Item #**1**July 21, 2008

Staff Report: Staff Draft of the Intercounty Connector Limited Functional Master Plan Amendment

Send date: July 18, 2008

From: Chuck Kines, Planner/Coordinator, Transportation Planning, 301-495-4525

Via: Dan Hardy, Acting Chief, Transportation Planning

Gwen Wright, Chief, Countywide Planning

RECOMMENDATION: Approve the Public Hearing Draft of the Intercounty Connector (ICC) Limited Functional Master Plan Amendment (LFMPA) as the Planning Board Draft and transmit to the Montgomery County Council.

Summary of Proposed Plan Recommendations

The ICC Limited Functional Master Plan Amendment (LFMPA) recommends selected changes to the shared-use path identified as the ICC bike path (SP-40) in the Countywide Bikeways Functional Master Plan. The ICC LFMPA also amends ICC roadway alignment and interchange recommendations to reflect the selected highway alternative now under construction.

Staff recommends that the Planning Board approve the following changes to the Public Hearing Draft Plan:

- Specify the retention of both hard surface and natural surface trail options in the Upper Paint Branch Park as subject for a future facility planning study
- Specify and include graphics showing the areas where the future master planned right-ofway for the Intercounty Connector will exceed the as-built right-of-way in order to accommodate future shared-use path construction and Midcounty Highway interchange connections

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I. Summary of Public Testimony and Planning Board Issues, Staff Responses

On July 10, 2008, the Montgomery County Planning Board hosted a public hearing on the plan amendment. Twenty three people testified, including representatives from the Washington Area Bicyclist Association, Montgomery Bike Advocates, Trail Conservancy and several community and/or civic groups. This is in addition to the over 200 letters or e-mails sent to the Planning Board prior to the public hearing. The written testimony is summarized by general topic area in **Exhibit 1**. **Attachment A** contains a summary by correspondent and we have posted the actual written testimony on the Department's ICC LFMPA webpage: http://www.mcparkandplanning.org/Transportation/icc/icc bike path.shtm

Exhibit 1 summarizes the primary categories of both oral and written testimony and provides brief staff responses to each set of comments. This memorandum expands upon concerns in the following categories:

- Opposition to the plan amendment in its entirety and support for SP-40 as currently envisioned in the 2005 Countywide Bikeways Functional Master Plan;
- Support or opposition to only specific recommendations in the plan amendment, and particularly opposing the recommendation to remove a hard surface trail from passing through Upper Paint Branch Stream Valley Park/Special Protection Area; and
- Opposition to detours due to safety and driveway crossings

Opposition to the Plan Amendment in its Entirety

Many correspondents requested that the entire shared use path be constructed within or along the current master-planned right-of-way for the Intercounty Connector. The detailed comments focused primarily on concerns in the Upper Paint Branch Stream Valley Park and this staff memorandum addresses those concerns in detail.

Alternative park trail alignments in the Rock Creek/Mill Creek Stream Valley Parks are not described in detail in this memorandum because:

- During the Environmental Impact Statement (EIS) process for the ICC in 2004-2006, the state selected a roadway alignment (Rock Creek Option C) that required several residential property displacements in the Cashell Estates community primarily due to the natural resource value along the master planned alignment. In addition to being biodiversity areas recognized by the Planning Department, the Redland Spring area is recognized as an Ecologically Sensitive Area by the Maryland Department of Natural Resources.
- The Rock Creek Option C alignment does not have sufficient right-of-way as it passes in a tunnel beneath the Winters Run community to accommodate a shared use path.
- During the EIS review process in 2005, the Planning Board, County Council, and County Executive all concluded that the western terminus of the shared use path being built along the ICC should occur at Needwood Road rather than Shady Grove Road.
- During the mandatory referral review process in 2006, staff discussed the ICC roadway crossings of the Mill Creek tributaries and recommended that no paved trails should be

constructed in these sensitive areas (despite guidance in the Shady Grove Sector Plan suggesting asphalt trails might be appropriate).

Supporting details on these points are contained in the several staff reports for prior Planning Board actions reviewed during 2004 through 2006, most notably in the staff review of the ICC Draft Environmental Impact Statement that was considered by the Planning Board on February 3, 2005.

In the Northwest Branch Stream Valley Park we find that the testimony summarized in Exhibit 1 suggests that there is some consensus that a shared use path that literally follows the ICC (on high bridges) is not as effective as one that more directly connects to Bonifant Road and the Trolley Museum.

We concur with the Executive Branch comment that the Public Hearing Draft Plan should:

- specify the reservation or dedication of additional transportation right-of-way for those sections where SP-40 is recommended but not being implemented as part of the current ICC construction project,
- clearly identify parcels to be reserved for the future Midcounty Highway extension interchange, and
- specify that no additional right-of-way beyond that used during the construction process need be acquired.

Upper Paint Branch Stream Valley Park/Special Protection Area

The majority of comments ask that the Planning Board reject the plan amendment (routing the trail around environmentally-sensitive resources) and to keep the current master plan alignment – along the ICC highway – as official county policy. Most oral testimony focused on the proposed recommendation to remove SP-40 from passing through the Upper Paint Branch Stream Valley Park and the Upper Paint Branch Special Protection Area. In light of the extensive testimony opposing our recommendations for Paint Branch, the Board asked staff to quantify the environmental impacts of a potential trail through this area, and identify the key constraints.

Over the past week, staff from transportation planning, environmental planning and park planning has examined the issue from a master plan perspective. The Public Hearing Draft Plan recommends that the Parks Department conduct facility planning studies for the most environmentally sensitive portions of trails within both the Northwest Branch Stream Valley Park and the Upper Paint Branch Stream Valley Park. However, during these conversations, staff developed a compromise solution for studying a hard surface trail through Paint Branch Stream Valley Park that may satisfy both the Planning Board as well as those in the bicycling community who opposed our prior recommendation. The compromise involves the following:

- Removing SP-40 from the Countywide Bikeways Functional Master Plan, from New Hampshire Avenue to and through U.S. 29; while
- Retaining and reemphasizing the Countywide Park Trails Plan recommendation on page 36 regarding Park Trail Corridor 7/Eastern County to "provide a hard surface trail in the

vicinity of the Intercounty Connector (ICC) right-of-way, whether or not the highway is built....staff recommends a trail throughout the length of the ICC (with or without the highway). However, its exact location and design should remain flexible in order to minimize its environmental impact."

These recommendations address multiple issues. First, it removes SP-40 from passing through Paint Branch, consistent with prior Planning Board guidance and decisions made as part of the highway project. Second, it "keeps the line on the map" (referring to a hard surface trail), something that the bicycling community has requested since the beginning of this planning process. Third, it defers further detailed study to the future, under the auspices of the Department of Parks, and allows planning staff to adequately study potential alignments and the related impacts before making a final decision on whether to build as either a hard surface or natural surface trail. It is important to note that a trail along the ICC route outside the right-of-way would have additional impacts resulting from the amount of clearing and grading necessary to accommodate a trail in the hilly terrain. **Attachment B** to this memorandum contains Appendices A and B from the Countywide Park Trails Plan, "Balancing Recreational, Transportation and Environmental Concerns"; and "Hard Surface Trail Planning Guidelines".

A concern of the biking community is how a park trail would connect to the rest of the countywide bicycle network, while recognizing park boundaries and sensitive natural areas within the Upper Paint Branch Stream Valley Park shown in **Exhibit 2**. Staff examined this issue and recommends the following route shown on **Exhibit 3**.

Within the park system, the trail from west to east could begin with a trailhead on Cape May Road, follow "people's choice" trails to the southern boundary of Dr. Charles R. Drew Elementary School, and follow the park boundary to the Gum Springs tributary utilizing an existing, unpaved, stormwater management pond maintenance road that will be realigned in parts as part of the highway project. The trail would need to cross the Gum Springs tributary and the Paint Branch to access Countryside Drive, where access to an ICC stormwater management pond is provided. This alignment appears to minimize stream buffer impacts, but alternative alignments would need to be studied as part of a future trail corridor planning study.

From the park's eastern boundary, the park trail could connect to the hard surface trail passing through Countryside Park connecting to Nees Lane. The Countryside Park and Countryside Drive serve as the "Paint Branch Connector" trail (PB-58) recommended in the Fairland Master Plan. The bike lanes along Briggs Chaney Road would take users to Old Columbia Pike (bike lanes), U.S. 29 (future shared use path) and connect to the shared use path along the south side of Briggs Chaney Road east of U.S. 29.

If this issue is to be studied further, it should be done in the context of Trail Corridor Study for Corridor 7: Eastern County of the Countywide Park Trails Plan (CPTP). See **Exhibit 4** for a map of the CPTP's Corridor 7: Eastern County. As directed by the CPTP, the planning process would:

• Identify the character and quality of environmental resources in the corridor

- Identify how a hard surface trail would contribute to the mobility and recreational opportunities in the corridor
- Identify the potential impacts of a hard surface trail on sensitive features
- Identify opportunities to avoid, minimize and mitigate negative impacts to high quality resources
- Propose trail recommendations that best achieve an appropriate balance among environmental, recreational and mobility objectives

Once the ICC LFMPA is approved and adopted, the Planning Board will develop a recommendation for further study of the trail alignment for consideration in a future fiscal year budget. This trail corridor study will recommend a hard surface trail, a natural surface trail or no trail at all. If a trail is recommended, more detailed studies will then be done in the context of a facility plan prior to the Planning Board approving the trail for construction. The facility plan includes a more rigorous analysis of environmental impacts and cultural resource impacts, recommends the specific type trail surface (boardwalk, asphalt, etc), analyzes community connection opportunities, analyzes engineering feasibility, estimates construction costs and estimates future maintenance and police needs. The Planning Board reviews the facility plan and determines whether to proceed with constructing the trail.

