MEMORANDUM

DATE: September 22, 2016

TO: Montgomery County Planning Board

VIA: Michael F. Riley, Director of Parks

Mitra Pedoeem, Deputy Director, Administration

Dr. John E. Hench, Ph.D., Chief, Park Planning and Stewardship Division (PPSD)

FROM: Charles S. Kines, AICP, Planner Coordinator (PPSD)

Brooke Farquhar, Supervisor (PPSD)

SUBJECT: Worksession #3, Countywide Park Trails Plan Amendment

Recommended Planning Board Action

- Review, approve and adopt the plan amendment to be titled 2016 Countywide Park Trails Plan. (Attachment 1)

Changes Made Since Public Hearing Draft

Attached is the final draft of the plan amendment, including all Planning Board-requested changes from worksessions #1 and #2, as well as all appendices. Please focus your attention on the following pages and issues:

1. Page 34, added language to clarify the addition of the Northwest Branch Trail to the plan, in order to facilitate mountain biking access between US 29 (Colesville Rd) and Wheaton Regional Park. In addition, an errata sheet will be inserted in the Rachel Carson Trail Corridor Plan to reflect this change in policy.

2. Page 48, incorporating Planning Board-approved text from worksession #2, regarding policy for trail user types

3. Appendices 5, 6, 8, 10, 11 and 15.

In addition, all maps now accurately reflect Planning Board direction.
Trail Planning Work Program – Remainder of FY 17
Following the approval and adoption of this plan amendment, trail planning staff will perform the following tasks to implement the Plan and address other trail planning topics requested by the Planning Board:

1. Develop program of requirements for the top implementation priority for both natural and hard surface trails.
2. Develop scopes of work for two limited area trail plans:
   a. Upper Paint Branch Watershed
   b. Cabin John Watershed
3. Draft a set of operational guidelines for weather-related, environmental, seasonal and/or safety related closures of natural surface trail segments on M-NCPCC parkland.
4. Propose amendments to existing park plans and policy documents for the purpose of converting limited-use natural surface park trails to sanctioned, sustainable multi-use natural surface park trails.

It is our goal to bring #2 to the Board by year’s end, followed by #1 by late winter 2017, #3 in early spring 2017, and #4 in late 2017.

List of Attachments
Attachment 1 - Draft Countywide Park Trails Plan Amendment - Worksession #3 Edition

CC:
M-NCPCC, Department of Parks
John Nisell, Deputy Director - Operations
Bill Tyler, Chief, Southern Parks Division
Doug Ludwig, Chief, Northern Parks Division
Antonio DeVaul, Chief, Park Police, Montgomery County Division
Michael Ma, Acting Chief, Park Development Division
David Vismara, Chief, Horticulture, Forestry and Environmental Education Division
Kristi Williams Chief, Public Affairs and Community Partnerships Division
Christy Turnbull, Chief, Enterprise Division
Jim Poore, Chief, Facilities Management Division
Shuchi Vera, Chief, Management Services Division
M-NCPCC, Planning Department
Robert Kronenberg, Chief, Area 1
Glenn Kreger, Chief, Area 2
Kip Reynolds, Chief, Area 3
Pam Dunn, Chief, Functional Planning & Policy Division
David Anspacher, Functional Planning & Policy Division
Montgomery County Department of Transportation
Patricia Shepherd, Transportation Engineering Division
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.
2016 Countywide Park Trails Plan Amendment - Worksession #3 Edition

September 2016

M-NCPPC Montgomery Parks | montgomeryparks.org
Park Planning and Stewardship Division | parkplanningandstewardship.org
Park and Trail Planning Section | parkplanning.org
# Table of Contents

## Executive Summary

5

## Introduction

7

* Purpose

7

* Scope of the Amendment

8

* Planning Process and Public Outreach

8

## Background

9

* Trails Types

9

  * Hard Surface Trails .......................................................... 9

  * Natural Surface Trails .......................................................... 9

* Natural Resource-Based Recreation

9

* Trail Users

10

  * Hikers, Walkers and Runners ................................................. 10

  * Cyclists and Mountain Bikers ................................................. 10

  * Equestrians ............................................................................ 10

  * Persons with Disabilities ..................................................... 10

* The 2008 Plan Today

11

  * Existing Hard Surface Park Trails ........................................... 12

  * Existing Natural Surface Park Trails ....................................... 12

  * Countywide Trails Managed by Other Agencies .......................... 15

  * Existing Non-Park Bikeway Connectors .................................... 15

* Policy History

18

* Guiding Documents .................................................................... 18

## Methodology and Analysis

20

* Decision Making Criteria ......................................................... 20

* Environmental and Cultural Resources Evaluation ........................... 23

* More Realistic Recommendations ............................................. 24

## Recommendations

25

* A New Plan Framework

25

  * Loops & Links ......................................................................... 25

  * Trail Planning Areas ............................................................... 30
Level of Service Performance ........................................................................................................... 40
  Gaps in Service ............................................................................................................................... 40
Which Trails to Retain or Remove ........................................................................................................ 43
  Hard Surface Park Trails ................................................................................................................... 43
  Natural Surface Park Trails ............................................................................................................ 44
Other Plan Deletions .......................................................................................................................... 46
  Scenic bikeways in the Agricultural Reserve ................................................................................... 46
  Other Bikeways ............................................................................................................................... 46
  Trail easements in the Agricultural Reserve ................................................................................... 46
Relationship Between Plan Amendment and Trail Corridor Plans .................................................... 46
Other Recommendations .................................................................................................................. 48
  Sustainable Trails ............................................................................................................................ 48
  Trail User Designations .................................................................................................................. 48
  Trails as Transportation Policy ....................................................................................................... 48
  Park Trails in Transportation Rights of Way and/or Constructed Using Transportation Funding ...... 49
  Hard Surface Park Trails on Parkland ............................................................................................ 49

Implementation .................................................................................................................................. 50
  Criteria ........................................................................................................................................... 50
  Priorities ......................................................................................................................................... 50
Appendix ............................................................................................................................................ 54
  List of Appendices .......................................................................................................................... 54
    Appendix 1 - Vision 2030 Survey Results .................................................................................... 55
    Appendix 2 - Resource Atlas Mapping ......................................................................................... 59
    Appendix 3 - Trail Implementation Difficulties Evaluation Matrix Charts .................................... 60
    Appendix 4 - The New Trail Planning Process .............................................................................. 64
    Appendix 5 - Understanding the CIP Process .............................................................................. 65
    Appendix 6 - Sustainable Natural Surface Trail Guidelines ....................................................... 66
    Appendix 7 - Relationship between Countywide Park Trails Plan, Trail Corridor Plans and other Park Master Plans ........................................................................................................ 70
    Appendix 8 - Trails Working Group Members and Affiliations ................................................... 72
    Appendix 9 - PEPCO-Exelon Merger, Pilot Trail Project in Bethesda-Dickerson Corridor .......... 73
    Appendix 10 - Architectural Barriers Act (ABA) Requirements for Trails .................................. 75
    Appendix 11 - Countywide Bikeways Functional Master Plan Map .............................................. 77
    Appendix 12 - Parks Director Letter to DOT ................................................................................ 78
    Appendix 13 - The Plan Process and Public Outreach ................................................................. 81
    Appendix 14 - Glossary of Terms ................................................................................................. 84

Acknowledgements ............................................................................................................................ 87
LIST OF FIGURES

