



THE MARYLAND-NATIONAL CAPITAL PARK & PLANNING COMMISSION

MCPB Item # 5
December 12, 2002

TO: Montgomery County Planning Board

VIA: Jeff Zyontz, ^{JK} Chief, County-wide Planning Division

FROM: John Hench, Supervisor, Park Planning and Resource Analysis Unit ^{feh}
Lyn Coleman, Trail Planning Supervisor, PPRA Unit ^{LC}

SUBJECT: Countywide Park Trails Plan: Staff Draft Amendment Relating to the Trail Planning and Implementation Process – Approval to Print for Public Hearing

Staff Recommendation:

APPROVAL to print for purposes of Public Hearing, to be scheduled in late January.

Background

Many citizens have expressed confusion about how park trails are planned and implemented. During the Muddy Branch Trail Corridor Plan process in particular, citizens testified that the process needs to be better explained and the role of citizens in the process should be better defined.

In response to these concerns, the Board directed staff to prepare an overall explanation of the process and to include it in the Countywide Park Trails Plan.

The attached amendment responds to the Board's request. Staff is recommending the Planning Board approve the amendment for purposes of Public Hearing. After the Public Hearing, staff will analyze the testimony and schedule a Planning Board worksession to discuss the testimony and recommend any changes needed to the proposed process.

Summary of Staff Draft Amendment

The Staff Draft Amendment proposes the following additions to the Countywide Park Trails Plan:

ADD a new section to the *Introduction* entitled "Achieving Recreational and Environmental Protection Objectives". (pages 1-4)

This section is based on discussions with the Planning Board held during their review of the Muddy Branch Stream Valley Park Trail Corridor Plan.

ADD a new chapter entitled *Trail Corridor Plans*. (pages 5-19)

This chapter is presented in question-answer format and explains the trail corridor planning process through responses to the following questions:

- What is a Trail Corridor Plan? Page 5
- How is a Trail Corridor Plan prepared? Page 5
- What types of data are collected during the Trail Corridor Plan process? Page 10
- If a Trail Corridor Plan recommends a hard surface trail, what other studies are done before the trail is actually constructed? Page 11
- What planning objectives and principles guide the natural surface trail planning process? Page 13
- What are the categories of natural surface trails used in the planning process? Page 13
- What criteria is used to determine whether a natural surface trail should be shared use? Page 14
- If a Trail Corridor Plan recommends a shared use natural surface trail, what other studies are done before the trail is actually constructed? Page 16
- How are the needs of people with disabilities taken into account in Trail Corridor Plans? Page 16
- Are there other types of trail plans in addition to Trail Corridor Plans? Page 16
- How are trails in approved trail plans implemented? Page 18

ADD the following new sections to the Implementation Recommendations chapter:

- “Trails Work Program” (page 19)
- “Implementing Trail Plans Through the Capital Improvements Program” (page 19)
- “Trail Monitoring and Maintenance” (page 21)

Staff Analysis and Comments

On October 17, 2002 during a Planning Board item on trails, staff noted the need to clarify the trail planning process and to focus on five key topics:

Trail Use Philosophy
Planning Process
Trail Categories for Natural Surface Trails
Decision Making criteria for Determining Natural Surface Trail Categories
Trail Monitoring and Maintenance

The attached amendment addresses all of these topics.

Staff looks forward to hearing from the public on the amendment and discussing it in more detail with the Planning Board during worksessions.

Staff Draft Amendment to the Countywide Park Trails Plan: Trail Planning and Implementation Process

ADD a new section to the *Introduction* entitled “Achieving Recreational and Environmental Protection Objectives”:

Achieving Recreational and Environmental Protection Objectives

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.

Balancing the protection and preservation of natural and cultural resources while concurrently providing the appropriate mix of recreational activities for park users is perhaps the greatest challenge we face in stewarding our County park system. How environmental concerns, policies and objectives are balanced with recreational and mobility concerns, policies and objectives in the trail planning process merit discussion since it is an issue that continually is raised regardless of the trail project.

To better understand the types and quality of environmental resources in the park system, Planning Department staff have assembled and mapped an extensive amount of information on natural and cultural resources over the past decade. All trail planning efforts are preceded by a sensitive areas analysis that relies in large part upon this information. With the aid of a computer-based GIS system, staff examine streams and their buffers; 100-year floodplains; steep slopes; highly erodible soils; hydric soils; wetlands and their buffers; habitats of rare, threatened, endangered, and watchlist species; archaeological sites; and historical resources. Mapped data are verified in the field. In addition, staff continue to collect and compile information on the location of rare, threatened, and endangered species of plants and animals, the relative size and health of their populations, and threats to their continued existence. Monitoring efforts allow staff to update information on natural and cultural resources on a somewhat regular basis. Not surprisingly, staff have found these important resources in a variety of Countywide and Community-use parks throughout the County park system. Accordingly, the balance between stewardship and

recreation is done on a case-by-case basis looking at each resource from both a local and countywide perspective.

To better understand recreational demand, M-NCPPC prepares the Park Recreation and Open Space Master Plan (i.e., the PROS Plan) 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 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 C.1):

Well over half of those surveyed (67%) had used paved park trails in the last year (1996); 74% for observing nature, 52% for walking, 41% for bicycling, 33% for running or jogging, 12.8% for roller-skating, and less than 10% to go to school or work.

Fifty-eight percent of the respondents indicated that they had used unpaved trails in the last year (1996); 90% for walking, 85% for observing nature, 28% for running or jogging, 17% for mountain biking, 5% for horse-back riding, and 4% to go to school or work.

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.

The Planning Board and staff share the public's 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. However given the policy requirement to provide for both stewardship and recreation in County parks (see the General Plan Refinement, Goals and Objectives; the PROS Plan; the Countywide Trails Plan; as well as approved park master plans), staff must continually strive to protect and preserve sensitive natural and cultural resources while concurrently making available to the public, a variety of high-quality recreational experiences and opportunities. This difficult challenge is best accomplished by:

- 1) understanding the resource – both within and among parks;
- 2) forecasting the need for recreation – both within and among planning areas;
- 3) thoroughly evaluating the potential impacts of recreation on the resource;
- 4) planning, implementing, maintaining, and policing projects in a manner that avoids, minimizes, and mitigates for negative impacts to high quality resources;
- 5) monitoring the long-term success of our efforts to balance stewardship and recreation and finally
- 6) interpreting the results of our efforts to the public.

