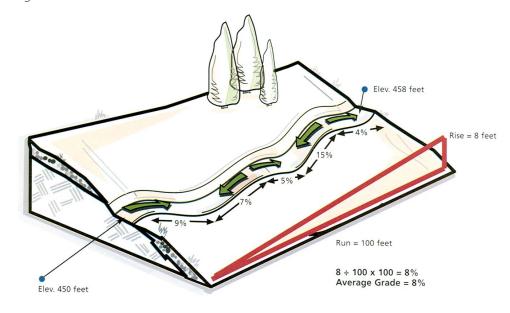


Figure 24- The 10% Average Rule

3. The steepest section of the trail that is more than 10 feet in length and is dependent on soil type, annual rainfall and user characteristics.

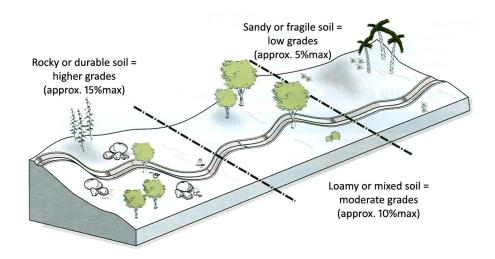


Figure 25- Maximum Sustainable Grade

4. A spot at which a climbing trail levels out and then changes direction, descending slightly for about 10 to 30 feet before climbing again.

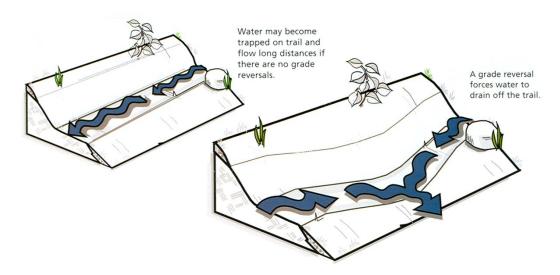


Figure 26 - Grade Reversals

5. The cross sectional grade of the trail tread itself. A 5% outslope is recommended for all natural surface trails.

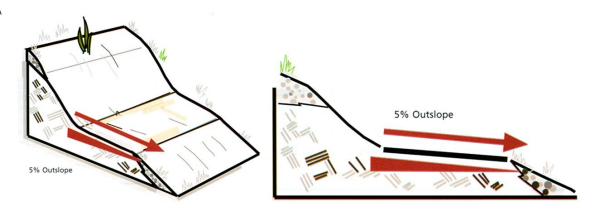


Figure 27 - Outslope

# Appendix 8 - Relationship between Countywide Park Trails Plan, Trail Corridor Plans and other Park Master Plans

Insert text here...

### **Previous Amendments**

In February 1991, a staff study, <u>A Planning Guide to Trails for Montgomery County Parks</u> (PDF, 3MB) was completed. The first Countywide Park Trails Plan was approved and adopted in July 1998, and amended in March 2004 and September 2008.

- 1998 Countywide Park Trails Plan (PDF, 3.9MB)
- Countywide Park Trails Plan Update 2008 (web page)

Various <u>Community Area, Sector and Functional Master Plans</u> along with the following Park and Trail Corridor Plans have since amended the Countywide Park Trails Plan.

- Woodstock Equestrian Park Master Plan (2002) (web page)
- Muddy Branch Stream Valley Trail Corridor Plan (2002) (PDF)
- Amendment to add a "Trail Planning Process" (2003) (PDF)
- Blockhouse Point Conservation Park Master Plan (2004) (web page)
- Rachel Carson Greenway Trail Corridor Plan (2005) (web page)
- <u>Little Bennett Regional Park Master Plan (2007)</u> (web page)
- Upper Rock Creek Trail Corridor Plan (2008) (web page)
- Intercounty Connector Limited Functional Master Plan Amendment (2009) (web page)