Concerns about detour safety and driveway crossings

Some testimony expressed concerns about the safety of the detours, in particular the number of driveway crossings. Staff analyzed the driveway crossings, and developed a table for both driveway crossings and cost estimates. See **Exhibit 5** summarizing driveway crossings for the recommended new alignment for SP-40.

For driveway crossings, it is important to distinguish between residential and commercial. Residential driveways experience only a few motor vehicle crossings per day; whereas commercial driveways can experience over a hundred crossings per hour depending on the location. As you can see from the table, the recommended segments along Muncaster Mill Road, New Hampshire Avenue, Randolph Road and Fairland Road all feature numerous driveway crossings. With the exception of the commercial area near the intersection of E. Randolph Road and New Hampshire Avenue, nearly all these driveways are residential.

It is also important to emphasize that the plan amendment recommends improvements to existing roads where needed; the plan is not relying on existing conditions. For example, along Fairland Road, bike lanes current exist but this plan amendment proposes to add a shared use path to the south side to accommodate hikers and family cyclists.

Some testimony also expressed concern that the trail would pass through commercial areas, and the conflicts with motor vehicles are the primary characteristic of a trail serving a commercial area. That's a matter of personal perspective, preferences, and intended use of the trail. These commercial areas are also destinations for the transportation cyclist. Long distance recreational cyclists may (or may not) find this to be a problem. Some cyclists may find value in passing through commercial areas, because these areas not only offer retail opportunities, but also service

opportunities. It is a matter of perspective, and these perspectives vary widely within the cycling community and often vary by bicycling ability levels.

II. Background Materials Requested by the Planning Board

At the ICC Status Report #14 on May 1st, the Planning Board asked staff to be prepared to discuss several issues at the ICC plan worksession. Staff included responses to a few of these issues in their memorandum to the Board for the May 22nd worksession. This memorandum provides information on the final two topics: trail pavement types (and pervious pavement/surfaces) and cost estimates.

Hard surface trail pavement types

In anticipation of public testimony on the plan following the public meetings in March and April, we determined that the Board would likely require additional information on trail pavement types, particularly pervious pavement, as part of their deliberations on the plan and ultimate recommendations to the County Council, an in particular with regard to the portion of SP-40 passing through Upper Paint Branch Stream Valley Park and the Upper Paint Branch Special Protection Area. During the public meetings—and reflected now in public testimony on the plan—residents and cycling advocates opposed removing the master-planned hard surface trail that passes through Paint Branch without first knowing the specific environmental impacts of constructing a trail suitable for all trail user groups. Of specific interest was the use of pervious pavement and boardwalks, the latter of which was used for segments of the Matthew Henson Trail that likewise passes through environmentally-sensitive resources.

During June and July, transportation planning staff met with environmental planning and park planning staff to discuss these pavement types/materials and the extent to which environmental and natural resource planners are comfortable with their application on parkland, with a particular focus on the Upper Paint Branch Stream Valley Park and the impervious impacts. For shared use paths (aka bike trails) there are a number of surface type alternatives to conventional hard surfaces such as asphalt and concrete, in addition to the better known and more commonly used options such as natural surface, wood chips, and crushed stone. The less frequently used options include boardwalks and porous pavement.

Boardwalks

Boardwalks that are raised above the ground surface are generally used for conveyance over sensitive areas such as wetlands. Typical applications include trail access through sensitive natural areas in golf courses and parks. If installed properly, there is usually no significant construction-related soil compaction underneath the boardwalk. And because the boardwalk itself is raised above the ground, there is minimal load-related soil compaction due to the weight of the boardwalk and its users. Because of these factors, and also due to the fact that, if the boards have some space between them, precipitation can generally make its way to the soil beneath the boardwalk through the spaces between the boards, boardwalks are generally considered to have much lower general impacts on natural areas than hard surface trails, including lower impacts due to lower precipitation infiltration and associated increases in runoff.

Unless the boardwalk is elevated high enough to allow significant light underneath, there is usually, however, a complete loss of vegetation beneath the boardwalk.

Because of their acknowledged usefulness in managing impacts to sensitive areas, a boardwalk option could be considered for a sensitive forest or watershed such as Paint Branch. Feasibility aspects associated with a boardwalk option for Paint Branch, however, may be come into play considering the length of the potential trail, including construction costs, maintenance requirements, security issues and suitability for all users. In addition, construction-related impacts will generally be higher for a boardwalk option in a natural area compared with a natural surface trail, due to a larger area of disturbance needed for construction equipment. As a result, construction-related impacts for a boardwalk are typically intermediate between those associated with natural surface and hard surface trails.

The length of boardwalk is a significant factor for perceived and actual public safety. To meet impervious cover restrictions in the SPA, the entire trail from New Hampshire Avenue to U.S. 29 would need to be nearly continuous boardwalk. And because this is such an isolated area with few access points it's questionable whether trail users would feel safe using such a long facility. How park police patrol and respond to emergencies along long lengths of boardwalk also is an issue since boardwalks limit some emergency vehicle access. And maintenance staff may not be able to adequately patrol long lengths of boardwalk as well. That's not to say it's impossible, but challenging.

Porous Pavement

Porous pavement is another option that has been used as an alternative to hard surfaces. The County Department of Permitting Services (DPS) has recognized pervious sidewalks as appropriate to meet stormwater management (SWM) quality control and groundwater recharge requirements, including those in Special Protection Areas (SPAs). However, there are problematic factors with its use, especially through wooded areas. These factors include construction impacts, maintenance requirements, long-term performance, and cost-related considerations. These limitations are summarized below:

Construction-Related Issues:

Construction of a porous pavement trail would involve comparable lateral disturbance and soil compaction impacts because of a similar need to accommodate the heavy equipment required to construct the trail. In addition, construction of a porous pavement bike trail would involve even more construction-related impacts than a conventional hard-surface trail due to the need to excavate a suitable sub-base to receive and hold rainwater for infiltration. To adequately support maintenance equipment, the sub-base would need to be at least 12 inches deep. In areas with less permeable soils, such as Montgomery County, the sub-base excavation requirements, and resulting impacts, would be even greater. This additional excavation could be expected to have higher negative impacts in natural areas where tree root networks generally extend to the ground surface.

Interlocking grid paver systems could also be used for a bike trail. Although the need for heavy construction equipment would be less, the same construction impact concerns regarding the sub-base would apply. Disruption of the grid pavers by tree roots resulting in an uneven surface, however, would make its use in forested areas problematic.

Maintenance-Related Issues:

For porous pavement systems to function they require much more rigorous and frequent maintenance compared to conventional pavement. EPA recommendations for typical (urban) porous pavement applications include vacuum sweeping at least four times a year (with proper disposal of removed material), followed by high-pressure hosing. Potholes and cracks can be filled with patching mixes unless more than 10 percent of the surface area needs repair. Spotclogging may be fixed by drilling 1.3 centimeter (half-inch) holes through the porous pavement layer every few feet. The pavement should be inspected several times during the first few months following installation and annually thereafter. Annual inspections should take place immediately after large storms, when puddles will make any clogging obvious.

The maintenance requirements for porous pavement trails through forested areas such as Paint Branch would be significantly greatly than in urban settings. The large quantity of tree-derived organic debris such as leaves, seeds, nuts, bark, and twigs, as well as the tendency of foot and bike traffic to break up this debris and push it into the surface pores and into the aggregate itself, would pose major long-term maintenance issues.

Performance-Related Issues:

As with other stormwater BMPs, porous pavement performance over time usually degrades, even with proper maintenance. In the case of porous pavement, even regular vacuuming cannot remove 100% of the debris that finds its way into the pores at the pavement surface. Over time, this gradual accumulation of debris can cause an increasing decline in the ability of the porous pavement to infiltrate rainwater. In wooded areas, the additional organic debris accumulation and breakup due to normal use mentioned above would pose additional serious long-term effectiveness issues. Tree root invasion of the sub-base after trail construction could also compromise the functionality of a porous pavement trail in a forested area.

Experience with a 500-foot porous pavement path through a wooded area in U.S. Forest Service site in Pennsylvania showed that because of the plentiful organic debris, there were serious overall feasibility issues with regard to maintenance and effectiveness. Preservation and resource management staff at the site indicated that based on their pilot application, they would not recommend the use of porous pavement in wooded areas. In addition, the product manager of a company that designs and installs porous pavement has recently indicated that using porous pavement in a wooded area would be a questionable application.

Economic-Related Issues:

The extra design, construction, and special materials required for porous pavement systems such as sub-base excavation, stone fill, filter fabric, and porous pavement aggregate, all add to the

overall costs of porous pavement compared to conventional pavement types. Likewise, the extra maintenance requirements described above are also accompanied by higher yearly costs.

Cost Estimates

The Planning Board asked for cost estimates of the alternatives proposed in the plan in order to better understand the financial benefits and/or trade-offs involved with selecting one alternative over another. **Exhibit 6** is two-part table comparing cost estimates for the old and new alignments for SP-40, breaking down the trail corridor into 16 segments for the old SP-40 alignment and 26 segments for the newly proposed SP-40 alignment. Each segment assigned a level of implementation difficulty ranging from "0" to "3", with "0" indicating it is already built or programmed, "1" indicating that the ROW is present and level, and trail construction would likely have minimal utility/resource protection issues, "2" indicating some ROW acquisition is needed, and that construction would have moderate utility/resource protection issues; and "3" indicating that ROW is not present, and that construction would have extensive utility/resource protection issues likely requiring bridges and/or retaining walls. For planning purposes, we assume an average shared use path will cost approximately \$2.5M per mile to design and construct. For the more customized approach to this project, we assigned three cost ratings to different trail sections based on assumed design constraints. A rating of 3 is estimated to cost \$5M per mile (about the same as the Rock Creek Trail bridge over Veirs Mill Road), a rating of 2 is estimated to cost \$3M per mile (about the same as the Shady Grove Metro Access trail), and a rating of 1 costs \$1M per mile (about the same as the Falls Road East Side Hiker Biker path).