Figure 1 - The Existing 2008 Countywide Park Trails Plan................................................................. 4
Figure 2 - The 2008 CWPTP Trail Planning Corridors ........................................................................... 11
Figure 3 - 2008 CWPTP Status of Hard Surface Park Trails .................................................................. 13
Figure 4 - 2008 CWPTP Status of Natural Surface Park Trails ................................................................. 14
Figure 5 - Countywide Trails Managed by Other Agencies, and Non-Park Bikeway Connectors ............ 16
Figure 6 - 2008 CWPTP Existing Park Trails and Non-Park Connectors .................................................. 17
Figure 7 - 2008 CWPTP Proposed Trails Not Yet Built.......................................................................... 21
Figure 8 - Proposed New Destinations Map ............................................................................................ 27
Figure 9 - Proposed New Loop & Link Trail Network .............................................................................. 28
Figure 10 - Proposed Loop & Link Trail Network by Trail Surface Types ............................................... 29
Figure 11 - The New Trail Planning Areas ............................................................................................... 30
Figure 12 - Upper County Loops and Links ........................................................................................... 32
Figure 13- Mid County Loops and Links ................................................................................................. 33
Figure 14 - Eastern County Loops and Links ........................................................................................... 34
Figure 15 - Lower County Loops & Links ............................................................................................... 36
Figure 16 - Status of Trails in the New Loops & Links Framework ......................................................... 38
Figure 17 - Loops & Links 1-mile Radius Level of Service Analysis with the Vision 2030 Projected Population Density ............................................................... 39
Figure 18 - Level of Service Performance ............................................................................................... 40
Figure 19 - Gaps in Service Map .............................................................................................................. 42
Figure 20 - Northern and Southern Regions Implementation Difficulties ............................................... 45
Figure 21 - 2008 CWPTP Trail Lines to be Deleted by the Plan Amendment ............................................. 47
Figure 22 - Park Trail Implementation Priorities Charts ......................................................................... 51
Figure 23 - The Half Rule.......................................................................................................................... 67
Figure 24- The 10% Average Rule ........................................................................................................... 67
Figure 25- Maximum Sustainable Grade .................................................................................................. 68
Figure 26 - Grade Reversals ...................................................................................................................... 68
Figure 27 - Outslope................................................................................................................................ 69
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

Attachment 1
as well as more local, community-serving trails to which residents can walk or bike from home.

(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 Trails-As-Transportation Policy 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 8

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 13 - 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 10

**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 -
Architectural Barriers Act (ABA) Requirements for Trails - for laws and polices 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.

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.

![Figure 2 - The 2008 CWPTP Trail Planning Corridors](image)
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.

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

(Insert photos)
Figure 3 - 2008 CWPTP Status of Hard Surface Park Trails
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

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

(Insert photos)
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 11 - 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 Environmental and Cultural Resources Evaluation.

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 - Trail Implementation Difficulties Evaluation Matrix Charts.

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
Attachment 1

Figure 7 - 2008 CWPTP Proposed Trails Not Yet Built
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.

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

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. See 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 9 - Proposed New Loop & Link Trail Network and Figure 10 - Proposed Loop & Link Trail Network by Trail Surface Types

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.
The Proposed New Loop & Link Trail Network shown in Figure 9 - Proposed New Loop & Link Trail Network identifies four (4) major loops (highlighted in dark blue) which are discussed in more detail in the Trail Planning Areas section of this document.
Figure 8 - Proposed New Destinations Map
Figure 9 - Proposed New Loop & Link Trail Network
Figure 10 - Proposed Loop & Link Trail Network by Trail Surface Types
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. - see Figure 11 - The New Trail Planning Areas

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

Upper County Planning Area
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 - Upper County Loops and Links

M-NCPPC PARK TRAILS*

U-01  Black Hill Regional Park  
- U-01.01 Hoyles Mill Trail  
- U-01.02 Cabin Branch Trail  
- U-01.03 Hard Rock Trail  
- U-01.04 Cool Spring Run Trail

U-02  Blockhouse Point Conservation Park  
- U-02.01 Muddy Branch Greenway Trail

U-03  Clarksburg Greenway Trail

U-04  Damascus Rec Park  
- U-04.01 Magruder Branch Trail  
- U-04.02 Lower Magruder Trail

U-05  Damascus Trail Link  
- U-05.01 Damascus Recreation Center  
- U-05.02 Oak Ridge Conservation Park  
- U-05.03 Little Bennett Stream Valley Park

U-06  Hoyles Mill Conservation Park  
- U-06.01 Hoyles Mill Trail
U-07  Little Bennett Regional Park (Lower)
  - U-07.01 Soper’s Branch Trail
  - U-07.02 MD Rte. 355 / Day Use Area Trail
  - U-07.03 Purdum Trail
  - U-07.04 Hard Cider Trail
  - U-07.05 Froggy Hollow Trail
  - U-07.06 Logger’s Hollow Trail
  - U-07.07 Western Piedmont Trail

U-08  Lois Y. Green Farm Conservation Park
  - U-08.01 Two Farms Loop
  - U-08.02 Hadley Farms Connector

U-09  Lower Magruder Branch Trail
U-10  Magruder Branch Trail
  - U-10.01 Extension to Damascus Town Center
U-11  Muddy Branch Greenway Trail
  - U-11.01 Hard surface trail, MD 28 to Quince Orchard Rd

U-12  North Germantown Greenway Trail
U-13  Ovid Hazen Wells - Damascus RP Link
U-14  Ovid Hazen Wells Recreational Park
  - U-14.01 Ovid Hazen Wells Trail

U-15  Seneca Creek Greenway Trail
  - U-15.01 Patuxent Extension

U-16  South Germantown Recreational Park
  - U-16.01 Hoyles Mill Trail
  - U-16.02 Diabase Trail

U-17  Ten Mile Creek Greenway Trail
U-18  Woodstock Equestrian Park Trails
  - U-18.01 Wasche Field Loop
  - U-18.02 Farm Road Trail
  - U-18.03 Stone Barn Loop

U-19  Woodstock North Link
U-20  Woodstock South Link

NON-PARK OWNERSHIP

U-21  Montgomery Village Link East
U-22  Montgomery Village Link West
U-23  Sugarloaf Link
  - U-23.01 East
  - U-23.02 West
U-24  Observation Drive Link

State Park Trails

U-25  Seneca Creek State Park
  - U-25.01 Seneca Creek Greenway Trail
  - U-25.02 Seneca Ridge Trail
  - U-25.03 Seneca Bluff Trail
  - U-25.04 Schaeffer Farm Link

U-26  Patuxent River State Park

Pepco

U-27  Pepco Potomac Corridor Trail

National Park Service Trails

U-28  C&O Canal Towpath

Bikeways, Paths and Sidewalks

U-29  Clarksburg Rd
U-30  Little Seneca Pkwy
U-31  Great Seneca Highway Bike Path
U-32  Lakelands Trail Bike Path
U-33  Mid County Highway Bike Path
U-34  MOCO Epic Connector
U-35  Travilah Road Bike Path/Lane
U-36  Woodstock Wasche Link

* Existing and proposed Park trails
Figure 12 - Upper County Loops and Links
Mid County Planning Area

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- Mid County Loops and Links

M-NCPPC PARK TRAILS*

M-01 Agricultural Farm Park
  - M-01.01 Percheron Trail
M-02 Olney North Trail
M-03 North Branch Trail
  - M-03.01 – Rock Creek Regional Park to Bowie Mill Local Park
  - M-03.02 – Bowie Mill Local Park to Bowie Mill Rd
M-04 Rachel Carson Conservation Park
  - M-02.01 Rachel Carson Greenway Trail
  - M-02.02 River Otter Trail
  - M-02.03 Fox Meadow Loop
  - M-02.04 Hawlings River Link
M-05 Patuxent East Link
M-06 Rock Creek Hiker-Biker 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-07.04 Gude Trail
M-08 Rock Creek Stream Valley Trail
M-09 Upper Rock Creek Trail
  - M-09.01 – Muncaster Road to North Branch

NON-PARK OWNERSHIP

M-10 Millennium Trail Link

M-11 Montgomery Village Link
M-12 Blue Mash Link

Bikeways, Paths and Sidewalks

M-13 ICC Bike Path, SP-40
M-14 Emory Lane, SP-32
M-15 Millennium Trail, SP-51

* Existing and proposed Park trails

Figure 13- Mid County Loops and Links
Eastern County Planning Area

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. For the Northwest Branch Stream Valley Park between US Rte. 29 and Wheaton Regional Park, the Rachel Carson Greenway Trail on the east side will remain limited use (for this stretch only), but the Northwest Branch Trail along the west side will be multi-use to provide a way for mountain bikers to ride through this park. Figure 14 - Eastern County Loops and Links

