
Analysis of economic impacts of the Northern Central Rail Trail

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ANALYSIS OF ECONOMIC IMPACTS OF THE
NORTHERN CENTRAL RAIL TRAIL

JUNE 1994

Prepared for:

Maryland Greenways Commission
Maryland Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland

Prepared by:

PKF Consulting

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May 16, 1994

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Dear Ms. Moore:

We are pleased to present our findings and conclusions regarding our assessment of the current direct, indirect and induced economic impacts resulting from the establishment of the Northern Central Rail Trail (NCRT) in Baltimore County, Maryland. Our study was undertaken in accordance with the scope of work outlined in our correspondence dated August 23, 1993, and agreed upon on October 20, 1993.

Pursuant to the work plan, we have conducted a thorough and focused investigation regarding the influence that the NCRT has on tourism, property values, commercial uses, local resident expenditures, public sector expenditures and the qualitative factors in users and nearby property owners quality of life.

As indicated in our proposal, PKF utilized a variety of data gathering techniques. Our findings and conclusions are based on the results of three surveys - one distributed directly to users of the NCRT, a second to property owners in and around the area and a third to local business establishments that may be impacted by the presence of the Trail. In addition, numerous interviews, online data sources, and other information sources were used to obtain the necessary data and qualifiers used as the basis of this report. The data obtained was then synthesized and evaluated through the use of the IMPLAN input-output economic model; final economic modeling is a result of this approach.

Member, Pannell Kerr Forster International

The quantitative findings expressed herein are not based on hypothetical models, rather proven techniques and objective data gathering by PKF's staff. Qualitative factors are expressed in this report as an aggregation of responses from the various survey questions directly related to each topic. The following report constitutes a summary of our findings.

We express our appreciation to you, your associates, government officials and the Park's personnel for the cooperation extended to us during the course of our engagement.

Sincerely,
PKF Consulting

Walter C. Williams
Senior Vice President

Acknowledgements

PKF Consulting would like to express its appreciation for the assistance, knowledge, and contributions that were provided to us by:

Ms. Teresa Moore, Executive Director, Maryland Greenways Commission

Mr. Edward T. McMahon, Director, American Greenways Program

Mr. David Burwell, Rails to Trails Conservancy

Mr. Earl Copenhaver, Maryland Department of Natural Resources

Mr. Mike Browning, Maryland Department of Natural Resources

Mr. William Hughey, Baltimore County Planning and Zoning Department

Additionally, we would like to thank the numerous other staff and personnel at Maryland Department of Natural Resources who assisted PKF Consulting during the course of this engagement.

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PREFACE:

PKF's approach to study the economic impacts of the Northern Central Rail Trail (NCRT) involved the investigation of seven subject categories: tourism, property values, commercial uses, local resident expenditures, public sector expenditures, qualitative factors, and overall benefits. As expressed in the methodology section of this report, a major contributor toward the conclusions of this study was the use of three surveys to directly assess residents', trail users', and businesses' attitudes toward the resource. Accordingly, the basis of this report summary is the presentation of the survey questions with aggregate responses. In addition, appropriate cross tabulations and extrapolations are presented within the body of the text.

Section I

Executive Summary

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EXECUTIVE SUMMARY:

America's concern for the environment and enhanced understanding of our recreational needs has brought about a recent evolution in open space preservation. This evolution, or "revolution" in land conservation/recreation planning has created a broad interest in the development of greenways. This report addresses this evolution at three distinct levels:

- First, a national perspective on greenways is provided by Edward T. McMahon, Director of the American Greenways Program.
- Second, a synopsis of greenway initiatives in the state of Maryland is provided by Ms. Teresa Moore, Executive Director, Maryland Greenways Commission.
- Lastly, an analysis of the Northern Central Rail Trail Greenway in Baltimore County, Maryland conducted by PKF Consulting reveals the economic and qualitative impacts of a new greenway resource.

Based upon our analysis, we are of the opinion that the Northern Central Rail Trail (NCRT) provides a number of substantial economic and qualitative benefits to the people of Maryland. Perhaps the most significant economic finding of this study is that while the 1993 budget to provide the Trail to the public was \$191,893, the direct economic inputs to the State via tax revenue alone were \$303,750. Additionally, we estimate the Trail supports 264 jobs statewide. The value of goods purchased because of the NCRT for 1993 is estimated to total in excess of \$3,380,000.

