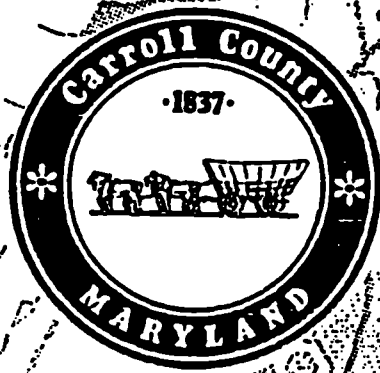




**GREENWAYS, BICYCLE, AND
PEDESTRIAN FACILITIES NETWORK
TECHNICAL REPORT**



**CARROLL COUNTY,
MARYLAND**

SYKESVILLE

PATAPSCO

RIVER

LIBERTY
RESERVOIR

PRESTON
RESERVOIR

26

PROPOSED GREENWAYS, BICYCLE AND PEDESTRIAN FACILITIES NETWORK

TECHNICAL REPORT

Prepared For:

**CARROLL COUNTY, MARYLAND
DEPARTMENT OF PLANNING
DEPARTMENT OF
RECREATION AND PARKS**

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DECEMBER 13, 1994

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I. EXECUTIVE SUMMARY

The Maryland Office of Planning and the Department of Natural Resources are responsible for developing a Statewide Land Preservation and Recreation Plan which provides a framework for future State programming and funding of these activities. This plan requires that each county develop a local plan for ultimate incorporation, ensuring that local planning and Annual Program Open Space funding are consistent with State goals and that the State Plan reflects local needs and demands. Carroll County, using Program Open Space funding, retained the consulting firm of John E. Harms, Jr. and Associates, Inc. through competitive bidding to prepare the greenways component of the County Plan.

This Technical Report addresses the related social, economic, environmental, recreational and transportation benefits and impacts associated with the development, adoption, and implementation of Carroll County's Proposed Greenways, Bicycle, and Pedestrian Facilities Network (referred throughout the report as Greenway Plan).

The following greenway definition was established for this study to identify the many types of greenways that can be provided.

- Greenway:
- 1) A linear open space established along a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a manmade corridor such as a railroad right-of-way, canal, scenic road, or other route.
 - 2) A recreational open space connector linking parks, nature reserves, cultural features, historic sites, or recreational facilities with each other and with populated areas through a system of pathways suited to a variety of activities (ie. walking, bicycling or horseback riding).
 - 3) A natural corridor, often along a stream or river, which is protected in order to provide contiguous areas for wildlife habitats, enhancement of water quality, and/or unique opportunities for education through controlled human interaction.
 - 4) A linkage connecting populated areas to other populated areas, employment centers, schools, and recreational facilities while encouraging alternative modes of transportation (ie. walking or bicycling).

This study is a comprehensive effort to identify the challenges inherent in the drafting and implementation of a greenway plan. Issues identified by the County in it's local plan as well as those brought up by concerned citizens at two public workshops (September 2,

1993 and March 15, 1994 - see appendix A) have been closely examined. Recommendations on addressing these issues are presented in this study categorized into seven tasks discussed briefly in this Executive Summary and in greater detail in the body of the Technical Report.

1. Develop a comprehensive inventory of public and private open space throughout the County, including within each local municipality.

The inventory serves as a basis for the development of the Greenway Plan. Utilizing information obtained from the Maryland Office of Planning, the Carroll County Departments of Planning and Recreation and Parks, and a host of other sources, any land currently designated as open space was documented. The areas were then mapped at a scale of 1"-2000' and overlaid on a base map of Carroll County which included the major roadway system, political boundaries, environmental features, and other applicable systems.

Open space exists in a variety of forms, including community and County parks, college and school recreation areas, State parks and State-owned land, watershed management areas, streams, agricultural preservation districts, major utility easements, railroad rights-of-way, historic/cultural facilities, and cemeteries.

Once mapped, the areas began to show patterns for potential greenway development.

2. Identify Regional Greenway Initiatives

Existing and proposed greenway systems were then added to the 2000 scale map to further aid in identifying potential greenways in Carroll County. The State of Maryland, the Maryland Counties of Baltimore, Howard and Frederick, and the Pennsylvania Counties of York and Adams were all thoroughly researched. Within Maryland, several priority greenway initiatives were identified. These include:

- South Branch Patapsco - Sykesville to Mt. Airy
- Piney Run - Sykesville to South Branch of the Patapsco
- Morgan Run connection to Liberty Reservoir
- Little Pipe Creek Greenway
- Monocacy Scenic River Greenway
- Union Mills to Westminster Greenway

Additionally, design criteria was established to set minimum standards for interconnecting trails.

3. Identify Greenway Opportunities

Once the base information was mapped, the effort was made to identify greenway

opportunities. Priorities in this step included linking adjacent County greenways, providing linkages to schools, historic sites, and recreational facilities, utilizing stream and river corridors, and providing contiguous wildlife habitats.

4. Develop a Greenway Classification System

With the identification of a variety of potential greenway locations, it became necessary to establish a system of classification of greenway types to match the character of the linkages. The system includes the five following classifications:

- Class 1 Environmental Area
- Class 2 Environmental Appreciation
- Class 3 Environmental Recreation
- Class 4 Medium Use Recreation
- Class 5 High Use Recreation

Color photographic examples and typical sections are included in the Technical Report to illustrate the character of each greenway class.

5. Develop a Final Greenway Plan

Development of the Final Greenway Plan consisted of assembling all the information gathered for the study, prioritizing potential greenways, and applying this data to the base mapping utilizing the classification system. The result is a color-coded map of Carroll County showing the entire proposed network.

A greenway matrix system was compiled which listed all of the greenways identified on the Plan. The summary matrix is shown below:

**GREENWAY MATRIX SUMMARY
CARROLL COUNTY GREENWAY PLAN**

GREENWAY CLASSIFICATION	# OF PROPOSED GREENWAYS	TOTAL APPROX. LENGTH IN MILES	TOTAL APPROX. ACREAGE	TOTAL APPROX. LENGTH ZONED CONSERVATION IN MILES
2- ENVIRONMENTAL APPRECIATION	15 GREENWAYS	100.2 MILES ±	1215.8 ACRES ±	61.1 MILES ±
3- ENVIRONMENTAL RECREATION	25 GREENWAYS	110.6 MILES ±	669.8 ACRES ±	70.4 MILES ±
4- MEDIUM USE RECREATION	26 GREENWAYS	109.8 MILES ±	332.6 ACRES ±	34.1 MILES ±
5- RECREATION	13 GREENWAYS	32.4 MILES ±	117.7 ACRES ±	4.0 MILES ±
GRAND TOTAL	79 GREENWAYS	353.0 MILES ±	2335.9 ACRES ±	169.6 MILES ±

6. Analyze Legal Issues

The range of legal issues involved in implementing an interconnecting trail system was analyzed and detailed explanations were provided summarizing the results. Issues pertaining to private and public liabilities, responsibilities of adjacent property owners and the responsibilities of the County and its eight municipalities were among the topics examined.

The Federal requirements for handicapped accessibility have been established in the proposed greenway classifications and design criteria. Recommendations are made as to how the County can limit its liability in respect to the system's users and those property owners who abut the greenway system. In particular, the technical report addresses the issue of willful and unlawful trespassing on private property and the protections private property owners are guaranteed through a greenway program. Finally, the *Dolan vs. City of Tigard* case is discussed and implications as to its impact on a greenway program are identified. It is the conclusion of this report that a greenway system is still very possible despite the outcome of the Dolan case.

7. Recommend Techniques for Greenway Implementation

There exist many techniques to aid in the implementation of greenways, not all of them applicable to Carroll County. Among those discussed in the Technical Report: 1) public involvement and the open planning process to foster grass roots support, 2) formation of "Friends of Greenways" organizations to supply money and volunteer labor, 3) promotional campaigns, 4) enactment of comprehensive rezoning to include greenway zoning and greenway overlay zones, 5) revising the County and local municipality zoning ordinances and subdivision regulations to mandate greenway creation, 6) providing alternatives for land acquisition, 7) recommending various funding alternatives, and allowing for periodic updating of the Greenway Plan.

II. INTRODUCTION

A. Purpose

Carroll County has recognized the opportunity to establish a greenway program that will provide water quality benefits and recreational opportunities, preserve wildlife habitats and corridors, preserve open space, protect natural areas and provide opportunities for alternative transportation modes. Before much of the land in the County is appropriated for other uses making land assemblage for a greenway system more difficult, the County initiated this study for incorporation into the County's Parks and Land Preservation Plan. The proposed Greenways, Bicycle, and Pedestrian Facilities Network Study includes a Technical Report and a Plan, and will identify potential greenway locations, recommend greenway corridor design criteria, establish a greenway classification system, and propose a method of determining priority projects to help focus the County's efforts in implementing the Plan.

The following greenway definition was established for this study to identify the many types of greenways that can be provided.

- Greenway:
- 1) A linear open space established along a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a manmade corridor such as a railroad right-of-way, canal, scenic road, or other route.
 - 2) A recreational open space connector linking parks, nature reserves, cultural features, historic sites, or recreational facilities with each other and with populated areas through a system of pathways suited to a variety of activities (ie. walking, bicycling or horseback riding).
 - 3) A natural corridor, often along a stream or river, which is protected in order to provide contiguous areas for wildlife habitats, enhancement of water quality, and/or unique opportunities for education through controlled human interaction.
 - 4) A linkage connecting populated areas to other populated areas, employment centers, schools, and recreational facilities while encouraging alternative modes of transportation (ie. walking or bicycling).

B. Planning Process

After determining the types of greenways that were to be incorporated into this Plan and prior to making recommendations, seven primary tasks were completed.

The *first* task performed was an inventory of public and private open space. Once gathered, this information was placed on a map which was then used as a composite base for developing greenway opportunities.

The *second* task was to identify regional greenway initiatives. All adjacent Counties, the Maryland Greenways Commission, the Rails-To-Trails Conservancy, and the National Park Service were contacted and the information received from them was incorporated into the Master Plan.

The *third* task was to identify greenway opportunities in Carroll County based on the existing inventory of open space and the greenway initiatives of surrounding counties. The system utilizes a network of interjurisdictional linkages, facility linkages and natural /manmade corridors to create greenbelt opportunities (Figure 1).

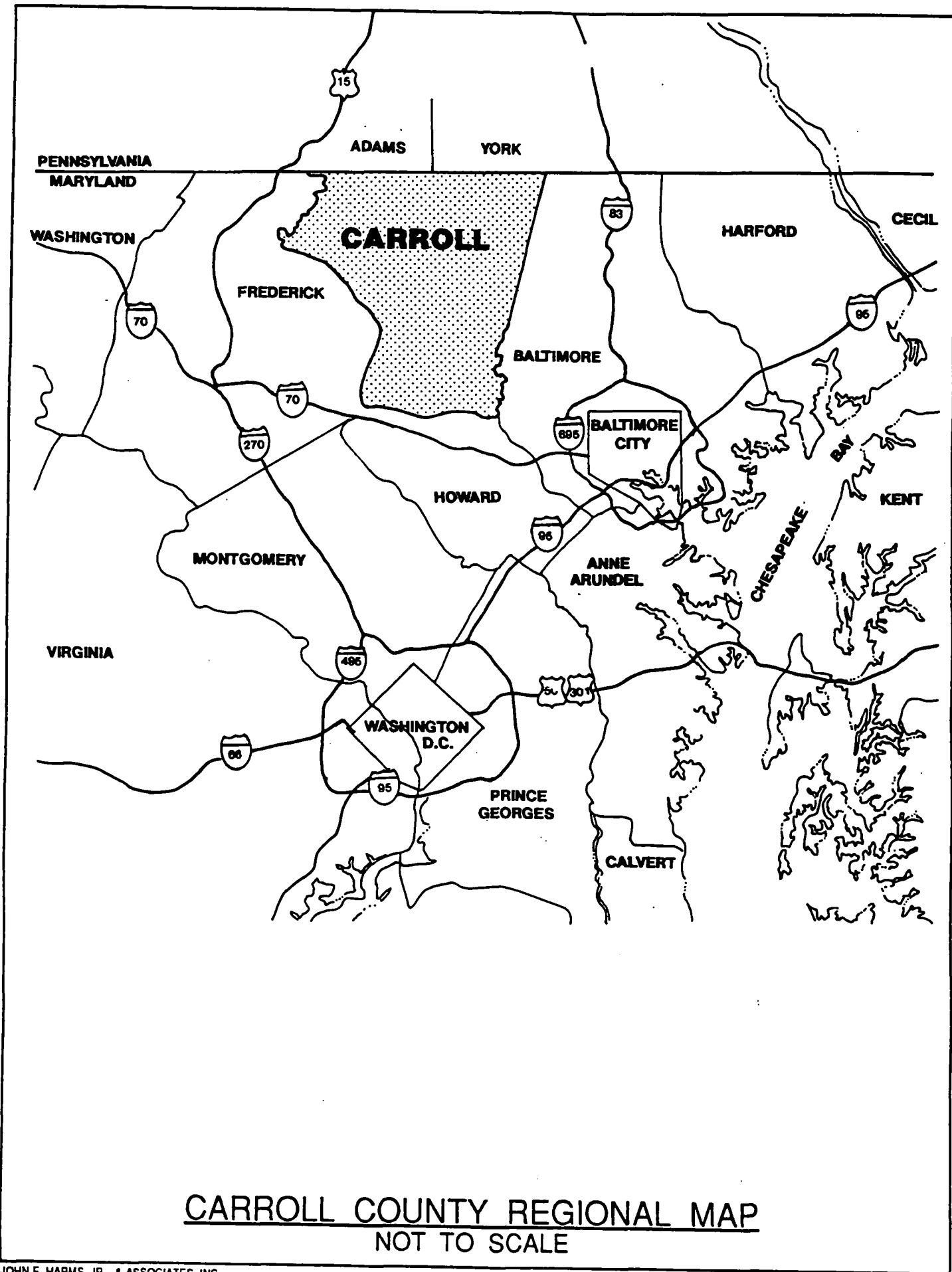
The *fourth* task was to create a greenway classification system based on environmental and/or recreational character. The classification system also identified potential activities, facilities, and greenway criteria (Figure 2). Color photographic examples and typical sections have been provided to illustrate the character of each greenway class (Figures 3-12).

The *fifth* task was to prepare a Greenway Plan, including a greenway matrix and greenway prioritization. The purpose of the matrix is to provide information on each proposed greenway segment at a glance, and the prioritization format incorporates a numerical scoring system which is divided into environmental, recreational, and transportation categories (Figures 13-16).

The *sixth* task was an analysis of the legal issues prepared by Andrea Ferster, counsel to the Rails-to-Trails Conservancy. The legal analysis addresses liability and maintenance responsibility issues for both the County and private landowners.

The *seventh* task was to identify implementation techniques for a greenway program. These techniques include public education, alternative sources of funding, pilot projects, and land acquisition alternatives.

All seven tasks were performed in conjunction with the County's Planning, Environmental, and Recreation and Parks Departments. Also, two public meetings were held to acquire feedback from County residents and various interested organizations.



III. INVENTORY OF PUBLIC AND PRIVATE OPEN SPACE

In order to create a Greenway Plan, it is essential that a thorough inventory of all publicly owned and privately held open space be performed. In most jurisdictions, open space is found in a variety of forms such as parks, agricultural preservation easements, public utility rights-of-way, school sites, community recreation areas, flood plains, streams and others. Many sources of information were used to determine ownership and classification of properties, including the Maryland Office of Planning and the Carroll County Departments of Planning and Recreation and Parks.

The following information was compiled and mapped at a scale of 1"=2000', referred to as the map. This map was utilized for analysis only and is not included within this Technical Report.

A. Community/Neighborhood/Countywide Parks

All existing and proposed County Parks were identified on the Map. These include community centers, parks and activity areas. This inventory's more prominent examples are the Hashawha Environmental Center, Piney Run Park Gillis Falls Park, Westminster Community Pond, Bennett Cerf Park, and the Carroll County Farm Museum. In addition to County-wide facilities, community and subdivision recreational facilities such as picnic areas, playgrounds, tennis courts, pools and tot lots were also identified.

B. Educational Recreational Areas

The County contains two college sites and approximately forty-one existing school-sites within its boundaries. The college sites include Carroll Community College and Western Maryland College. All of the existing and proposed school sites have been indicated on the Map.