This is no easy task. 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. The assessment of recreational needs put forth in the PROS Plan, the Countywide Trails Plan, and other related policy documents establishes the rationale for proposed projects within and among planning areas. However, the truly challenging part is predicting and evaluating potential negative impacts of these projects on the resource and subsequently looking for practicable ways to avoid, minimize, and mitigate predicted impacts. A commitment to long-term monitoring while concurrently working on new projects or other resource management issues is important. Projects like the Little Bennett Golf Center in Clarksburg, Soccerplex in Germantown, and the Capital Crescent Trail in Bethesda demonstrate that this approach to achieving balance does work. However, our long-term success remains contingent on the use of important tools such as M-NCPPC's Environmental Guidelines, important PROS policies such as the *Policy for Parks* (i.e., the 2/3rds – 1/3rd development policy for regional parks), as well as new, trend-setting programs such as Legacy Open Space.

PARK TRAIL USE

PROS Survey for Montgomery County - 1997

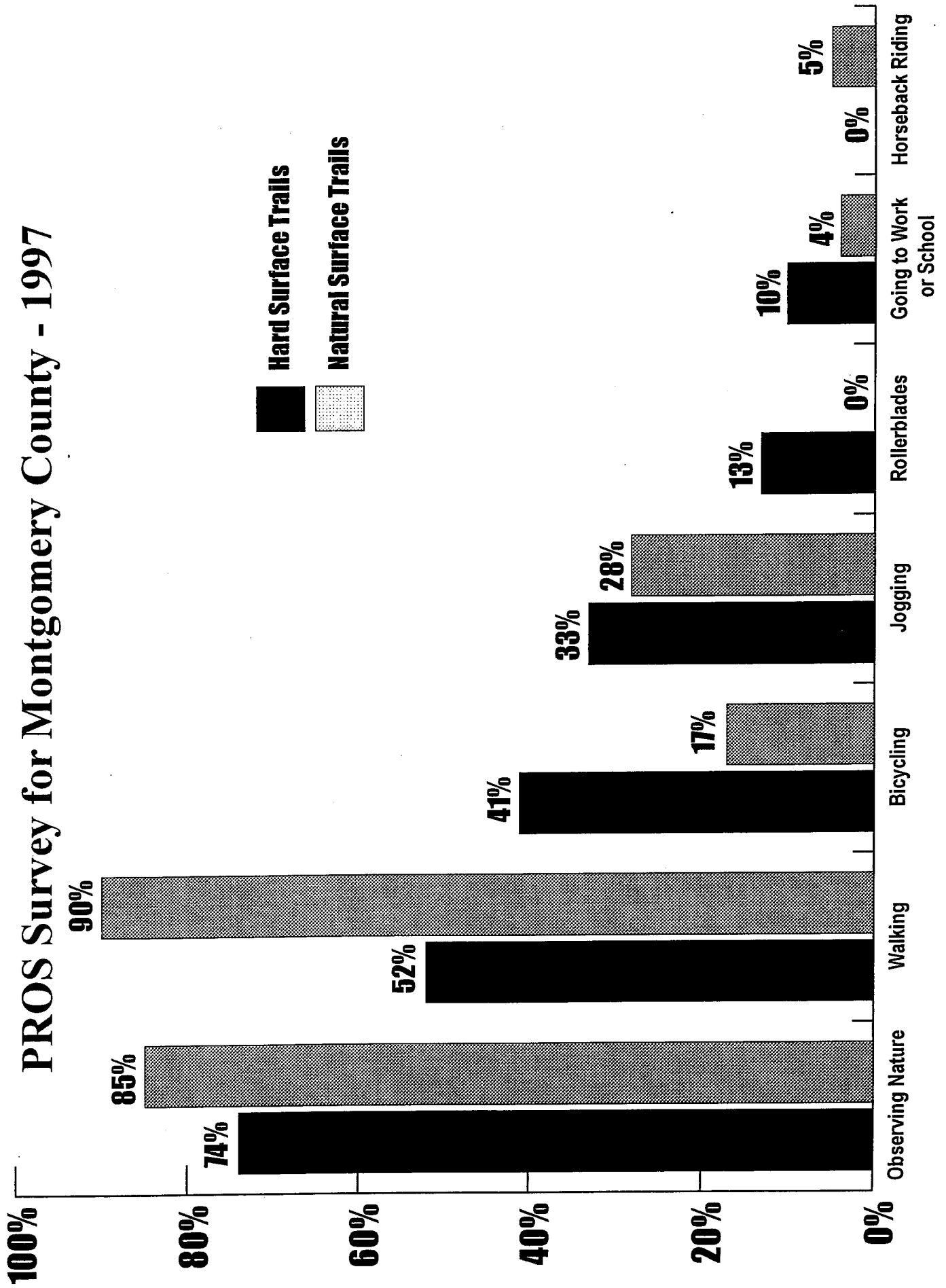


Figure C-1

ADD a new chapter entitled Trail Corridor Plans:

TRAIL CORRIDOR PLANS

The Countywide Park Trails Plan identifies eight significant trail corridors and Plan objectives for each (see Figure 1). Generalized, conceptual trail routes are shown within each corridor. More detailed planning and implementation studies will be needed to refine concepts, explore trail alignment options and recommend trail type.

The eight generalized trail corridors will be studied in more detail in the context of Trail Corridor Plans. This chapter describes the Trail Corridor Planning process.

1. What is a Trail Corridor Plan?

A Trail Corridor Plan focuses on one or more of the eight trail planning corridors identified in the Countywide Park Trails Plan and studies in more detail the general recommendations of the Countywide Park Trails Plan for that corridor. The scope of a Trail Corridor Plan may be less than an entire corridor.