The attractiveness and demand for use of the Trail can best be

illustrated by the tremendous growth in the Trail's use, from under 10,000 visitors per annum in 1984 to over 450,000 in 1993 - equating to a compound annual attendance growth rate of 53 percent per year. Coinciding with this expression of interest were a number of key survey findings, such as:

- 93.72 percent of the survey respondents felt the Northern Central Rail Trail is a good use of State funds.
- Two-thirds of respondents liked greenways better than traditional, more confined parks.

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- Over 95 percent of respondents view the Trail as an asset to their community.
- Less than 2 percent of respondents felt unsafe on the Trail.
- Nearly two-thirds of respondents felt the trail enhances nearby property values.

The NCRT is clearly recognized by residents as an asset for the region, especially the local community. As the survey findings demonstrate, nearly 100 percent of the Trail's users come from Baltimore County, and as a percentage of Trail users nearly 80 percent use the Trail at least once per week.

While some greenways have diverse attendance segments and can significantly increase tourism, others like the (NCRT) are used primarily as a passive recreation resource (walking, biking) primarily by local residents. Not only did the surveys indicate this, but the visitor logs from Monkton Station from 1989-1993 all support this finding. The reason for the NCRT's use primarily by residents can be attributed to both its location (in a suburban to rural bedroom market for Baltimore), its relatively new presence in the market (10 years), limited signage to the resource from major travel corridors, and lack of commercial development along its length.

Consequently, there are relatively few establishments to capture tourism dollars. However, this market is beginning to grow as is shown by the emergence of tourist related businesses at Monkton Station and elsewhere along the trail. The NCRT's recognition as a local resource is a remarkable accomplishment. Before it was redeveloped as a greenway, the rail corridor was a "magnet" for illegal dumping, vandalism, and illicit uses by adolescents and others. Now, as a prized local resource, the NCRT is "policed" by residents and problems along the corridor have decreased dramatically.

With regard to user expenditures detailed in the economic impacts section of this report, Trail users who had purchased goods for use on the Trail spent an average of \$203 in 1993. Similarly, users who purchased soft goods (food etc.) before or after using the Trail spent an average of \$6.30 per visit.

To understand the Trail's success one must recognize the forces that have led to its popularity. Two general areas of interest lead: safety and passive recreation. The interest in safety for walkers, runners and especially bicyclists (who together make up almost 98 percent of the Trail's users) reflects a lack of other safe areas to congregate. To that end, the NCRT fills a critical gap for the surrounding region. Tied into this need are some basic trends:

- 1) An aging population - in six more years, at the turn of the century over 40 percent of the U.S. population will be over 60 years of age - and already Baltimore County has the second oldest population per capita of any county in the U.S. (Dade County, Florida is number one.)
- 2) More bicycles are sold in the United States than are automobiles. Nearly all respondents mentioned there are relatively few places near their homes where bicyclists can safely ride.
- 3) The most popular recreation activity in the United States is walking; over 100 million Americans participate in this activity 2 to 3 times per week.
- 4) Current land development and housing patterns remain focused outside urban core areas and center on rural and suburban areas. These areas provide relatively inexpensive land, good travel corridors, better schools, support facilities (shopping areas) and less crime than more urban settings.

Knowing these facts it is no small wonder why the Trail is so popular. That popularity is not limited to Maryland; presently the section of the former Northern Central rail corridor that runs from the Maryland/Pennsylvania state line north toward York, Pennsylvania is also being redeveloped as a trail corridor. As the rail corridor was redeveloped as a greenway a new life has been given to the historic hamlets along its route, and a new generation of businesses are beginning to establish a relationship with the Trail. Even some smaller, local businesses such as bike shops, with sales of just over \$1,000,000 per year estimate that one quarter of their business comes from users of the Northern Central.