The County also has a wide variety of recreational facilities including campsites, golf courses, the Carroll County Sports Complex, and numerous fairgrounds. Each of these facilities is a major draw either seasonally or year round.

C. State Parks/State Land

There is no Federally-owned land in Carroll County and only three state-owned properties. These properties are the Morgan Run Natural Environmental Area, Springfield State Center and a portion of the Patapsco Valley State Park.

D. Reserved Open Space/Natural Areas

Several areas have been reserved for reservoirs and/or watershed management areas. These areas include Liberty Reservoir, Piney Run Reservoir, Gillis Falls Reservoir, Union Mills Reservoir, New Windsor Watershed, Cranberry Reservoir, Hanover Watershed/Wildlife Management Area, and Pretty Boy Reservoir.

E. Streams

Use III and IV streams have been indicated on the Map. The streams within these classifications were found in the COMAR, 26.08 Water Quality Regulations. Also, Catherine Rappe, Bureau Chief in the County Water Resources Office, provided an update on changes in the classification of some streams.

F. County Agricultural Preservation Districts & Easements/ Conservation Zone

The County has recognized the importance of Agricultural Preservation Districts and Easements for preserving the rural character of the County. An overlay was prepared which displayed the greatest concentration of agricultural preservation districts and/or easements located in the northwest and southern portions of the County. Zoning in these areas largely encourages rural land uses. The Conservation Zone was also superimposed on the Map from the County Comprehensive Plan. The majority of this zoning is found in the southern half of the County. In many areas the zone follows stream corridors.

G. Major Utility Easements and Railroad Rights-of-way

There are two major powerline easements traversing the southern portion of the County. There are also two railroad rights-of-way which include the Maryland-Midland Railway which bisects the County east to west. This is an active railway. The other line known as the Maryland/Pennsylvania Line is abandoned. The railroad bed extends from Angel Road north to Littlestown, Pennsylvania.

H. Historic/Cultural Facilities

Sites listed on the National Register of Historic Places have been highlighted on the Map and labeled.

I. Cemeteries

There are approximately forty-two cemeteries located throughout Carroll County. Many are small and/or associated with churches. Only the cemeteries of considerable size have been identified. These are Pine Grove, Beth Jacobs, Evergreen Memorial Gardens, Gardens of Eternal Hope, and Meadow Branch Cemetery.

J. Municipal Corporate Limits/Planning Area Limits

The municipal corporate limits and planning area limits have both been shown on the Map since they differ slightly. These limits primarily indicate high growth areas which normally necessitate a more extensive greenway system.

K. Planned Water and Sewer Service Areas

Planned water and sewer service areas have been shown on the Map which were interpolated from the Carroll County Sewer and Water Service Area Plans. These Planned Service areas are located at each town center. These areas are identified since cluster development is likely to occur, providing an opportunity for greenways in open space.

IV. IDENTIFICATION OF REGIONAL GREENWAY INITIATIVES

Staff from adjacent counties in both Maryland and Pennsylvania were contacted to identify local greenway initiatives and their priorities. Meetings were held with Maryland Greenways to determine if there were any initiatives being coordinated at the State level. Finally, the Rivers and Trails Conservation Assistance Program within the National Park Service was contacted to identify any projects, programs or services which may be of assistance to Carroll County.

A. Baltimore County, Maryland

Bill Hughey of the Department of Planning and Zoning was contacted to determine potential or existing inter-county greenway connections. Baltimore County's greenway development has been following the County's Parks and Open Space section of their latest Master Plan (1989-2000) for the last several years.

Priorities for Carroll County would be to tie into Pretty Boy Reservoir, Liberty Reservoir, and Cook's Branch. Also, there are three Maryland Scenic Roadways that tie the two counties together. They are Falls Road, Lower Beckleysville Road and Carrollton/Fringer Road.

Baltimore County secures land for most of its greenways through the development process. Developers must dedicate land when building near a planned greenway. Also, the Recreation and Parks Department allots money in their budget to purchase land for greenways.

B. Howard County, Maryland

Clara Gouin, Senior Park Planner with the Department of Recreation and Parks, was contacted to determine potential or existing inter-county greenway connections. At that time, Howard County was using the Maryland Greenway Atlas as their master plan. The majority of their greenways are located along the Little Patuxent, Middle Patuxent and Patuxent Rivers.

Their major greenway connection to Carroll County is through the Patapsco River Greenway. Also, there are plans to connect the Patapsco Greenway to the Patuxent Greenway in the northwest corner of Howard County along Long Corner Road.

Ms. Gouin recommended speaking to Kay Gordon from Trail Riders of Today (TROT) since horseback riding is an important recreational activity in Howard County. According to Ms. Gordon, there is a major equestrian center planned near the Marriottsville Landfill. A horse trailer parking area is planned at the proposed Sykesville City Park located near the Hugg-Thomas Wildlife Area in Howard County. This will provide horse access to many of the trails in the Patapsco Valley State Park.

C. Frederick County

Gil Kingsbury of the Department of Recreation and Parks was contacted regarding potential inter-county greenway connections. The Monocacy Scenic River Greenway is the only planned Greenway adjoining Carroll County. Major efforts are underway to protect the river from pollution and erosion and to preserve the scenic landscape.

D. Adams County, PA

Richard Schmoyer of the Department of Planning and Development was contacted regarding information relating to greenways, open space and/or recreational facilities in Adams County adjacent to Carroll County. They are not actively pursuing development of a greenway plan. Their comprehensive plan identifies preservation of areas and streams near the Monocacy River. Also, Alloway Creek was identified as a valuable potential greenway.

Another potential connection is by way of the abandoned Maryland-Pennsylvania Railroad that connects Taneytown to Littlestown, Pennsylvania.

E. York County, PA

Joseph D. Heffner, Senior Planner of the Planning Department was contacted regarding information relating to greenways, open space and/or recreational facilities in York County adjacent to Carroll County. Their recently-completed Comprehensive Plan has not specified anything with respect to greenways. At present, the area bordering Carroll County is predominantly either open space or agricultural and is projected for continuance of these uses. The western side of the Hanover Watershed Wildlife Management Area has been designated as an urban growth area.

F. Maryland Greenways

Theresa Moore, Executive Director, and John Wilson, Greenways and Resource Planner, provided state-level information that impacts development of greenways in Carroll County. The Patapsco River Greenway was designated a priority for Maryland with the establishment of the Maryland Greenways Commission. A study of the Patapsco River was completed and the Patapsco Greenway Advisory Committee was formed to develop priorities within the Greenway Action Agenda. The top two regional priorities were Gwynn's Falls, and South Branch Patapsco. The following were noted as priority Greenway projects within Carroll County

- South Branch Patapsco - Sykesville to Mt. Airy
- Piney Run - Sykesville to South Branch of Patapsco
- Morgan Run connection to Liberty Reservoir

The Patapsco Greenway Study also stated that the Town of Mount Airy is studying the creation of a rail trail along the abandoned Baltimore and Ohio Railroad. The potential trail will connect the center of Mount Airy to the South Branch of the Patapsco River.

The Maryland Greenways Atlas identifies additional priority greenways:

- Little Pipe Creek Greenway
- Monocacy Scenic River Greenway
- Union Mills to Westminster Greenway

It should be further noted that the Monocacy River is officially designated as a Maryland Scenic River. As a part of the designation process, the Commissioners of both Carroll and Frederick Counties endorsed the 1990 Monocacy Scenic River Study and Management Plan and five Carroll County residents sit on the 10-member Monocacy Scenic River Citizens Advisory Board, which will play an advisory role in any greenway development along the Monocacy and its major tributaries.

V. IDENTIFICATION OF GREENWAY OPPORTUNITIES

Once the baseline information was collected regarding Carroll County's resources and adjacent county plans, opportunities for the greenway system were identified. A Greenway Plan (referred to as the Plan) was developed that incorporated the following key elements:

- Linkage potential to adjacent County greenway systems;
- Linkage potential to schools, historic sites, recreation facilities, population and employment centers, and other high user areas;
- Preservation and protection of rivers and streams;
- Provision of contiguous wildlife habitat corridors; and
- Development of both passive and active greenways.

A. Linkage to Adjacent County Greenway Systems

Previous investigation identified potential linkages to proposed and existing greenway systems in adjacent counties. The Plan has incorporated the following greenway connections:

- Baltimore County - Liberty Reservoir area, Pretty Boy Reservoir, the Maryland Mid-Atlantic Railroad and along three scenic roads.
- Howard County - South Branch of the Patapsco River with major connections to Mt. Airy and Sykesville.
- Frederick County - Monacacy River
- Adams County - Monacacy River, Alloway Creek, and the abandoned Maryland-Pennsylvania Railroad.
- York County - Hanover Watershed Wildlife Management Area

B. Linkage to Schools, Historic Sites, and Recreational Facilities

A concerted effort was made to interconnect most of the schools, historic sites, parks and other high-user areas with surrounding residential and town development. This presented the opportunity to expand the greenways even further by providing greenbelts around the town centers. The purpose was to link these key sites and provide other transportation options or opportunities for the residents of Carroll County.

Schools included in the proposed Greenway Plan are:

- | | |
|-----------------------------|------------------------|
| - Carroll Community College | - Elmer Wolf ES |
| - Carrolltowne ES | - Francis Scott Key HS |
| - Charles Carroll ES | - Freedom ES |
| - East MS | - Friendship Valley ES |
| - Eldersburg ES | - Friendship Valley MS |

- Hampstead ES
- Liberty HS
- Manchester ES
- Mechanicsville ES
- Mt. Airy ES
- Mt. Airy MS
- New Windsor MS
- North Carroll HS
- North Carroll MS
- Northwest MS
- Piney Ridge ES
- Robert Moton ES
- Runnymede ES
- Sandymount ES
- South Carroll HS
- Spring Garden ES
- St. John's School
- Sykesville MS
- Taneytown ES
- West MS
- Western Maryland College
- Westminster ES
- Westminster HS
- William Winchester ES
- Winfield ES

Historic sites linked by the proposed Greenway Plan.

- Carroll County Farm Museum
- Carroll County Historical Society
- County Courthouse
- Hard Lodging Historic Site
- Quaker Meeting House
- Sykesville Historic Train Station
- Terra Rubra-Francis Scott Key Historic Home
- Union Mills Homestead
- Western Maryland RR Museum

City, County and State parks included in the Greenway Plan:

- Bennett Cerf Memorial Park
- Big Pipe Creek Park
- Christmas Tree Park
- Cranberry Park
- Gillis Falls
- Hashawha Environmental Center
- Hodges Park
- Liberty Reservoir
- Mayeski Park
- Millard Cooper Town Park
- Morgan Run natural Environment Area
- Patapsco State Park
- Piney Run Park
- Roaring Run Community Park
- Salt Box Park
- Taneytown Memorial Park
- Union Bridge Community Park
- Union Mills Homestead Park
- Watkins Park
- Westminster Community Park
- Westside Memorial Park

High user areas included in the Greenway Plan:

- Carroll County Sports Complex
- Carroll Plaza
- Cranberry Mall
- Cranberry Square Shopping Center
- Eldersburg Business Center
- Englar Business Park
- Finksburg Plaza
- K-Mart Plaza
- Roberts Field Business Center
- Springfield Hospital Center
- Taneytown Shopping Center
- Tibbetts Industrial Park
- Twin Arch Shopping Center
- Walnut Park Industrial Park
- Westminster Air Business Center
- Westminster Shopping Center

C. Rivers and Streams

The Use III and IV streams were identified during the inventory stage of the project. Use III streams are designated as natural trout streams and Use IV are stocked with trout. These classifications further enhance the value of these streams making it even more essential to preserve them.

The following is a list of those streams included in the Greenway Plan:

- Alloway Creek
- Bear Branch
- Beaver Run
- Big Pipe Creek
- Buck Horn Run
- Cabbage Spring Branch
- Deep Run
- East Branch
- George's Run
- Gillis Falls
- Joe Branch
- Little Morgan Run
- Little Pipe Creek
- Middle Run
- Monocacy River
- Morgan run
- Murphy Run
- North Branch Patapsco River
- Piney Creek
- Piney Run
- Roaring Run
- Sams Creek
- South Branch Patapsco River
- West Branch Patapsco River
- Wolf Pit Branch

D. Contiguous Wildlife Habitats

Each of these rivers and streams typically run along multiple properties owned by either public and/or private entities. The County's stream corridor provision requiring 100 feet of buffer on each side of the stream will be beneficial in acquiring these greenways.

Much of the County is either zoned conservation or within an agriculture district or easement. Therefore, there are very large rural areas that contain existing wildlife

corridors. The Plan provides proposed greenway connections to these rural areas and stream valleys in order to provide wildlife corridor connections. These greenways will help prevent the typical segmenting of land that occurs through any subdivision process and will provide wildlife benefit.

E. Development of Passive and Active Greenways

In any greenway plan, a variety of greenway types are not only possible, but desirable. With its landscape ranging from rural farmland to undisturbed forest to suburban and urban development, Carroll County has an excellent opportunity to develop a greenway system that will serve a variety of users and offer distinct alternatives in which to travel and enjoy the system.

As will be described further in the next section of this study, this Greenway plan proposes a customized greenway classification system for Carroll County. These classifications include both passive and recreational opportunities for the residents of Carroll County.

VI. DEVELOPMENT OF A GREENWAY CLASSIFICATION SYSTEM

Once greenway opportunities were identified, the next step in developing the Plan was to establish a Greenway Classification System. The purpose of this system is to provide detailed criteria that will assist the County in classifying and designing greenways.

The Greenway Classification System is divided into the following five categories:

- Class #1 - Environmental Area
- Class #2 - Environmental Appreciation
- Class #3 - Environmental Recreation
- Class #4 - Medium Use Recreation
- Class #5 - High Use Recreation

Four primary factors were used to define each classification.

1. Emphasis - Ranges from a high degree of environmental protection and preservation to a high degree of recreational use.
2. Potential Activities - Specifies types of allowable activities and their degree of availability.
3. Facilities - Specifies types of facilities that can be provided and where along the greenway the facility should be located.
4. Corridor and Pathway Criteria - Provides general guidelines for the development of the greenway.

The Greenway Classification Chart is included in this Technical Report for reference purposes (Figure 2). Also, color photographic examples and typical sections have been included to illustrate the character of each greenway class.

A. Class 1 - Environmental Area

Class 1 emphasizes the protection and preservation of stream valleys, wildlife corridors, and natural areas (Figures 3 and 4). This classification does not allow any activities or facilities within the greenway. Therefore, there is no specific pathway criteria given. The only criteria is the greenway corridor be at least 200' in width. It is imperative that this type of greenway function with little or no pedestrian or vehicular interaction so that these areas can be maintained in their pristine, natural states.

Class 1 Greenways have not been shown on the final Greenway Plan (Figure 13) or on the greenway matrix (Figure 14) because there are so many potential locations throughout the County. Greenways with this classification should be identified by the County on a case by case basis. Activities and/or facilities would only be provided if another classification overlapped the Environmental Area classification.