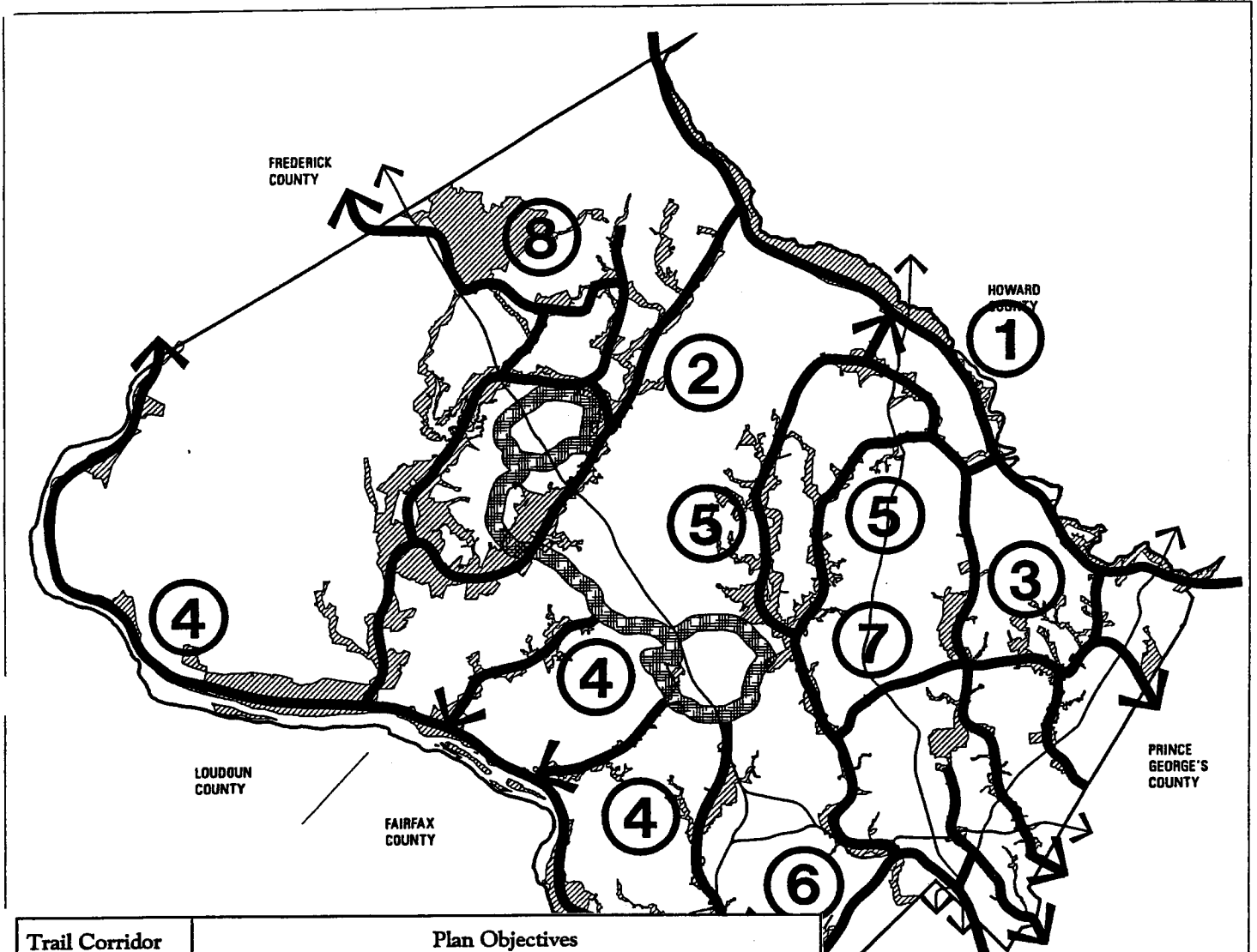
A Trail Corridor Plan is preceded by an environmental analysis and identifies trail opportunities and constraints, recommends generalized alignments for trails, recommends whether trails should be hard surface or natural surface, recommends natural surface trail categories (shared use or single use), relates trail recommendations to park stewardship objectives and to park accessibility guidelines, suggests trail related amenities (i.e., interpretation opportunities, areas for public access, potential community connections) and provides opportunities for connectivity to nearby recreational and community destinations.

A Trail Corridor Plan includes a statement of goals and objectives, maps and text pertaining to existing conditions, public policy context, analysis of opportunities and constraints and a trail concept plan identifying generalized trail alignment. The level of detail in a Trail Corridor Plan will reflect the type, length and character of a trail proposal, particularly in terms of whether a hard surface or natural surface trail is involved.

2. How is a Trail Corridor Plan Prepared?

COUNTYWIDE TRAIL CORRIDORS

Figure-04



Trail Corridor	Plan Objectives
1. Patuxent River	Provide a continuous natural surface trail system along the river.
2. Seneca Greenway	Provide a continuous natural surface trail from the Potomac to the Patuxent.
3. Northwest Branch	Provide a natural surface trail that provides a high-quality passive recreational experience.
4. C&O Canal	Improve trail connections to the C&O Canal towpath.
5. Rock Creek	Expand the trail system in Rock Creek Regional Park northward to Olney and the Patuxent River and southward to the Potomac River.
6. Capital Crescent	Provide a continuous trail corridor through Bethesda and Silver Spring to the Metropolitan Branch Trail in the District of Columbia.
7. Eastern County	Enhance east-west hard surface trail connectivity between parks and park trail systems.
8. Upcounty	Provide a hard surface recreational trail to serve the existing and future residents of Germantown, Clarksburg, and Damascus.

The basic elements of a Trail Corridor Plan and the approval process are shown in Table 1 and discussed below. The approach used in preparing community master plans has served as the basis for the process.

Phase 1 – Staff proposes a Trail Corridor Plan be added to the Trails Work Program.

This Plan Amendment recommends establishing a Trails Work Program, described in more detail in the Implementation Recommendations chapter. The Trails Work Program would prioritize the initiation and completion of Trail Corridor Plans. The Planning Board would review staff recommended planning projects and determine which Trail Corridor studies should go forward.

Phase 2 – Staff prepares and presents an Issues and Outreach Strategy Report to the Planning Board.

Once a Trail Corridor Plan has been added to the Trails Work Program, staff will begin detailed data collection, including an environmental assessment, technical analysis and map preparation for the Trail Corridor area.

Informal meetings with community groups or a public forum may be held during this phase to report on preliminary findings of the data collection effort and to help identify planning issues.

Staff will then prepare an Issues and Outreach Strategy Report for review by the Planning Board. This report will identify the most significant issues in the corridor, propose a time-line for completing the Plan and recommend a citizen participation strategy.

Phase 3 – Staff Prepares a Staff Draft Trail Corridor Plan

After the Issues and Outreach Strategy Report is approved, the most intensive phase of the Plan process begins. Staff meets with the community to identify trail opportunities and constraints within the corridor, to review the environmental analysis and trail alignment alternatives, to discuss the character of trails and to identify trail concerns. Additional data and studies are completed as needed.

At the same time, staff within the Department of Park and Planning meet, discuss options and evaluate ideas and concepts resulting from community meetings.

At the end of this phase, staff prepares a Staff Draft Trail Corridor Plan.

Phase 4 – Planning Board Reviews and Revises Staff Draft Plan for Purposes of Public Hearing