Worth noting are ongoing negotiations between the Maryland Department

of Natural Resources (DNR) and MCI Telecommunications Company. At the time of this writing MCI is offering DNR \$200,000 to be used for improvements to the trail as specified by DNR (\$26,316 per mile used). MCI is making this offer in agreement for a non-exclusive perpetual license agreement to use 7.6 miles of the NCRT corridor right-of-way for fiber optics routing. These ongoing discussions (near completion) emphasize another intrinsic value long touted for greenways - as infrastructure corridors.

Section II

The National Perspective

by

Edward T. McMahon

Director, American Greenways Program

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Introduction

The United States's first national park was created at Yellowstone, Wyoming, in 1872, to preserve the site's unique geysers and other natural features. Since then, the park system has expanded to include many other areas noted for their extraordinary natural and cultural resources.

Over the past century, America has invested enormous sums of money in our federal and state parks, forests, and preserves. While we have the finest national park system in the world, most of these parks tend to be far from where people live and are limited in their ability to meet the growing diversity of America's recreation and conservation needs. Increasingly, outdoor recreation occurs close to home, in or near the cities and suburbs where 80 percent of Americans live and work. As a result, in 1987, the President's Commission on Americans Outdoors recommended the establishment of a national "network of greenways to provide people with access to open spaces close to where they live, and to link together the rural and urban open space in the American landscape."

The Commission also called for a "prairie fire of local action" to implement the greenway concept. Today, this prairie fire has ignited, and greenways are being developed in hundreds of communities across the country.

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What is a greenway?

greenway (gren'-wa) n. 1. A linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, a scenic road, or other route. 2. Any

natural or landscaped course for pedestrian or bicycle passage. 3. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas. 4. Locally, certain strip or linear parks designated as a parkway or greenbelt. [American neologism: green + way; origin obscure.]

Greenways are corridors of protected open space managed for conservation and recreation purposes. Greenways typically follow linear landscape features such as rivers, streams, and ridgelines. They are also being created along canals, abandoned railroad lines, utility corridors, country roads, and other manmade features. Greenways are, of course, not new. The concept grew out of the work of landscape architect Frederick Law Olmstead, who coined the phrase "parkway" in 1865, and was the designer of some of the nation's first linear parks. It evolved with the development of the Appalachian Trail in 1921, the urban parkways of the 1930's, and the post-World War II greenbelt concept. The term itself was not used until at least 1959 and did not come into widespread use until the 1970's.

In his book *Greenways for America*, author Charles Little identifies five major types of greenway. These are:

1. Urban riverside greenways, usually created as part of (or instead of) a redevelopment program along neglected, often run-down, city waterfronts.

2. Recreational greenways, featuring paths and trails of various kinds, often of relatively long distance, based on natural corridors, as well as man-made features such as abandoned railbeds, canals, or other public rights-of-way.

3. Ecologically significant natural corridors, usually along rivers and streams and, sometimes ridgelines, to provide for wildlife migration and habitat protection as well as nature study.

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4. Scenic and historic routes, usually along a road or highway (or sometimes a waterway), the most representative of which make an effort to provide pedestrian access along the route or at least places to alight from a car.

5. Comprehensive greenway systems or networks, usually based on natural landforms such as valleys and ridges, but sometimes simply an opportunistic assemblage of greenways and open space of various kinds to create an alternative municipal or regional green infrastructure.

What benefits do greenways provide?

Greenways can provide a multitude of benefits for people, wildlife and the economy. More expansive and flexible than traditional, more confined parks, greenways can provide a kind of community trail system for the linear forms of outdoor recreation Americans are engaged in today, such as: hiking, jogging, bicycling, rollerblading, horseback

riding, cross country skiing, or just plain strolling.

However, greenway benefits are not limited to recreation. They can provide lifelines for wildlife moving from one isolated natural area to another; they can help preserve biodiversity and wildlife areas by protecting environmentally sensitive land along rivers, streams, and wetlands. They can protect water quality by providing a buffer against urban run-off and non-point source pollution. Greenways can soften and direct urban growth, and they can act as outdoor classrooms: a close to home way to get children out of school and into nature.