GREENWAY CLASSIFICATIONS

CARROLL COUNTY GREENWAY MASTER PLAN

CLASSIFICATIONS		POTENTIAL ACTIVITIES								FACILITIES								GREENWAY CRITERIA									
KEY ON MASTER PLAN	CLASSIFICATION #	EMPHASIS	WHEELCHAIR AND STROLLER ACCESSIBLE	NATURE STUDY	HIKING	HORSEBACK RIDING	JOGGING	BICYCLING	ROLLER BLADING	CROSS COUNTRY SKIING	SEATING	PICNIC TABLES & PAVILIONS	REST ROOMS	WATER FOUNTAINS	BIKE RACKS	TRASH RECEPTACLES	INFORMATION KIOSKS	PARKING	Corridor Criteria	Pathway Criteria							
																			RECOMMENDED MINIMUM WIDTH	SURFACE MATERIAL	HEIGHT CLEARANCE	PATHWAY WIDTH	SHOULDER WIDTH	MAXIMUM GRADE	MINIMUM BIKE RADIUS	MINIMUM BIKE STOP SIGHT DISTANCE	
Not Shown	1	Environmental Area (See Note)																	200'	NA	NA	NA	NA	NA	NA	NA	NA
	2	Environmental Appreciation																	100'	Soft	10'	2' to 4'	NA	NA	NA	NA	
	3	Environmental Recreation																	50'	Soft or Hard	10'	2' to 4'	NA	NA	NA	NA	
	4	Medium Use Recreation																	25'	Soft or Hard	10'	4' to 8'	0' to 2'	8%	25' to 50'	50' to 75'	
	5	High Use Recreation																	30'	Hard	10'	8' to 10'	2' to 5'	8%	50'	75'	

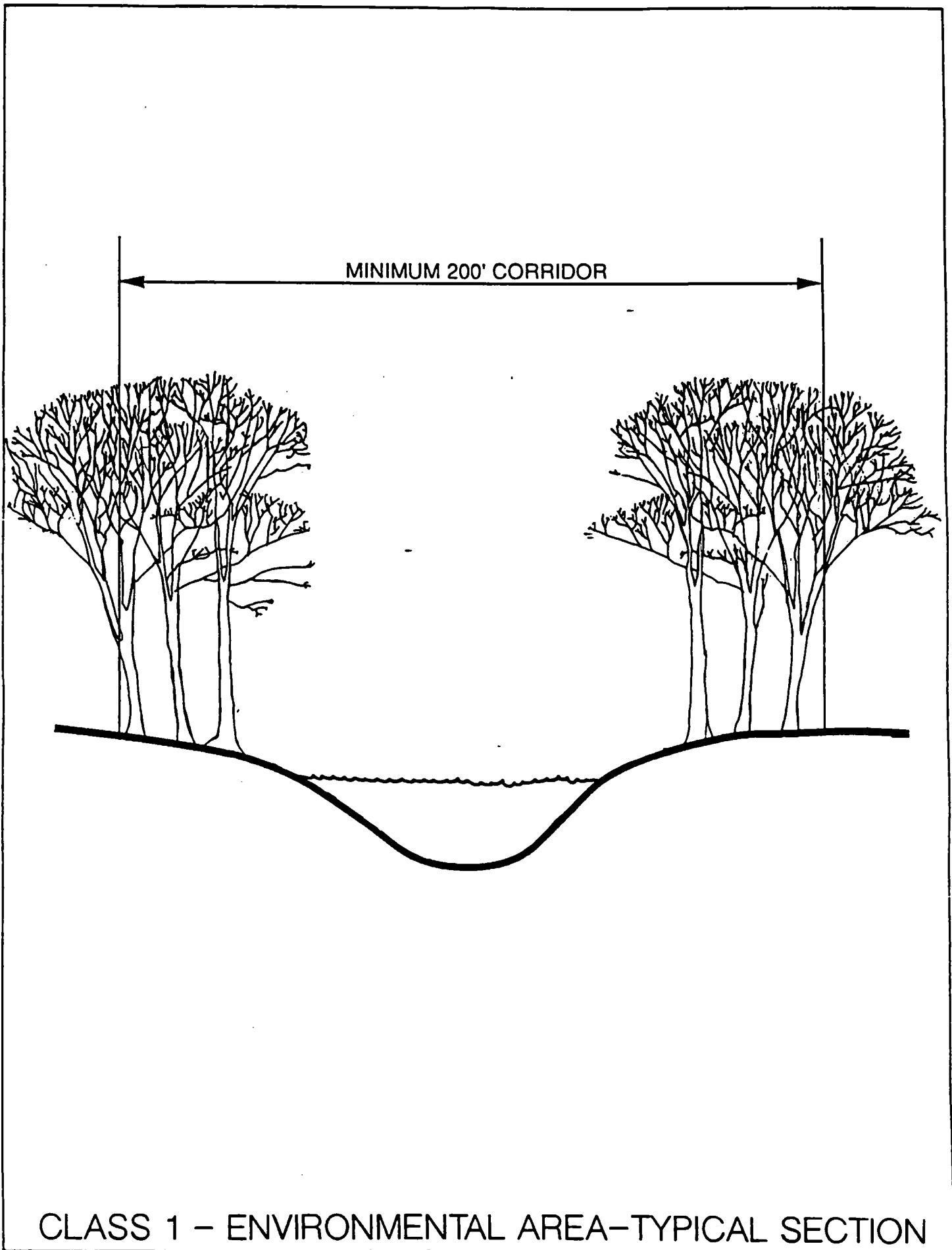
- ALWAYS
 - SOMETIMES
 - NEVER
 T - FOUND ALONG TRAIL
 A - FOUND ONLY AT ACCESS POINTS

NOTE: Classification #1 Greenways are intended to protect and preserve stream and wildlife corridors and natural areas. In no way should this apply to all stream and wildlife corridors and natural areas. Therefore, Classification #1 Greenways have not been shown on the Greenway Plan and will be identified on a case by case basis by the County. Also, activities and facilities will not be provided for unless the classification #1 Greenway is overlapped by a classification #2 - #5 Greenway.

FIGURE 2



CLASS 1 - ENVIRONMENTAL AREA - EXAMPLES



B. Class 2 - Environmental Appreciation

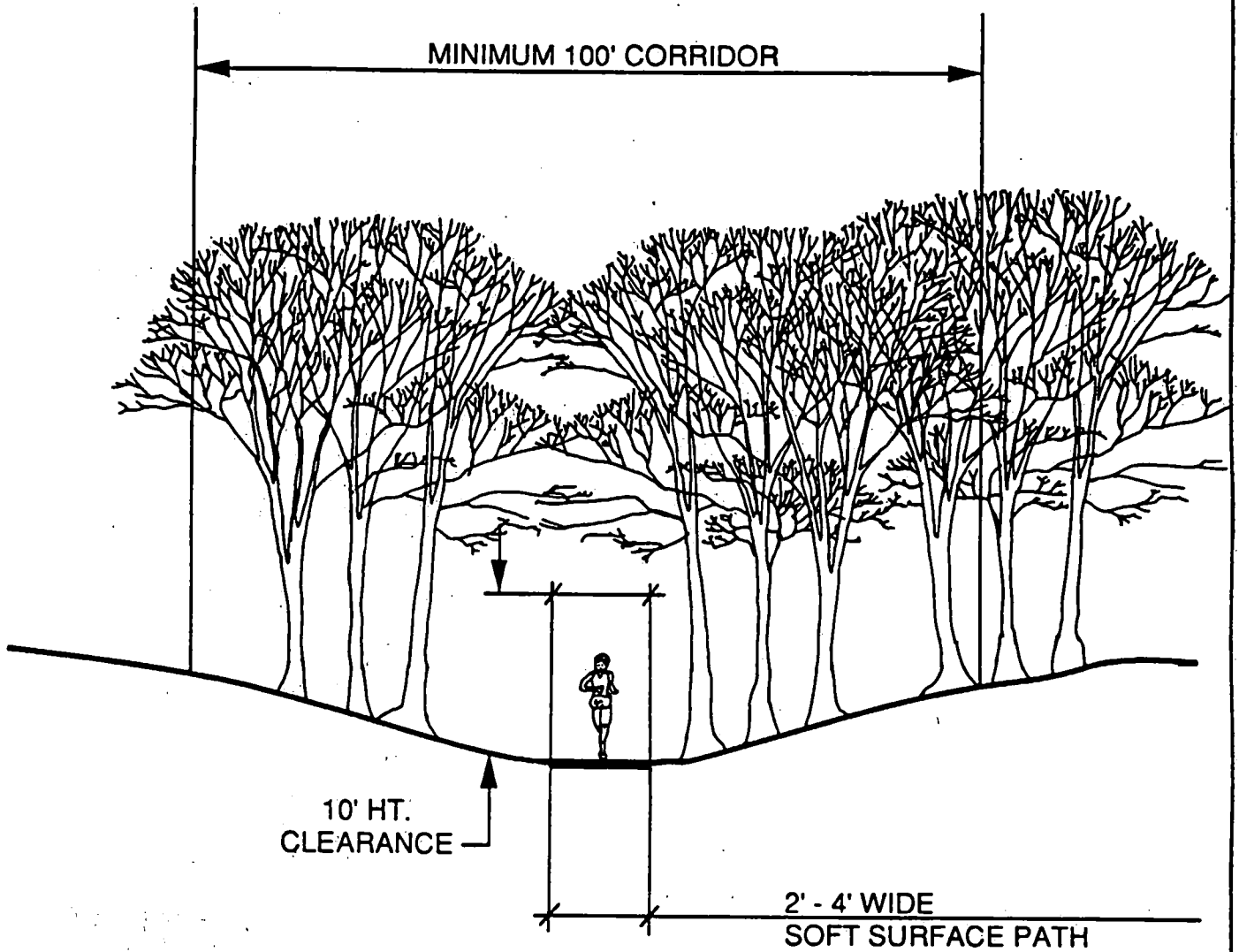
Class 2 emphasizes the appreciation of the preserved natural environment while allowing limited activities and facilities such as nature study, hiking, and horseback riding (Figures 5 and 6). Facilities may include seating, trash receptacles and information kiosks. These facilities should only be located at major access points to the greenway.

Environmental Appreciation Greenways should contain a two to four foot wide soft surface pathway with a ten foot height clearance which will allow horseback riding. These greenways should also be a minimum of 100 feet in width to protect the natural character of the greenway.

Class 2 Greenways have been identified by green hexagons on the final Greenway Plan (Figure 13). Most of the Class 2 Greenways are located along bodies of water such as the Monocacy River and Liberty Reservoir.



CLASS 2 - ENVIRONMENTAL APPRECIATION - EXAMPLES



CLASS 2 - ENVIRONMENTAL APPRECIATION-TYPICAL SECTION

C. Class 3 - Environmental Recreation

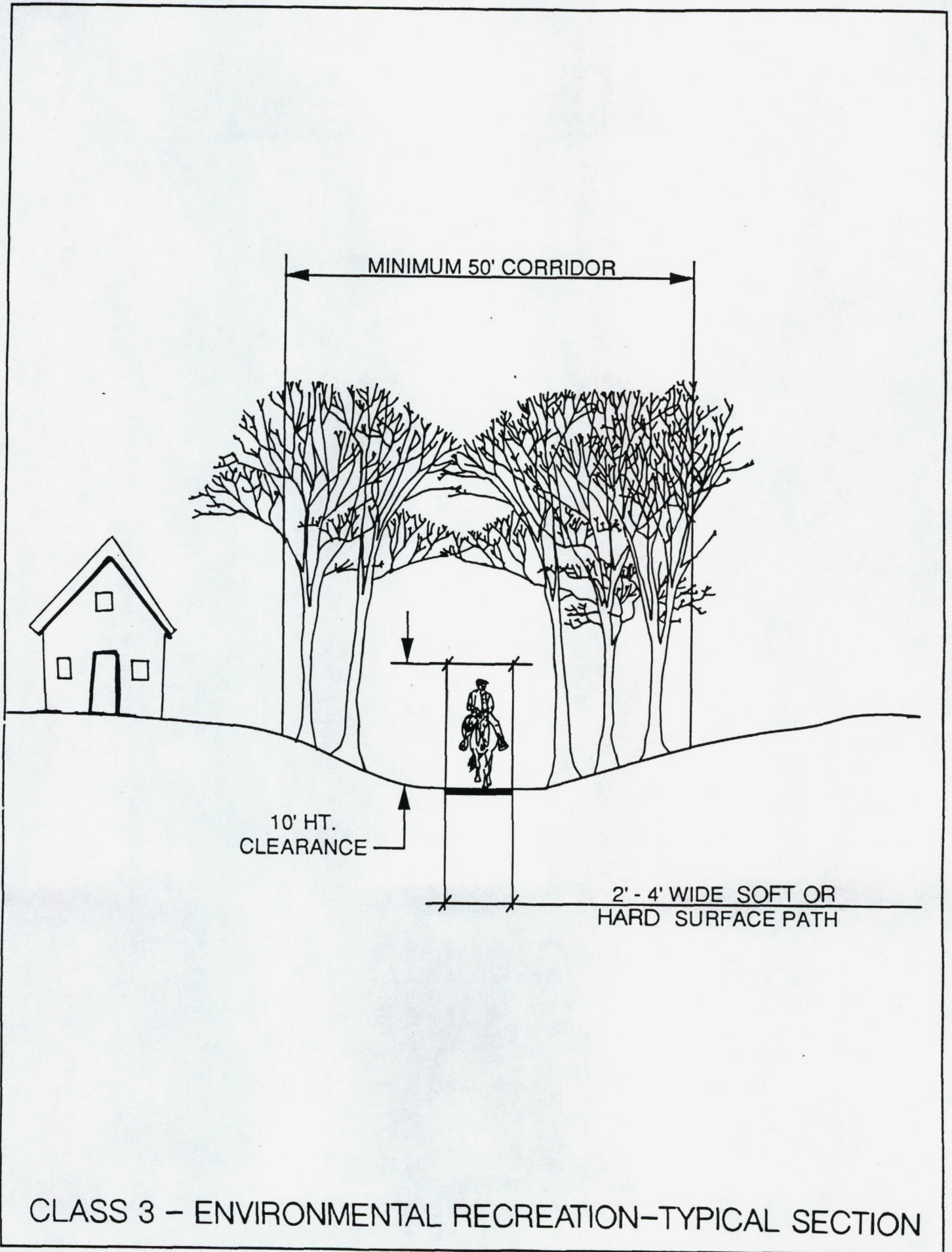
Class 3 emphasizes a balance between environmental preservation and minimal recreational use (Figures 7 and 8). While hiking and horseback riding will be the primary activities, there may also be areas where jogging, bicycling, and wheelchair and stroller accessibility will occur. Limited facilities, depending on the activities that occur, can be provided at the access points to the greenways such as seating, picnic tables, and parking.

Environmental Recreation Greenways should contain a two to four foot wide soft or hard surface pathway with a height clearance of ten feet. These greenways should have a minimum width of 50' in order to maintain the character of the greenway and provide buffers to adjacent properties.

Class 3 Greenways are identified by brown triangles on the final Greenway Plan (Figure 13). The proposed Class 3 Greenways are located throughout the County with the greatest concentrations in the vicinities of Taneytown, Hampstead, the Piney Run Reservoir, and south of Westminster.



CLASS 3 ENVIRONMENTAL RECREATION - EXAMPLES



CLASS 3 - ENVIRONMENTAL RECREATION-TYPICAL SECTION

D. Class 4 - Medium Use Recreation

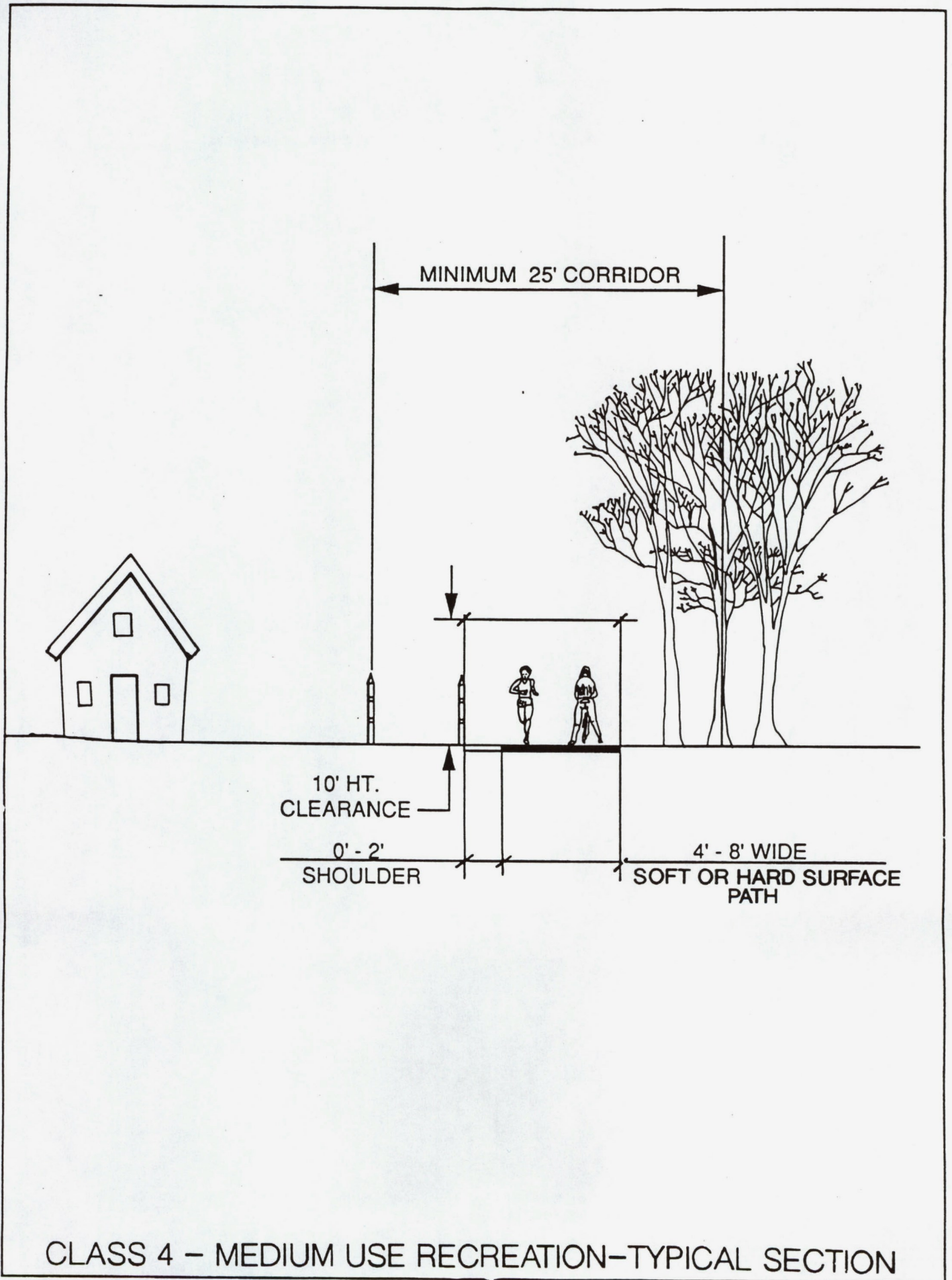
Class 4 emphasizes medium use of recreational facilities (Figures 9 and 10). In general, Class 4 is similar to Class 5 except that the pathway may not always be wheelchair and/or stroller accessible, provide habitat for nature studies or contain a pathway surface suitable for roller blading. Seating, bicycle racks and trash receptacles should be located at all access points. Any of the other potential facilities can be provided at access points as necessary.