The estimated cost for the current SP-40 alignment is \$31.5 M for 13.0 miles, while the estimated cost for the Public Hearing Draft Plan alignment for SP-40 is \$19.2M for 14.2 miles. We estimate that change to the SP-40 alignment recommended in the Public Hearing Draft Plan would increase the end-to-end length by about 10%, and reduce the implementation cost by about one-third.

CK:tc

Exhibit 1. Summary of Public Hearing Testimony

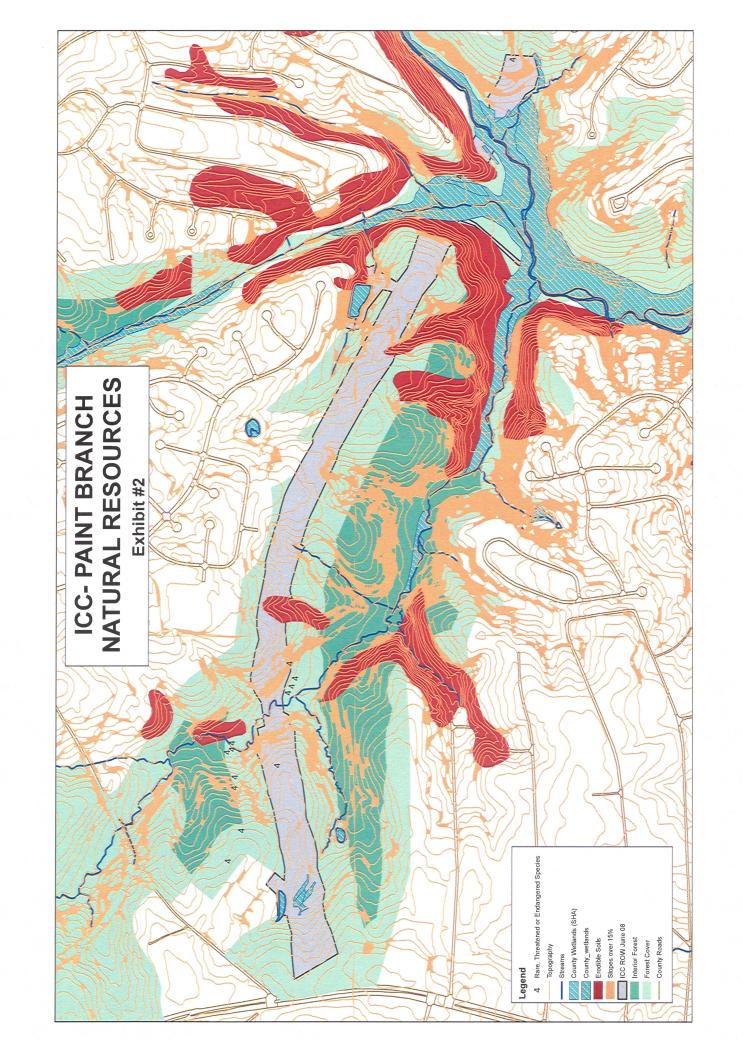
	Comment	Made by	Staff Response
Overall			T
_	The bike path should be built	Over 250 pieces of	The Public Hearing Draft Plan and supporting staff
	along the ICC.	correspondence –	memos describe the reasons for the staff recommendation
		see Attachment A	to shift portions of the bike path outside of the most
			environmentally sensitive areas and instead run the
			bikeway/trail along existing roads. Where appropriate,
			staff recommends improvements/upgrades to existing
			roads to ensure the route meets the needs of all potential
			users
2	The Planning Board shouldn't	Numerous letters	The Public Hearing Draft Plan recommends five changes
	accept the SHA bicycle and	and speakers	or additions to the SHA Bicycle and Pedestrian Plan:
	pedestrian plan in the ICC		1. Construction of a shared use path along
	Record of Decision		Needwood Road, between ICC and Muncaster
			Mill Road, and along Muncaster Mill Road from
			Needwood Road to Shady Grove Road
			2. Retention of the current SP-40 alignment along
			the north side of the ICC between Emory Lane
			and Georgia Avenue
			3. Adjustment of the alignments in the vicinity of
			Northwest Branch stream valley park to better
			connect local park activities such as the Trolley
			Museum with the ICC trail and Matthew Henson
			Trail from both the west (Layhill Road) and the
			east (Notley Road)
			4. Conversion of the portion of SP-40 along New
			Hampshire Avenue from bike lanes to dual
			bikeway to also include a shared-use path along

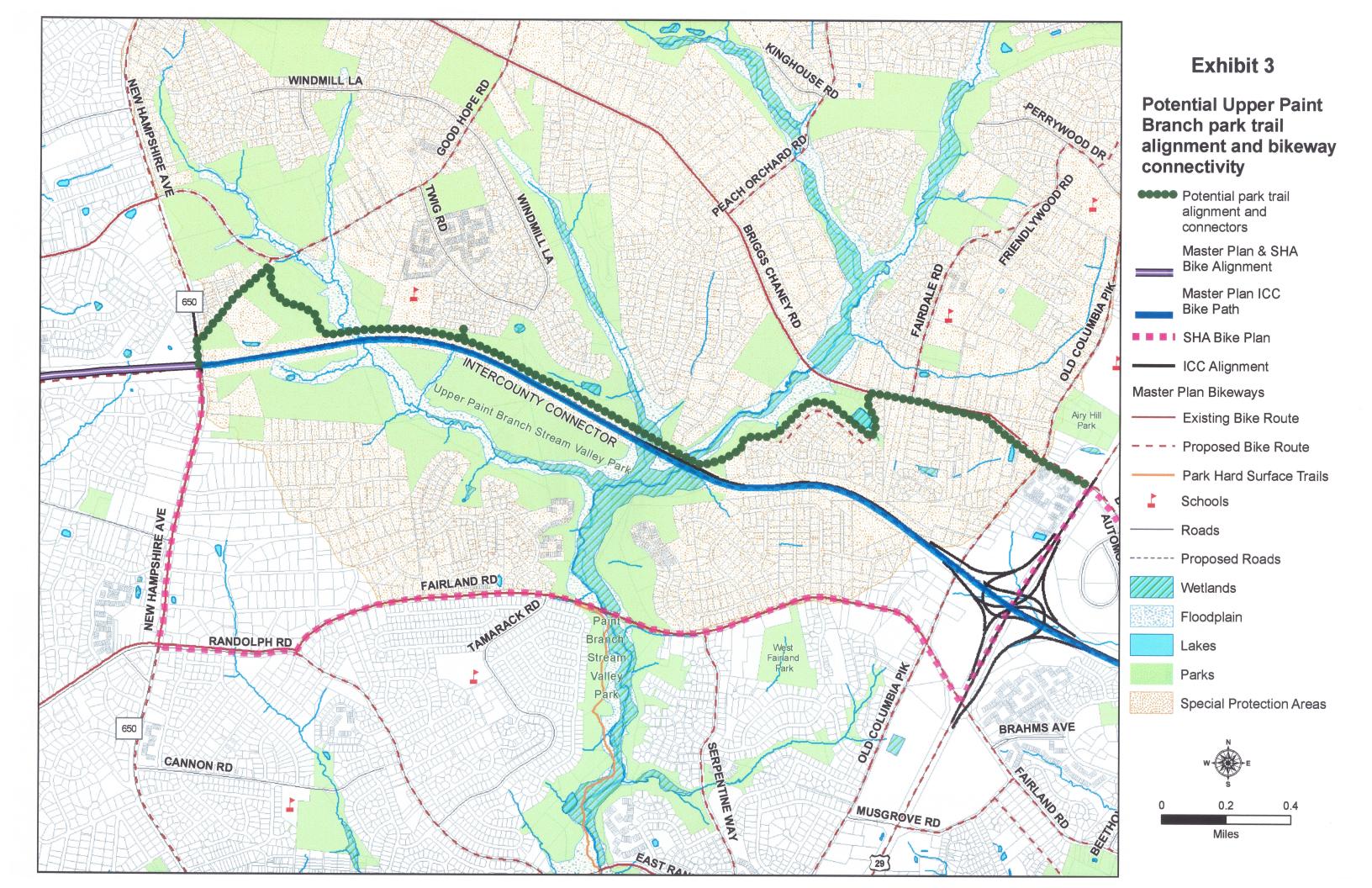
			the west side. 5. Retention of the current SP-40 alignment along the south side of the ICC between US 29 and Briggs Chaney Road
			These changes reduce the difference in length between the current SP-40 and the alternative route. Whereas the SHA Bicycle and Pedestrian Plan is 20% longer than the current SP-40 alignment, the Public Hearing Draft Plan is only about 10% longer than the current SP-40 alignment.
m .	Mixing bicycles with traffic on the roads is unsafe	Numerous letters and speakers	The Public Hearing Draft Plan recommends a complete and continuous shared-use path connection that will allow all users to be separated from traffic. Where a shared use path is proposed along the road with existing or previously proposed bike lanes, this plan amendment recommends both facilities, making these roads dual bikeways.
4	Where ICC ROW is not available, the trail should go through parkland	Morrison, Cochrane, Fritch, Steo	The Public Hearing Draft Plan recommends a Countywide Park Trail Corridor Study in Paint Branch Park. A similar trail is not recommended in Mill Creek Stream Valley Park due to environmental constraints, but is recommended to pass through Northwest Branch Park to connect to and through the Trolley Museum site.
5	A path that crosses driveways and side streets is less desirable than one through the park	Cochrane, Anderson, Morrison	The portions of the newly recommended alignment for SP-40 along existing roads in the Public Hearing Draft Plan connect to 16 local streets that would not otherwise have trail access, increasing bike connectivity. The same portions of the trail cross an average of 20 driveways per mile, nearly all for single-family residences where vehicular conflicts are rare (roughly trips 10 per day).
9	Impervious surfaces or	Cochrane, Fritch,	The environmental impacts associated with bike trail