Greenways can also stimulate the economy by providing an array of economic and quality of life benefits. Numerous studies demonstrate that linear parks can increase nearby property values, which can in turn increase local tax revenues. Spending by residents on greenway-related activities helps support recreation-oriented businesses and employment, as well as other businesses that are patronized by greenway users. Greenways often provide new business opportunities and locations for commercial activities like bed and breakfast establishments, and bike and canoe rental shops. Greenways are often

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major tourist attractions which generate expenditures on lodging, food, and recreation-oriented services. Finally, greenways can reduce public expenditures by lowering the costs associated with flooding and other natural hazards.

In summary, greenways are a cost-effective, multi-purpose concept that allows public agencies to link existing parks, historic sites, and natural areas with numerous environmental, recreational, and economic benefits.

Where are greenways?

Greenways can be found in all states and regions of the country. Today there are an estimated 3000 greenways already in existence across the United States. These vary from large multi-state greenways like the Appalachian Trail or Blue Ridge Parkway, to extensive riverfront promenades like the Riverfront Park in Battle Creek, Michigan, to small streamside parks like the Happy Creek Greenway in Front Royal, Virginia.

Greenways vary in size, scope, and nature. Some are ecological corridors with little or no public access; others, like the Pinellas Trail in Tampa, Florida, attract millions of visitors each year. The scope and widespread nature of greenways is illustrated by the following statistics.

- Rails-Trails - The Rails-to-Trails Conservancy reports that, nationwide, 572 abandoned railroad lines totaling almost 7000 linear miles have been converted into multipurpose parks for cyclists and pedestrians.

- Waterfronts - The Waterfront Center maintains files on over 1000 waterfront promenades and linear parks located along rivers and harbors in the United States. Many of these waterfront parks are known for their role in attracting tourists and fostering related economic development. For example, the San Antonio Riverwalk is the leading tourist attraction in the state of Texas. The Augusta Canal Project has leveraged more than \$100 million in new waterfront development from a public investment of \$8 million in a riverfront walkway and park.

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- Save Our Streams - The Izaak Walton League reports that there are over 2000 Save Our Streams projects around the country involving streamside restoration, water quality monitoring, and riverside clean-up.

- Wild and Scenic Rivers - There are currently 152 federally designated wild and scenic rivers in 34 states, totaling 10,516 miles.

- ISTEA - The Surface Transportation Policy Project reports that a total of \$389 million has been spent in the last 3 years on 869 projects involving greenways, rail trails, and other bicycle and pedestrian facilities around the country.

Nationwide, ISTEA Enhancement Funding for Non-motorized Transportation Facilities

(All Figures in Millions)

Facility Type	Federal Share	Match Share	Total	No. of Projects
Rails-Trails	\$ 94.4	\$39.0	\$133.4	224
Greenway Trails*	\$106.3	\$38.7	\$145.0	366
Other Bicycle and Pedestrian Facilities**	\$ 77.9	\$32.8	\$110.7	279
Total	\$278.6	\$110.5	\$389.1	869

*Greenway Trails includes sidepaths and off-road trail and bikeway facilities that are not Rail-Trails. **Other Bicycle & Pedestrian Facilities includes on-road bicycle facilities, overpasses, underpasses, pedestrian sidewalks, plazas, etc.

- National Park Service - In 1993, the Rivers, Trails, and Conservation Assistance Program of the National Park Service provided technical assistance to 130 greenway projects in 46 states. These projects ranged from the development-of a regional bikeway system for Cape Cod, Massachusetts, to creating 280 miles of trails and 7 new riverfront parks in New York State.

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- Maryland Greenways - The Maryland Greenway Atlas, prepared by

the Maryland Greenway Commission, identifies 131 existing and proposed greenway projects in the State of Maryland. Existing greenways in Maryland range from the 184-mile long C&O Canal National Historical Park to the 1200-acre Gwynns Falls Greenway in the City of Baltimore.

Have other studies been done on the impact of greenways?

A number of studies have been conducted that examine the impact and benefits of greenways and open space. The results of these studies reinforce the findings of the Northern Central Rail Trail Study. Other major studies include the following:

(1) The Impact A of Rail-Trails, by the Rivers, Trails, and Conservation Assistance Program, National Park Service, 1992. This study of users on three rails-to-trails projects found that users spent an average of \$3.97 to \$11.02 per day, generating an annual impact of \$1.2 million or more on each trail. The survey documented that both local users and visitors or tourists also spend as much as \$250 per year on trail-related purchases such as bike equipment, clothing, shoes or boots, books, and accessories. The trails attracted spending by non-county residents ranging from \$294 000 to \$630,000 each year.