Medium Use Recreation Greenways should contain a four to eight foot wide soft or hard surface pathway with a minimum height clearance of ten feet. Shoulder widths of up to two feet on either side of the path are also recommended. The maximum grade of the path should be 8% (handicap accessible) with a minimum bike radius of 25'-50' and bike stopping distance of 50'-75'. These greenways should have a minimum width of 25 feet to allow ample room for construction of the pathway and facilities.

Class 4 Greenways are identified by orange squares on the final Greenway Plan (Figure 13). The proposed Class 4 Greenways are located throughout the County with the greatest concentrations in the vicinities of Taneytown, Westminster, Finksburg, Manchester and Patapsco River State Park.



CLASS 4 MEDIUM USE RECREATION - EXAMPLES



CLASS 4 – MEDIUM USE RECREATION—TYPICAL SECTION

E. Class 5 - High Use Recreation

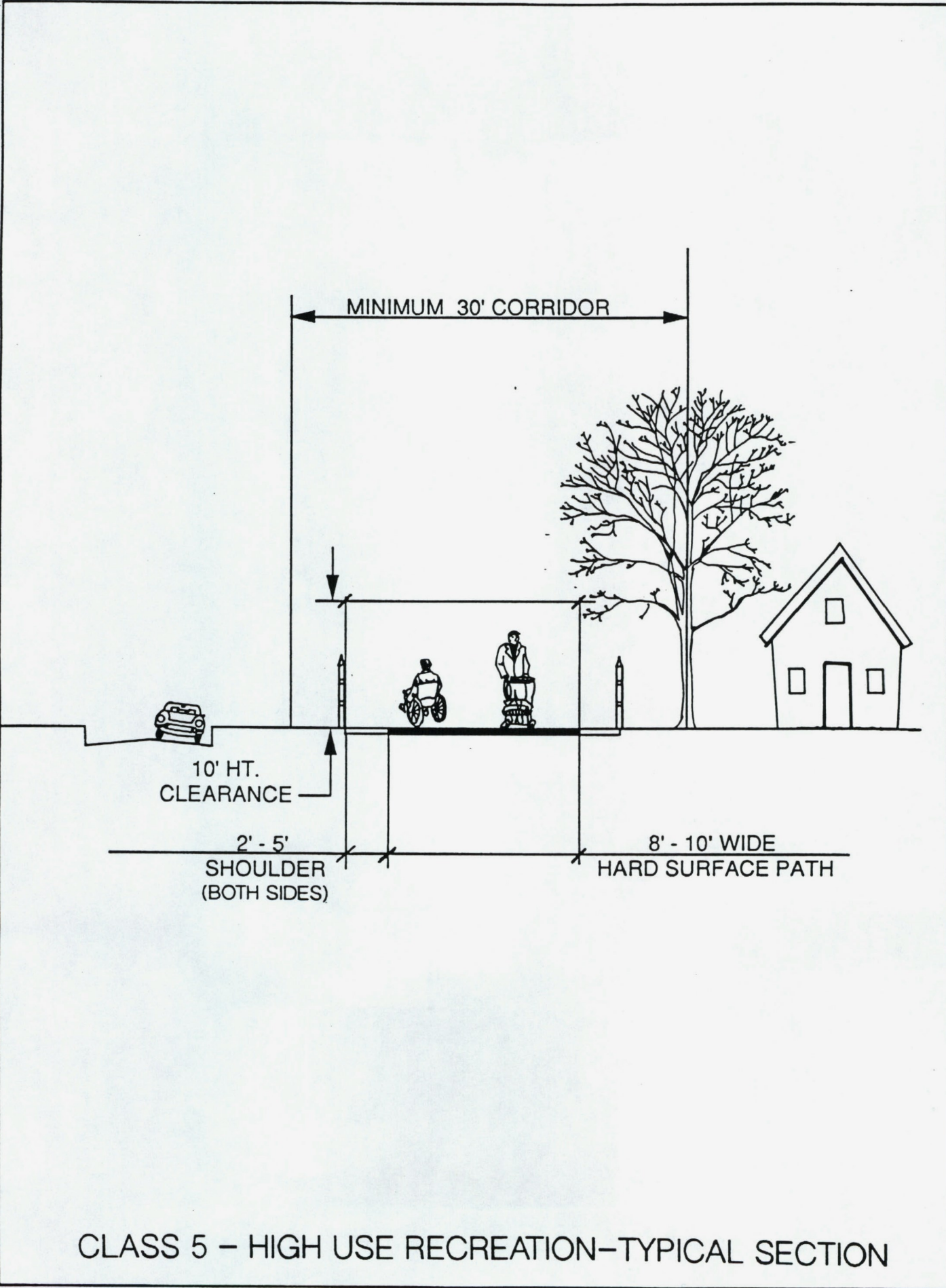
Class 5 emphasizes high recreational use with limited environmental preservation (Figures 11 and 12). Due to the type of surface and the location of the greenway, horseback riding and nature studies may not always be possible. The same facilities located at the access points of a Class 4 Greenway will more likely be located along the pathway of a Class 5 Greenway.

High Use Recreation Greenways should contain an eight to ten foot wide hard surface pathway with two to five foot shoulders on each side and a minimum ten foot height clearance. The maximum grade should be 8% with minimum bike radii of 50' feet and bike stopping distance of 75' feet. The Greenway should have a minimum width of approximately 30 feet.

Class 5 Greenways are identified by blue rectangles on the final Greenway Plan (Figure 13). The proposed Class 5 Greenways are located within Taneytown, Union Bridge, New Windsor, Westminster, Manchester, Hampstead, Mount Airy and Sykesville.



CLASS 5 HIGH USE RECREATION EXAMPLES



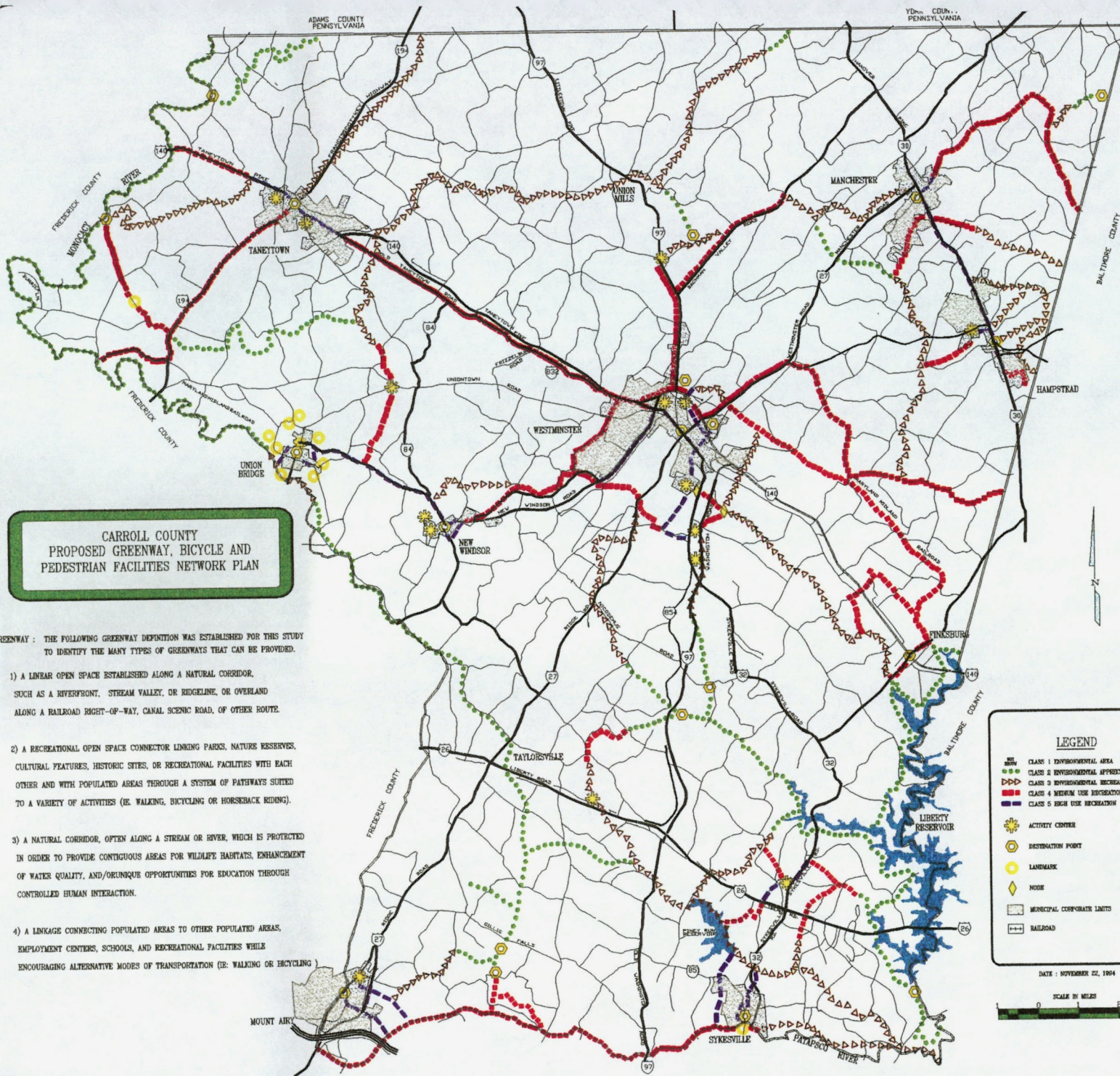
CLASS 5 – HIGH USE RECREATION—TYPICAL SECTION

VII. FINAL GREENWAY PLAN

Once the greenway opportunities were identified and the greenway classifications were established, the Final Greenway Plan was prepared (Figure 13). The Plan incorporates significant input from County officials and the general public obtained through two public hearings and through written recommendations.

The Final Greenway Plan identifies conceptual greenway alignments for Classes 2 through 5. Class 1 Greenways, as stated previously, are too numerous to map.

The Greenway Plan should be used by the County as a tool to determine essential greenway areas that can be acquired during the development process. The Plan should also act as a guide in land purchases and greenway prioritization. The color coded Greenway Plan, at a scale of 1"=1 mile, is provided at the back of this Technical Report (Appendix B).



**CARROLL COUNTY
PROPOSED GREENWAY, BICYCLE AND
PEDESTRIAN FACILITIES NETWORK PLAN**

GREENWAY : THE FOLLOWING GREENWAY DEFINITION WAS ESTABLISHED FOR THIS STUDY TO IDENTIFY THE MANY TYPES OF GREENWAYS THAT CAN BE PROVIDED.

- 1) A LINEAR OPEN SPACE ESTABLISHED ALONG A NATURAL CORRIDOR, SUCH AS A RIVERFRONT, STREAM VALLEY, OR RIDGELINE, OR OVERLAND ALONG A RAILROAD RIGHT-OF-WAY, CANAL SCENIC ROAD, OF OTHER ROUTE.
- 2) A RECREATIONAL OPEN SPACE CONNECTOR LINKING PARKS, NATURE RESERVES, CULTURAL FEATURES, HISTORIC SITES, OR RECREATIONAL FACILITIES WITH EACH OTHER AND WITH POPULATED AREAS THROUGH A SYSTEM OF PATHWAYS SUITED TO A VARIETY OF ACTIVITIES (IE. WALKING, BICYCLING OR HORSEBACK RIDING).
- 3) A NATURAL CORRIDOR, OFTEN ALONG A STREAM OR RIVER, WHICH IS PROTECTED IN ORDER TO PROVIDE CONTIGUOUS AREAS FOR WILDLIFE HABITATS, ENHANCEMENT OF WATER QUALITY, AND/OR UNIQUE OPPORTUNITIES FOR EDUCATION THROUGH CONTROLLED HUMAN INTERACTION.
- 4) A LINKAGE CONNECTING POPULATED AREAS TO OTHER POPULATED AREAS, EMPLOYMENT CENTERS, SCHOOLS, AND RECREATIONAL FACILITIES WHILE ENCOURAGING ALTERNATIVE MODES OF TRANSPORTATION (IE. WALKING OR BICYCLING)

LEGEND

	CLASS 1 ENVIRONMENTAL AREA
	CLASS 2 ENVIRONMENTAL APPRECIATION
	CLASS 3 ENVIRONMENTAL RECREATION
	CLASS 4 MEDIUM USE RECREATION
	CLASS 5 HIGH USE RECREATION
	ACTIVITY CENTER
	DESTINATION POINT
	LANDMARK
	NODE
	MUNICIPAL CORPORATE LIMITS
	RAILROAD

DATE - NOVEMBER 22, 1984



A. Greenway Matrix

A greenway matrix (Figures 14 and 15) was compiled listing all of the greenways shown on the Final Plan.

The end result is a plan that includes 79 greenways encompassing approximately 2,335 acres of land with a total length of 353 miles. The matrix on the following pages identifies and provides the location of the proposed greenways. Lengths of the greenways range from 0.3 mile to 26.5 miles. The acreage required for the greenways ranges from 1 acre to 321 acres. Many of the greenways are located in areas zoned conservation and act as links to other greenways within the system. Areas zoned conservation are already restricted by the zoning therefore they are more likely to be preserved and have greater potential for greenway development.

The matrix has been provided in alphabetical order by name and by classification.