	boardwalk should be used to mitigate environmental concerns	Anderson	construction include forest stand loss and grading impact both within and beyond environmental buffers. Pervious pavement technologies are insufficient to mitigate water quality concerns. Within the Upper Paint Branch SPA a paved trail would add approximately 2.5 acres of impervious surface that the County would be required to remove elsewhere in the SPA. Boardwalk could be a reasonable alternative to help minimize pervious impacts, but it has other problems that are documented in the staff memo.
7	The Corps of Engineers and EPA have indicated that a bike trail could be permitted	Numerous letters	The EPA does not permit local trails, but is supportive of bike initiatives. A Corps of Engineers permit is needed for any impacts greater than 1 acre for wetlands or waters of the US. Any implementing agency must demonstrate purpose/need and investigate reasonable avoidance/minimization options in permit consideration.
∞	The trail could be natural surface in sensitive areas such as the Upper Paint Branch SPA.	Chines, Fritsch, Steo	The Public Hearing Draft Plan recommends a natural surface trail in the Upper Paint Branch Park. Staff recommends clarifying the Planning Board Draft Plan to recommend study of a hard surface park trail.
6	Insufficient information exists regarding costs and impacts to make a decision	Cochrane, Gilliland	Natural resource information was provided at the public forums during the spring. This staff memorandum provides additional information on natural resources for the Upper Paint Branch Stream Valley Park. For the benefit of new readers, we have imported many sources of information from prior staff reports. This staff memorandum also provides previously unreleased estimates of capital costs and driveway crossings.
10	The master planned right-of-way for the ICC should be specified	County Executive	The Public Hearing Draft Plan does not recommend any change to the 300' wide right-of-way associated with a standard freeway design. We concur with the Executive

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Land use and zoning information should be included for portions of the ICC ROW being amended the Plan should be revised to move background materials to an Appendix Specific Areas The proposed connections in the vicinity of Layhill Road and Northwest Branch park are sensible The SP-40 connection between

		distance for bikers traveling from the east on the ICC trail
		to the Trolley Museum or points northwest on the ICC
		trail.
15	Consider Briggs Chaney Road as	Staff examined Cape May Road, Good Hope Road, and
	an option to Upper Paint Branch	Briggs Chaney Road as alternates to the Upper Paint
	SPA	Branch Stream Valley Park. The primary concern is that
		these roadways are entirely within the Upper Paint
		Branch SPA and, due to a more circuitous route would
		entail more impervious paving in the ICC (whereas the
		Public Hearing Draft Plan alignment along Randolph and
		Fairland Roads is outside the SPA boundary). The
		residential densities are lower along these roads so that
		fewer activity centers would be connected.
16	The concentration of commercial	The routing of a shared-use path to a commercial activity
	activity at the Colesville Center	center can be an asset to the bike path and the activity
	(New Hampshire and Randolph	center alike, and safety and access concerns need to be
	Road) is unsafe for bikes	addressed. Placing the shared-use path in the master plan
		would help guide commercial center redevelopment as it
		occurs to reduce the 16 driveways that exist in the three-
		quarter mile section along MD 650 and Randolph Road in
		and near the Colesville Center. Additional study of
		connection options through the center could also be
		considered as alternatives to the plan during the
		redevelopment process.





COUNTYWIDE PARK TRAIL CONCEPT: EASTERN COUNTY CORRIDOR

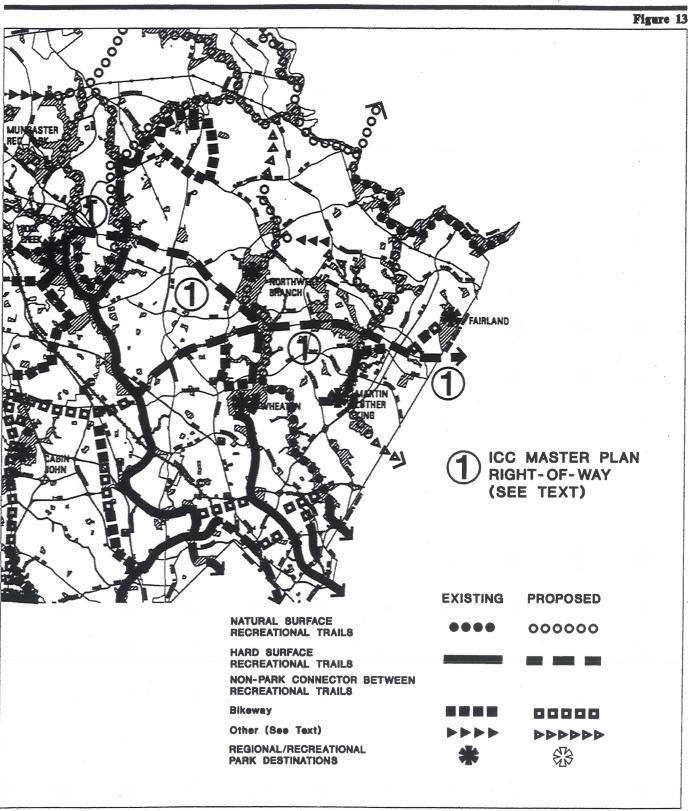


Exhibit 5. Estimated construction costs

SP-40 - Existing Plan

					Length					
Section	Roadside	From	То	Side of road	(mi) Existing	Difficulty	Unit	Cost	Tot	al Cost
1	ICC	Shady Grove Road	Nedham Road	south	0.70 No	2	\$	3.0	\$	2.1
2	ICC	Nedham Road	Needwood Road	south	0.85 No	3	\$	5.0	\$	4.3
3	ICC	Needwood Road	Emory Lane	south	1.95 Programmed	0	\$	-	\$	-
4	Emory Lane	ICC trail	ICC bridge	east	0.04 Programmed	0	\$	-	\$	-
5	ICC	ICC bridge	MD 97	north	0.09 No	2	\$	3.0	\$	0.3
6	ICC	MD 97	MD 182	north	2.22 Programmed	0	\$	-	\$	-
7	ICC	MD 182 East side Northwest	East side Northwest Branch Park	south	1.69 No	3	\$	5.0	\$	8.4
8	ICC "	Branch Park	Notley Road	south	0.36 No	1	\$	1.0	\$	0.4
9	Notley Road	ICC bridge	ICC bridge	west	0.09 No	2	\$	3.0	\$	0.3
10	ICC	Notley Road	MD 650	north	0.76 Programmed	0	\$	-	\$	-
11	ICC	MD 650	Batchellors Drive	north	2.08 No	3	\$	5.0	\$	10.4
12	ICC	Batchellors Drive	Old Columbia Pike	north	0.44 No	1	\$	1.0	\$	0.4
13	Old Columbia Pike	ICC bridge	ICC bridge	west	0.09 No	2	\$	3.0	\$	0.3
14	ICC	Old Columbia Pike	Trebleclef Lane	south	0.45 No	3	\$	5.0	\$	2.3
15	ICC	Trebleclef Lane	Briggs Chaney Road	south	0.76 No	2	\$	3.0	\$	2.3
16	ICC	Briggs Chaney Road	Prince George's County line	south	0.45 Programmed	0	\$	-	\$	-
TOTALS					13.03				\$	31.5

SP-40 - Proposed Plan

					Length					
Section	Roadside	From	То	Side of road	(mi) Existing	Difficulty	Unit	Cost	Tota	l Cost (\$M)
1	MD 115	Airpark Road	Redland Road	south	0.31 Yes	0	\$	-	\$	
2	MD 115	Redland Road	Applewood Lane	south	0.45 Yes	0	\$	-	\$	-
3	MD 115	Applewood Lane	Rock Creek Park west boundary	south	0.38 No	1	\$	1.0	\$	0.4
4	MD 115	Rock Creek Park west bour	Muncaster Road	south	0.60 No	3	\$	5.0	\$	3.0
5	MD 115	Muncaster Road	Needwood Road	south	0.10 No	2	\$	3.0	\$	0.3
6	Needwood Road	MD 115	ICC bridge	east	0.19 No	1	\$	1.0	\$	0.2
7	Needwood Road	ICC bridge	ICC trail	south	0.09 Programmed	0	\$	-	\$	-
8	ICC	Needwood Road	Emory Lane	south	1.95 Programmed	0	\$	-	\$	-
9	Emory Lane	ICC trail	ICC bridge	east	0.04 Programmed	0	\$	-	\$	-
10	ICC	ICC bridge	MD 97	north	0.09 No	2	\$	3.0	\$	0.3
11	ICC	MD 97	MD 182	north	2.22 Programmed	0	\$	-	\$	-
12	New park alignment	MD 182	Trolley Museum	north	0.38 No	3	\$	5.0	\$	1.9
13	Trolley Museum	Museum site west side	Bonifant Road	unknown	0.38 No	1	\$	1.0	\$	0.4
14	Bonifant Road	Trolley Museum	Notley Road	south	0.78 No	2	\$	3.0	\$	2.3
15	Notley Road	Bonifant Road	ICC	west	0.40 No	2	\$	3.0	\$	1.2
16	ICC	Notley Road	MD 650	north	0.76 Programmed	0	\$	-	\$	-
17	MD 650	ICC	Notley Road	west	0.56 No	1	\$	1.0	\$	0.6
18	MD 650	Notley Road	Randolph Road	west	0.30 No	2	\$	3.0	\$	0.9
19	Randolph Road	MD 650	Fairland Road	north	0.43 Yes, substandar	1	\$	1.0	\$	0.4
20	Fairland Road	Randolph Road	Tamarack Road	south	0.83 No	1	\$	1.0	\$	0.8
21	Fairland Road	Tamarack Road	Cedar Creek Lane	south	0.44 No	3	\$	5.0	\$	2.2
22	Fairland Road	Cedar Creek Lane	Old Columbia Pike	south	0.83 No	1	\$	1.0	\$	0.8
23	Fairland Road	Old Columbia Pike	US 29/ICC bikeway	south	0.25 No	3	\$	5.0	\$	1.2
24	US 29	Fairland Road	Trebleclef Lane	east	0.21 Programmed	0	\$	-	\$	-
25	ICC	Trebleclef Lane	Briggs Chaney Road	south	0.76 No	2	\$	3.0	\$	2.3
26	ICC	Briggs Chaney Road	Prince George's County line	south	0.45 Programmed	0	\$	-	\$	-
TOTALS					14.17				\$	19.2