M-NCP DC PARK TRAILS*

E-01 Long Branch Trail
E-02 Matthew Henson Trail
E-03 Northwest Branch Trail
  - E-03.01 US Rte. 29 to Wheaton Regional Link
  - E-03.02 Wheaton Regional Link to Wheaton Regional RP
  - E-03.03 Wheaton Regional Park to Matthew Henson Trail
E-04 Paint Branch Trail
  - E-04.01 North Extension: Fairland Rd to Briggs Chaney Rd
  - E-04.02 Main stem: Fairland Rd to Martin Luther King Jr. Recreational Park
  - E-04.03 South Extension: Martin Luther King Jr. Recreational Park to Old Columbia Pike
E-05 Rachel Carson Greenway Trail
  - E-05.01 North: ICC Link to MD Rte. 108
  - E-05.02 Mid: Wheaton Regional Link to ICC Link
  - E-05.03 South: County Line to Wheaton Regional Link
E-06 Sligo Creek Trail
E-07 Wheaton Regional Park Trails
  - E-07.01 - Future through trail(s)
  - E-07.02 – Wheaton Regional Park Link South

*Figure 14 - Eastern County Loops and Links
NON-PARK OWNERSHIP

Bikeways, Paths and Sidewalks

E-08 Bonifant Road, DB-43
E-09 E. Randolph Road, SP-26
E-10 ICC Bike Path, SP-40
E-11 Jackson Road, EB-9
E-12 Layhill Road, BL-18 and sidewalks
E-13 Long Branch - Glenside Drive
E-14 Metropolitan Branch Trail
E-15 Robey Road, SP 22
E-16 Silver Spring Green Trail, Piney Branch Road
E-17 Sligo Creek Trail - Wheaton Regional Park Link South
E-18 Springbrook Drive

* Existing and proposed Park trails

(Insert photos)
Lower County Planning Area

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 15 - Lower County Loops & Links

M-NCPCC PARK TRAILS*

| L-01  | Cabin John Regional Park |
| L-02  | Cabin John Stream Valley Trail |
| L-03  | Capital Crescent Trail |
| L-04  | Rock Creek Hiker-Biker Trail |

NON-PARK OWNERSHIP

Pepco

| L-05  | Pepco - Potomac Corridor Trail |

National Park Trails

| L-06  | C&O Canal Towpath |

Bikeways, Paths and Sidewalks

| L-07  | Bethesda Trolley Trail |
| L-08  | Georgetown Branch Trail, SP-6 |
| L-09  | MacArthur Boulevard - C&O Canal Link |
| L-10  | Millennium Trail, SP-51 |
| L-11  | Montrose Parkway, SP-50 |
| L-12  | Seven Locks Rd |

* Existing and proposed Park trails

Figure 15 - Lower County Loops & Links
Major Regional Links
The plan also identifies major regional links. - See Figure 8 - Proposed New Destinations Map

- C&O Canal Towpath, DC to Frederick County: U-28, L-6
- Muddy Branch Trail, City of Gaithersburg to C&O Canal Towpath: U-11
- Seneca Greenway Trail, Seneca Creek State Park to C&O Canal Towpath: U-25
- Links between Woodstock Equestrian Park and C&O Canal Towpath: U-19, U-20, U-36
- Broad Run stream valley in Legacy Open Space Master Plan: U-20
- Various local rustic and scenic roads: U-36
- Links between Little Bennett Regional Park and C&O Canal Towpath, passing in-part through Frederick County to/through Sugarloaf Mountain: U-23
- Ten Mile Creek Greenway: U-17
- Magruder Branch Trail: U-10
- Seneca Greenway Trail, county parkland to Patuxent River State Park: U-15.01
- Link through (and/or parallel to, along roads or utility corridors) Patuxent River State Park: U-26
- Link from Upper Rock Creek Loop to Patuxent River State Park, passing through Rachel Carson Conservation Park: M-05
- Rock Creek Trail, connecting Upper Rock Creek Loop with Lower County Loop: M-06
- Matthew Henson Trail: E-02
- 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 9 - Proposed New Loop & Link Trail Network

- ICC Bike Path: SP-40 in the 2005 Countywide Bikeways Functional Master Plan and E-10, M-13 in this plan
- Midcounty Highway: SP-70, U-33
- Georgetown Branch Trail: SP-6, L-8
- Metropolitan Branch Trail: SP-12, E-14
- Bethesda Trolley Trail: SP-41, L-07
- Seven Locks Road: DB-3, L-12, L-13
- Rockville’s Millennium Trail: SP-51, L-10, M-15
- Great Seneca Highway: SP-63, U-31
- Montrose Parkway: SP-50, L-11
- Silver Spring Green Trail: SP-10, E-16
- Robey Road: SP-22, E-15
- Travilah Road: SP-57, U-35

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.

<table>
<thead>
<tr>
<th>DISTANCE</th>
<th>Loops and Links</th>
<th>Loops, Links &amp; Key Bikeways</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POPULATION</td>
<td>% TOTAL POPULATION</td>
</tr>
<tr>
<td>.25 mile</td>
<td>248,117</td>
<td>25.53%</td>
</tr>
<tr>
<td>.5 mile</td>
<td>394,826</td>
<td>40.63%</td>
</tr>
<tr>
<td>1 mile</td>
<td>666,588</td>
<td>68.59%</td>
</tr>
<tr>
<td>3 miles</td>
<td>968,754</td>
<td>99.69%</td>
</tr>
<tr>
<td>5 miles</td>
<td>971,777</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

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. - See Figure 19 - Gaps in Service Map

(Insert photos)
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.

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

There are three possible outcomes for each segment.

1. The trail segment does not have adverse impacts and is retained
2. 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
3. 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). - M-03.02
  - 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). - E-03.03
  - Links a major regional trail with a major regional park.
- Upper County Trail Link, Ovid Hazen Wells Recreational Park to Damascus Recreational Park. - U-13
  - Links a major park in Clarksburg with a major park and regional trail in Damascus.

**Remove from Plan**

- Crabb's 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 - U-26
- 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 - M-02.04
- Important link between people's choice trails in Hawlings River with the conservation park.

Rachel Carson Greenway Trail, link to Patuxent River State Park - M-05
- 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 - U-15.01
- Part of important connection between the Upper County and Mid County Loops, and also links to a state park.

Ten Mill Creek Greenway Trail - U-17
- Links two major regional parks in the Clarksburg area

Upper Rock Creek, Blue Mash Trails to Rachel Carson Conservation Park - M-12
- 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 - M-19.01
- 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.
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-NCPCC 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-NCPCC, Montgomery Parks will employ all four CIP categories (see Appendix 5) to implement this plan. For more detailed information on the relationship between this plan and trail corridor plans, see Appendix 7.
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 use.
- Require little rerouting and minimal long-term maintenance.

More detailed information regarding sustainable trails is located in Appendix 6

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, staff believes all users can be accommodated. The available evidence indicates that hikers and mountain bikes have approximately the same degree of environmental impact. While horses, because of their weight and wider gait, potentially have greater impact than hikers or bikers, natural surface trails built in accordance with contemporary sustainability standards generally can accommodate all user groups.

That said, there may be rare situations during which use would be limited to one or more specific user groups. These situations would be based upon one or more of the following criteria:

- Achieve environmental sustainability
- Minimize/mitigate impacts to cultural resources
- Avoid user conflicts
  - Public safety
  - Provide a specific type of user experience

Exceptions to the general policy favoring multi-use access should be based on specific and objective evidence wherever possible. In cases where limitations are needed in order to avoid overuse of trails or user conflicts, strong consideration should be given to providing multiuse access to other trails in the vicinity.

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 in-part with transportation grants. 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
Northwest Branch Trail - Wheaton Regional Park to Matthew Henson Trail (Score=10) – E-03.03
Wheaton Regional Park Through-Trail - Southern Boundary to Kemp Mill Road (10) – E-07.01
Muddy Branch Trail - MD 28 to Quince Orchard Road (8) – U-11.01
Magruder Branch Trail - Current trail terminus to Damascus Town Center (7) – U-10.01
Ovid Hazen Wells Recreational Park-Damascus Recreational Park Link (7) – U-13
Top 5 Implementation Priorities for Countywide Natural Surface Trails:

- Paint Branch Trail Extension South - MLK Jr. Recreational Park to Old Columbia Pike (Score=11) – E-04.03
- Sligo Creek Trail - Wheaton Regional Park Link South - Colt Terrace Neighborhood Park to Tennis Bubble (9) – E-07.02
- Paint Branch Trail Extension North - Fairland Road to Briggs Chaney Road (8) – E-04.01

Rachel Carson Greenway Trail North - Wheaton Regional Park to Woodlawn Manor Special Park (8) – E-05.01 and E-05.02
- Cabin John Trail Link to C&O Canal Towpath - Cabin John Local Park to C&O Canal Towpath (7) – L-09