## Appendix 9 - Trails Working Group Members and Affiliations

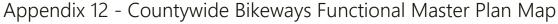
- Ginny Barnes, Legacy Open Space Committee; Conservation Montgomery
- Jennifer Chambers, Potomac Appalachian Trail Club (PATC); Hiking Along with Kids, LLC
- Jack Cochrane, Montgomery Bike Advocates (MOBIKE)
- Joe Fritsch, Mid-Atlantic Off-Road Enthusiasts (MORE)
- Ron MacNab, Trail Riders of Today (TROT); Maryland Horse Council
- Ed Schultze, Seneca Greenway Coalition; Montgomery County Road Runners (resigned)
- Austin Steo, Trail Conservancy
- George Tarrico, Montgomery County Road Runners
- Parks Staff, Park and Trail Planning Section, Volunteer Services, Natural Resources Stewardship Section

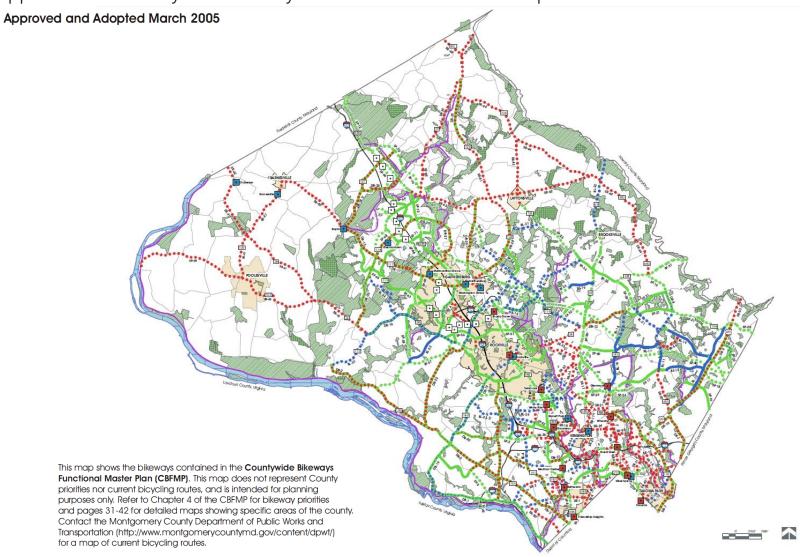
Appendix 10 - Utility ROWs - PEPCO policies / PSC Review of PEPCO-Exelon Merger, County request for access/trails

Insert text here, re: PEPCO agreement to help build new pilot trail within PEPCO's Potomac Corridor

# Appendix 11 - American for Disabilities Act Information

Insert text here, re: laws and guiding policies for accommodating persons with disabilities along trails





Bike Lanes | Shared Use Paths | Shared Roadways | Bike Lanes | Shared Use Paths | Shared Roadways

## Appendix 13 - Parks Director Letter to DOT

Letter from Department of Parks Director Mary Bradford to Maryland DOT, March 2010



March 19, 2010

Donald Halligan
Director, Office of Planning and Capital Programming
Maryland Department of Transportation
7201 Corporate Center Drive
Hanover, MD 21076

Dear Mr. Halligan,

This letter is in response to your request for our agency's comments on Maryland Trails: A Greener Way to Go. Both the Department of Parks and the Department of Planning have reviewed the document and the online interactive map. Since the majority of off-road trails in Montgomery County are located on parkland, the Department of Parks is leading our agency's response. You can expect separate comments from the County's Department of Transportation.

The primary goal of Maryland Trails: A Greener Way to Go is to emphasize the transportation value of off-road trails. We applaud this goal and share your vision that trails can play an important role in promoting more sustainable forms of transportation. The M-NCPPC affirms that properly designed and located trails can be important components of a balanced transportation system. Such a system will facilitate non-motorized travel to and from work as well as short trips to neighborhood destinations. We believe the County needs to continue to invest in these facilities to promote healthier lifestyles and provide additional travel options for our residents and workers.

Montgomery County features an extensive network of off-road trail facilities that can and should be included in this plan. However, it is important to note that many of these trails exist in the county park system and were designed and constructed primarily to serve recreational rather than transportation needs. Accordingly, we ask that this Statewide trail plan distinguish among off-road trail facilities based on their primary roles:

### Shared Use Paths (Bikeways)/Primary Role: Transportation

The Countywide Bikeways Functional Master Plan (M-NCPPC, 2005) identifies a number of shared use paths located in transportation rights of way. These facilities primarily provide a transportation function for bicycle and pedestrian trips, but may also be used for some forms of recreation (e.g., high-speed biking). Examples include Falls Road, Great Seneca Highway and the future ICC bike path.