(2) Does Farmland Protection Pay? The Cost of Community Services in Three Massachusetts Towns, American Farmland Trust, Northeastern Office, Northampton, Mass., 1992. This study found that open space and farmland make a greater net contribution to three towns' revenues than other types of property. While farms and open space account for relatively smaller amounts of tax revenue - and would be unable to sustain the tax base alone - they also make far fewer demands for services. For every \$1 collected in property taxes, farms and open spaces require only 33 cents in services. Commercial and industrial development cost slightly more, at 41 cents per \$1 of tax revenue. Residential development was a clear loser, costing the communities an average of \$1.12 for every \$1 of tax generated. The fiscal impact analysis included a full accounting of revenues and expenses for the towns of Agwam, Deerfield, and Gill.

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(3) A Look at Visitors on Wisconsin's Elroy-Sparta Bike Trail, University of Wisconsin-Extension, 1988. Exurban and rural trails with historic or natural characteristics that encourage "vacation"-style trips generate more revenue per use than urban and suburban trails used for light recreation and commuting. Studies of Wisconsin's Elroy-Sparta Trail and Sugar River Trail found that spending by out-of-state visitors for lodging, bike rentals, bus shuttle service, and restaurant meals was roughly twice as high as for in-state visitors. A survey of trail users in Minnesota found that users who traveled less than 25 miles to the trail spent an average of just \$.61 to \$2.68 per day, while those traveling 25 miles or more spent up to \$53.20 per day on average.

(4) The Illinois Statewide Trail User Study, North Central Forest Experiment Station, USDA Forest Service, Chicago. This survey of 3,400 users of 19 Illinois trails found a range of spending from just

46 cents per trip on Thorn Creek Trail in south suburban Cook County to more than \$200 on the River to River (Horse) Trail in the Shawnee National Forest. Average spending for non-horse-related trail use was \$2.89 per trail user. Users said they used the trails often, with 60 percent visiting at least 10 times a year and more than 40 percent estimating their usage as "virtually every week." The survey also documented another measure of trail value: more than 68 percent of those surveyed said they would pay a \$5 per year fee to help maintain the trail and develop new trails.

(5) Urban Open Space: An Investment that Pays, The Neighborhood Open Space Coalition, New York City, 1990. One of the most vivid examples of how a greenway can boost property values comes from the famous landscape architect Frederick Law Olmstead, who tracked property values around Central Park in New York before and after its construction. The city's investment of \$13.9 million in land acquisition and construction paid off handsomely. Growth in property values in nearby wards far outpaced the growth in similar wards elsewhere, skyrocketing from a total value of \$26.5 million in 1856 to \$236 million in 1873. The increase in tax revenue over what it would likely have been without the park was \$5.2 million, providing a net revenue gain of \$4.4 million after paying interest on the cost of park construction.

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The Central Park scenario was hardly isolated. The park-like Commonwealth Avenue development in Boston (1859-1890) preserved a threatened stretch of the Charles River and created an elegant new residential district. Kansas City's park and boulevard system, begun in 1895, created the core of a boulevard system that helped boost assessed value of nearby properties by 44 percent. And in Elizabeth, New Jersey, construction of Warinanco Park helped produce a 632 percent increase in value between 1922 and 1939 for properties within, 1,300 feet of the park, while the overall increase in Elizabeth property values was just 257 percent. That new tax revenue paid for the park in just five years.

The green space premium

Numerous studies have documented that green space continues to support higher values for nearby real estate. In urban, suburban, and rural areas, properties near trails, forest preserves, rivers, or protected corridors consistently show equal or higher property values than more distant properties and are often easier to sell.