Exhibit 6. Street and Driveway Crossings for Proposed SP-40

1 MD 115 Airpark Road Redland Road Redland Road Routh 2 MD 115 Redland Road Applewood Lane Rock Creek Park west boundary south 4 MD 115 Rock Creek Park west boundary Muncaster Road south 5 MD 115 Muntaster Road ICC bridge north 6 Needwood Road ICC bridge north 9 ICC Needwood Road Emory Lane south 10 ICC Needwood Road Emory Lane south 1 ICC Needwood Road Emory Lane south 1 ICC MD 60 ICC bridge south 1 ICC MD 82 ICC bridge south 1 ICC MD 82 Trolley Museum north 1 ICC MD 82 Trolley Museum north 1 Rowigh Road IT olley Museum Notely Road south 1 Noteley Road IT olley Museum Noteley Road <	Section	Roadside	From	To	Side of road	# Roads	# Driveways
MD 115 Redland Road Applewood Lane Applewood Lane MD 115 Rock Creek Park west boundary Nuncaster Road MD 115 Muncaster Road Needwood Road Needwood Road ICC bridge ICC bridge Needwood Road ICC bridge ICC trail ICC Needwood Road ICC bridge ICC MD 97 ICC bridge ICC MD 97 MD 97 ICC MD 97 MD 97 ICC MD 97 MD 182 ICC MD 97 MD 182 Notley Museum Museum Notley Road Bonifant Road ITrolley Museum Notley Road Notley Road Bonifant Road ICC MD 650 ICC Notley Road MD 650 ICC Notley Road Randolph Road Tamarack Road Fairland Road Randolph Road Tamarack Road Cedar Creek Lane Fairland Road Gedar Creek Lane Old Columbia Pike ICC ITrebleclef Lane Irreblecl	1	MD 115	Airpark Road	Redland Road	south	T	3
MD 115Applewood LaneRock Creek Park west boundaryRock Creek Park west boundaryRock Creek Park west boundaryMD 115Muncaster RoadNeedwood RoadNeedwood RoadICC bridgeICC bridgeICCNeedwood RoadICC bridgeEmoryICC trailICC bridgeICCMD 97MD 97ICCMD 97MD 182ICCMD 97MD 182ICCMD 97MD 182ICCMD 97MD 182ICCMD 97MD 182ICCMD 182Trolley MuseumIndiey RoadBonifant RoadICCICCNotley RoadICCMD 650ICCNotley RoadMD 650ICCNotley RoadRandolph RoadTamarack RoadFairland RoadFairland RoadTamarack RoadCedar Creek LaneFairland RoadTrebleclef LaneIrrebleclef LaneICCTrebleclef LaneBriggs Chaney RoadICCTrebleclef LanePrince George's County lineICCBriggs Chaney RoadPrince George's County line	2	MD 115	Redland Road	Applewood Lane	south	0	14
MD 115Rock Creek Park west boundaryMuncaster RoadMuncaster RoadNeedwood RoadICC bridgeICC bridgeNeedwood RoadICC bridgeICC trailICCNeedwood RoadEmory LaneICCICC bridgeICC bridgeICCICC bridgeICC bridgeICCICC bridgeICC bridgeICCMD 97MD 182ICCMD 97MD 182New alignmentMD 182Trolley MuseumTrolley MuseumNotley RoadNotley RoadNotley RoadICCNotley RoadICCNotley RoadRandolph RoadMD 650ICCNotley RoadRandolph RoadTamarack RoadFairland RoadFairland RoadTamarack RoadCedar Creek LaneFairland RoadTamarack RoadITrebleclef LaneICCICCUS 29/ICC bikewayICCTrebleclef LaneBriggs Chaney RoadICCTrebleclef LaneBriggs Chaney RoadICCTrebleclef LaneBriggs Chaney RoadICCTrebleclef LaneBriggs Chaney Road	co	MD 115	Applewood Lane	Rock Creek Park west boundary	south	2	8
MD 115Muncaster RoadNeedwood RoadNeedwood RoadICC bridgeICC bridgeNeedwood RoadICC bridgeICC trailICCICC trailICC trailICCICC bridgeICC bridgeICCICC bridgeICC bridgeICCICC bridgeICC bridgeICCICC bridgeICC bridgeNow alignmentMD 182ITrolley MuseumTrolley MuseumMuseum site west sideBonifant RoadBonifant RoadITrolley MuseumNotley RoadNotley RoadICCMD 650MD 650ICCNotley RoadRandolph RoadFairland RoadFairland RoadFairland RoadRandolph RoadTamarack RoadFairland RoadTamarack RoadCedar Creek LaneFairland RoadTamarack RoadCedar Creek LaneFairland RoadCedar Creek LaneOld Columbia PikeFairland RoadFairland RoadTrebleclef LaneICCTrebleclef LaneBriggs Chaney RoadICCBriggs Chaney RoadPrince George's County line	4	MD 115	Rock Creek Park west boundary	Muncaster Road	south		
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MD 650ICCNotley RoadNotley RoadMD 650Randolph RoadFairland RoadFairland RoadTamarack RoadTamarack RoadFairland RoadCedar Creek LaneCedar Creek LaneFairland RoadCedar Creek LaneOld Columbia PikeFairland RoadOld Columbia PikeUS 29/ICC bikewayUS 29Fairland RoadTrebleclef LaneICCTrebleclef LaneBriggs Chaney RoadICCBriggs Chaney RoadPrince George's County line	16	CC	Notley Road	MD 650	north		
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Randolph RoadMD 650Fairland RoadFairland RoadTamarack RoadTamarack RoadFairland RoadCedar Creek LaneOld Columbia PikeFairland RoadOld Columbia PikeUS 29/ICC bikewayUS 29Fairland RoadTrebleclef LaneICCTrebleclef LaneBriggs Chaney RoadICCBriggs Chaney RoadPrince George's County line	18	MD 650	Notley Road	Randolph Road	west	1	5
Fairland RoadRandolph RoadTamarack RoadFairland RoadCedar Creek LaneCedar Creek LaneFairland RoadOld Columbia PikeUS 29/ICC bikewayUS 29Fairland RoadTrebleclef LaneICCTrebleclef LaneBriggs Chaney RoadICCBriggs Chaney RoadPrince George's County line	19	Randolph Road	MD 650	Fairland Road	north	1	11
Fairland RoadTamarack RoadCedar Creek LaneFairland RoadCedar Creek LaneOld Columbia PikeFairland RoadUS 29/ICC bikewayUS 29Fairland RoadTrebleclef LaneICCTrebleclef LaneBriggs Chaney RoadICCBriggs Chaney Road	20	Fairland Road	Randolph Road	Tamarack Road	south	2	11
Fairland Road Cedar Creek Lane Old Columbia Pike Fairland Road US 29/ICC bikeway US 29 Trebleclef Lane ICC Trebleclef Lane Briggs Chaney Road ICC Briggs Chaney Road Prince George's County line	21	Fairland Road	Tamarack Road	Cedar Creek Lane	south	0	0
Fairland Road Old Columbia Pike US 29/ICC bikeway US 29 Fairland Road Trebleclef Lane ICC Trebleclef Lane Briggs Chaney Road ICC Briggs Chaney Road Prince George's County line	22	Fairland Road	Cedar Creek Lane	Old Columbia Pike	south	2	24
US 29 Fairland Road Trebleclef Lane ICC Trebleclef Lane Briggs Chaney Road ICC Briggs Chaney Road Prince George's County line	23	Fairland Road	Old Columbia Pike	US 29/ICC bikeway	south	0	8
ICC Trebleclef Lane Briggs Chaney Road ICC Briggs Chaney Road Prince George's County line	24	US 29	Fairland Road	Trebleclef Lane	east		
ICC Briggs Chaney Road Prince George's County line	25	CC	Trebleclef Lane	Briggs Chaney Road	south		
	26	ICC DOI	Briggs Chaney Road	Prince George's County line	south		