Figure 22 - Park Trail Implementation Priorities Charts

<table>
<thead>
<tr>
<th>TRAIL SEGMENT NAME</th>
<th>LIMITS (TO/FROM) - PLAN SEGMENT #</th>
<th>SCORE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H A R D  S U R F A C E  T R A I L S</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Northwest Branch Trail</td>
<td>Wheaton Regional Park to Matthew Henson Trail - E-03.03</td>
<td>10</td>
<td>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)</td>
</tr>
<tr>
<td>2 Wheaton Regional Park Through-Trail</td>
<td>Southern Boundary to Kemp Mill Road - E-07.01</td>
<td>10</td>
<td>To be studied as part of Wheaton Regional Park Master Plan; connects Sligo Creek Trail with Northwest Branch Trail</td>
</tr>
<tr>
<td>3 Muddy Branch Trail</td>
<td>MD 28 to Quince Orchard road - U-11.01</td>
<td>8</td>
<td>Existing natural surface trail currently provides service to this area</td>
</tr>
<tr>
<td>4 Magruder Branch Trail</td>
<td>Current trail terminus to Damascus Town Center - U-10.01</td>
<td>7</td>
<td>Mostly on existing parkland, but requires some land acquisition near the town center.</td>
</tr>
<tr>
<td>5 Ovid Hazen Wells Recreational Park-Damascus Recreational Park Link</td>
<td>Recreational Park to Recreational Park (and Magruder Branch Trail) - U-13</td>
<td>7</td>
<td>Awaiting subdivision activity in vicinity of MD 27</td>
</tr>
<tr>
<td>6 Rock Creek Trail - Millennium Trail Link</td>
<td>Gude Drive to Lake Needwood - M-10</td>
<td>6</td>
<td>Awaiting land transfer (Gude Landfill)</td>
</tr>
</tbody>
</table>
## Natural Surface Trails

<table>
<thead>
<tr>
<th>Trail Segment Name</th>
<th>Limits (To/From) - Plan Segment #</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Paint Branch Trail Extension South</td>
<td>MLK Jr Recreational Park to Old Columbia Pike - E-04.03</td>
<td>11</td>
<td>Previously a hard surface trail recommendation; connects White Oak communities to Martin Luther King, Jr Recreational Park and Paint Branch Trail</td>
</tr>
<tr>
<td>2 Sligo Creek Trail - Wheaton Regional Park Link South</td>
<td>Colt Terrace Neighborhood Park to Tennis Bubble - E-07.02</td>
<td>9</td>
<td>Being studied as part of Wheaton Regional Park Master Plan; involves crossing Arcola Avenue mid-block</td>
</tr>
<tr>
<td>3 Paint Branch Trail Extension North</td>
<td>Fairland Road to Briggs Chaney Road - E-04.01</td>
<td>8</td>
<td>Connects to/through Countryside Neighborhood Park</td>
</tr>
<tr>
<td>4 Rachel Carson Greenway Trail North</td>
<td>Wheaton Regional Park to Woodlawn Manor Special Park - E-05.01 and E-05.02</td>
<td>8</td>
<td>Current high priority in Natural Surface Trail Program CIP; links numerous cultural and historic resources</td>
</tr>
<tr>
<td>5 Cabin John Link to C&amp;O Canal Towpath</td>
<td>Cabin John Local Park to C&amp;O Canal Towpath - L-09</td>
<td>7</td>
<td>Not on county parkland, but instead on federal parkland and/or along federal roadways</td>
</tr>
<tr>
<td>6 Blue Mash Links</td>
<td>Rachel Carson Conservation Park to Upper Rock Creek Trail Loop - M-12</td>
<td>4</td>
<td>Natural surface trails within Blue Mash exist, but links to north and to the south not yet</td>
</tr>
<tr>
<td>7 Patuxent Link East</td>
<td>Rachel Carson CP to Patuxent River State Park - M-05</td>
<td>4</td>
<td>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</td>
</tr>
<tr>
<td>8 Patuxent Link West</td>
<td>Current terminus of Seneca Greenway Trail to Patuxent River State Park - U-15.01</td>
<td>4</td>
<td>Requires additional parkland acquisition, particularly north of MD 108</td>
</tr>
<tr>
<td>9 Sugarloaf Link East</td>
<td>Little Bennett Regional Park to Sugarloaf Mountain - U-23.01</td>
<td>4</td>
<td>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</td>
</tr>
<tr>
<td>TRAIL SEGMENT NAME</td>
<td>LIMITS (TO/FROM) - PLAN SEGMENT #</td>
<td>SCORE</td>
<td>COMMENTS</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------------------</td>
<td>-------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10 Patuxent River State Park</td>
<td>East Link to West Link - U-26</td>
<td>3</td>
<td>Ribbons of trails (for horses and hikers) exist through the wildlands area; but not one designated trail yet.</td>
</tr>
<tr>
<td>11 Sugarloaf Link West</td>
<td>Sugarloaf Mountain to C&amp;O Canal Towpath - U-23.02</td>
<td>3</td>
<td>Supported by the Frederick County Bikeways and Trails Plan. Links C&amp;O Canal Towpath with Sugarloaf Mountain, and could pass through Montgomery County in Dickerson area, likely along low volume rural roads</td>
</tr>
<tr>
<td>12 Woodstock Link North</td>
<td>Woodstock Special Park to C&amp;O Canal Towpath - U-19 and U-36</td>
<td>3</td>
<td>Likely to be implemented largely along low volume rural roads</td>
</tr>
<tr>
<td>13 Woodstock Link South</td>
<td>Woodstock Special Park to C&amp;O Canal Towpath - U-20</td>
<td>3</td>
<td>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</td>
</tr>
</tbody>
</table>
Appendix

List of Appendices

Appendix 1 - Vision 2030 Survey Results.................................................................................................................. 55
Appendix 2 - Resource Atlas Mapping.......................................................................................................................... 59
Appendix 3 - Trail Implementation Difficulties Evaluation Matrix Charts................................................................. 60
Appendix 4 - The New Trail Planning Process.............................................................................................................. 64
Appendix 5 - Understanding the CIP Process................................................................................................................ 65
Appendix 6 - Sustainable Natural Surface Trail Guidelines.......................................................................................... 66
Appendix 7 - Relationship between Countywide Park Trails Plan, Trail Corridor Plans and other Park Master Plans.................................................................................................................. 70
Appendix 8 - Trails Working Group Members and Affiliations..................................................................................... 72
Appendix 9 - PEPCO-Exelon Merger, Pilot Trail Project in Bethesda-Dickerson Corridor............................................. 73
Appendix 10 - Architectural Barriers Act (ABA) Requirements for Trails........................................................................ 75
Appendix 11 - Countywide Bikeways Functional Master Plan Map.................................................................................. 77
Appendix 12 - Parks Director Letter to DOT................................................................................................................ 78
Appendix 13 - The Plan Process and Public Outreach.................................................................................................. 81
Appendix 14 - Glossary of Terms........................................................................................................................................ 84
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

- Hard surface trails: 68%
- Natural surface trails: 68%
- Playgrounds: 62%
- Community/recreation centers: 61%
- Natural areas: 58%
- Picnic shelters: 56%
- Nature center: 52%
- Indoor aquatic centers: 43%
- Outdoor aquatic centers (incl. splash parks & water features): 42%
- Outdoor tennis: 36%
- Soccer, lacrosse, football fields: 35%
- Historic/archeological sites: 35%
- Ice rink: 31%
- Outdoor basketball courts: 30%
- Dog parks: 19%
- Baseball fields: 17%
- Softball fields: 13%
- Indoor tennis: 12%
- Skateboard parks and spots: 11%
- Equestrian centers: 7%
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
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.