(6) Boulder Greenbelt, Colorado - Estimated Premium: \$4.20-\$10.20 decrease per foot from greenway. The taxpayers in Boulder, Colorado, decided in 1967 to invest in a network of parks and open space, with an emphasis on the creation of a greenbelt around the city. The 17,000-acre system helped contain the city's development patterns and proved a potent multiplier of property values. A 1978 study found that property values were highest next to the greenbelt and declined with distance from it, at an average rate of \$4.20 per foot, with one neighborhood showing a \$10.20 per foot falloff. The largest value

increases were for houses with views of or immediate access to the greenbelt.

(7) Burke-Gilman Trail, Seattle, Washington - Estimated Premium: 6.5 percent two blocks from the trail. A survey of real estate agents with experience along the 12.1 mile Burke-Gilman Trail found that properties two blocks from the trail are easier to sell than other homes and carry a price premium of about 6.2 percent. Agents were mixed about homes immediately adjacent to the trail, with 42 percent saying they are easier to sell, 30 percent saying sales are more difficult, and 27 percent seeing no effect. A survey of

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homeowners found that 75 percent of owners who had bought property adjacent to the trail after it opened felt the home would be easier to sell, and 48 percent expected a value premium. Only 4 percent felt their homes would sell for less. Of owners who bought before the trail opened, 33 percent expected sales to be easier, and 15 percent expected a value premium. About 48 percent thought the location would have no effect or couldn't predict the effect, and 8.5 percent felt the property would sell for less. Crime and other problems along the trail were minimal. No respondents felt the trail should be closed.

Source: The Effect of the Burke-Gilman Trail Upon Property Values of Adjacent and Nearby Properties and Upon the Property Crime Rate in the Vicinity of the Trail, Seattle Engineering Department, 1986.

(8) Illinois Prairie Path - Estimated Premium: "Definitely enhances value of adjacent real estate." An informal 1985 survey of 40 experienced real estate professionals found that all agreed that the 40-mile Illinois Prairie Path made properties easier to sell and often created a price premium. Based in Glen Ellyn and Wheaton, the agents said they often advertise the proximity of the path when selling such properties.

Source: "Old Plank Trail - Community Impacts," Openlands Project, Chicago, 1985.

(9) Santa Ana River Corridor, California - Estimated Premium: \$139 million to \$201 million in property values. A partially completed trail on the Santa Ana River southeast of Los Angeles was estimated to have a positive effect on property values within one-eighth mile of the trail. Based on similar studies of value premiums next to parks and trails, a conservative premium of 6.5 percent was estimated for the proposed trail extension. Counting only private, taxpaying properties on 6,050 acres in Orange, Riverside, and San Bernadino Counties, total property values were estimated at \$2.15 billion (low estimate) to \$3.1 billion (high), yielding increases of \$139 million to \$201 million.

Source: Santa Ana River Corridor Master Plan.

(10) Pennypack Park, Philadelphia - Estimated Premium: 33 percent

at 40 feet; 9 percent at 1,000 feet. A 1,300-acre linear park along the Pennypack River in northeast Philadelphia was estimated in 1974 to increase property values by as much as 33 percent, depending on distance from the park. The study targeted 336 properties in 16

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different developments and used multiple regression analysis to account for variables such as age of homes, corner locations, and type of house. Houses 40 feet from the park had values 33 percent above similar houses outside of the park's influence. Values at 1,000 feet were 9 percent higher, and at 2,500 feet had a 4.2 percent premium.

Source: Urban Open Space: An Investment that Pays, The Neighborhood Open Space Coalition, New York, 1990, based on "The Effect of a Large Urban Park on Real Estate Values," T.R. Hammer, R. E. Coughlin, and E. T. Horn, Journal of American Planning Association, 1974.

Section III

Trends in Maryland Open Space Preservation

By

Ms. Teresa Moore

Executive Director, Maryland Greenways Commission

III-1

TRENDS IN MARYLAND OPEN SPACE PRESERVATION

Maryland has a distinguished history of land conservation, evidenced today by the more than 800,000 acres of land set aside for parks, recreation, wildlife, agriculture and natural resource management. Approximately one-seventh of the state's six million acres are under some form of long-term protection:

- 330,000 acres protected by state government
- 84,000 acres protected by federal government
- 140,000 acres protected by local government
- 100,000 acres protected under state agricultural easements
- 30,228 acres protected under local agricultural easements