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Total

ATTACHMENT A

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		Keep in	Ď	20				
Name	alignment ma	master plan	Spoke	Spoke Attended	Letter	Other	Alternative Alignments	Address
Todd Andrews	1	1			1			
Colleen Mitchell	1				1			
Kevin Maresca	1				1	1 User of other trails		
David Smith					1	1 Keep trees		Silver Spring
Kelly Gray	-	Н			1	1 Bike rider		Takoma Park
Alison Dewey	Т				1	1 Bike rider		Rockville
						Bike commuter 35 miles		
Karen Weiss	П				1	round trip		Rockville
David Jorgenson	1				1			Baltimore
Len Singel					1			Silver Spring
						can't commute b/c lack of		
Brigette Buchet	1				1	safe connection		Rockville
Samantha Smith	1				1			Bethesda
Sergiy Ponomarov	П				1			Bethesda
Dennis Rodrigues	П				1	1 use bike to shop/errands		Gaithersburg
Wayne Phyillaier	Н				1			Silver Spring
Emily Littleton	П				1			Ellicott City
Edward Rangel	1				-	don't site envir.concerns as argument for no trail		Derwood
Jennifer Haliski	1	Н			1			Silver Spring
Lawrence Bleau	П	Н			Н			College park
Dave Bender	П				1	1 realitor/cyclist		Germantown
Todd Hardin	1				1			Rockville
Bill Norwood	П	1			1			Greenbelt
Dan Leggett	1	Н			Н	commute 25 mile round 1 trip to work (unsafe route)		Chevy Chase
Aleksey Vysokolov	1				1			Rockville
Benjamin Foster	1				1			Greenbelt
Louis Hostler	П				Н	commute by bike and transit regularly		Wheaton
Shannen Hill	1	П			Т	1 avid cyclist		College park
Emma Barrios	П				1	want options for east to 1 west travel		Silver Spring
Dave Vannier	1				1			Bethesda
Peter Mathers	Н	1			1			Chevy Chase

Name	alignment	master plan	Spoke	Attended	Letter	Other	Alternative Alignments	Address
		,				commute to work want		
Terry Gitnick		1			1	1 path not on-road		Derwood
Beatrice Grabowski		1			1			Silver Spring
Marti Scheel		1			1	1 No road, but path		Greenbelt
Matthew Jones		1			1			Silver Spring
Iraima Alonso		П			1			Chevy Chase
Patrick Dobak		1			1	bike trails are overcrowded & property values go up w/ trail		Cabin John
Brian Beard		П			1			Silver Spring
Julie Siegel		_			П			Takoma Park
Raymond Peterson		1			1			Greenbelt
Quincy Yuen		1			1			Gaithersburg
John Lawrence		1			1			Burtonsville
lan Litmans		1 1			1			Silver Spring
Maya Lachman		1			1			Chevy Chase
Pamela Blumenthal		-				mentioned cyclists that was hit		Bethesda
Richard Price		1			1			Glenn Dale
Kathy Daniel		1 1	1		1 1			Bethesda
Chip Schwartz		1			1			Gaithersburg
Mark Green		1			1			Bethesda
Jason Kimelman- Block								Silver Spring
Rohn Brown		1			1			Potomac
Peter Burkholder		1	1		1 1			Hyattsville
Anke Meyer		1			1			Hyattsville
George Wenchel		1			1			Chevy Chase
Charles Abod		1			1	1 avid cyclists		Rockville
Susan Walther		7				take away 1-lane from 1 cars & give to bikes		Montgomery Village
Harvey Sugar		1			1			Takoma Park
Hannah Moulton		1			1			Takoma Park
Hugh McFarland		1			7	commute for 14 yrs by bike		Rockville
Alexander Meitiv		1			1			Silver Spring
Patrick Wojahn		1			1	1 avid cyclists		College park
Ashish Gupta		П			1			Silver Spring

Name	alignment ma:	master plan S	spoke Atte	Attended Le	Letter Other	Alternative Alignments	Address
Dan Klein	1				1		Bethesda
Nicole Thomas	1				1		Olney
David LaRoche	1				1		Bethesda
Jerry McCoy	1				1		Silver Spring
Brad Conad	П				1		Berwyn Heights
Carla Krivak	1				1		Potomac
Andrej Krasnansky	Н				1 bike commuter		Chevy Chase
William Kasper	П				П		Silver Spring
Jonathan Morrison	1	1	1	1	1	MHT ext. needs to be in Park MP	
Alan Migdall	1	1			Complete alt. study for 1 other bike alts.		Gaithersburg
Eric Eisen	\leftarrow				Complete alt. study for 1 other bike alts.		Bethesda
Connie and Steve							
Jacobson	1				1		Rockville
Joe Foley	П				1		Silver Spring
Lynne Oliver	1				Good alignment for 1 commuters		Derwood
Marc Gwadz	1				1		DC
Joel Gwadz	1				1 look at PA's bikes		DC
Chris Larkin	1				commute by bike & want 1 safer route		Silver Spring
					son commutes by bike		
Elaine Larkin	1				down Beach Dr, which		Rockville
Tom Vaughn	1						Olney
Roald Keith	1				1		Rockville
Michael Klasmeier	1				1		Crofton
Tom Jelen	1				Н		Rockville
Dan Kluckhuhn					_		Silver Spring
Andy Goglia					No road, but natural 1 surface path		Silver Spring
Bruce Ng	-				1		Rockville
Cristina Grohowski	П				1		Germantown
Eva Collins	1				1		Columbia
Michelle Larsen	П				-		Chevy Chase

Name	alignment	master plan	эроке	Attended	Janaa	Other	Aiternative Ailgnments	Address
Jennifer Kalmanson		1			7	1 want bus and bike facility		Laurel
Sigrid Haines		1			1			Gaithersburg
Paul Meloan		1			1			Gaithersburg
Barry Miller		1			1			Bethesda
Allison Wright					1	commute by bike to DC & Alexandria		Wheaton
Steve Ketchum		1			1			Poolesville
Marc Currie		1			1			Gaithersburg
Claudia Seelig		1			1			Rockville
Robbe Smith	Ţ	1			7	1 biker; nat. trail & horses		Olney
John Beutler		1			1			Union Bridge
Herbert Gross		1			1			UMD
Bob Bloomfield		1			7			Clarksburg, MA
Evelyn Egizi		1		1	7	1 commute by bike 20 mi		Silver Spring
Rob Hanson	. 7	1			-			Cheverly
Kevin Parker	• 7	1			1			Greenbelt
Robert Fox	. 1	1			1			Rockville
Frank Loversky	. 1	1			1			Chevy Chase
Robert Samis	• 1	1			1			Potomac
Beatrice Newbury	<i>τ</i> 1	1			7	ride bike to MD for errands		DC
Andrew OBrien	• 7	1			1			Bethesda
Anna Priddy	D	1			7	1 uses Capital Crescent		Silver Spring
Christopher Redlack	C	1	×		_	shop by bike & use 1 existing trail systems		Silver Spring
James McNeely	,	1				commute by bike & car PG 1 to SS or CC ride to DC		Crofton
						commute by bike &		
Craig Jordan		1			1	1 recreational		Derwood
Susanne Lowen	, 1	1			1			Takoma Park
Jennifer Dickey	, 7	1			П			North Bethesda
Haiqing Li	¢ 7	1			1			Rockville
Felicia Black	· 1	1			1	1 Look @ Portland OR		Olney
Hans Riemer	·-1	1	1		1 1	need E-W bike route		Silver Spring
Lisa Vasquez	-1	1			1			Silver Spring
Anna Couvillon		1			1			Rockville
A	,-	-						

Name	alignment master plan	lan Spoke Attended	Letter Other	Alternative Alignments Address
,	•		commute by bike from	-
Kandy Kubetin	1	1	1 Takoma Park	l akoma Park
Bill Dahut	T		П	Gaithersburg
Nancy Seibel	1		1 don't ride on crowded rds	Silver Spring
Brian Shaw	-		1 User of other trails	Bethesda
John Wetmore			questions to consider	Bethesda
			-	Rockville Bike Advisory
Nancy Breen			1 support lanes on ICC	Committee
James Hudnall	7	T	I Oxon Hill Bike & Irail	Oxon Hill
Carolyn Avery	П			Bethesda
Oliver Baumann	1		7	DC
Blake Altman	1		7	La Plata
David Cohen	1		biker & volunteer park 1 police biker	Gaithersburg
Neal Smith	T		1	Severna Park
Judith Gray			1	Severn
David Kosterlitz	7		1 want bike accomodation	Bethesda
Ta-Mao (Eric) Hwang	1		1 safety needed of path	North Potomac
Barry Polisar	Т		1 biker & uses trails	Burtonsville
Erik Moe			1	DC
Andrew Medley	1		1 path needed b/c danger	DC
John Shea	1		bike commuter 5 yrs seen 1 recent increase	Silver Spring
Ernest Miller	7	7	1 family use trails	Silver Spring
Steve Harvey		17	bike commuter Capital 1 Crescent Trail	Bethesda
Evangelos Xydis	1		use ICC path to commute 1 to work	Olney
Geng Chan	1		1	Olney
Chris Leins		П	1 1	Rockville
Dominique Lorang	7		1	Potomac
Craig Syndal	1		1	Ellicott City
William Small	1		1 bike commuter	Annapolis

William Beck Pete Clarke	angmuem	master plan	Spoke	Spoke Attended	Letter	Other	Alternative Alignments	Addiess
Pete Clarke	Н				Н	New Hamp. too busy; unsafe; work at US Army 1 Research Lab. in Adelphi	trail next to ICC	Woodbine
	1				1			Damascus
Lou Viner	1				Н	30-yr bike commuter; dangerous to bike b/w 1 Mont. Co. and P.G. Co.		Bethesda
Tamzin Smith	1				1	bike commuter; 18-yr. Rd. 1 cyclist		Bethesda
lan Morrison	1				Т	compared Capital 1 Crescent Trail use		Silver Spring
Elisabeth Fetting	1				7	Commute from Frederick to Bethesda; Why isn't SHA including bike lanes?		Frederick
Stephen Grau	H				Н	would use trail to commute by bike, but uncomfortable traveling 1 with vehicles		Brookeville
Tom Pollak	1				1			Kensington
Fred Pugh	н				H	would travel on trail from 1 Howard Co. to Rockville		Laurel
Craig Moloney	1				1			Rockville
Jenny Leeman	1				1			DC
						should call it a shared use path/trail or multi-use path/trail; cheaper to built it with something else; against MDOT policy to not accommodate		Native Montgomery
John Thomas David Karasik						bike/ped. in projects		County resident Rockville