PARK PLANNING & STEWARDSHIP 1109 Spring Street, Suite 800 - Silver Spring, Maryland 20910 www.MontgomeryParks.org 301.650.4370 fax 301.650.4379  Hard surface park trails in transportation rights-of-way or constructed with transportation funding/Joint Roles: Transportation and Recreation

The Capital Crescent Trail is located in a rail-banked corridor which is owned by the County Department of Transportation but is operated and maintained as a park trail. It was partially funded with federal and state transportation grants, the most recent example being the bridge over River Road. The Matthew Henson Trail, located in the former right-of-way for the Rockville Facility, was funded under *Go Montgomery!*. These trails or trail segments are heavily used for commuting and short trips on weekdays and are primarily used for recreation on weekends.

#### Hard surface park trails on parkland/Primary Role: Recreation

The majority of the county's hard surface park trails are located in stream valley parks, such as Rock Creek, Sligo Creek, and Magruder Branch. These trails were built decades ago and were intended to serve a variety of trail-based recreational needs – including walking, jogging, biking, and nature appreciation. Given their age, they often do not meet AASHTO design standards. They were also frequently built in areas that are considered environmentally sensitive today. These areas include stream buffers, 100-year floodplains, and non-tidal wetlands. Although these facilities may offer some limited transportation benefit, their primary purpose is recreation.

Given their different primary roles, each of these facility types is designed, managed, operated and maintained differently. For example, hard surface park trails located in stream valleys do not receive the same level of maintenance as shared-use paths or hard surface trails located in transportation rights-of-way. This reflects both budget limitations (e.g., snow removal on remote stream valley trails) and a variety of environmental concerns (e.g., de-icing trails located adjacent to streams).

We believe that graphically distinguishing primary or joint use trails on the Maryland Trails website has value not only for Montgomery (and Prince George's) County, but also throughout the State. It would be enable trail users and policy makers to distinguish between trails intended primarily for transportation (but used for recreation) and trails intended primarily for recreation (but used for transportation), as well as their role in the entire statewide bikeway and trail network.

Please contact Mr. Joe B. Davis, Senior Natural Resource Specialist, M-NCPPC, Department of Parks, Montgomery County, for a copy of the Department of Park's hard surface trails GIS layer. Mr. Davis can be reached at 301-650-4393 or Davis.JoeB@montgomeryparks.org.

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The Department of Parks looks forward to participating in this important planning initiative. If you have any questions about this letter and our participation in this plan, please contact our trails planner Chuck Kines, 301-495-2184; <a href="mailto:Charles.Kines@montgomeryparks.org">Charles.Kines@montgomeryparks.org</a>.

Sincerely,

Mary Bradford

Director, Montgomery County Department of Parks

MBrodfral

Pc: Dan Hardy

John E. Hench

Mike Horrigan

Gene Giddens

Darien Manley

John Nissel

Mitra Pedoeem

Mike Riley

Brian Woodward

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# Appendix 14 - The Plan Process and Public Outreach Outreach Plan

Below are the outreach Tasks and Tactics, and the plan Schedule and Meeting Notes for this Plan.

### Tasks and Tactics

#### **Print Materials**

- Large Exterior Signage for public meeting noticing at the park entrances
- Posters for general distribution and noticing in park kiosks
- Bi-lingual bookmarks distributed at events

### Traditional Media Outreach

- Press Releases / News Media Announcements
- Presentations at Public Meetings, Events and Planning Board Meetings

### **Electronic Outreach and Communications**

- Public link: www.ParkPlanning.org
- Email noticing County, Regional Service Centers, Elected Officials, Stakeholders, Special Interest Groups and targeted civic groups. Individual citizens were encouraged to contact the project manager to become part of the e-mail list distributions.
- The project web page was used to keep citizens updated throughout the planning process. It will remain in place as an archival record for this plan process at:

  <a href="http://www.montgomeryparks.org/PPSD/ParkPlanning/Projects/cwptp\_ammend/cwptp.amendment.shtm">http://www.montgomeryparks.org/PPSD/ParkPlanning/Projects/cwptp\_ammend/cwptp.amendment.shtm</a>

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- Online Public Input Tool the public was encouraged to "Tell Us What You Think" at any time via an online comment tool
- Online listings: Parks Department Parks home page, Event Calendar, Media Center. Planning Department Media Center, E-Newsletter.
- Calendar Notices Online news and Blogs: Gazette, Patch, Washington Post.
- Social Media Posts Facebook meeting notices, reminders and updates. Twitter meeting notices, reminders and updates.



# **Project Schedule and Meeting Notes**

DATE   TIME	NOTES AND PRESENTATIONS	PLANNING STAGE   TOPIC FOR DISCUSSION	LOCATION   DESCRIPTION		
2011					
October 6	<u>Staff Memo</u> - from the <u>Planning Board</u> <u>archives</u> for this date - item # 7	Objectives, Outreach Strategy & Schedule M-NCPPC Planning Board presentation	M-NCPPC - Montgomery Regional Office (MRO) Auditorium		
FALL / WINTER		Monthly "Trails Working Group" meetings	TBD - Ongoing		
FALL / WINTER		Meetings with McBAG, Conservation Montgomery and Countywide RAB	TBD - Ongoing		
2012					
January 24		Upcounty Public Meeting in coordination with the 2012 Park Recreation and Open Space (PROS) Plan update	M-NCPPC - Montgomery Regional Office		
January 25		Downcounty Public Meeting in coordination with the 2012 Park Recreation and Open Space (PROS) Plan update	UpCounty Service Center		
December 6	<u>Staff Memo</u> - from the <u>Planning Board</u> <u>archives</u> for this date - item # 5	Status Report M-NCPPC Planning Board Presentation	M-NCPPC - Montgomery Regional Office (MRO) Auditorium		
2013					
June 24	<ul> <li>Meeting invitation</li> <li>PowerPoint presentation (PDF, 8MB)</li> <li>Survey Results (PDF, 800KB)</li> </ul>	Upcounty Public Meeting to seek feedback on new "Loops and Links" plan framework	M-NCPPC Shady Grove Training Room		
June 25	<ul> <li>Meeting invitation</li> <li>PowerPoint presentation (PDF, 8MB)</li> <li>Survey Results (PDF, 800KB)</li> <li>Video Record (external link)</li> </ul>	Downcounty Public Meeting to seek feedback on new "Loops and Links" plan framework	M-NCPPC - Montgomery Regional Office (MRO) Auditorium		
2014	Staff Draft Plan Development				
2015					
January 5	- <u>PowerPoint presentation</u> (PDF, 3MB)	<u>Upcounty Recreation Advisory Board</u> Meeting Presentation	4010 Randolph Road, Silver Spring, MD 20902		
January 15	- <u>PowerPoint presentation</u> (PDF, 3MB)	Montgomery County Bicycle Action Group (McBAG) Presentation	Executive Office Building		
September 16	- <u>invitation</u> (PDF, 100MB) - <u>PowerPoint presentation</u> (PDF, 2.3MB)	Public Meeting- Staff presentation of the draft plan	M-NCPPC Montgomery Parks Shady Grove Maintenance Yard Training		
2016					

January 21	- PowerPoint presentation (will be posted after the meeting)	Planning Board Staff Draft Plan Review - The public is welcome to attend; however public testimony will NOT be taken.	M-NCPPC - Montgomery Regional Office (MRO) Auditorium
Winter		M-NCPPC Planning Board Public Hearing	M-NCPPC - Montgomery Regional Office (MRO) Auditorium
		M-NCPPC Planning Board Work Session(s)	M-NCPPC - Montgomery Regional Office (MRO) Auditorium
		M-NCPPC Planning Board Plan Approval and Adoption	M-NCPPC - Montgomery Regional Office (MRO) Auditorium

# Appendix 15 - Glossary of Terms

Insert terms and definitions here

# Acknowledgements

Staff

**Elected and Appointed Officials**