Possible Future Trail Alignment

Sensitive Area Not Suitable for Trails
### Appendix 3 - Trail Implementation Difficulties Evaluation Matrix Charts

#### NATURAL SURFACE TRAILS Implementation Difficulties Decision Making Matrix

<table>
<thead>
<tr>
<th>TRAIL SEGMENT</th>
<th>EXISTING OR PROPOSED</th>
<th>SENSITIVE AREAS CODE</th>
<th>BEST NATURAL AREA CODE</th>
<th>BIODIVERSITY AREA (BDA)</th>
<th>CULTURAL/HISTORICAL ISSUES CODE</th>
<th>LAND ACQUISITION OPPORTUNITY TO BYPASS COST TO REDEVELOPMENT OR MITIGATE IMPACTS</th>
<th>IS THE TRAIL A DESTINATION EXPERIENCE OR OTHER MAJOR REC DESTINATION</th>
<th>IS THE TRAIL CAPABLE OF IMPROVING VISION 2030 LEVEL OF SERVICE (CURRENTLY UNDERSERVED AREA)</th>
<th>DISCUSSION</th>
<th>KEEP IN MASTER PLAN</th>
<th>PRIORITY FOR IMPLEMENTATION (H, M, L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairland Recreational Park north to Burtonsville</td>
<td>P F, SB, SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NO H YES NO YES YES NO</td>
<td>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.</td>
<td>NO NO</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint Branch Trail, MLK Jr. Recreational Park to U.S. Food and Drug Administration Campus</td>
<td>P F, W, SB, SS</td>
<td>BDA</td>
<td>H</td>
<td>YES</td>
<td>M</td>
<td>YES NO YES YES YES YES</td>
<td>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.</td>
<td>YES YES</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rachel Carson Greenway Trail - Northwest Branch Recreational Park to Norbeck Road</td>
<td>P F, SB, SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NO H NO NO YES YES YES YES</td>
<td>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</td>
<td>YES YES</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rachel Carson Greenway Trail - North of Sandy Spring</td>
<td>P N, A N, A N, A N, A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NO H NO NO NO NO N, A NO</td>
<td>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</td>
<td>NO NO</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rachel Carson Greenway Trail - Link from Rachel Carson CP to Patuxent</td>
<td>P N, A N, A N, A N, A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YES? H NO YES YES NO NO</td>
<td>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.</td>
<td>YES NO</td>
<td>YES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Attachment 1**
<table>
<thead>
<tr>
<th>TRAIL SEGMENT</th>
<th>EXISTING OR PROPOSED SENSITIVE AREAS CODE</th>
<th>BEST NATURAL AREA (BNA) OR BIODIVERSITY AREA (BDA)</th>
<th>CULTURAL, HISTORICAL AND ARCHAEOLOGICAL ISSUES CODE</th>
<th>LAND ACQUISITION OPPORTUNITY TO BYPASS CONSERVATION COST TO KEEP ON PARKLAND &amp; MITIGATE IMPACTS</th>
<th>RELATIVE COST TO KEEP ON PARKLAND &amp; MITIGATE IMPACTS (H, M, L)</th>
<th>IS THE TRAIL A DESTINATION EXPERIENCE</th>
<th>CONNECTIONS TO MAJOR OR OTHER MAJOR REC DESTINATIONS?</th>
<th>TERRAIN SUITABLE FOR ALL USERS?</th>
<th>IMPROVES VISION 2030 LEVEL OF SERVICE (CURRENTLY UNDERSERVED AREA)</th>
<th>DISCUSSION</th>
<th>KEEP IN MASTER PLAN PRIORITY FOR IMPLEMENTATION (H, M, L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seneca Greenway Trail - Connection to Patuxent River State Park</td>
<td>P F SB S BDA H NO M NO YES YES N A NO</td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
</tr>
<tr>
<td>Ten Mile Creek Greenway</td>
<td>P F SB W H YES M NO NO YES YES YES</td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
</tr>
<tr>
<td>Upper Rock Creek Trail - Muncaster Road to North Branch</td>
<td>P F W SB NO M NO YES YES YES YES</td>
<td>Gap caused by lack of parkland ownership. Route trail briefly on private driveway to bypass sensitive areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
</tr>
<tr>
<td>Upper Rock Creek Trail - Link between Blue Mash and Rachel Carson Conservation Park</td>
<td>P N A N A N A NO H NO YES YES YES NO</td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
</tr>
<tr>
<td>Watts Branch Trail - entire length</td>
<td>P F W SB YES NO H NO NO YES NO NO NO</td>
<td>Narrow stream valley that is environmentally constrained. Sustainable trail alignment infeasible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
<td>YES NO</td>
</tr>
</tbody>
</table>

1. Per Article 66B of the Maryland Code
2. Per 2005 Land Preservation, Parks and Recreation Plan, page V-14
<table>
<thead>
<tr>
<th>TRAIL SEGMENT</th>
<th>EXISTING OR PROPOSED</th>
<th>SENSITIVE AREAS CODE</th>
<th>BEST NATURAL AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>East County - Link from Wheaton Regional Park to Matthew Henson Trail</td>
<td>P</td>
<td>F, W, SB, SS</td>
<td>BDA</td>
</tr>
<tr>
<td>Seneca Greenway Trail</td>
<td>P</td>
<td>F, W, SB</td>
<td>BDA</td>
</tr>
<tr>
<td>Paint Branch Trail - Martin Luther King Jr. Recreational Park to Old Columbia Pike</td>
<td>P</td>
<td>F, W, SB</td>
<td>BDA</td>
</tr>
<tr>
<td>Rock Creek - Crabbs Branch Link</td>
<td>P</td>
<td>F, W, SB, SS</td>
<td>BDA</td>
</tr>
<tr>
<td>Rock Creek - North Branch Trail, Preserve at Rock Creek to Bowie Mill Road</td>
<td>P</td>
<td>F, W, SB</td>
<td></td>
</tr>
<tr>
<td>Upper County Trail Link - Ovid Hazen Wells Recreational Park to Damascus Recreational Park</td>
<td>P</td>
<td>F, W, SB</td>
<td></td>
</tr>
<tr>
<td>Upper County Trail Link, Goshen Recreational Park to Damascus Recreational Park</td>
<td>P</td>
<td>F, W, SB, SS</td>
<td>BDA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARD SURFACE TRAILS Implementation Difficulties Decision Making Matrix</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Existing OR Proposed</th>
<th>Sensitivity CODE</th>
<th>Best Natural Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>F, W, SB, SS</td>
<td>BDA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hard Surface Trails Implementation Challenges and Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing OR Proposed</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Narrow stream valley, popular natural surface trail exists that would likely be compromised to build hard surface trail.</td>
</tr>
<tr>
<td>Area is environmentally constrained. Pursue natural surface trail instead.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Will connect Olney to Rock Creek Trail system, and thus also the regional trail system.</td>
</tr>
<tr>
<td>Align trail through adjacent properties to avoid sensitive areas. Implement trail as part of future subdivision activity.</td>
</tr>
<tr>
<td>Links two recreational parks. Serves as a link to Magruder Branch Trail. Land acquisition needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>NO</td>
</tr>
</tbody>
</table>

62
Upper County Trail Link - Little Bennett Regional Park to Frederick County trail system (destination: Sugarloaf)

<table>
<thead>
<tr>
<th>P</th>
<th>F, SB, W, SS</th>
<th>BNA</th>
<th>NO</th>
<th>H</th>
<th>NO</th>
<th>NO</th>
<th>YES</th>
<th>NO</th>
<th>NO</th>
<th>Intended to link Little Bennett Regional Park with Sugarloaf Mountain. Not enough demand to warrant impacts and land acquisition needs.</th>
</tr>
</thead>
</table>

1. Per Article 66B of the Maryland Code
2. Per 2005 Land Preservation, Parks and Recreation Plan, page V-14

Codes for Sensitive Areas.  
F=Floodplain, SB=Stream Buffer, SS=Steep Slopes, W=Wetlands, HES=Highly Erodible Soils, RTE=Rare, Threatened and 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 land-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
Appendix 4 - The New Trail Planning Process

Until this plan amendment, the CWPTP served as very broad policy guidance, deferring more detailed environmental feasibility analysis for trail alignments until later in the planning process, often as part of Trail Corridor Plans (TCPs). See Appendix 7. This plan amendment determined the environmental feasibility for all trail alignments that have been retained as recommendations. As such, TCPs are no longer needed. In place of TCPs, staff will now be developing program of requirements for each trail segment to be included in the CIP (see Appendix 5), which will include analysis of many of the issues previously part of TCPs. This will streamline the process, and allow trails to be built/implemented more quickly as funding becomes available.