Table 1

TRAIL CORRIDOR PLANNING PROCESS

PHASE	PRODUCT	REVIEW	STUDY ELEMENTS
<p>Phase 1: Staff proposes a Trail Corridor Plan be added to the Trails Work Program</p>	<p>Plan added to Planning Board Approved <u>Trails Work Program</u></p>	<ul style="list-style-type: none"> • Community Meetings on Work Program • Planning Board review 	<ul style="list-style-type: none"> • Establish priority of trail plans and projects.
<p>Phase 2: Staff presents Issues and Outreach Strategy Report to Planning Board</p>	<p>Issues and Outreach Strategy Report</p>	<ul style="list-style-type: none"> • Community Meetings • Planning Board review 	<ul style="list-style-type: none"> • Plan goals / objectives • Opportunities / constraints • Key issues • Community Outreach Program
<p>Phase 3: Staff prepares Staff Draft Trail Corridor Plan</p>	<p>Staff Draft Trail Corridor Plan</p>	<ul style="list-style-type: none"> • Community Meetings • Planning Board reviews Staff Draft, makes changes, approves publication as Public Hearing Draft Plan 	<ul style="list-style-type: none"> • Relation to Countywide Path Trail Plan • Document trail need • Evaluate trail opportunities and constraints based upon following information: <ul style="list-style-type: none"> a. Mapping of sensitive areas as defined by the Environmental Guidelines b. Identification of historic and archaeological features and settings. c. Potential for connection to adjacent communities and other trail systems d. Identification of disturbed areas within corridor e. Identification of generalized areas where bridge crossings are needed. f. Analysis of grades and slopes to examine potential for accessibility to people with disabilities • Balance recreational and environmental objectives • Identify recommended trail alignments for purposes of further community input • Recommend amendments to Countywide Park Trails Plan • Recommend trail uses (shared use, hiking only) for natural surface trails based upon evaluation of following considerations: <ul style="list-style-type: none"> a. Relationship of trail to sensitive areas (natural, archaeological, historic)

PHASE	PRODUCT	REVIEW	STUDY ELEMENTS
			<ul style="list-style-type: none"> b. Proximity to a nature center, stable, or other type of park facilities c. Proximity to population centers or community amenities such as schools, libraries, rec. centers, etc. d. Safety (sight distance, hazards on trail, steep slopes, etc.) e. Maintenance considerations f. Evaluation of trail use needs in larger geographic area (that is, are there user groups whose trail needs are not being accommodated in the larger geographic area?)
Phase 4: Planning Board review	Public Hearing Draft Trail Corridor Plan	<ul style="list-style-type: none"> • Planning Board Public Hearing • Planning Board Worksessions 	<ul style="list-style-type: none"> • Staff prepares written summary of Public Hearing Testimony. • Staff responds in writing to testimony. • Staff discusses recommended changes to Draft Plan based on analysis of testimony.
Phase 5: Planning Board approves Trail Corridor Plan	Approved Trail Corridor Plan	<ul style="list-style-type: none"> • Briefing of County Council 	<ul style="list-style-type: none"> • Amended text and recommendations to reflect Planning Board Actions.

(9)

After the Staff Draft is completed, it is reviewed by the Planning Board. The Planning Board determines if the Staff Draft is acceptable for purposes of a Public Hearing. After making any changes to the Draft Plan as directed by the Board, staff published the Public Hearing Draft Plan and notifies the community of the opportunity to testify on the plan. Anyone may testify either orally or in writing.

Phase 5- Planning Board approves the Trail Corridor Plan.

After the close of the record of the Public Hearing, staff prepares a written summary and written responses to the Public Hearing testimony. The Planning Board holds work sessions with staff to review the testimony and to determine whether to make any revisions to the draft plan. The public is welcome to attend worksessions but testimony is typically not taken because the opportunity for public input was provided by the public hearing.

During worksessions, the Planning Board makes whatever changes they feel necessary to the Plan text. Staff incorporates these changes into the Draft plan.

The final action of the Planning Board is to approve the Trail Corridor Plan.

3. What Types of Data Are Collected in the Trail Corridor Plan Process?

The data and analyses will vary depending on the specific trail issues and concerns. Types of data collection and planning analyses that are usually undertaken during the trail corridor planning process include:

Environmental Analyses

-Mapping and evaluation of sensitive areas such as streams and their buffers; 100-year floodplains; steep slopes; highly erodible soils; hydric soils; wetlands and their buffers; habitats of rare, threatened, endangered and watchlist species; forest cover

Community Facilities and Land Use Analyses

-Mapping of existing and proposed land use, zoning and density
-Identification of community destinations such as parks, libraries, schools, stables, nature centers

Transportation Analyses

-Analyses of pedestrian and bicycle circulation systems

Cultural Features

-Identification of historic resources and archeological sites

Areas of Disturbance and Informal Trails

-Identify and map existing areas of disturbance (sewer line rights of way, transmission line rights of way)

-Identify existing, informal trails used by the public

4. If a Trail Corridor Plan recommends a hard surface trail, what other studies are done before the trail is actually constructed?

A Trail Corridor Plan may recommend a generalized location and alignment of a hard surface trail. This type of recommendation is based upon an analysis of opportunities and constraints in the corridor (see Table 1: Phase 3 Study Elements). Because of the potential environmental impacts and cost implications of a hard surface trail, more study must be done before a final commitment is made to construct the trail.

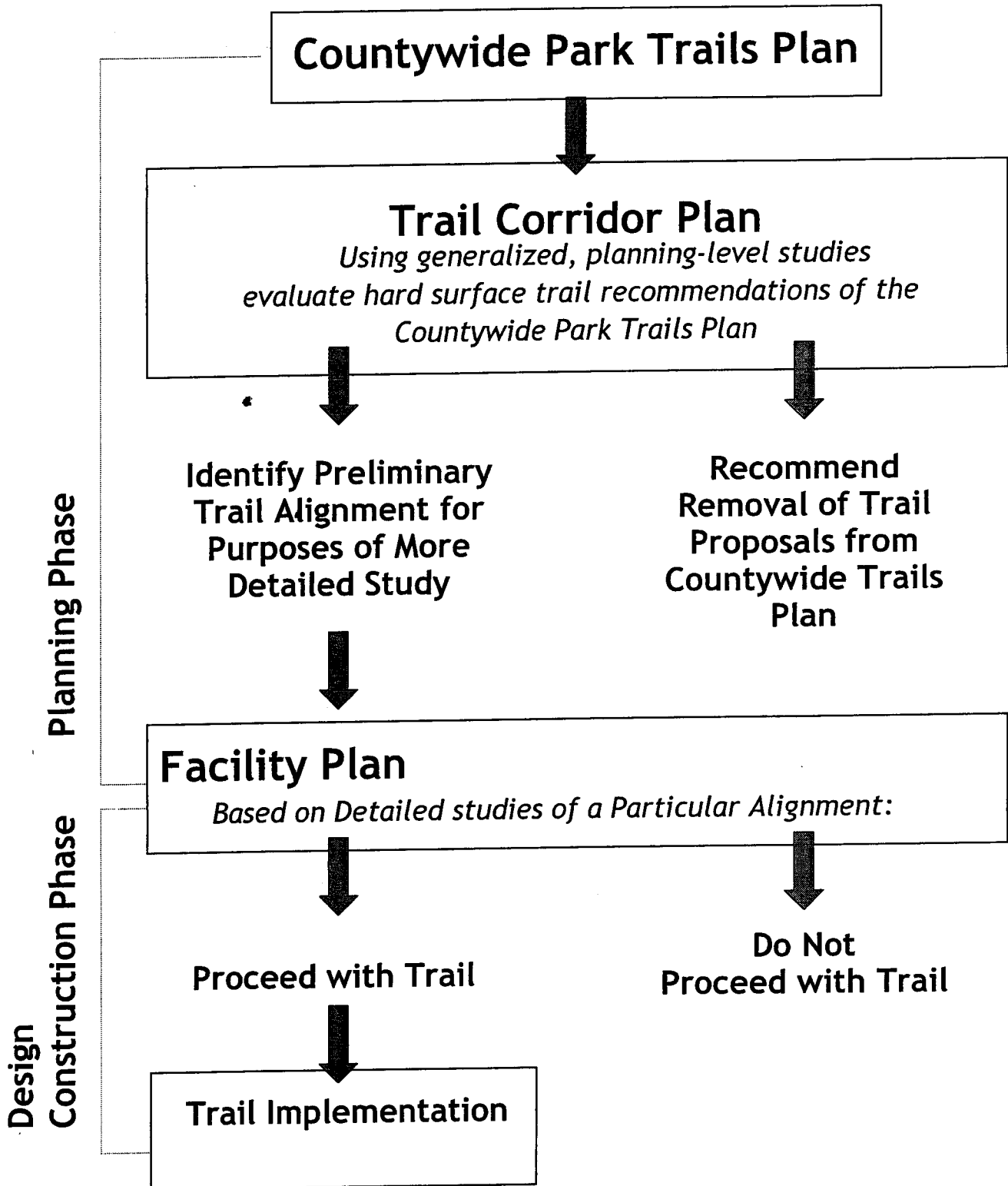
For hard surface trails, more detailed studies will be done in the context of a **Facility Plan.**, generally funded through the Capital Improvements Program (see Implementation Recommendations chapter). The relation of the facility plan to the Trail Corridor Plan is shown in Figure 2.