GREENWAY MATRIX SUMMARY
CARROLL COUNTY GREENWAY PLAN

GREENWAY CLASSIFICATION	# OF PROPOSED GREENWAYS	TOTAL APPROX. LENGTH IN MILES	TOTAL APPROX. ACREAGE	TOTAL APPROX. LENGTH ZONED CONSERVATION IN MILES
2 - ENVIRONMENTAL APPRECIATION	15 GREENWAYS	100.2 MILES±	1215.8 ACRES±	61.1 MILES±
3 - ENVIRONMENTAL RECREATION	25 GREENWAYS	110.6 MILES±	669.8 ACRES±	70.4 MILES±
4 - MEDIUM USE RECREATION	26 GREENWAYS	109.8 MILES±	332.6 ACRES±	34.1 MILES±
5 - HIGH USE RECREATION	13 GREENWAYS	32.4 MILES±	117.7 ACRES±	4.0 MILES±
GRAND TOTAL	79 GREENWAYS	353.0 MILES±	2335.9 ACRES±	169.6 MILES±

FIGURE 14

GREENWAY MATRIX - IN ORDER BY CLASSIFICATION
CARROLL COUNTY GREENWAY PLAN

PROPOSED GREENWAY	GREENWAY CLASS	ADC MAP LOCATION	TRAIL LENGTH	REC. WIDTH PER CLASS	APPROX. ACREAGE	% ZONED CONSERVATION	# OF LINKS TO OTHER GREENWAYS	DESCRIPTION
ALLOWAY CREEK	2	1	4.9MI	100'	59.4AC	25%	1	Follows Alloway Cr. from Monocacy R. (Starners Dam) to PA border.
BEAR BRANCH	2	12	1.5MI	100'	18.4AC		2	Along Bear Branch from Union Mills Homestead to Hashawha
BIG PIPE CREEK SOUTH	2	9	7.8MI	100'	94.1AC		2	Along Big Pipe Cr. from Bruceville to Trevanion
BUCK HORN RUN	2	29	3.0MI	100'	36.7AC	100%	2	Along Buck Horn Run from Gillis Falls to Piney Run
CABBAGE SPRING BRANCH	2	28	1.7MI	100'	20.7AC	100%	2	Along Cabbage Spring Branch from Flowerwood Estates to Gillis Falls
HANOVER WILDLIFE AREA	2	5	0.8MI	100'	9.7AC		1	Runs through Hanover Watershed Wildlife Mgmt. Area from PA. border
JOE BRANCH	2	24	2.8MI	100'	34.4AC	100%	2	Along Joe Branch from Rte. 97 to Morgan Run Natural Environmental Area
LIBERTY RESERVOIR	2	26	17.4MI	100'	211.2AC	100% state	5	From North end of Liberty Reservoir south to S.W. corner of Carroll Co.
LITTLE MORGAN RUN/LIBERTY	2	30	1.1MI	100'	13.6AC		2	Along Little Morgan Run from Bartholow Rd. to Liberty Reservoir
MIDDLE RUN	2	28	1.1MI	100'	13.8AC	Gillis Falls	2	Along Middle Run from Watersville Rd. to Gillis Falls
MONOCACY RIVER	2	8	26.5MI	100'	321.3AC	50%	7	Follows Monocacy R. & Little Pipe Cr. from PA. border to Union Bridge
MORGAN RUN	2	25	11.4MI	100'	137.8AC	100%	5	Along Morgan Run from Salem Manor to Patapsco R.
PRETTY BOY	2	7	0.9MI	100'	10.9AC	mostly public	1	Runs through Pretty Boy Reservoir by River Valley Ranch & links to Balt. Co.
ROSS RUN/GUMMEL	2	13	3.0MI	100'	36.4AC	60%	3	Along creeks/streams between Fridinger Mill Rd. & Harvey Gummel Rd.
SAMS CREEK/GILLIS FALLS	2	28	16.3MI	100'	197.4AC	40%	5	Along Sams Cr. and Gillis Falls from Union Bridge to Gillis Falls Reservoir
BACHMAN HILLS	3	14	4.5MI	50'	27.5AC	10%	3	From Bachman Hills to Manchester along creeks/streams
BEAVER RUN	3	20	9.1MI	50'	55.1AC	100%	5	Along Beaver Run from Rte. 97 to Gamber Rd.(MD 91)
BENNETT CERF	3	19	1.1MI	50'	6.9AC	100%	3	Along Sunshine Way and through Bennett Cerf Park to Rte 27.
BIG PIPE CREEK NORTH	3	10	10.8MI	50'	65.4AC	20%	4	From Old Taneytown Rd. to Union Mills/Hashawha along Big Pipe Cr.
CRESTVIEW MEADOWS	3	14	1.3MI	50'	8.0AC	25%	2	Along streams/creeks from downtown Hampstead to Balt. Co. border
DEEP RUN	3	4	4.9MI	50'	29.7AC	70%	2	Along Deep Run from Hanover Watershed Wildlife Mgmt. Area to Union Mills/Big Pipe Cr.
E. BRANCH/CASCADE LAKE	3	14	6.8MI	50'	41.3AC	100%	4	Along East Branch and Cascade Lake from Harvel Gummel Rd. to Carrollton Rd.
GEORGE'S RUN	3	15	2.7MI	50'	16.1AC	100%	1	Along George's Run from Balt. Co. to Maple Grove
JOHN OWINGS RD.	3	12	2.3MI	50'	13.8AC	gov't/consv.	3	Along John Owings Rd. between Littlestown Pk. and Bachmans Valley Rd.
KEMPFELD	3	15	1.7MI	50'	10.3AC	100%	2	From Small Crossings to Gross Mill Estates along streams/creeks
LITTLE MORGAN RUN	3	30	5.5MI	50'	33.3AC	45%	3	Along Little Morgan Run from S. Carroll HS to Hammond Estates
LITTLE PIPE CREEK	3	18	3.0MI	50'	18.4AC		2	Follows Little Pipe Cr. from New Windsor to Wakefield(MD 84 to John Hyde Rd)
MARYLAND MIDLAND R.R.	3	2	5.3MI	50'	32.1AC		2	Follows Maryland Midland RR R/W from Taneytown to PA. border
MURPHY RUN	3	7	5.3MI	50'	32.1AC	85%	4	Along Murphy Run & streams/creeks from Greenmount Methodist Church to Balt. Co.
OLD WESTMINSTER RD.	3	19	4.9MI	50'	29.8AC	55%	2	Along Old Westminster & Nicodemus Rd. from Spring Mills to Bloom Rd.
PATAPSCO STATE PARK	3	35	5.7MI	50'	34.4AC	95%	3	Along South Branch Patapsco R. between Sykesville and the Balt./How./Carroll Co. borders
PINEY CREEK	3	8	6.3MI	50'	37.9AC	100%	3	Along Piney Cr. from Monocacy R. to Rte. 140
PINEY RUN SOUTH	3	29	14.4MI	50'	87.2AC	90%	9	Along Piney Run from Winfield Woods to Patapsco State Park
ROLLER RD.	3	7	0.9MI	50'	5.5AC		2	Along Roller Rd. between Alesia & River Valley Ranch
SAMS CREEK/UNION BRIDGE	3	16	2.1MI	50'	12.6AC		3	Along Sams Cr. in Union Bridge Town Planning Area
SPRINGFIELD	3	30	1.0MI	50'	6.0AC		2	Along streams/creeks through Springfield Hospital Center to Piney Run.
TREVANION	3	10	3.4MI	50'	20.7AC		4	From Clear View Rd. to Old Taneytown Rd. along Big Pipe Cr.
WALNUT RIDGE/CLOVER AC.	3	20	2.3MI	50'	13.8AC	75%	5	Runs between West Branch Patapsco R. and Beaver Run
WATERSVILLE RD.	3	32	2.5MI	50'	14.9AC	60%	2	Along Watersville Rd. from the RR R/W to Gillis Falls Park
WHITE ROCK/LINTON RDS.	3	29	2.8MI	50'	17.0AC	95%	4	From Piney Run Park along White Rock & Linton Roads to Little Morgan Run
BACHMANS VALLEY RD	4	12	3.8MI	25'	11.5AC	40%	3	Along Bachmans Valley Rd. from Littlestown Pike to Bachman Mills
BAKER RD. - CHANTER DR.	4	24	1.9MI	25'	5.7AC	90%	2	Along Baker Rd, Salem Bottom Rd & Chanter Dr from Windfield Woods to Clearview Air Park
BEAVER RUN/RTE. 97	4	19	1.5MI	25'	4.6AC		4	Along Beaver Run & streams/creeks from Hunter Prof. Center to Beaver Run & Rte. 97
BELL RD.	4	18	2.5MI	25'	7.5AC		2	Along Bell Rd. from Uniontown Rd. to Adams Mill Rd.
FALLS/WATER SCHALK RD.	4	6	6.8MI	25'	20.7AC		2	From Manchester to Baltimore Co. border
FLAG MARSH RD.	4	33	0.8MI	25'	2.3AC	100%	3	From Gillis Falls to South Branch Patapsco R. along Flag Marsh R.

GREENWAY MATRIX - IN ORDER BY CLASSIFICATION

CARROLL COUNTY GREENWAY PLAN

PROPOSED GREENWAY	GREENWAY CLASS	ADC MAP LOCATION	TRAIL LENGTH	REC. WIDTH PER CLASS	APPROX. ACREAGE	% ZONED CONSERVATION	# OF LINKS TO OTHER GREENWAYS	DESCRIPTION
FRANCIS SCOTT KEY HWY	4	9	7.6MI	25'	23.0AC		5	Along Detour Rd. and FSK Hwy from Detour to Taneytown
FREEDOM/ROLLING VIEW	4	30	2.1MI	25'	6.3AC	40%	3	Along streams/creeks from Freedom ES to Liberty Reservoir
GILLIS FALLS SOUTH	4	33	1.7MI	25'	5.2AC	100%	2	Along Gillis Falls from Flag Marsh Rd. to Newport
GLAZERS HILL	4	14	2.1MI	25'	6.3AC	40%	4	Along streams/creeks between Harvey Gummel Rd. and Hanover Pike
HODGES PARK	4	30	1.1MI	25'	3.4AC		3	Runs by Hodges Park & Liberty HS
KEYSVILLE	4	8	3.8MI	25'	11.5AC	15%	3	Along Keysville Rd from Monocacy R. to Rte. 194 (FSK Hwy.)
LITTLESTOWN PIKE	4	12	3.6MI	25'	10.9AC		3	Along Littlestown Pk. (MD 97) from Rte. 140 to Carroll Co. Sports Com.
MARTZ/JOHNSVILLE RDS	4	29	1.7MI	25'	5.2AC	30%	2	Along Martz & Johnsville Rd. from Piney Run Park to Liberty Rd.
NORTHWOODS/BOXWOOD	4	14	1.3MI	25'	3.9AC		2	Along Boxwood Dr. and North Woods Trail
OKLAHOMA	4	30	1.8MI	25'	5.4AC	45%	2	Along streams/creeks from Oklahoma to Springfield Hospital Center.
OLD GAMBER/CEDARHURST	4	26	1.3MI	25'	4.0AC		2	Along Old Gamber Rd. & Cedarhurst Rd. between Rte. 91 and North Branch Patapsco R.
OLD NEW WINDSOR PIKE	4	18	6.4MI	25'	19.5AC	40%	6	Along Old New Windsor Pike & Little Pipe Cr. from New Windsor to Friendship Valley school site
OLD TANEYTOWN PIKE NE	4	1	2.3MI	25'	7.0AC	15%	3	From Monocacy R. to edge of Taneytown
OLD TANEYTOWN RD.	4	10	9.3MI	25'	28.1AC		5	Along Old Taneytown Rd. & Rte. 140 from Taneytown to Westminster
ROARING RUN/SUFFOLK RD.	4	26	3.2MI	25'	9.8AC	60%	2	Along Roaring Run and Suffolk Rd between N. Branch Patapsco R. & Beaver Run
RTE. 140 - CARROLLTON RD.	4	19	13.3MI	25'	40.2AC		7	Along Rte. 140, Manchester Rd, Leisters Church Rd. & Carrollton Rd. from West Md. Col. to Balto. Co.
S. BRANCH PATAPSCO R.	4	34	13.6MI	25'	41.3AC	70%	6	Along South branch Patapsco R. from Mt. Airy to Sykesville
TREELIN MANOR	4	14	1.1MI	25'	3.4AC	100%	3	Along George's Run from Maple Grove to Hanover Pike
W & N BRANCH PATAPSCO R.	4	26	11.4MI	25'	34.4AC	90%	7	Along W & N branches of Patapsco R. from Manchester Rd. to Emory Rd.
WOLF PIT BRANCH	4	17	3.8MI	25'	11.5AC	20%	2	Follows Wolf Pit Branch from Clear View Rd. to Green Valley Rd.
BALTIMORE ST. (TANEYTOWN)	5	10	2.6MI	30'	9.3AC		4	Through Taneytown along Baltimore St.
GREEN VALLEY RD.	5	17	5.3MI	30'	19.3AC		6	Along Green Valley Rd. between Union Bridge and New Windsor
HANOVER PIKE	5	14	5.5MI	30'	20.0AC		9	Along York St. and Hanover Pike from Manchester to Hampstead
JOHNSVILLE RD.	5	30	1.1MI	30'	4.1AC		3	From Liberty Run to Freedom ES along Johnsville & Sykesville Rds.
MAIN STREET (WESTMINSTER)	5	19	1.5MI	30'	5.5AC		3	Along Main St. between Rte. 31 and Washington Ave.
MT. AIRY/WATKINS PARK	5	32	2.2MI	30'	8.2AC		3	Along R.R. R/W from downtown Mt. Airy to South Branch Patapsco R.
NEW WINDSOR RD.	5	19	2.3MI	30'	8.3AC	45%	2	From Avondale to Main St. along New Windsor Rd.
PARK AVE./TWIN ARCH RD.	5	32	1.9MI	30'	6.9AC		2	Along Park Ave. & Twin Arch Rd. from Mt. Airy to South Branch Patapsco R.
RTE. 140 - GIST RD.	5	19	4.7MI	30'	17.2AC	10%	7	Along Rte. 140, Gist Rd. & Washington Ave. between Community Pond & Vo-Tech Center
RTE. 27	5	32	0.6MI	30'	2.1AC		2	Runs between Park Ave. and Watkins Park on Rte. 27
SHANNON RUN	5	34	2.7MI	30'	9.6AC	70%	2	From South Branch Patapsco R. along streams/creeks to Piney Run Park
SULLIVAN HEIGHTS	5	19	0.3MI	30'	1.0AC		2	Along Sullivan Rd. from Rte. 140 to Sunshine Way.
SYKESVILLE RR R/W	5	35	1.7MI	30'	6.2AC	35%	2	Along Sykesville RR R/W from South Branch Patapsco R. to Piney Run