### COUNTYWIDE PARK TRAILS PLAN

<table>
<thead>
<tr>
<th>Implementation Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add to Capital Improvement Program (CIP)</td>
</tr>
<tr>
<td>Consult relevant Trail Corridor Plans, Park Master Plans, Functional Plans and Area/Sector Plans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARD SURFACE TRAILS</th>
<th>NATURAL SURFACE TRAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Program of Requirements for Trail</td>
<td>Evaluate potential routes that can accommodate a sustainable trail open to all user types. (This phase involves more detailed analysis of resource impacts and also operating budget impacts).</td>
</tr>
<tr>
<td>Preliminary Design/Facility Planning</td>
<td>Select route with fewest resource impacts</td>
</tr>
<tr>
<td>Obtain public input, modify as needed</td>
<td>Obtain public input, when needed</td>
</tr>
<tr>
<td>Detailed Design</td>
<td></td>
</tr>
<tr>
<td>Planning Board review</td>
<td>Begin construction (break into phases if large/expensive project)</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5 - Understanding the CIP Process

The CIP is a six-year capital improvements program that is prepared every two years. It includes new or renovation projects costing over $25,000 with a useful life greater than 15 years. There are “stand-alone” projects that have a beginning and an end. Stand-alone trail projects are usually major construction or renovation projects that have gone through facility planning. However, the majority of trails are funded through “level-of-effort” projects. Level of effort CIP projects are those that receive a certain amount of funding annually for various capital programs such as pollution prevention, ballfields, life-cycle asset replacements, resurfacing of parking lots and paths, and even trails. Both level of effort projects and stand-alone projects are funded from a myriad of funding sources but the most common are bonds (debt), current revenue (cash), grants (federal or State) and contributions.

There are four primary level of effort CIP projects for park trails:

1 - Trails: Hard Surface Design and Construction (P768673). This fund provides for the design and construction of new trails and extensions or connectors to existing trails, as well as trail amenities and trail signage. It does not include reconstruction or repair of existing trails. Hard surface trails accommodate road bicyclists, pedestrians, and in-line skaters and meet Americans with Disabilities Act (ADA) guidelines, where feasible.

2 - Trails: Hard Surface Renovation (P888754). This fund provides for major renovations of trails with asphalt or boardwalk surfaces (paved trails). Hard surface trails will accommodate road bicyclists, pedestrians, in-line skates and people in wheelchairs, where feasible. Projects include major trails of countywide significance, e.g., those in stream valley parks, but also shorter connector trails that link to the countywide system. Renovations may include resurfacing, culvert repair/replacement, and bridge repair/replacement. Where possible, trail renovations will meet ADA and American Association of State Highway and Transportation Officials (AASHTO) standards. This project does not include development of new trails or trails extensions.

3 - Facility Planning: Non-Local Parks (P958776). This fund provides for the preparation of facility plans and related plans/studies/analysis, e.g., environmental, feasibility, engineering, and utilities analysis. Facility plans produce well-reasoned project cost estimates based on preliminary design. i.e., 30% final design and construction documents. Preliminary design includes topographic surveys, environmental assessments, traffic studies, site plans, schematic drawings, elevations, quantity calculations, and cost estimates, as well as public participation. This fund also supports upfront planning activities associated with capital investments that may result from public-private partnerships.

4 - Trails: Natural Surface Design, Construction & Renovation (P858710). This fund includes planning, design, construction and reconstruction of natural surface trails. Natural surface trails are usually located in stream valley parks. Surfaces may include dirt, wood chip, soil mixtures, and sometimes gravel/stone, supplemented by boardwalk or other elevated surfaces when needed. They are generally narrower than hard surface trails. Natural surface trails accommodate hikers, horse riders and off-road (mountain) bicyclists, and generally do not meet ADA requirements. The costs included in this fund do not reflect work done by volunteers.
Appendix 6 - 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

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

6 - An average trail grade of 10% or less is most sustainable.
7 - 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.

8 - A spot at which a climbing trail levels out and then changes direction, descending slightly for about 10 to 30 feet before climbing again.
9 - The cross sectional grade of the trail tread itself. A 5% outslope is recommended for all natural surface trails.

Figure 27 - Outslope
Appendix 7 - Relationship between Countywide Park Trails Plan, Trail Corridor Plans and other Park Master Plans

The Countywide Park Trails Plan guides the planning and development of the county's regional trail system, those trails that are considered of countywide significance. Trails of countywide significance tend to be either those that offer longer-distance experiences or are destination trails, meaning residents and visitors are willing to drive to these trails for experiences lasting several hours or longer. The plan does not include recommendations for all park trails, including those trails located entirely within regional, recreational, conservation, neighborhood and local parks, nor trails intended for specific purposes such as Heart Smart Trails. It also does not include trail easements crossing private land, nor unsanctioned (unofficial) trails.

Until this plan amendment, the trail planning process involved establishing cross-county desire lines (CWPTP) and then determining feasibility of proposed trails, and analyzing potential trail alignments as well as community connectors, in more detail later as part of Trail Corridor Plans. This plan amendment, however, entirely encompasses feasibility; all trails included in this plan amendment are considered implementable and are able to avoid, minimize or mitigate impacts to sensitive natural and cultural resources. This plan amendment, however, does not specify a trail alignment nor connectors to communities and local destinations; these issues will be examined more closely during facility planning. See Appendix 5 for a trail planning process flow-chart.

Recommendations in existing trail corridor plans (Muddy Branch, Upper Rock Creek, Rachel Carson Greenway) remain in effect, except as explicitly changed by this plan amendment (i.e., Rachel Carson Greenway Trail Corridor Plan). The same is true to parks with separate master plans for regional, recreational and conservation parks. Except where a regional trail passes through these types of parks, and associated recommendations in this plan amendment impact trails that pass through these parks, the recommendations in these park master plans remain effective policy.

A separate, but related, issue is evaluating multi-use for trails governed by separate park master plans, such as Rachel Carson Conservation Park, Serpentine Barrens Conservation Park, and others. The Department will be re-examining these park master plans as part of a separate master planning process, schedule TBD.

Previous Amendments

In February 1991, a staff study, A Planning Guide to Trails for Montgomery County Parks (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 Community Area, Sector and Functional Master Plans 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)
- Rachel Carson Greenway Trail Corridor Plan (2005) (web page)
- Little Bennett Regional Park Master Plan (2007) (web page)
- Upper Rock Creek Trail Corridor Plan (2008) (web page)
- Intercounty Connector Limited Functional Master Plan Amendment (2009) (web page)
Appendix 8 - Trails Working Group Members and Affiliations

Alphabetical Order

- 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 9 - PEPCO-Exelon Merger, Pilot Trail Project in Bethesda-Dickerson Corridor

**PEPCO-EXELON Merger Commitment**, Condition 43:\(^1\)

*Pilot Project to Provide Public Recreational Use of Pepco Utility Corridors and to Enhance Utility Access to Facilities*

“Pepco shall coordinate with the Maryland Department of Natural Resources (‘DNR’), Montgomery County, Prince George’s County and the Maryland - National Capital Park and Planning Commission (‘M-NCPPC’) to establish a pilot project in its Maryland service territory by which Pepco will grant to an appropriate governmental or private entity in both Counties a limited, non-exclusive license to access specified portions of Pepco’s transmission-line property for recreational and transportation use by the public. Paths will provide increased access by Pepco to its facilities along the transmission corridor; therefore, Pepco will have access along any path to serve its facilities. Permanent paths will provide for faster access for restoration of lines damaged during storms and less impact on wetlands and streams since pathways will be built to mitigate damage to sensitive areas. Pepco shall work cooperatively with DNR, Montgomery County, Prince George’s County and M-NCPPC to define the license terms.

The first pilot project will be a combined paved and natural surface trail system along the transmission corridor from Westlake Drive near Montgomery Mall to the Soccerplex in Germantown (the “Bethesda-Dickerson Corridor”). Within four months after merger closing (March 23, 2016), Pepco shall solicit the input and work cooperatively with the DNR, Montgomery County, Prince George’s County, M-NCPPC, and other interested parties on the design of an unpaved trail in the portion of the Bethesda-Dickerson Corridor between the Soccerplex and Quince Orchard Road (the “Unpaved Trail”).