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 (Natural Resource Inventory/Forest Stand Delineation, preliminary Forest Conservation Plan, detailed wetland delineation, minimization and mitigation strategies), recommends the type of hard surface trail surface (boardwalk, asphalt, etc.), analyzes community connection opportunities (feasibility of grade-separated road crossings, tying into shared use bike paths), analyzes engineering feasibility, includes a stormwater management concept and provides cost estimates (these costs are for purposes of allocating construction funds in the Capital Improvement Program) and estimating future 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.

Figure 2

Hard Surface Trails Planning Process



5. What planning objectives and principles guide the natural surface trail planning process?

The following objectives and principles help guide the natural surface trail planning process:

1. To seek trail alignments that avoid environmentally sensitive areas and sensitive archaeological and historical features. *Evaluating environmental conditions during the trail planning process is essential to address park and open-space protection and the stewardship of natural, archaeological and historical resources.*
2. To recognize that hiking is a legitimate form of recreation and transportation on natural surface trails when and where it is practiced in an environmentally sound and socially responsible manner.
3. To recognize that horse back riding is a legitimate form of recreation and transportation on natural surface trails when and where it is practiced in an environmentally sound and socially responsible manner.
4. To recognize that bicycling is a legitimate form of recreation and transportation on natural surface trails when and where it is practiced in an environmentally sound and socially responsible manner.
5. To recognize that not all natural surface trails should be open to equestrian and/or bicycle use.
6. To provide geographic parity in natural surface trail use opportunities for hikers, equestrians and bicyclists across the park system.
7. To seek trail alignments that are compatible with adjacent land-use and connecting trails.
8. To incorporate features for user enjoyment, e.g., loop trails, scenic destinations and picnic areas
9. To create joint projects to educate all trail users.
10. To encourage communication between park staff, natural surface trail user groups and the environmental community.

6. What are the categories of natural surface trails used in the planning process?

Natural surface trails are enjoyed by people on foot, people on horseback and people on hybrid bicycles. An important planning issue relating to natural surface trails is what user groups should be accommodated on any given trail. The trail use categories for natural surface trails are:

Single Use, Hiking Only. Hiking trails may be located in environmentally sensitive areas that are considered too fragile for bicycle or equestrian use or traverse terrain that is very rugged.

Shared Use by All. These trails are open to hikers, equestrians and cyclists.

Shared Use by Some. These trails are open to hikers and equestrians or hikers and cyclists.

In special situations, trails may have a Special Focus. These are trails designed with a specific user group in mind. Equestrian trails intended to accommodate trail riding groups or to allow jumping or faster gaits, for example, should be designed and built to a higher trail standard. Trails for mountain bikers seeking a high degree of challenge and obstacles require careful planning. Interpretive trails for groups would involve higher standards in terms of trail width and access.

7. What criteria is used to determine whether a natural surface trail should be shared use?

Shared use trails are beneficial as they direct users to one trail alignment and eliminate the need to provide multiple parallel trails for each user group.

However, when the Department of Park and Planning reviews suitability of a natural surface trail for equestrian or bicycle use, equestrian or bicycle use should not be allowed where it would cause the following measurable effects. This list is not all-inclusive.

1. Significant soil erosion or significant damage to streams or palustrine wetlands.
2. Rutting, impairment of trail drainage, breakdown of trail shoulders, and other forms of damage not correctable using the Department of Park and Planning Trail maintenance standards and techniques.
3. Significant disturbance of plants or animals or their habitat.
4. Damage to archaeological, historical, or other significant resources, including rare natural features of interest for nature interpretation or scientific study.

5. Danger to the safety of equestrians, bicyclists or other trail users because of a horse's gait, bicycle's speed, steep grades, steep terrain, sharp curves, slippery or unstable trail surfaces or limited visibility.
6. Significant displacement of other natural surface trail users. If significant user conflicts arise, the issue of how best to accommodate different trail user groups will have to be explored.

There are many approaches to signing, maintaining and managing trails that help promote successful shared use trails. The approaches listed below are some examples:

1. Employ natural and/or artificial design features that restrict the speed of equestrians and bicyclists without posing an undue impediment to hikers.
1. Employ design features that enhance sight distance.
2. Employ design features that minimize trail erosion, e.g., proper grades, turn radii, tread hardening and drainage control.
3. Use wide or pull-off sections to facilitate slow downs or safe passing.
- 4.. Walk horses and bicycles in certain areas.
4. Establish and maintain "one-way-only" trail sections.
5. Recommend speed limits.
6. Restrict use by time of day, day of week, week of month or month of year.
7. Restrict use by season (e.g., to protect soils or breeding birds).
8. Separate different types of trail users at trail heads and congested areas.
9. Establish and enforce party size limits.
10. Allow use by permit only.
11. Install barriers to prevent leaving trails. Block and obliterate (through site restoration) unauthorized trails.
12. Monitor and maintain trails on a regular and routine basis.
13. Establish and maintain informational kiosks at trail heads.

14. Produce and disseminate accurate, up-to-date trail maps.

15. Establish and maintain an effective system of signs on natural surface trails.

7. If a Trail Corridor Plan recommends a shared use natural surface trail, what other studies are done before the trail is actually constructed?