GREENWAY MATRIX - IN ALPHABETICAL ORDER

CARROLL COUNTY GREENWAY PLAN

PROPOSED GREENWAY	GREENWAY CLASS	ADC MAP LOCATION	TRAIL LENGTH	REC. WIDTH PER CLASS	APPROX. ACREAGE	% ZONED CONSERVATION	# OF LINKS TO OTHER GREENWAYS	DESCRIPTION
ALLOWAY CREEK	2	1	4.9MI	100'	59.4AC	25%	1	Follows Alloway Cr. from Monocacy R. (Starner's Dam) to PA border.
BACHMAN HILLS	3	14	4.5MI	50'	27.5AC	10%	3	From Bachman Hills to Manchester along creeks/streams
BACHMANS VALLEY RD	4	12	3.8MI	25'	11.5AC	40%	3	Along Bachmans Valley Rd. from Littlestown Pike to Bachman Mills
BAKER RD. - CHANTER DR.	4	24	1.9MI	25'	5.7AC	90%	2	Along Baker Rd, Salem Bottom Rd & Chanter Dr from Windfield Woods to Clearview Air Park
BALTIMORE ST. (TANEYTOWN)	5	10	2.6MI	30'	9.3AC		4	Through Taneytown along Baltimore St.
BEAR BRANCH	2	12	1.5MI	100'	18.4AC		2	Along Bear Branch from Union Mills Homestead to Hashawha
BEAVER RUN	3	20	9.1MI	50'	55.1AC	100%	5	Along Beaver Run from Rte. 97 to Gamber Rd.(MD 91)
BEAVER RUN/RT. 97	4	19	1.5MI	25'	4.6AC		4	Along Beaver Run & streams/creeks from Hunter Prof. Center to Beaver Run & Rte. 97
BELL RD.	4	18	2.5MI	25'	7.5AC		2	Along Bell Rd. from Uniontown Rd. to Adams Mill Rd.
BENNETT CERF	3	19	1.1MI	50'	6.9AC	100%	3	Along Sunshine Way and through Bennett Cerf Park to Rte 27.
BIG PIPE CREEK NORTH	3	10	10.8MI	50'	65.4AC	20%	4	From Old Taneytown Rd. to Union Mills/Hashawha along Big Pipe Cr.
BIG PIPE CREEK SOUTH	2	9	7.8MI	100'	94.1AC		2	Along Big Pipe Cr. from Bruceville to Trevanion
BUCK HORN RUN	2	29	3.0MI	100'	36.7AC	100%	2	Along Buck Horn Run from Gillis Falls to Piney Run
CABBAGE SPRING BRANCH	2	28	1.7MI	100'	20.7AC	100%	2	Along Cabbage Spring Branch from Flowerwood Estates to Gillis Falls
CRESTVIEW MEADOWS	3	14	1.3MI	50'	8.0AC	25%	2	Along streams/creeks from downtown Hampstead to Balt. Co. border
DEEP RUN	3	4	4.9MI	50'	29.7AC	70%	2	Along Deep Run from Hanover Watershed Wildlife Mgmt. Area to Union Mills/Big Pipe Cr.
E. BRANCH/CASCADE LAKE	3	14	6.8MI	50'	41.3AC	100%	4	Along East Branch and Cascade Lake from Harvel Gummel Rd. to Carrollton Rd.
FALLS/WATER SCHALK RD.	4	6	6.8MI	25'	20.7AC		2	From Manchester to Baltimore Co. border
FLAG MARSH RD.	4	33	0.8MI	25'	2.3AC	100%	3	From Gillis Falls to South Branch Patapsco R. along Flag Marsh R.
FRANCIS SCOTT KEY HWY	4	9	7.6MI	25'	23.0AC		5	Along Detour Rd. and FSK Hwy from Detour to Taneytown
FREEDOM/ROLLING VIEW	4	30	2.1MI	25'	6.3AC	40%	3	Along streams/creeks from Freedom ES to Liberty Reservoir
GEORGE'S RUN	3	15	2.7MI	50'	16.1AC	100%	1	Along George's Run from Balt. Co. to Maple Grove
GILLIS FALLS SOUTH	4	33	1.7MI	25'	5.2AC	100%	2	Along Gillis Falls from Flag Marsh Rd. to Newport
GLAZERS HILL	4	14	2.1MI	25'	6.3AC	40%	4	Along streams/creeks between Harvey Gummel Rd. and Hanover Pike
GREEN VALLEY RD.	5	17	5.3MI	30'	19.3AC		6	Along Green Valley Rd. between Union Bridge and New Windsor
HANOVER PIKE	5	14	5.5MI	30'	20.0AC		9	Along York St. and Hanover Pike from Manchester to Hampstead
HANOVER WILDLIFE AREA	2	5	0.8MI	100'	9.7AC		1	Runs through Hanover Watershed Wildlife Mgmt. Area from PA. border
HODGES PARK	4	30	1.1MI	25'	3.4AC		3	Rugs by Hodges Park & Liberty HS
JOE BRANCH	2	24	2.8MI	100'	34.4AC	100%	2	Along Joe Branch from Rte. 97 to Morgan Run Natural Environmental Area
JOHN OWINGS RD.	3	12	2.3MI	50'	13.8AC	gov't/consv.	3	Along John Owings Rd. between Littlestown Pk. and Bachmans Valley Rd.
JOHNSVILLE RD.	5	30	1.1MI	30'	4.1AC		3	From Liberty Run to Freedom ES along Johnsville & Sykesville Rds.
KEMPFIELD	3	15	1.7MI	50'	10.3AC	100%	2	From Small Crossings to Gross Mill Estates along streams/creeks
KEYSVILLE	4	8	3.8MI	25'	11.5AC	15%	3	Along Keysville Rd from Monocacy R. to Rte. 194 (FSK Hwy.)
LIBERTY RESERVOIR	2	26	17.9MI	100'	211.2AC	100% state	5	From North end of Liberty Reservoir south to S.W. corner of Carroll Co.
LITTLE MORGAN RUN	3	30	5.5MI	50'	33.3AC	45%	3	Along Little Morgan Run from S. Carroll HS to Hammond Estates
LITTLE MORGAN RUN/LBERTY	2	30	1.1MI	100'	13.6AC		2	Along Little Morgan Run from Bartholow Rd. to Liberty Reservoir
LITTLE PIPE CREEK	3	18	3.0MI	50'	18.4AC		2	Follows Little Pipe Cr. from New Windsor to Wakefield(MD 84 to John Hyde Rd)
LITTLESTOWN PIKE	4	12	3.6MI	25'	10.9AC		3	Along Littlestown Pk. (MD 97) from Rte. 140 to Carroll Co. Sports Com.
MAIN STREET (WESTMINSTER)	5	19	1.5MI	30'	5.5AC		3	Along Main St. between Rte. 31 and Washington Ave.
MARTZ/JOHNSVILLE RDS	4	29	1.7MI	25'	5.2AC	30%	2	Along Martz & Johnsville Rd. from Piney Run Park to Liberty Rd.
MARYLAND MIDLAND R.R.	3	2	5.3MI	50'	32.1AC		2	Follows Maryland Midland RR R/W from Taneytown to PA. border
MIDDLE RUN	2	28	1.1MI	100'	13.8AC	Gillis Falls	2	Along Middle Run from Watersville Rd. to Gillis Falls
MONOCACY RIVER	2	8	26.5MI	100'	321.3AC	50%	7	Follows Monocacy R. & Little Pipe Cr. from PA. border to Union Bridge
MORGAN RUN	2	25	11.4MI	100'	137.8AC	100%	5	Along Morgan Run from Salem Manor to Patapsco R.
MT. AIRY/WATKINS PARK	5	32	2.2MI	30'	8.2AC		3	Along R.R. R/W from downtown Mt. Airy to South Branch Patapsco R.
MURPHY RUN	3	7	5.3MI	50'	32.1AC	85%	4	Along Murphy Run & streams/creeks from Greenmount Methodist Church to Balt. Co.

GREENWAY MATRIX - IN ALPHABETICAL ORDER

CARROLL COUNTY GREENWAY PLAN

PROPOSED GREENWAY	GREENWAY CLASS	ADC MAP LOCATION	TRAIL LENGTH	REC. WIDTH PER CLASS	APPROX. ACREAGE	% ZONED CONSERVATION	# OF LINKS TO OTHER GREENWAYS	DESCRIPTION
NEW WINDSOR RD.	5	19	2.3MI	30'	8.3AC	45%	2	From Avondale to Main St. along New Windsor Rd.
NORTHWOODS/BOXWOOD	4	14	1.3MI	25'	3.9AC		2	Along Boxwood Dr. and North Woods Trail
OKLAHOMA	4	30	1.8MI	25'	5.4AC	45%	2	Along streams/creeks from Oklahoma to Springfield Hospital Center
OLD GAMBER CEDARHURST	4	25	1.3MI	25'	4.0AC		2	Along Old Gamber Rd. & Cedarhurst Rd. between Rte. 91 and North Branch Patapsco R.
OLD NEW WINDSOR PIKE	4	18	6.4MI	25'	19.5AC	40%	6	Along Old New Windsor Pike & Little Pipe Cr. from New Windsor to Friendship Valley school site
OLD TANEYTOWN PIKE NE	4	1	2.3MI	25'	7.0AC	15%	3	From Monocacy R. to edge of Taneytown
OLD TANEYTOWN RD.	4	10	9.3MI	25'	28.1AC		5	Along Old Taneytown Rd. & Rte. 140 from Taneytown to Westminster
OLD WESTMINSTER RD.	3	19	4.9MI	50'	29.8AC	55%	2	Along Old Westminster & Nicodemus Rd. from Spring Mills to Bloom Rd.
PARK AVE./TWIN ARCH RD.	5	32	1.9MI	30'	6.9AC		2	Along Park Ave. & Twin Arch Rd. from Mt. Airy to South Branch Patapsco R.
PATAPSCO STATE PARK	3	35	5.7MI	50'	34.4AC	95%	3	Along South Branch Patapsco R. between Sykesville and the Balt./How./Carroll Co. borders
PINEY CREEK	3	8	6.3MI	50'	37.9AC	100%	3	Along Piney Cr. from Monocacy R. to Rte. 140
PINEY RUN SOUTH	3	29	14.4MI	50'	87.2AC	90%	9	Along Piney Run from Winfield Woods to Patapsco State Park
PRETTY BOY	2	7	0.9MI	100'	10.9AC	mostly public	1	Runs through Pretty Boy Reservoir by River Valley Ranch & links to Balt. Co.
ROARING RUN/SUFFOLK RD	4	28	3.2MI	25'	9.8AC	60%	2	Along Roaring Run and Suffolk Rd between N. Branch Patapsco R. & Beaver Run
ROLLER RD.	3	7	0.9MI	50'	5.5AC		2	Along Roller Rd. between Alesia & River Valley Ranch
ROSS RUN/GUMMEL	2	13	3.0MI	100'	36.4AC	60%	3	Along creeks/streams between Fridinger Mill Rd. & Harvey Gummel Rd.
RTE. 140 - CARROLLTON RD.	4	19	19.9MI	25'	40.2AC		7	Along Rte. 140, Manchester Rd, Talsters Church Rd. & Carrollton Rd. from West Md. Co. to Balt. Co.
RTE. 140 - GIST RD.	5	19	4.7MI	30'	17.2AC	10%	7	Along Rte. 140, Gist Rd. & Washington Ave. between Community Pond & Vo-Tech Center
RTE. 27	5	32	0.6MI	30'	2.1AC		2	Runs between Park Ave. and Watkins Park on Rte. 27
S. BRANCH PATAPSCO R.	4	34	13.6MI	25'	41.3AC	70%	6	Along South branch Patapsco R. from Mt. Airy to Sykosville
SAMS CREEK/GILLIS FALLS	2	28	16.3MI	100'	197.4AC	40%	5	Along Sams Cr. and Gillis Falls from Union Bridge to Gillis Falls Reservoir
SAMS CREEK/UNION BRIDGE	3	16	2.1MI	50'	12.6AC		3	Along Sams Cr. in Union Bridge Town Planning Area
SHANNON RUN	5	34	2.7MI	30'	9.6AC	70%	2	From South Branch Patapsco R. along streams/creeks to Piney Run Park
SPRINGFIELD	3	30	1.0MI	50'	6.0AC		2	Along streams/creeks through Springfield Hospital Center to Piney Run.
SULLIVAN HEIGHTS	5	19	0.3MI	30'	1.0AC		2	Along Sullivan Rd. from Rte. 140 to Sunshine Way.
SYKESVILLE RR R/W	5	35	1.7MI	30'	6.2AC	35%	2	Along Sykesville RR R/W from South Branch Patapsco R. to Piney Run
TREELIN MANOR	4	14	1.1MI	25'	3.4AC	100%	3	Along George's Run from Maple Grove to Hanover Pike
TREVANION	3	10	3.4MI	50'	20.7AC		4	From Clear View Rd. to Old Taneytown Rd. along Big Pipe Cr.
W & N BRANCH PATAPSCO R.	4	26	11.4MI	25'	34.4AC	90%	7	Along W & N branches of Patapsco R. from Manchester Rd. to Emory Rd.
WALNUT RIDGE/CLOVER AC.	3	20	2.3MI	50'	13.8AC	75%	5	Runs between West Branch Patapsco R. and Beaver Run
WATERSVILLE RD.	3	32	2.5MI	50'	14.9AC	60%	2	Along Watersville Rd. from the RR R/W to Gillis Falls Park
WHITE ROCK/LINTON RDS.	3	29	2.8MI	50'	17.0AC	95%	4	From Piney Run Park along White Rock & Linton Roads to Little Morgan Run
WOLF PIT BRANCH	4	17	3.8MI	25'	11.5AC	20%	2	Follows Wolf Pit Branch from Clear View Rd. to Green Valley Rd.

B. Greenway Prioritization

In addition to identifying, locating and measuring the proposed greenways, a Prioritization Form has been prepared (Figure 16). The Form is based on a numerical scoring system. There are three areas of evaluation which include recreational, environmental and transportation emphasis.

In evaluating the recreational benefits of a proposed greenway, seven areas need to be investigated. They are as follows:

- 1) Connections to Activity Areas;
- 2) Linkages to other Greenways;
- 3) Adjacent County Linkage Opportunities;
- 4) Ownership;
- 5) User Population;
- 6) Provision of Activities within the Greenway; and
- 7) Public Support.

In evaluating the environmental benefits of a proposed greenway, six areas need to be investigated. They are as follows:

- 1) Environmental Protection;
- 2) Wildlife Corridor Linkages;
- 3) Water Quality;
- 4) Ownership;
- 5) Educational Opportunities; and
- 6) Public Support

In evaluating the transportation benefits of a proposed greenway, six areas need to be investigated. They are as follows:

- 1) Public Access and Mobility;
- 2) Alternative Transportation Modes;
- 3) Connections to Activity Areas;
- 4) ISTEA Opportunities;
- 5) Ownership; and
- 6) Public Support.

A copy of the Prioritization Form has been included in this Technical Report (Figure 16). This form further breaks down each area of evaluation. Once a greenway is evaluated and the columns totalled the multipliers should be used to determine the priority score out of 100%. If all 'A's are chosen the total score will equal 100%. If all 'B's are chosen the total score will equal 80% and if all 'C's are chosen the total score will equal 60%. The closer to 60% a score is, the lower the priority rating. Each greenway should be

evaluated according to each emphasis. This is essential in determining what type of greenway is to be provided.

The County should prioritize each greenway since they have better knowledge of the user population, local support and ownership. Harms and Associates recommends that the greenway segment between Westminster Community Pond and Bennett Cerf Memorial Park be constructed as a pilot project due to its large user area and relatively short length.

PRIORITIZATION FORM

RECREATIONAL EMPHASIS

FIGURE 16

NAME OF GREENWAY: _____

PRIORITIZATION DONE BY: _____

DATE: _____

Check (A), (B) or (C) for each question.

	A	B	C
1. CONNECTIONS (A). The greenway connects high user areas to Activity Centers and Destination Points. (B). The greenway links to other greenways which connect to high user areas, Activity Centers and Destination Points. (C). The greenway does not connect to any high user areas, Activity Centers, or Destination Points.			
2. LINKAGES: (A). The greenway will link existing greenway segments. (B). The greenway will provide a connection to an Activity Center, Destination Point, or high user area. (C). The greenway will be an isolated segment.			
3. ADJACENT COUNTIES: (A). The greenway will connect to an existing greenway in an adjacent county. (B). The greenway will connect to a potential greenway in an adjacent county. (C). The greenway does not connect to a greenway in an adjacent county.			
4. OWNERSHIP: (A). The greenway is located primarily within publicly owned land, a public right-of-way or could be dedicated with the clustering of development. (B). The greenway is located within privately owned land which is in a Conservation Zoning District and/or stream corridor. (C). The greenway is located entirely within privately owned land.			
5. USER POPULATION: (A). The greenway will serve a large user population. (B). The greenway will serve a moderate user population. (C). The greenway will serve a small user population.			
6. ACTIVITIES: (A). The greenway will provide for a variety of activities. (B). The greenway will provide for a limited number of activities. (C). The greenway will provide for only one activity.			
7. SUPPORT: (A). There is strong user support and interest in the greenway. (B). There is moderate user support and interest in the greenway. (C). There is strong opposition and/or lack of user support.			

TOTAL THE NUMBER OF CHECKS IN EACH COLUMN _____

MULTIPLY THE NUMBER OF (A)S BY 14.3 _____ x 14.3 = _____ %

MULTIPLY THE NUMBER OF (B)S BY 11.4 _____ x 11.4 = _____ %

MULTIPLY THE NUMBER OF (C)S BY 8.6 _____ x 8.6 = _____ %

OUT OF 100%, THE PRIORITY SCORE = TOTAL _____ %

PRIORITIZATION FORM

ENVIRONMENTAL EMPHASIS

NAME OF GREENWAY: _____

PRIORITIZATION DONE BY: _____

DATE: _____

Check (A), (B) or (C) for each question.

	A	B	C
1. PROTECTION: (A). The greenway will provide a high level of preservation and protection to a natural area. (B). The greenway will provide a moderate level of preservation and protection to a natural area. (C). The greenway is located in an developed condition (ie. roadway or urban center).			
2. LINKAGES: (A). The greenway will provide a contiguous wildlife habitat corridor linking larger natural areas. (B). The greenway will connect to existing greenways providing wildlife habitat corridors. (C). The greenway will be an isolated segment.			
3. WATER QUALITY: (A). The greenway will preserve natural areas adjacent to a body of water in order to protect water quality. (B). The greenway will preserve natural areas adjacent to a body of water in order to enhance water quality. (C). The greenway is not adjacent to a body of water.			
4. OWNERSHIP: (A). The greenway is located primarily within publicly owned land, a public right-of-way or could be dedicated with the clustering of development. (B). The greenway is located within privately owned land which is in a Conservation Zoning District and/or stream corridor. (C). The greenway is located entirely within privately owned land.			
5. EDUCATION: (A). The greenway provides a unique opportunity for education and controlled interaction. (B). The greenway provides an opportunity for education and controlled interaction. (C). The greenway does not provide an opportunity for education due to location or surroundings.			
6. SUPPORT: (A). There is strong user support and interest in the greenway. (B). There is moderate user support and interest in the greenway. (C). There is strong opposition and/or lack of user support.			