Pepco shall work with the Counties, M-NCPPC, and DNR to gain approval of these trails and to construct them in a way that reasonably minimizes the portion deemed to be impervious surfaces in order to reduce the storm water retention requirements. Subject to the receipt of local contributions toward the pilot projects, Pepco may seek recovery in regulated transmission and distribution rates of the costs that it incurs

---

\(^1\) Order No. 86990; Public Service Commission of Maryland, Case No. 9361
in connection with the project. Pepco shall pay reasonable costs associated with the pilot project if it is able to obtain such recovery in regulated rates. If Pepco is not able to obtain rate recovery of the requested amount of pilot project costs (minus the local contribution), it will work with the Counties, M-NCPPC and DNR to reevaluate and appropriately limit the scope of the pilot project, pay the costs of designing the Unpaved Trail, and cooperate to seek alternate sources of funding to complete the pilot project. Pepco shall follow the implementation of the pilot project, collect lessons learned and identify criteria and conditions under which it would consider future projects to allow access to its property for non-motorized recreational and transportation use.”

A feasibility study will evaluate a variety of trail types including both natural surface hiker/biker/equestrian trails and paved shared use paths. The study would assess both recreational and non-motorized transportation opportunities for the area, and assess various trail types, alignments, grades and options for providing access to adjacent communities, existing and proposed bikeways and park trails, and recreational facilities. The study would work to identify trailhead access and parking needs and the design of safe and effective crossings and connections for local roadways, as well as environmentally sensitive crossings of streams and other sensitive resources.
Appendix 10 - Architectural Barriers Act (ABA) Requirements for Trails

M-NCPFC, Montgomery County Department of Parks designs all new hard surface park trails to meet ABA standards and requirements. When a need arises to renovate or reconstruct, existing trails likewise are developed to meet ABA requirements. Rare exceptions include minimizing impacts to sensitive natural, cultural, historical and archaeological resources.

Presently, there are no legal Americans with Disabilities (ADA) requirements for natural surface trails on local or state parkland, only ABA rules for certain federal lands and for non-federal entities that construct or alter recreational facilities on federal lands on behalf of federal agencies. M-NCPFC, Montgomery County Department of Parks, as a result, is not required to design natural surface (aka unpaved) trails to meet ADA standards or ABA Accessibility Guidelines. Where feasible and practical, however, the Department strives to design trails to meet the largest number of potential users, including persons with disabilities. Sustainably designed trails often can be used by persons with disabilities, but the department’s natural surface trail construction program does not explicitly design trails to meet the needs of persons with disabilities. It is the Department’s understanding that ABA Accessibility Guidelines for natural surface trails will be adopted or established as Standards by the Access Board and the Department of Justice within the coming years although no timetable has been established as of yet.

ABA Accessibility Guidelines are used by the Department to design park facilities, including hard surface park trails.

1. Architectural Barriers Act Accessibility Guidelines; Outdoor Developed Areas, Architectural and Transportation Barriers Compliance Board, November 2013

Architectural Barriers Act Accessibility Guidelines; Outdoor Developed Areas

The Architectural Barriers Act (ABA) requires facilities constructed or altered by or on behalf of federal agencies to be readily accessible to and usable by persons with disabilities. The final rule that implements the ABA does not apply to outdoor developed areas administered by state and local governments. While this law does not specifically apply to facilities on M-NCPFC parkland, the Department strives to make its facilities accessible to and usable by persons with disabilities. A separate rulemaking that applies to local and state governments is forthcoming.
Accessibility Standards for Federal Outdoor Developed Areas

This document is used to guide the design and development of all new hard surface park trails on M-NCPPC parkland. Shared use paths (aka paved trails aka hard surface trails) must meet specific technical requirements that include provisions for surface type, clear tread/pavement width, passing spaces, obstacles, openings, running slope, cross slopes, running intervals, protruding objects and trailhead signs.
Appendix 11 - Countywide Bikeways Functional Master Plan Map

Approved and Adopted March 2005

This map shows the bikeways contained in the Countywide Bikeways Functional Master Plan (CBFMP). This map does not represent County priorities nor current bicycling routes, and is intended for planning purposes only. Refer to Chapter 4 of the CBFMP for bikeway priorities and pages 31-42 for detailed maps showing specific areas of the county. Contact the Montgomery County Department of Public Works and Transportation (http://www.montgomerycountymd.gov/content/capwt) for a map of current bicycling routes.

Bike Lanes | Shared Use Paths | Shared Roadways | Bike Lanes | Shared Use Paths | Shared Roadways
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-NCPDC, 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.Joe8@montgomeryparks.org.
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; Charles.Kines@montgomeryparks.org.

Sincerely,

Mary Bradford
Director, Montgomery County Department of Parks

Cc: Dan Hardy
    John E. Hench
    Mike Horrigan
    Gene Giddens
    Darien Manley
    John Nissel
    Mitra Pedoeem
    Mike Riley
    Brian Woodward
Appendix 13 - 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](http://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: [http://www.montgomeryparks.org/PPSD/ParkPlanning/Projects/cwptp_amendment/cwptp.amendment.shtml](http://www.montgomeryparks.org/PPSD/ParkPlanning/Projects/cwptp_amendment/cwptp.amendment.shtml)
- 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.
- Social Media Posts - Facebook - meeting notices, reminders and updates. Twitter - meeting notices, reminders and updates.
### Project Schedule and Meeting Notes

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>NOTES AND PRESENTATIONS</th>
<th>PLANNING STAGE</th>
<th>TOPIC FOR DISCUSSION</th>
<th>LOCATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2011</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 6</td>
<td></td>
<td><strong>Staff Memo</strong> - from the Planning Board archives for this date - item # 7</td>
<td>Objectives, Outreach Strategy &amp; Schedule</td>
<td>M-NCPPC Planning Board presentation</td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
</tr>
<tr>
<td><strong>FALL / WINTER</strong></td>
<td></td>
<td>Monthly “Trails Working Group” meetings</td>
<td></td>
<td></td>
<td>TBD - Ongoing</td>
<td></td>
</tr>
<tr>
<td><strong>FALL / WINTER</strong></td>
<td></td>
<td>Meetings with McBAG, Conservation Montgomery and Countywide RAB</td>
<td></td>
<td></td>
<td>TBD - Ongoing</td>
<td></td>
</tr>
<tr>
<td><strong>2012</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 24</td>
<td></td>
<td><strong>Staff Memo</strong> - from the Planning Board archives for this date - item # 7</td>
<td>Upcounty Public Meeting in coordination with the 2012 Park Recreation and Open Space (PROS) Plan update</td>
<td></td>
<td>M-NCPPC - Montgomery Regional Office</td>
<td></td>
</tr>
<tr>
<td>January 25</td>
<td></td>
<td><strong>Staff Memo</strong> - from the Planning Board archives for this date - item # 7</td>
<td>Downcounty Public Meeting in coordination with the 2012 Park Recreation and Open Space (PROS) Plan update</td>
<td></td>
<td>UpCounty Service Center</td>
<td></td>
</tr>
<tr>
<td>December 6</td>
<td></td>
<td><strong>Staff Memo</strong> - from the Planning Board archives for this date - item # 7</td>
<td>Status Report</td>
<td>M-NCPPC Planning Board Presentation</td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
</tr>
<tr>
<td><strong>2013</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 24</td>
<td></td>
<td><strong>Meeting invitation</strong> - <strong>PowerPoint presentation</strong> (PDF, 8MB) - <strong>Survey Results</strong> (PDF, 800KB)</td>
<td>Upcounty Public Meeting to seek feedback on new “Loops and Links” plan framework</td>
<td></td>
<td>M-NCPPC Shady Grove Training Room</td>
<td></td>
</tr>
<tr>
<td>June 25</td>
<td></td>
<td><strong>Meeting invitation</strong> - <strong>PowerPoint presentation</strong> (PDF, 8MB) - <strong>Survey Results</strong> (PDF, 800KB) - <strong>Video Record</strong> (external link)</td>
<td>Downcounty Public Meeting to seek feedback on new “Loops and Links” plan framework</td>
<td></td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td><strong>2015</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 5</td>
<td></td>
<td><strong>PowerPoint presentation</strong> (PDF, 3MB)</td>
<td>Upcounty Recreation Advisory Board Meeting</td>
<td></td>
<td>4010 Randolph Road, Silver Spring, MD 20902</td>
<td></td>
</tr>
<tr>
<td>January 15</td>
<td></td>
<td><strong>PowerPoint presentation</strong> (PDF, 3MB)</td>
<td>Montgomery County Bicycle Action Group (McBAG) Presentation</td>
<td></td>
<td>Executive Office Building</td>
<td></td>
</tr>
<tr>
<td>September 16</td>
<td></td>
<td><strong>invitation</strong> (PDF, 100MB) - <strong>PowerPoint presentation</strong> (PDF, 2.3MB)</td>
<td>Public Meeting- Staff presentation of the draft plan</td>
<td></td>
<td>M-NCPPC Montgomery Parks Shady Grove Maintenance Yard Training</td>
<td></td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 21</td>
<td>- PowerPoint presentation (will be posted after the meeting)</td>
<td>Planning Board Staff Draft Plan Review - The public is welcome to attend; however public testimony will NOT be taken.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter</td>
<td></td>
<td>M-NCPPC Planning Board Public Hearing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M-NCPPC Planning Board Work Session(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M-NCPPC Planning Board Plan Approval and Adoption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M-NCPPC - Montgomery Regional Office (MRO) Auditorium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 14 - Glossary of Terms

**Agricultural Reserve** - Encompasses 93,000 acres - almost a third of the county’s land resources - along the county’s northern, western, and eastern borders. The Agricultural Reserve and its accompanying Master Plan and zoning elements were designed to protect farmland and agriculture.