When a Trail Corridor Plan identifies a preliminary alignment and recommends a shared use trail use category for a natural surface trail, further work is done by staff to designate a final alignment. Trail Assessment studies rely heavily on environmental analysis, field walks with park region staff, Park Development and Design staff, staff horticulturists and forest ecologists, natural resource specialists and park managers to assure a proposed trail is sustainable from both an environmental and recreational perspective. The planning process is shown in Figure 3.

9. How are the needs of people with disabilities taken into account in trail planning?

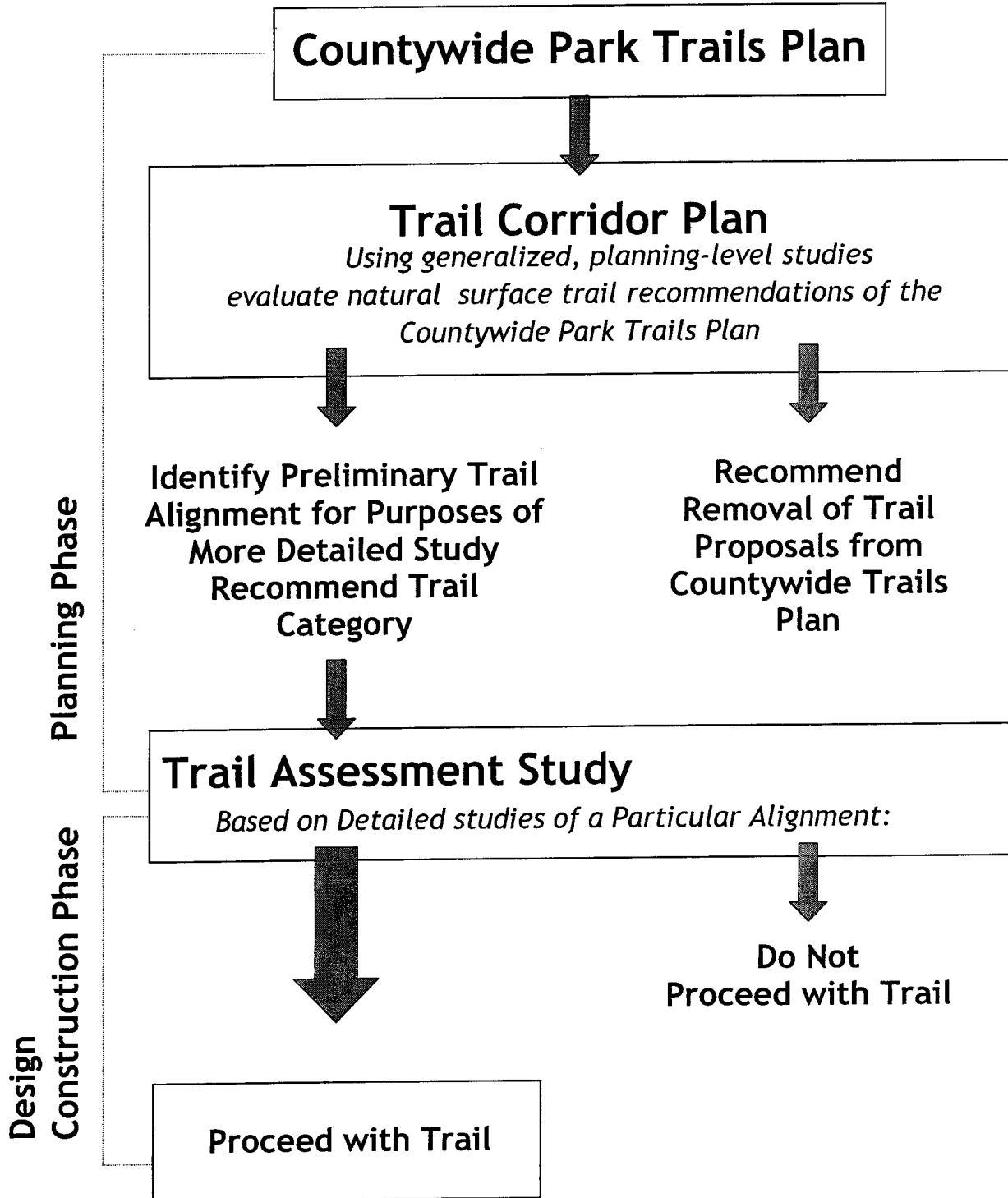
As stated in the 1998 Park, Recreation and Open Space Plan (PROS), the Department of Park and Planning seeks to provide public accessibility for all park visitors, consistent with the obligation to conserve park resources and preserve the quality of the park experience for everyone. One of the accessibility goals of the Department is “to increase utilization of Montgomery County Parks by persons with disabilities.” In order to implement this policy, the PROS Plan endorses providing accessible facilities in each region of the county to ensure convenient access to persons with disabilities.

As shown in the Trail Corridor Planning Process chart, potential trail alignments are examined and evaluated in terms of their potential for accessibility to people with disabilities (see Table 1: Phase 3) Not every trail, particularly natural surface trails, will be able to accommodate persons with disabilities. The intent of the Department’s accessibility policy is to assure that all residents of all different personal mobility skill levels have the opportunity to enjoy nature. This means providing a variety of accessible trails in different locations of the county to assure all residents of the county have the chance to enjoy nature.

10. Are there other types of trail plans in addition to Trail Corridor Plans?

Trail Corridor Plans focus exclusively on trails. Other planning documents, however, may include trail proposals. These include:

Natural Surface Trails Planning Process



A *Park Master Plan* is a comprehensive plan for a particular park. Trails are one of the park facilities studied.

A *Park Management Plan* addresses how to manage natural and cultural resources, identifies maintenance needs and recommends public access proposals. In some cases these plans may be “interim” plans until a more detailed Park Master Plan can be prepared. In other cases, the park management plan may guide use of the parks for many, many years.

A *Park and Trail Analysis Report* is prepared in conjunction with community master plans and provides the basis for the proposed parkland map contained in an *Area Master Plan*. The Park and Trail Analysis report looks at opportunities to expand trail corridors to maximize the opportunities to locate trails outside sensitive environmental areas and explores the opportunities for integrating park trails with proposed off-road bike paths.

The above plans involve the basic components of the trail corridor planning process: an evaluation of opportunities and constraints, public input and Planning Board review and approval. Regardless of when or in what process trails are studied or planned, the guiding principles of the Countywide Park Trails Plan, including the balancing of recreational and environmental protections objectives, will be applied.

As discussed in the Implementation Recommendations chapter, subdivision proposals and site plan applications may include proposed trails. These trails are reviewed by staff in accordance with the guiding principles of the Countywide Park Trails Plan.

11. How are Trails in approved Trail Corridor Plans Implemented?

This topic is addressed in the Implementation Recommendations chapter.