TOTAL THE NUMBER OF CHECKS IN EACH COLUMN _____

MULTIPLY THE NUMBER OF (A)S BY 16.7 _____ x 16.7 = _____ %

MULTIPLY THE NUMBER OF (B)S BY 13.3 _____ x 13.3 = _____ %

MULTIPLY THE NUMBER OF (C)S BY 10.0 _____ x 10.0 = _____ %

OUT OF 100%, THE PRIORITY SCORE = TOTAL _____ %

PRIORITIZATION FORM

TRANSPORTATION EMPHASIS

NAME OF GREENWAY: _____

PRIORITIZATION DONE BY: _____

DATE: _____

Check (A), (B) or (C) for each question.

	A	B	C
1. ACCESS:			
(A). The greenway will provide a high level of public access and facilitate public mobility.			
(B). The greenway will provide a moderate level of public access and facilitate public mobility.			
(C). The greenway will provide little or no public access.			
2. ALTERNATIVE TRANSPORTATION:			
(A). The greenway will provide a variety of opportunities for alternative transportation modes (ie. walking & bicycling).			
(B). The greenway will provide limited opportunities for alternative transportation modes.			
(C). The greenway will conflict with the existing pedestrian/vehicular systems.			
3. CONNECTIONS:			
(A). The greenway connects high user areas to Activity Centers and Destination Points.			
(B). The greenway links to other greenways which connect to high user areas, Activity Centers and Destination Points.			
(C). The greenway does not connect to any high user areas, Activity Centers, or Destination Points.			
4. ISTE A:			
(A). The greenway provides a strong opportunity for ISTE A enhancement activity.			
(B). The greenway provides a moderate opportunity for ISTE A enhancement activity.			
(C). The greenway provides a very limited opportunity for ISTE A enhancement activity qualification			
5. OWNERSHIP:			
(A). The greenway is located primarily within publicly owned land, a public right-of-way or could be dedicated with the clustering of development.			
(B). The greenway is located within privately owned land which is in a Conservation Zoning District and/or stream corridor.			
(C). The greenway is located entirely within privately owned land.			
6. SUPPORT:			
(A). There is strong user support and interest in the greenway.			
(B). There is moderate user support and interest in the greenway.			
(C). There is strong opposition and/or lack of user support.			

TOTAL THE NUMBER OF CHECKS IN EACH COLUMN _____

MULTIPLY THE NUMBER OF (A)S BY 16.7 _____ x 16.7= _____ %
 MULTIPLY THE NUMBER OF (B)S BY 13.3 _____ x 13.3= _____ %
 MULTIPLY THE NUMBER OF (C)S BY 10.0 _____ x 10.0= _____ %

OUT OF 100%, THE PRIORITY SCORE = TOTAL _____ %

VIII. ANALYSIS OF LEGAL ISSUES

This analysis assumes that the County Commissioners will formally adopt a Greenway Plan, and that Carroll County will acquire segments in either fee simple ownership, by easement, or by lease. The County, as the greenways manager, will have primary responsibility for developing and maintaining the system.

The following legal liability questions are being addressed: (1) the liability of Carroll County as a manager of greenways system, and (2) the liability of adjacent landowners (including the potential liability of the underlying fee owner of the greenway). While risk minimization measures are not within the scope of this analysis, some sources for trail design and management standards are referenced.

A. County Liability

It is unlikely that Carroll County will be afforded the limited liability protection under Maryland's Recreational Use Statute, (RUS) which limits liability for landowners who allow public use of their land for recreational purposes. 11 Ann. Code of Maryland, §5-1101 et seq. (1990).¹ Maryland's RUS appears to apply to private landowners, not public landowners.

Nonetheless, the County may be immune from tort law liability under general principles of governmental immunity. The doctrine of sovereign immunity provides immunity to the state, and its political subdivisions and local agencies, unless the General Assembly either directly or by necessary implication, has waived the immunity. Austin v. City of Baltimore, 405 A.2d 255, 256 (Md. App. 1979) (holding that Department of Recreation was immune from liability in operating summer camp for children).

¹ The stated purpose of Maryland's RUS is "to encourage any owner of land to make land, water, and airspace above the land and water areas available to the public for any recreation and educational purpose by limiting the owner's liability toward any person who enters on land, water, and airspace above the land and water areas for these purposes." §5-1102. Maryland's recreational use statute limits traditional common-law notions of landowner liability by recognizing that landowners who allow recreational use of their land owe no duty of care to persons on their land for recreational or educational purposes. §5-1103. This means that a landowner is under no obligation to keep his or her premises "safe for entry or use,... or to give any warning of a dangerous condition, use, structure, or activity on the premises to any person who enters on the land for {recreational or educational} purposes." Id. These liability limiting benefits accrue only to the landowner who "directly or indirectly invites or permits without charge" persons to use his or her property for the above stated purposes. §5-1104.

The state of Maryland has enacted the Maryland Tort Claims Act, waiving the State's liability for actions sounding in tort and contract. Annotated Maryland Code, SG, 12-101 et seq. However, the Maryland Tort Claims Act expressly provides that it does not apply to waive "any immunity of a bicounty unit, county, municipal corporation, or other political subdivision or any unit, official, or employee of any of those agencies or subdivisions. Id. 12-103(3). Nor does the Local Government Tort Claims abrogate any common law immunity of local governments in existence as of June 30, 1987. Maryland Annotated Code, CJ §5-404(e). The Local Government Tort Claims Act does, however, require local governments to defend employees and pay any damage awards arising out of tortious acts or omissions committed by the employee within the scope of employment with the local government. Id. §§ 5-402, 403(b). As to claims for which liability has been waived, the local government's liability may not exceed \$200,000 per individual claim, and \$500,000 per total claims that arise from the same occurrence. 5-403(a), 5-403(b). However, a local government may not be liable for punitive damages. Id. § 403(c).

The common law of Maryland, as it had developed as of June 30, 1987, entitles Carroll County and other local governmental entities to immunity from liability for tortious conduct which occurs in the exercise of a "governmental" but not "proprietary" functions. Austin, 405 A.2d at 256. This immunity does not include liability from claims sounding in nuisance. Board v. Town of Riverdale, 320 Md. 384. 578 A.2d 207 (1990). Accordingly, the question here is whether maintenance and operation of the greenway system is a governmental or a proprietary function.

In Maryland, the maintenance, control and operation of a park is considered "a governmental duty, discretionary in its nature, performed in its political and governmental capacity as an agency of the state." Mayor and City Council of Baltimore v. Ahrens, 179 A. 169, 171, 173 (Md Ap. 1935). See also Baltimore v. State, ex rel. Blueford, 173 Md. 267, 195 A. 571 (1937) and Town of Brunswick v. Hyatt, 91 Md. App. 555, 605 A.2d 620 (1992) (holding that management and maintenance of a swimming pool was a governmental function).² As the Court explained in Ahrens, to hold governments liable for injuries in parks "would be against public policy, because it would retard the expansion and development of parking systems, in and around our growing cities, and stifle a gratuitous governmental activity vitally necessary to the health, contentment, and happiness of their inhabitants." Ahrens, 179 A. at 173. Therefore, a governmental entity that has not waived its sovereign immunity will be immune from civil tort liability for injuries to users of the park.

²In Blueford, the court set forth the following guidelines for determining whether a municipal function is proprietary or governmental in nature:

Where the act in question is sanctioned by legislative authority, is solely for the public benefit, with no profit or emolument inuring to the municipality, and tends to benefit the public health and promote the welfare of the whole public, and has in it no element of private interest, it is government in nature.

Blueford, 173 Md. at 275-76, 195 A. at 576.

The difficulty is that the greenways system will serve a dual purpose -- it will constitute both a linear park and a public way for transportation purposes. Maintenance of public roads and bridges has been held to be a proprietary function, of which county and municipal governments receive no immunity. Cox v. Anne Arundel County, 181 Md. 428, 31 A.2d 179 (1943). Moreover, the court has also held that where a pedestrian was injured while using steps that were part of a concrete walkway that traversed a public park, in order to travel between points outside the park and not for recreational purposes, such steps were part of a public way, and therefore a proprietary function. Haley v. City of Baltimore, 211 Md. 269, 127 A.2d 371 (1956); see also Baltimore v. Eagers, 167 Md. 128, 173 A. 56 (1934) (city was liable to person injured by the City's negligent tree removal activities while walking along a street through a public park).

Based on Haley and Eager, it appears that the County's tort liability immunity depends on whether the greenway could be considered a "public way," which in turn depends on whether it is being used by persons for utilitarian purposes, to travel to points outside of the linear greenways system (such as for shopping, schools, or other key destinations), or whether it is being used purely for recreational purposes. If the use is recreational, it is likely that a court would conclude that the greenways system is a park, thereby entitling the County to immunity from tort liability. This conclusion will be helped if the greenways plan is adopted by the county legislature, the managing entity is the County Parks Department, and if the purposes for the greenways system emphasize recreational use and enjoyment as well as transportation. However, to the extent portions of the greenway are within public roads and streets, the County will probably owe the same duty to exercise reasonable care in its construction.

The County's liability as a land owner is the same, whether it possesses the property as a fee simple owner or as easement holder, so long as it exercises sufficient control over the land. Wagner v. Doehring, 553 A.2d 684, 687 (Md. 1989). Maryland Court's have held that an easement holder who "exercise[s] a degree of control over the land which permits the holder to exclude trespassers from the easement" is entitled to the same immunity from liability to trespassers as the underlying landowner. Wagner v. Doehring; PEPCO v. Smith, 79 Md. App. 581, 558 A.2d 768 (Md. App. 1989).

The County is unlikely to be held liable if greenway users leave the greenway and trespass on adjacent property. In general, the law does not impose on landowners who invite the public onto their property the duty of inspecting their neighbors' property to see whether any of their customers may be wandering onto it, and endangering themselves by doing so. 62A Am. Jur.2d, "Premises Liability," §740, at 299 (Lawyer's Coop., 1990).

In any event, under the Local Government Tort Claims Act, the County may not be liable for punitive damages, and its liability for tort claims asserted against the County or its employees is limited to \$200,000 per individual claim, and \$500,000 per total claims that arise from the same occurrence. Annotated Code of Maryland, CJ, §5-403.

B. Adjacent Landowner Liability

Adjacent landowners may be concerned about the following liability issues: (1) their residual liability, as owners of the underlying fee interest, where the County acquires only an easement interest; and (2) their liability for injuries to persons on the corridor caused by conditions on adjacent property.

1. Residual Liability of Underlying Fee Owners in General

As noted above, Maryland's RUS clearly accords protection to private landowners who make their land available to the public for educational and recreational use. 11 Ann. Code of Maryland, §5-1101 et seq. Nonetheless, the liability afforded to the owner of the underlying fee interest under Maryland's RUS is unclear.³ Arguably, the underlying fee owner should be entitled to protection under Maryland's RUS, which applies to "any" owner of land. Id. §5-1102(a). However, the definition of "owner" suggests that applies to any "person who possesses the premises." Id. 5-1101(e). The underlying fee owner would not satisfy the tort definition of possessor of land, since under the terms of the easement, the County and not the underlying landowner, would be in control of the property.⁴ Moreover, this is reinforced by the existence of a provision specifically according protection to "owners of land leased to the State or any of its political subdivisions for any recreational or educational purpose." Id. §5-1105. The implication of this provision is that all other landowners who do not control or possess the land are not entitled to protection under Maryland's RUS.

³ It should be noted that, while the owner of the underlying fee interest is likely to also be the adjacent landowner, in some instances, adjacent landowners may make a subsequent conveyance of only the adjacent property, in which case the reversionary interest in the corridor will no longer be in the adjacent landowner.

⁴ A possessor of land is: "(a) a person who is in occupation of the land with intent to control it or (b) a person who has been in occupation of land with intent to control it, if no other person has subsequently occupied it with intent to control it, or (c) a person who is entitled to immediate occupation of the land, if no other person is in possession under Clauses (a) and (b)." Restatement (Second) of Torts, § 328E (1965) (quoted by the Maryland Court of Appeals in Wagner v. Doehring)

Nonetheless, the underlying fee owners would not be subject to any liability if they can show that they do not "control" the land, by virtue of having conveyed an easement to Carroll County. "[T]he rights and liabilities arising out of the condition of land, and activities upon it, have been concerned chiefly with the possession of land,... for the obvious reason that the man in possession is in a position of control, and normally best able to prevent any harm to others." Prosser, Torts 4th Ed., Ch. 10, at 351 (West, 1978). In general, "whoever controls land is responsible for its safety." 62 Am Jur.2d, "Premises Liability," §742, at 299 (Lawyer's Coop., 1990), citing Streuber v. E. E. Meachum & Son, 148 NYS 983. In Streuber, the invitee of the easement holder, was denied recovery against the owner of the servient tenement for a injury-causing defect on a rough, unimproved rural road because the defect did not interfere with the exercise of the easement and burden of making any improvements fell on the owner of the dominant tenement.

However, if a plaintiff's injury was caused by the combined negligence of the landowner and the easement holder, both may be held liable for concurrent negligence. 62 Am. Jur. 2d §29, citing Sutton v. Monongahela Power Co., 158 S.E.2d 98. Accordingly, the underlying fee owner who conveys to an easement holder the right to possess and control the property, and is not responsible for causing the injury, owes no duty of care to the persons using the easement simply by virtue of ownership of the underlying fee interest.

2. Liability of adjacent property owner to trail user.

While there are no cases interpreting Maryland's RUS, landowners adjacent to a trail should be able to benefit from the limited liability of the stature. While it is unclear as to exactly what constitutes indirectly inviting the public to use one's land for recreational purposes, common sense should give some answers. For example, if a trail user accesses an adjacent landowner's property to have a picnic or ride through the woods on a trail, he or she will still be deemed to be there for recreational purposes. If the landowner does not string fences along the trail and does not post "no trespassing" signs, he or she may be deemed as having indirectly invited the public to use his or her land. Indeed, section 5-1107 seems to suggest that a landowner can place conspicuous signs indicating the property is private and still come within the protection of the stature. Thus, no liability would attach for an injury on a landowner's property unless it was caused by the landowner's "wanton and willful conduct."

Even, if Maryland's RUS were not applicable to adjacent landowners, the resulting liability would be the same under Maryland common law principles of tort liability. In either situation, he or she will be liable only for "willful and wanton" conduct that causes injury to the person on the land.

Under Maryland's common law, the liability of a property owner depends upon the standard of care owed an individual, and the standard of care owed is defined in terms of an individual's status while on the owner's property. An individual's status may be that of a invitee, licensee by invitation, bare licensee, or trespasser. Wagner v. Doebling, 553 A.2d 684, 687 (Md. 1989.)

A trespasser is one who intentionally and without consent or privilege enters another's property. Wagner, 553 A.2d 684, 687. No duty is owed a trespasser except to refrain from "willfully and wantonly injuring or entrapping" him or her. Id. This standard is the same whether the trespasser is an adult or a child of "tender years." Kirby v. Hilton, 443 A.2d 640 (Md. app. 1982), citing Mondshour v. Moore, 261 A.2d 482 (Md. 1970). The term "willful and wanton" has been defined as "conduct that is extreme and outrageous, in reckless disregard for the rights of others." PEPCO v. Smith, 558 A.2d 768, 778 (Md. App. 1989). Thus, it is extremely rare that a landowner would be liable for injury to a trespasser on his or her land.