Name	alignment	master plan	Spoke	Attended	Letter	Other	Alternative Alignments	Address
Rishi Kurichh		T-1			4	Army Corps of Engineers have stated on record that the trail could be built in an environmentally sensitive way through the 1 parks		Bethesda
Steven Smith		н	Н		-	work with state to build 1 trail in future		Takoma Park
Barry Polisar		1		1		e.g. Mt. Vernon bike trail through wetlands; want continuous path instead of sections; don't want bike 1 lane, but path	e.g. Mt. Vernon bike trail through wetlands; want continuous path instead of trail could be non-impervious sections; don't want bike materail (crush stone); wooded lane, but path planks	
George Banville		1			1			Rockville
Casey Anderson			1	1		don't want path with lot of curb cuts along busy rds.; interim facilities should not replace permanent solutions; mentions bikes prohibited from nat. surface trails in 1 parks	alt. route & surfacing ok; connections among segments of trail pending completion of full route;	
Ronald MacNab				1	1		created maps showing hiker/equestrian trails in park	Montgomery Co. Coordinator, TROT
Valerie Matthews				1	1	cyclists; nat. surface should accommodate all 1 range of riders	route should be easy to follow for 1st time rider; still need destinations (park, restaurant, and commuting)	Ashton
				,		use trails 3-4 time/month; do not like detours along Fairland, New Hampshire, Bonifant; want	use nat. trail service at edges of park; pervious trails & outside wetland area; contiguous trail using bridges, raised paths, nat.	A
Corrie bovier			7			WABA, & others will meet	patri	Montgomery Bicycle
Jack Cochrane			1	,	1 1	1 to discuss goals & offer		Advocates

Name	alignment	master plan	Spoke	Attended	Letter	Other	Alternative Alignments	Address
Sandy Irving	1				7	don't want on-rd 1 connectors		Greenbelt
Marylyn Westervelt	1				1	meetings wasn't well publicized; don't ride on streets; e.g. Allegheny Highland trail	dedicated trail doesn't need to be paved	Silver Spring
David Buchholz	П				1			Silver Spring
Eric Cotter	1				1			Gaithersburg
Joseph Romeo	7				1			Potomac
C. Mark Eakin					-	bike commuter on Sligo		Silver Spring
Deb Fagan					-			Takoma Park
Eric Goodall					1 -			Silver Spring
Amy Carr								Bethesda
						bike commuter; bike mentor through MDOT website; prefer bike lanes		
Peggy Ollerhead	1				1	to shared road		Towson
Joe Altobelli	1	1			-	State & county may be jeopardizing fed. hwy. funding b/c multimodal 1 option not being met		Silver Spring
	1				1	2010		Siling Isalic
Barry Childress	1	1			1		Senate Bill 492 removed mandatory prohib. of bikes on toll Baltimore Bicycling bridges; utilize ICC bridges Club	Baltimore Bicycling Club
Paul Brown	1				1			Silver Spring
Carol Bonkosky					1	want safe route b/w Laurel & Rockville		Adelphi
Rodger Rawls	1				1			Rockville
Gareth Buckland	-				1			Frederick
Dave Ennist	1				1	want trail without car		Bethesda
John Santell	П				7	want uninterrupted trail to jog, bike, walk		Gaithersburg
Abigail Rome	1				1			Silver Spring
Bruce Hebblethwaite	П				7	want separate facilities for 1 cars and bikes		Cheverly
Mark Williams	1				1			Silver Spring
Amv Wilson	1	П			1			Adelphi

Name	alignment	master plan	Spoke	Attended	Letter	Other	Alternative Alignments	Address
Todd Cranford	1				1			Annandale, VA
Iva Maxwell	1				kids (e.g. R	kids (e.g. Rock Creek Park Trail)		Gaithersburg
Joseph Hage	1				-			Bethesda
Dr. James Yang	1				1			Silver Spring
John Atwater	1				1			Bethesda
Stephen Turow	1				1			Bethesda
Jochen Schaefer	1				ride bike from R 1 Eastern Market	ride bike from Rockville to Eastern Market		Rockville
Erin Morrow	1				1 demand for rec. trails	or rec. trails		Silver Spring
David Cheney	1				e.g. Beijing 1 Pittsburgh	e.g. Beijing, Germany, Pittsburgh		Silver Spring
Mary Alexander	1	1			П		build path with ICC	Olney
Thomas Boyce	Н				avid cyclists; need 1 connectivity	ts; need tv		Winter's Run (Derwood)
					Smart Gro	Smart Growth doesn't		
Tom Mullins	1				1 mean no bikes	oikes		Bethesda
Emery Ford	1				1			Kensington
Cristina Price	1				Н			Rockville
Laura Betz	1				continuou 1 with kids	continuous path; use trail with kids		Kensington
Richard Monastersky	1	1			don't like New 1 Hampshire/Eas	don't like New 1 Hampshire/East Randolph		Silver Spring
Cecily Baskir	1				1			Chevy Chase
							bike lanes ok but shouldn't bemoved into traffic; soln. Narrow medium strip b/w carriage ways, narrowing/eliminate hard shoulder/emergency over the sensitive section, provide elevated	Po
Dr. Mark Flugge	1				-		bike trail	Bethesda
Gordon Goeke	1					bike commuter 30-mi; danager = driveways		Kensington
April Terrell	1				1			Silver Spring
Deborah Steplock	1				1 bike comn	1 bike commuter >5 yrs.	delete car lane	Baltimore
Jim Heller	1				1 keep trail intact	intact		Chevy Chase

Name	alignment	master plan	Spoke	Attended	Letter	Other	Alternative Alignments	Address
Gareth Buckland	duplicate				duplicate			
Charles Mullins	1				1	1 Fairland Rd. isn't safe	want continuous path	Olney
Charles Deering	1				1	detours don't offset ICC	proposed detours may have rec. value	Damascus
Kelly Appler	1	_			1			Rockville
David Sieradzki	1				1		take a car lane for bikes	Bethesda
Howard Albin	T	1			1	8 yr biker		Bethesda
Augusto Macedo	1				Н	1 build ICC with trail		Brookeville
Chris Stringer	1				1			Silver Spring
Sule Williams	1				1			Laurel
Jessica Flugge					1			Bethesda
Caroline Handorf	1				1			Bethesda
Scott Schang	1	1			1			Takoma Park
Andrew Burns	1				1			Bethesda
Jean Buergler	7				. 1	bike to/from work & activities abt. 5 mi.		Chevy Chase
Robert Musil	1				1			Bethesda
Richard Walther	1				1			Montgomery Village
Steve Van Pelt	1	1			1			Takoma Park
Michael Press	1				7	bike commuter/recreational 1 biker		North Potomac
Christine Turner	T				1			Takoma Park
David Super	I				1			Silver Spring
Jerome Jump	1				1	want safe option	don't like New Hampshire as alt.	Bethesda
Donald Boardman	1				1	on-rd bikers 25 yrs		Bethesda
Carol Schaffer	1	1			1			Silver Spring
David Fouse					1	want safe route	build path with ICC	Silver Spring
Phyllis Derrick					П	husband & her bike 1 commute to DC		Silver Spring
Norbert Wendlandt	1	,			1			Gaithersburg
Thomas Buzas	П				1			Kensington
Steve Mohr					1	1 bike commuter		Silver Spring
Lisa Taber	1	1			1			Chevy Chase
Raymond Heinsman					1	\		Bethesda
Heidi Sorensen	1				1			University Park

	parmound	uccep m					
Name	alignment	master plan	Spoke	Spoke Attended	Letter Other	Alternative Alignments	Address
Tom Vaughn	duplicate				duplicate		Olney
Timothy Meinberg		1			1		Silver Spring
Claudia Seelig	duplicate				duplicate		Rockville
Carolyn Williams		1			1 must have connectivity		Bethesda
Maria Kozloski		1 1			1		Bethesda
Nate Wall					live in Longmead Crossing;	ŭď	Cilver Caring
		1			T DIVIDED TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO THE TOTAL THE TOTAL TO T		Silvel optilig
						Not enough info abt alt for	
						Needwood area w/ ROW; support alt. alignments for Northwest	t
						Branch; Upper Paint Branch -	
						don't like detour alt. for bike since	e
Arthur Holmes						not adding to bike facilities	DOT

Appendix A

Balancing Recreational, Transportation, and Environmental Concerns

Trails are one of Montgomery County's most popular recreational facilities and can be enjoyed by all age groups as well as persons with disabilities. Trails are used for transportation to jobs and community destinations as well as recreation and can form an important network to connect parks with nearby residential communities. Trails also provide access to natural areas and conservation areas, thereby fostering public appreciation for the beauty, serenity, and intrinsic value of undeveloped parkland.