AMEND the *Implementation Recommendations* chapter as follows:

ADD section entitled Trails Work Program:

Trails Work Program

The Countywide Park Trails Plan recommends and sets priorities for routes that should be acquired, developed and open for public use in the next ten years. This priority listing should be revisited and amended in the context of a Trails Work Program.

This Plan Amendment recommends a Trails Work Program be approved by the Planning Board every two years to coincide with preparation of the Capital Improvements Program (see Table 6 in Countywide Park Trails Plan for description of the CIP). As shown in Figure 4, the Trails Work Program would:

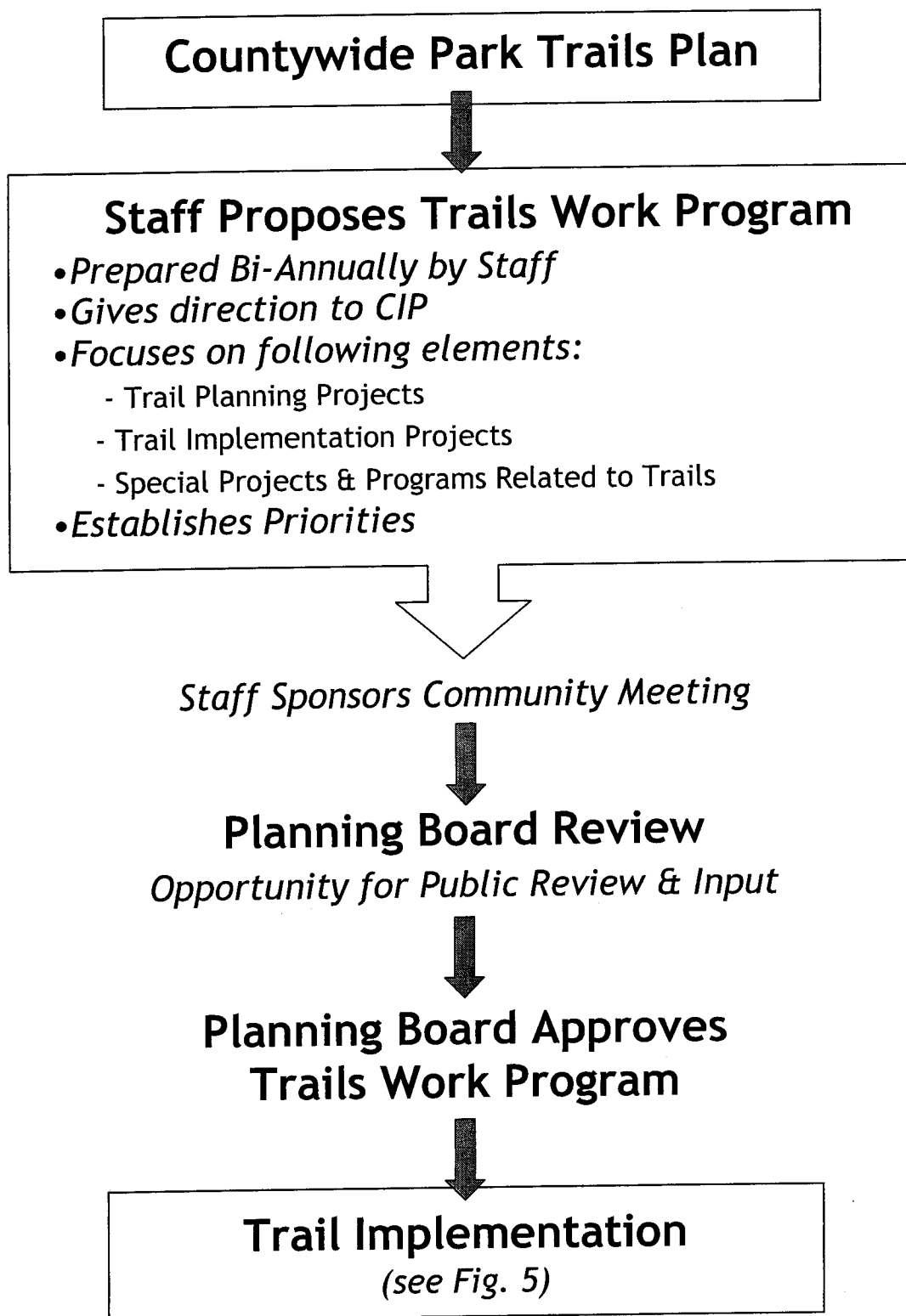
1. *Establish trail planning priorities.* As discussed in the chapter on Trail Corridor Plans, the schedule for Trail Corridor Plans would be established in the Trails Work Program.
2. *Establish trail implementation priorities.* The Trails Work Program would provide the opportunity for the Board to adjust, amend and/or add to the priorities shown in the Countywide Park Trails.
3. *Identify special projects and programs to enhance the trail system.* Trail signage, trail amenities and interpretive displays would come under this topic. There is a need in the county trail system for improved signage and for enhancing interpretive opportunities. Incorporating these features in the trails work program will help assure funds are available to meet these needs.

The recommended review and approval process for establishing a Trails Work Program is shown in Figure ~~4~~4.

ADD explanation of how trails are implemented through the Capital Improvements Program.

Figures 5 and 6 should be added to better explain how trail proposals are implemented through Capital Improvement Program (CIP).

Trails Work Program



ADD "Monitoring and Maintenance of Trails"

Assuring that trails are enjoyable, safe and environmentally friendly requires regular monitoring and maintenance. This Plan recommends the following actions be taken to help assure proper management of trails:

1. Consider establishing a Trail Work crew in each of the park regions (north and south) to foster trail building and maintenance expertise and to allow a more systematic approach to trail monitoring and maintenance.
2. Utilize volunteers to monitor the condition of trails and clearly identify the role of volunteers in relation to park maintenance staff.
3. Assure signs are posted on all formal, maintained trails to identify permitted uses and assure trail maps are readily available so people can easily find formal trails.