Several cases have addressed liability claims asserted by trespassers. In Bramble v. Thompson, 287 A.2d 265 (Md. 1972), the court held that an owner of a dog was not liable for injuries the dog inflicted on two trespassers, even though the dog was known to be vicious. In Doebling v. Wagner, the court found the landowner not liable for the death of a motorcyclist who, upon entering the landowner's right-of-way, struck a cable stretched across the path. The court found for the defendant-landowner despite the fact that he knew that motorcyclists frequently used his right-of-way, because his conduct did not amount to wanton and willful misconduct. 562 A.2d at 768-69. The court in Doebling noted that "the Maryland cases have generally looked to conduct of a more deliberate nature... i.e., conduct calculated to or reasonably expected to lead to a desired result." Id. at 767 (citations omitted).

The court's reasoning in Doebling suggests that the landowner's intent to injure or entrap is the key to determining liability. The court remarked that "the sole fact that the chain was erected is not evidence that the Doeblings intended to injure the decedent... As we said in Carter: '...the law would permit no recovery without a showing of intentional harm.'" Id. at 768 (citations omitted, emphasis added). Under the above reasoning a landowner would not be liable to trespassers who step in animal traps unless the traps were deliberately set to injure trespassers.

Even if an adjacent landowner implicitly permits a trail user to enter his or her land, the landowner would owe only a duty of care owed a bare licensee. A bare licensee is a person "who enters upon property, not as a social guest, but for his own convenience and purpose." "No duty is owed a bare licensee except that he or she may not be wantonly or willfully injured or entrapped, nor may the occupier of land create new and undisclosed sources of danger without warning the licensee." Id., quoting Sherman v. Suburban Trust Co., 384 A.2d 76, 79 (Md. 1978). Thus a property owner may be liable to a bare licensee for a dangerous condition known to the owner.

Finally, an adjacent landowner is likely to have limited liability for injuries to trail users resulting from conditions on their property. For example, the Court of Appeals has held that, on rural and suburban roads, adjacent landowners have no obligation to inspect trees bordering the roads to determine if any are defective, and therefore would only be liable if they had actual knowledge of the dangerous condition. Hensley v. Montgomery County, 25 Md. Ap. 361, 334 A.2d 542 (1975). The general rule is that "an owner or occupant of premises is not an insurer of the safety of pedestrians using the abutting sidewalk," (although an exception exists for commercial landowners who make a special use of the abutting sidewalk for their own convenience). 62A Am. Jur.2d, "Premises Liability," §650, at 209 (Lawyer's Coop., 1990).

C. Risk Minimization Guidelines

Notwithstanding the limited liability of both County and adjacent landowners, it is prudent to develop and manage trail consistent with established rail development and operational standards. Up until recently, the only standards generally available governing bikeways were developed by the American Association of State Highway and Transportation Officials (AASHTO), Guide for the Development of Bicycle Facilities. This publication provides guidelines for bikeway design, such as sight distances, trail width, and trail clearances. In addition, the Rails-to-Trails Conservancy has recently published Trails for the 21st Century, which is a comprehensive planning, design, and management manual for multi-use trails, and provides numerous recommendations for enhancing the safety of trail users and adjacent property owners, including signage, landscaping, crossings, and trail support facilities.

D. Greenway Acquisition

Several alternatives for acquiring land for greenway corridors is discussed below:

1. Easements - The County could purchase easements on privately owned property or require that recreational easements be dedicated through the subdivision process.
2. Land Dedication - The County could modify their subdivision regulations so that it is mandatory for a developer to dedicate required recreational area and/or open space to the County. Also, clustering development lends itself to maintaining large tracts of green area. Howard and Anne Arundel County benefit from these types of processes.
3. Land Purchase - The County could budget money for land acquisition or obtain funding from various organizations.
4. Fee in lieu - Through the subdivision process the County could require a fee-in-lieu for recreational requirements. This money can then be used to purchase land for greenways.
5. Donations - Private Property owners could donate land to the County for greenway purposes.
6. Condemnation - This is the least preferred alternative and should only be used as a last resort.

There are many alternatives to acquiring land for greenways. Any system or combination of these alternatives could aid the County in this tremendous endeavor.

E. Dolan Case Analysis

A considerable amount of interest has been generated in recent years pertaining to private property interests and rights litigation. The one case that has received the most attention is *Dolan vs City of Tigard*. In this case, the City of Tigard conditioned approval of a building permit to expand a plumbing and electrical supply store by requiring dedication of land for a storm drain system and pedestrian/bicycle path.

The conditions set by the city not only imposed limitations on the use of property, but required the deeding of property to the City. The Supreme Court dictated that the taking of land for public use without just compensation was unconstitutional and that an applicant cannot be forced to make the choice between just compensation for land and the issuance of a building permit.

The Supreme Court concluded that cases such as *Dolan vs City of Tigard* made it clear that when a government jurisdiction imposes regulatory exactions, they must demonstrate the following:

1. a nexus exists between the exaction and the stated purpose of the regulatory action;
2. a nexus exists between the exaction and impact caused by the new development. This must be proven by the government by showing a proportional relationship between the exaction and the development's impact.

The Supreme Court also stated that precise mathematical calculations are not necessary, but that government agencies need to make some serious quantification in support of requiring dedication of land. To simply say that a pedestrian/bicycle path will offset some of the traffic demands for an expanded use is simply not enough. In addition, although the Court found the City's goals laudable in this case, they also stated that achieving goals via "shortcuts" is not as justifiable as the conventional way of paying for land to be used for future public uses.

In conclusion, Carroll County needs to take this case's outcome in consideration when implementing the Greenway program. This decision has affected the approach to land dedication policies throughout the country, but, if handled properly, Carroll County can implement a viable Greenway program.

IX. IMPLEMENTATION TECHNIQUES

Once the Greenway Plan is prepared and the legal ramifications are identified, the next step is to identify techniques that can be used to implement the Plan. Not all of the techniques used in other areas of the country can be used in Carroll County. Each jurisdiction has its own methods and ideas as to how such a Plan can be implemented. Further, a closely coordinated effort will be required between the County and the municipalities to ensure success of the Greenway plan.

A. Public Involvement

One common and extremely critical element in implementing the Greenway Plan is getting the public involved in an "open planning process" scenario. If a realistic and comprehensive public involvement campaign is initiated, trust and the necessary support will be generated between the government agencies and the public.

The public has already been involved to this point, but the Greenway Plan is now at a new stage. When the jurisdiction takes the next step, which is to begin implementation of the plan, the public will suddenly become more interested, especially those landowners who are directly affected by the proposed project.

It is important for the County to research each proposed project site. The County should have a complete inventory of all property owners involved and familiarize itself with the physical characteristics and the history of the proposed greenway.

In addition, the County may wish to prepare distribution material to educate the public about the project. The material should include background information, location of the proposed greenway, and rough cost estimates if possible. The materials could include posters, bumper stickers, school fliers, brochures or newsletters.

The next step recommended is for the County to sponsor a series of workshops. These community workshops should identify key issues and give the public the opportunity to present their design ideas.

Communication is critical in such an undertaking. The media should be kept informed and utilized to promote the greenway project. One of the County's strongest allies can be the media if they are kept informed as to the progress of the proposed greenway project.

Formation of a private, non-profit "Friends of Greenways" organization can be critical not only in the early stages of the Greenway Plan, but also in the long-term sense. These kinds of groups provide a variety of assistance that many times a government agency can not supply. Fund raising, preparing literature, promotion, surveillance and physical labor can all be provided by such a group.

Finally, one of the most critical elements of a successful greenway project is to get the adjacent landowners involved and supportive of the project. Without this, a project's success can be greatly compromised. Meetings, trail tours and solutions via negotiations and mitigation are recommended to gather support for the project.

Other promotional opportunities for a proposed greenway are greenway corridor tours, "Name the Greenway" Contests, photo and poster contests, and greenway work days which could be held later in the process.

B. The Comprehensive Plan

It is recommended that the Greenway Plan be adopted as part of Carroll County's Comprehensive Plan. This can either be in the form of total inclusion or act as a supplemental document to the Comprehensive Plan. By being adopted as part of the Comprehensive Plan, the Greenway Plan not only will secure legitimacy, but will become a document from which the County can make decisions, not just recommendations.

Inclusion into the Comprehensive Plan can be done by immediate adoption by the County or by inclusion at the County's next Comprehensive Plan update. By including the Greenway Plan in the Comprehensive Plan, the County will have the opportunity to provide input and recommendations on subdivisions and large projects for which special conditions can be applied. This represents a good opportunity to have future developments contribute to the implementation of the Greenway Plan.

If the Greenway Plan is not included in the Comprehensive Plan, it can be adopted as a set of guidelines for which all future development should follow. This, however, does not give the County as much "authority" to implement the Plan.

C. Comprehensive Rezoning

The implementation of the Greenway Plan can be facilitated through the adoption of a new zoning classification which could be applied throughout the County. This new "Greenway" zoning would utilize the Greenway Plan as a guide to what areas would be designated as a Greenway Zone or Open Space.

Separate zoning criteria would be developed for this newly created zone which would then be identified on the official County Zoning Map. The regulations would be prepared in ordinance form and then adopted for inclusion into the zoning regulations.

A second alternative to a conventional zoning classification would be an overlay zone. This zone, much like a conventional zoning classification, would have specific zoning criteria which would apply. But in this case, an underlying zone's requirements would also have to be considered. Typically, the most restrictive requirements of the two zones should prevail. Overlay zones are usually spelled out in a separate section of the zoning

regulations.

D. County Zoning Ordinance & Subdivision Regulations

In addition to the changes to the zoning regulations identified in the previous section, another method in which to implement the Greenway Plan is to include language in the County Zoning Ordinance and/or Subdivision Regulations which reference or specify action in accordance with the Greenway Plan. This can be done in several ways.

One alternative is to reference the Greenway Plan in the zoning Ordinance and/or Subdivision Regulations by a new section which identifies the need for all projects to verify whether a greenway is proposed in their location. If a site is located in the path of a proposed greenway, the County would then have the opportunity to require either the dedication of the right-of-way or the actual construction of a portion of the greenway. If neither are possible, the County could also request a fee-in-lieu which would be dedicated to a greenway project in the vicinity of the proposed development.

It is particularly critical that the setting aside of right-of-way or the actual implementation of constructing a trail for a greenway not be inhibitive to the normal development potential of a property. Therefore, density reductions due to land dedication should not be encouraged.

A second option would be to initiate a greenway impact fee on future development which could be assessed on a household basis for proposed residential uses and on a square footage basis for other uses. Although this is a challenge with respect to adoption of such a policy, it is possible.

E. Land Acquisition Alternatives

In addition to legislative implementation tools, land acquisition is also possible in the County. Land can be acquired in a number of ways by the County for the use of future greenways. These include donations of land by benevolent property owners, public access via public rights-of-way, lease agreements with impacted property owners, or fee simple purchase of land by the County.

The first three alternatives are potentially the most viable from a fiscal standpoint for the County. Fee simple purchase can be expensive, especially if property owners recognize that the County needs a piece of property for completion of a greenway. The County wants to avoid forced property acquisition negotiations which leave the County susceptible to over market purchases of land.

F. County Capital Improvement Projects

When the County undertakes projects such as road crossings, new or improved intersections, utility line extensions, or new road projects, the Greenway Plan should be implemented. This gives the County the opportunity to develop segments of the Plan in order to link future projects.

It is critical that the County be in total support of the Greenway Plan and implement its share of greenways. If the County does not support the Plan wholeheartedly or implements the Plan in a piecemeal fashion, this will open the doors for private developers who wish not to participate in the Greenway Plan.

G. ISTEAFUNDING OPPORTUNITIES

Greenways offer an alternative to conventional transportation alternatives. ISTEAFunds are available for these types of projects. By being eligible for outside funding sources and relying on the taxpayers of Carroll County, officials should be interested in implementing the Greenway Plan. Presenting funding options to the elected officials at the time of adoption of the Plan is a good strategy for implementation.

H. Maintenance and Security

Several rail trails have been evaluated by the Rails-to-Trails Conservancy over the last ten years. Most homeowners that live adjacent to the trail or within a couple of blocks have been pleased with the development of the trail, although not all were supportive at first. These studies show that those opposed found that the trails were aesthetically pleasing, in some cases increased property values (never lowered), protected valuable open space, bolstered local economics, and increased community pride. The studies also found that those who were once opposed are now genuinely supportive.

Burglaries and vandalism did not seem to increase. The trails have been successful with respect to keeping trail users from trespassing on adjacent private property.

Also, there is the potential for a number of groups such as "Friends of Greenways", equestrian clubs, local park boards and interested citizens that can act in maintenance and security capacities, further increasing the success of the greenways.

In summary, it appears that initial concerns of property owners and neighborhood residents prior to development of trails were extinguished once the trails were developed.

I. Compensation From Outside Sources

The County can also secure funding for greenways through the following sources:

- 1) Leases with utility companies;
- 2) Fees through licensing agreements administered by a licensing authority;
- 3) Fees for use of land between the trail and the County's property lines;
- 4) Trail improvements funding from new development; and
- 5) Fee generating special events.

Each of these programs is feasible in Carroll County and would require County approval at the Commissioner level. In addition, items 1-4 would require new legislation in order for implementation to take place.

J. Future Update

The Greenway Plan should be subject to continuous review and updating to assure its responsiveness to the County's current needs. It is suggested that it at least be updated every ten years or simultaneously with the County's Comprehensive Plan.

Appendix A - Meeting Notices

CARROLL COUNTY MARYLAND
225 N. Center Street
Westminster, Maryland 21157-5194



Department of Planning
Edmund R. Cueman
Director
Westminster 410-857-2115
Baltimore 410-876-2085
FAX 410-848-0003
TT 410-848-3017

MEETING NOTICE

July 27, 1993

To: Carroll County Commissioners
Edmund Cueman
Bill Powel
Michelle Ostrander
Bruce Dutterer
Cathie Rappe
Bob King
Dave Blaha, ERM
Equestrian Council
Ag Commission, Donald Essich
SWC Recreation Subcommittee
MD Mountain Club, Mary Lewis
local Recreation Councils

Carroll County Planning Commission
Marlene Couaway
Town Planners
Richard Soisson
Frank Schaeffer
Tom Devilbiss
Jim Slater
Marilee Tortorelli, Harms & Assoc.
Farm Bureau, Gary Brauning, II
Environmental Affairs Board
State Greenway Commission, Teresa Moore
Parks & Recreation Board

From: Steven C. Horn *sh/la*

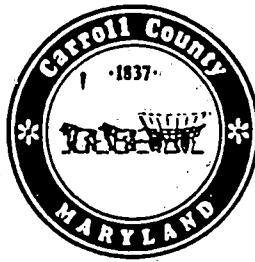
Re: Greenways

A public workshop on Greenways has been scheduled for Thursday, September 2, 1993, at 7:00 p.m., at the Cooperative Extension Service, 700 Agricultural Center, Room A & B, Westminster, Maryland.

This workshop will be held to discuss and bring everyone up-to-date on the progress of the ongoing Countywide Greenways Study.

SIT:la
shmemo34.la

CARROLL COUNTY MARYLAND
225 N. Center Street
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MEETING NOTICE

March 4, 1994

To: Carroll County Commissioners
Edmund R. Cushman
Bill Powel
Helen Spinelli
Brenda Dinne
Beth Evans
Bruce Dutterer
Cathie Rappe
Bob King
Robert Logue, Farm Bureau
Environmental Affairs Advisory Board
Marilee Tortorelli, Harms & Assoc.
Mary Lewis, MD Mountain Club
SWC Recreation Subcommittee
Parks and Recreation Board

Carroll County Planning Commission
K. Marlene Conaway
Gregg Horner
Bobbi Moser
Sandy Baber
Richard Soisson
Frank Schaeffer
Tom Devilbiss
Jim Slater
Donald Essich, Ag Commission
Dave Blaha, ERM
Teresa Moore, State Greenway
Commission
Equestrian Council
local Recreation Councils

From: Steven C. Horn *SCH/lc*

Re: Greenways Public Workshop

The second public workshop on the Carroll County Greenway's Study has been rescheduled for *March 15, 1994, from 7:00 to 9:00 p.m., in the Bear Branch Auditorium of the Hashawha Environmental Center, 300 John Owings Road, Westminster, Maryland.* The purpose of this meeting will be to address the issues and concerns raised at the first public meeting, and to discuss the direction of the final Greenway's Study to be completed in April.

Your presence at this meeting would be appreciated. Please contact Lori Amoss in the Department of Planning at 857-2145 to confirm your attendance.

Appendix B