**Americans with Disabilities Act (ADA)** - The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations (including parks, trails), commercial facilities, and transportation.

**Architectural Barriers Act (ABA)** - The Architectural Barriers Act (ABA) requires facilities constructed or altered by or on behalf of federal agencies to be readily accessible to and usable by persons with disabilities. While this law does not specifically apply to facilities on M-NCPCC parkland, the Department strives to make its facilities accessible to and usable by persons with disabilities.

**Best natural area** - Specially designated areas of parkland that contain the best examples of park natural resources in Montgomery County, Maryland. Features such as 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 help determine an area as the county’s best natural area.

**Biodiversity area** - These areas are defined in the 1998 PROS (Parks, Recreation and Open Space) Plan 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.

**Capital Improvement Program (CIP)** - The CIP is a six-year capital improvements (design and construction) program that is prepared every two years. It includes new or renovation projects costing over $25,000 with a useful life greater than 15 years.

**Circuit trail** - A trail that provides an opportunity to begin and end at the same location.

**CWPTP** - Countywide Park Trails Plan

**EPIC route** - The International Mountain Bike Association (IMBA) designates select trail routes around the United States that are demanding, mostly single-track adventures in natural settings. The EPIC designation denotes a true backcountry riding experience—one that is
technically and physically challenging, more than 80 percent single-track and at least 20 miles in length.

GIS - Geographic Information System - a computer system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.

Hard surface trail - a trail that has a paved surface, typically asphalt but sometimes concrete or finely crushed stone.

Heart smart trail - A specially-designated trail that is generally 1-mile in length or less and follows a hard surface, level path. Bronze medallions are embedded in the path every 1/10 of a mile so walkers can keep track of the distance they have traveled.

Historic or cultural trail - a park trail for which historical, cultural or archaeological interpretive programming is offered.

Hybrid loop - a trail that features different surface types in order to provide a continuous user experience. For example, a hard surface park trail, a natural surface park trail, an off-road bikeway and a sidewalk all may be part of one hybrid loop.

ICC - Intercounty Connector, MD 200

Implementation difficulty - a trail segment identified in the 2008 CWPTP that has not yet been built due to high cost, environmental constraints or insufficient public support.

Legacy Open Space Functional Master Plan - Legacy Open Space is Montgomery County’s bold initiative to preserve the distinctive resources that set the County apart and enhance its appeal as a quality place to, live, visit, work and invest. It features its own master plan that guides investments in land acquisition.

Limited use trail - a trail that prohibits at least one mode (hiking, off-road biking, horses)

Link - a park trail or bikeway that connects to one of the four countywide loops

Loop - one of four countywide hybrid loops that serve as the primary routes in the countywide park trail system:

- Upper County
- Eastern County
- Lower County
- Mid County

M-NCPPC - Maryland - National Capital Park and Planning Commission

Natural surface trail - a trail with a dirt or composite soil-based surface or tread.

OBI - Operating Budget Impact. The cost to operate, maintain, police and manage a facility

PEPCO - Potomac Electric and Power Company

Planning Board - the governing body that oversees the physical development of Montgomery County. Members also serve as the Parks Commissioners, which oversees the development and management of the county’s park system.
PROS Plan - Parks, Recreation and Open Space Plan

ROW - Right of Way

Sensitive areas - land and water features that are protected by Article 66B of the Maryland Code. Features include floodplains, wetlands, stream buffers, steep slopes, highly erodible soils, and habitats of rare, threatened and endangered species.

Stacked loop - a trail system that provides opportunities for varied experiences, and allows the user to begin and end at the same location, if desired. For example, two simple loop trails may form a figure 8, connecting in the middle, and allows for a continuous experience.

Sustainable plan - a policy guiding document that will stand the test of time. It is implementable now, and will be implementable in the future as well.

Sustainable trail - a trail that is designed well to minimize natural resource impacts and shed water, thereby requiring very little maintenance, relative to trails not built sustainably.

Trail easement - A landowner conveys to another person/group the rights to create a trail, open it for public use and maintain it without the owner giving up ownership and enjoyment of the land through which the trail passes.

Trail Corridor Plan - A planning document that in the past followed the Countywide Park Trails Plan Amendment, but preceded detailed facility planning. It typically identifies resource impacts (and ways to avoid/minimize them), selects an alignment (including side of stream) and neighborhood connectors.

Trails Working Group (TWG) - Advises the Parks Department on trail policy topics, including the Countywide Park Trails Plan Amendment. The group includes representatives from the major trail user groups, as well as representatives for park stewardship and conservation.

Unsanctioned trail - a trail that is not signed, marked, mapped, maintained or patrolled, also known as a "people’s choice" trail. These trails typically represent desire lines, connecting points of interest. These trails were not master planned, nor designed to be sustainable.

Vision 2030 Strategic Plan for Parks and Recreation in Montgomery County (Vision 2030) - The M - NCPPC Department of Parks, Montgomery County and the Montgomery County Department of Recreation have collaborated on the development of this long-term strategic plan to guide parks and Recreation services for the next 20 years.

Washington Suburban Sanitary Commission (WSSC) - Established in 1918, WSSC is currently among the largest water and wastewater utilities in the nation, serving 1.8 million residents in Montgomery and Prince George’s counties. The utility operates and maintains three reservoirs in or adjacent to Montgomery County, including Triadelphia, Rocky Gorge and Little Seneca, as well as the lands that border them. Limited use trails can be found on its lands.
Acknowledgements

Staff

M-NCPPC Montgomery Parks

Director’s Office, Department of Parks
Mike Riley, Director
Mitra Pedoeem, Deputy Director, Administration
John Nissel, Deputy Director, Operations

Park Planning & Stewardship Division
Dr. John E. Hench, Chief
E. Brooke Farquhar, Supervisor, Park and Trail Planning Section
Charles S. Kines, AICP, Park & Trail Planning Section (Project Coordinator)
Bob Turnbull, Natural Surface Trail Construction Manager
Jai Cole, Natural Resources Manager
Bill Hamilton, Natural Resources Manager
Joe Davis, Aquatic Resources Section
Barbara Lerch, Sr. Graphic Designer

Public Affairs and Community Partnerships Division
Jayne Hench, Senior Volunteer Services Coordinator
Jim Corcoran, Trail Volunteer Coordinator

Northern Management Region
Doug Ludwig, Chief

Southern Management Region
Bill Tyler, Chief

M-NCPPC Park Police, Montgomery County Division
Antonio DeVaul, Chief

Montgomery Planning Department
David Anspacher, Functional Planning & Policy Division
Elected and Appointed Officials

Montgomery County Council
Nancy Floreen, President
Roger Berliner, Vice President
Marc Elrich
Tom Hucker
Sidney Katz
George Leventhal
Nancy Navarro
Craig Rice
Hans Riemer

County Executive
Isiah Leggett

The Maryland National Capital Park and Planning Commission
Casey Anderson, Chair
Elizabeth M. Hewlett, Vice Chair

Commissioners

*Montgomery County Planning Board*
Casey Anderson, Chair
Marye Wells-Harley, Vice Chair
Gerald Cichy
Norman Dreyfuss
Natali Fani-Gonzalez

*Prince George’s County Planning Board*
Elizabeth M. Hewlett, Chair
Dorothy F. Bailey, Vice Chair
Manuel R. Geraldo
A. Shuanise Washington