Implementing Trails Through the Capital Improvements Program

Fig. 5

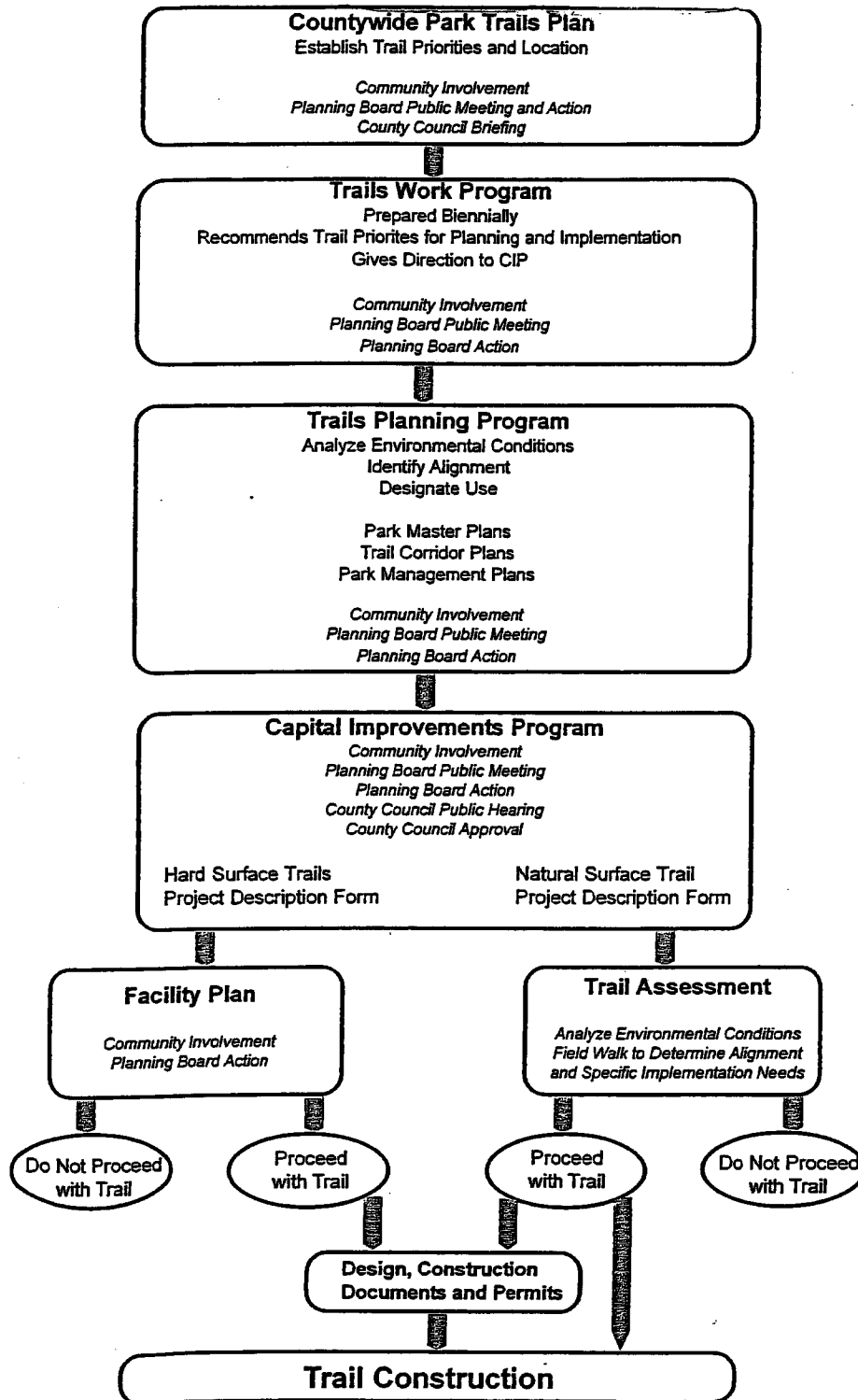


Figure 6

IMPLEMENTING TRAILS THROUGH THE CAPITAL IMPROVEMENTS PROGRAM

PHASE	PRODUCT	REVIEW	STUDY ELEMENTS
<p><u>Phase 1</u> Staff prepares Capital Improvements Program</p>	<p>Approved Capital Improvements Program</p> <p>a. Hard Surface Trails Project Description Form</p> <p>b. Natural Surface Trails Project Description Form</p>	<ul style="list-style-type: none"> • Joint Recreation Advisory Boards and Planning Board public forum • Planning Board review and approval • County Executive review and recommendation to County Council • County Council public hearing • County Council review and approval 	<ul style="list-style-type: none"> • Recommend priority of trail projects on a biennial basis for a six-year Capital Improvements Program. Priorities are based on the Approved Trails Work Program and the Trails Planning Program.

Phase 2a

Staff or consultant prepares a Facility Plan for a Hard Surface Trail

Facility Plan (30 percent complete design documents) and cost estimate

- Community meetings
- Regulatory agency review and approval of concept
- Internal review and approval
- Planning Board action

- Conduct site survey and prepare base plans
- Analyze environmental conditions & delineate wetlands
- Conduct necessary geotechnical and subsurface investigations
- Obtain approval of natural resources inventory
- Meet with the community to review existing conditions and proposed project, and gather community input and ideas
- Determine project requirements
- Prepare design alternatives
- Identify permits and approvals required for construction
- Review alternatives with regulatory agencies and committees
- Review alternatives and preferred option with the community
- Revise and refine work as required
- Obtain storm water management concept approval from regulatory agencies
- Obtain approval of forest conservation plan
- Prepare final drawings, report and cost estimate.
- Obtain internal approval of facility plan

			<ul style="list-style-type: none"> • Present the facility plan to the Planning Board for action • If the Planning Board approves the facility plan, the project is included in the Capital Improvements Program for design and construction funding
<p><u>Phase 2b</u> Staff conducts a Trail Assessment for a Natural Surface Trail</p>	<p>Determination of trail alignment and specific implementation requirements</p>	<ul style="list-style-type: none"> • Staff review 	<ul style="list-style-type: none"> • Analyze environmental conditions • Conduct field walk to consider alternative alignments and determine preferred alignment • Determine project elements (such as signs, bridges or kiosks) • Identify any permits or approvals required for construction of specific elements (such as bridges) • Identify specific construction requirements and needs for additional study • Prepare construction cost estimate
<p><u>Phase 3</u> For trails approved in Phase 2, staff or consultant prepares Detailed Design and construction documents and acquires necessary</p>	<p>Construction documents and permits</p>	<ul style="list-style-type: none"> • Staff review and approval • Regulatory agency review and approval 	<ul style="list-style-type: none"> • Prepare surveyed base plan information as required • Conduct additional geotechnical and subsurface investigations as required • Prepare final design and 100 percent complete construction drawings, bid forms, specifications, and cost

<p>permits for all hard surface trails and for those natural surface trails that have boardwalks, bridges or other structures</p>			<p>estimate</p> <ul style="list-style-type: none"> • Comply with all applicable code requirements • Obtain all applicable county, state and federal permits • Advertise bid documents and select contractor
<p><u>Phase 4</u> Contractor, park crews or volunteers construct trail</p>	<p>Completed trail</p>	<ul style="list-style-type: none"> • Staff inspection of construction • Regulatory agency inspection of construction as required 	<ul style="list-style-type: none"> • Conduct a pre-construction meeting and regular progress meetings during the course of construction • Inspect work on a regular basis • Develop lists of corrective work needed and verify that all corrections have been made prior to final acceptance of work

NOTE: This chart applies only to those trails implemented through the Capital Improvements Program. Trails may also be implemented through the regulatory process and through open space initiatives (see text).