To protect and preserve sensitive natural and cultural resources while concurrently making available to the public a variety of high-quality trail experiences, the trail planning process includes the following elements:

Understanding The Types And Quality Of Environmental Resources In The Park System. All trail planning efforts will be preceded by a sensitive areas analysis. With the aid of a computer-based mapping system, the following natural and cultural resources will be identified and evaluated:

- streams and their buffers
- steep slopes
- hydric soils
- archaeological sites
- historical resources
- 100-year floodplains
- highly erodible soils
- wetlands and their buffers
- habitats of rare, threatened, endangered, and watchlist species

Anticipating the Need for Recreation

To better understand recreational demand, M-NCPPC prepares the <u>Park Recreation and Open Space Master Plan (i.e., the PROS Plan)</u>, which is updated every 5 years. This important functional plan provides broad policy guidance for the acquisition, planning, development and management of the County park system. The basic purpose of the PROS Plan is to answer two questions:

What is the demand for recreation facilities and programs? and

What important natural and cultural resources need to be preserved?

As reported in the 1997 Park, Recreation and Open Space Survey for Montgomery County, slightly over 75% of the survey respondents reported visiting a County park within the last year (i.e., 1996) to enjoy nature or the outdoors. However, nearly 60% of the respondents also visited a part to use a playground, 55% used parks for picnicking, and 41% used parks for playing field sports such as baseball and soccer. The 1996 survey also showed that the activities most often participated in by

A

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adults for recreation in Montgomery County were walking and bicycle riding, respectively. The survey clearly reveals the importance of County parks for both stewardship of natural and cultural resources and recreation, especially recreational activities associated with trails.

Several questions in the 1996 survey were specifically designed to learn more about trail use in County parks. The responses were as follows (see Figure 1-A):

Well over half of those surveyed (67%) had used paved park trails in the last year: 74% for observing nature, 52% for walking, 41% for bicycling and 33% for running or jogging.

Fifty-eight percent of the respondents indicated that they had used unpaved trails in the last year: 90% for walking, 85% for observing nature, 28% for running or jogging, 17% for mountain biking and 5% for horse-back riding.

Across the County, responses were evenly divided between those persons who preferred paved trails (35.1%) and those who preferred unpaved trails (34.2%). Potomac area residents showed a higher use and preference for unpaved trails, while I-270 corridor and Silver Spring residents indicated a somewhat higher preference for paved trails. From these specific survey results, staff inferred that in general, areas of higher population density are better served by paved rather than unpaved trails.

Evaluating the Potential Impacts of Trails on the Resource. There are many concerns regarding the negative impacts of trails on natural and cultural resources. Forest fragmentation; edge-effect; the spread of exotic, invasive plant species; cow-bird parasitism of song-bird nests; heightened mammalian predation rates; soil compaction; trampling of vegetation; plant collection; localized increases in stormwater runoff; and artifact hunting are some of the common shared concerns.

Trail related impacts, such as those listed above must be identified and mapped as "constraints".

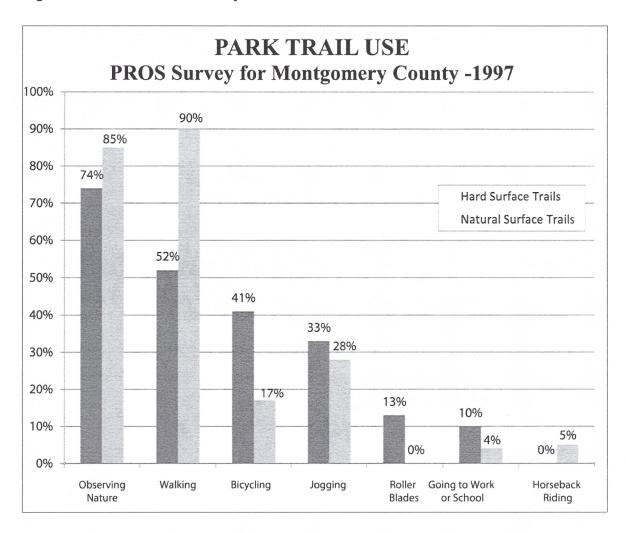
Balancing stewardship and recreation goals and objectives. The General Plan Refinements Goals and Objectives, the PROS Plan and this Plan's Guiding Principles underscore the need for both stewardship and recreation in County parks. The sensitive areas analysis and subsequent field work provides the basis for setting stewardship goals as well as evaluating potential impacts of future recreation on the resource.

Planning and implementing projects in a manner that avoids minimizes, and mitigates for negative impacts to high quality resources. Appendix A includes examples of environmentally sensitive trail design techniques and outlines the trail planning approach used in parks with sensitive environmental features.

Monitoring the long-term success of our efforts to balance stewardship and recreation. Once the trail is opened, regular and routing monitoring must occur to ensure that any negative environmental effects are addressed in a timely manner. A monitoring program is essential to understanding what design techniques are most effective in making a trail "sustainable" both from a recreation and stewardship perspective.

Interpreting the results of the trail program to the public. The concept of stewardship is one of balance. Educating the public as to how the trail program achieves balance at the countywide level in terms of protecting sensitive features and providing recreation opportunities is essential to this Plan's success.

Figure A1 - Park Trail Use Survey



Appendix B

Hard Surface Trail Planning Guidelines

The Countywide Park Trails Plan proposes an interconnected system of hard surface and natural surface trails. This concept establishes the framework for trail planning at the corridor level.

Of the eight corridors identified in the Countywide Park Trails Plan, four include hard surface trails. Hard surface trails provide the greatest recreational and mobility opportunities but they also pose the greatest environmental concerns. For this reason, hard surface trail proposals within a corridor must be carefully studied.

The following approach will be used in the Trail Corridor Plan process to achieve a balance among environmental, recreation and mobility objectives

Identify character and quality of environmental resources in the corridor.

Mapping and evaluation of the following natural features is the first step in the Trail Corridor Planning process:

- Streams and stream buffer
- 100-year floodplain limits
- Wetlands & wetland buffers
- Highly erodible soils
- Steep slopes
- Habitats of rare, threatened, endangered, and watchlist species
- Archaeological and historic sites

When the trail corridor involves a stream valley park, this step includes determining if a trail can be located outside the stream valley buffer and associated areas of significant environmental features. This process is outlined in Appendix C.

Identify how a hard surface trail would contribute to the mobility and recreational opportunities in the corridor.

Answering this question requires an understanding of land use patterns, population densities, and community destinations and proximity to other hard surface trails in the community and county.

Identify the potential impacts of a hard surface trail on sensitive features

As noted in the Plan Introduction, negative effects such as forest fragmentation, soil compaction and the spread of exotic, invasive plant species need to be identified.

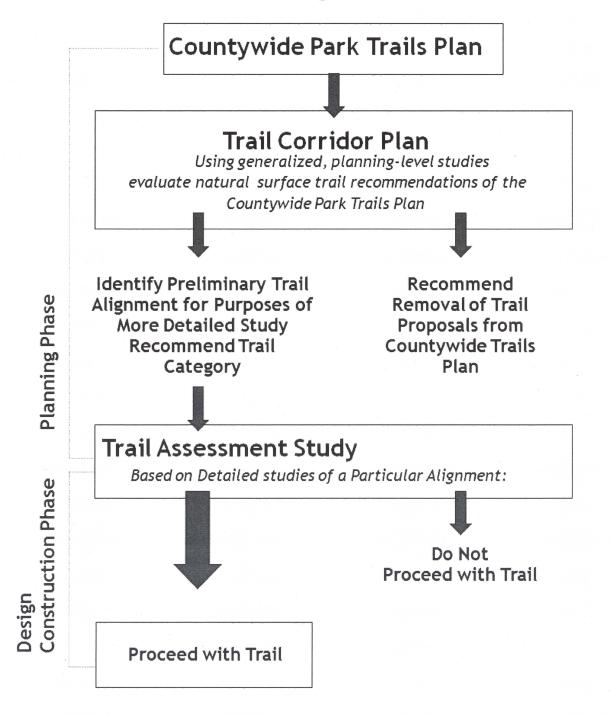
Identify opportunities to avoid, minimize and mitigate negative impacts to high quality resources

Included in Appendix B are M-NCPPC policies relating to planning hard surface trails in areas with sensitive and significant environmental features. Although these policies relate primarily to stream valley parks, the commitment to avoid, minimize and mitigate negative environmental effects applies to all trail planning efforts. Opportunities to minimize and/or mitigate effects of stormwater run-off, habitat fragmentation, edge effects, spread of exotic invasive plant species are identified.

Propose trail recommendations that best achieve an appropriate balance among environmental, recreational and mobility objectives.

Different policy objectives must be considered and weighed in relation to others. The Trail Corridor Plan process emphasizes the balance between stewardship, transportation and recreation and makes recommendations regarding hard surface trails based upon this balance.

Natural Surface Trails Planning Process



FINAL

The Trail Corridor Plan will either:

- Identify a preliminary hard surface trail alignment for purposes of more detailed study, or
- Recommend removal of a hard surface trail proposal from the Countywide Park Trails Plan.

If a Trail Corridor Plan is approved with a hard surface trail proposal, more detailed studies will be done in the context of a Facility Plan prior to the Planning Board approving the trail for construction.

Facility Planning

A Facility Plan is the last step in the hard surface trail planning process and is the basis for deciding whether or not a project should be implemented. The Facility Plan includes a more rigorous analysis of environmental impacts and cultural resource impacts,

recommends the type of hard surface trail surface (boardwalk, asphalt, etc), analyzes community connection opportunities, analyzes engineering feasibility, estimates construction costs and estimates future maintenance an policy needs maintenance and policing needs.

After reviewing the Facility Plan, the Board determines if the project achieves a reasonable balance of environmental, cultural, recreational and fiscal objectives. If it does, the trail project is considered along with other park projects for funding in the Capital Improvement Program. If the Planning Board determines that the trail is not feasible, not worth the negative impacts, or too costly, then the project is abandoned at the end of the facility planning stage.