- 25,000-30,000 acres protected by transfer of development rights
- 30,386 acres protected by environmental trust easements
- 64,424 acres protected by private land trusts

While these efforts are impressive and illustrate the range of public and private efforts to preserve land in Maryland, the rate that land is being converted to residential and commercial uses continues to dwarf land preservation activity. As the Baltimore-Washington corridor reaches build-out, many outlying counties are now experiencing a rapid consumption of land and an unsettling adjustment to a suburban environment that often lacks character and a comforting sense of place. This phenomenon is causing many to give careful consideration to the amount and types of open space needed to preserve not only ecological diversity but to maintain some of the natural and cultural qualities that make an area distinct.

The state's land conservation goals have historically been determined through a formula based on population. Recently, however, the Maryland Office of Planning determined that while this method was adequate for estimating recreational open space needs, it was not adequate for setting land preservation goals necessary to provide natural resource protection. In addition to population increases, the rate at which open land is being converted for residential and commercial uses must be taken into account. Under the old method,

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only about 100,000 acres would be targeted for land conservation during the next 26 years, while 550,000 acres are projected to be developed during that same period. Conversion of land at this rate will have an enormous impact on natural resources in the state, many of which are severely stressed. It is clear that a more concerted effort by both the public and private sector is needed to restore and/or maintain the ecological balance required to keep Maryland an attractive place to live and for all sectors of the economy to prosper.

Preservation in a Regional Context

Maryland has been fortunate to have a governor who understands the importance of conservation and natural resource protection. Governor Schaefer has supported numerous public preservation programs and has been a leader in fostering broad, interjurisdictional programs such as the multi-state Chesapeake Bay Program and the statewide greenways program. His administration is also responsible for many regulatory programs designed to protect shorelines and wetlands and to direct growth in a manner that reduces the environmental and fiscal impacts.

The Economic Growth, Resource Protection and Planning Act passed by the Maryland General Assembly in 1992 will help protect greenway corridors and open space in Maryland. The Planning Act requires all state plans and programs to conform to broad growth management policies. This law, to be implemented at the local level and through

state policy, is designed to ensure a balance between satisfying the demands of growth and maintaining environmental integrity.

Because the need for such a balance is evident, there is strong support for such measures. Increasingly, land conservation needs are viewed in the context of what is needed to preserve or restore an ecological balance for an area defined by something other than political boundaries. Across the state, local river management committees, greenway coalitions, land trusts and watershed commissions have formed to monitor the status and determine the needs of a specific natural resource.

III-3

As land conservation is more often viewed in a regional or watershed context, the concept of linkage has grown in popularity. Isolated parcels of protected land are seen as less environmentally beneficial than lands that are connected by a greenway that provides a continual buffer and/or migration corridor. The idea of a statewide green infrastructure has captured the support of many in the public and private sector. The Maryland Greenways Commission, established by Governor Schaefer in 1990, is actively promoting greenway corridors throughout the state. Such a network of greenway corridors would offer protection of stream valleys, wetlands, and sensitive habitats and would assure that at least minimal stretches of natural areas remain visible and functional throughout the state, even in the most highly developed areas.

Maryland's Greenways Program

In many areas of the country, including Maryland, greenways are viewed as the parks of the 21st century. These protected linear corridors offer a variety of ecological benefits and can be used to help shape growth patterns and maintain the distinctive traits of a particular community. Greenways can preserve pieces of the landscape important to a region's character while at the same time providing habitat for plants and animals, protection of waterways, migration corridors, and recreation and alternative transportation opportunities for people. Greenways can also reduce the need for public expenditures for water treatment, flood insurance and a variety of restoration efforts, and they can increase the value of neighboring properties.

Over the last several decades, the Maryland Department of Natural Resources established a number of notable stream valley parks. These large parcels of publicly owned land now serve as the framework for a network of greenways throughout the entire state. The network will consist of state and locally owned lands as well as private lands where willing landowners support the greenway concept. Already, numerous easements on individual private properties and larger parcels owned by private land trusts are included in the emerging network of protected greenways. Over 800 linear miles of established greenway corridors have been identified, and another 500 miles are currently

III-4

being established or are planned. Another 1,000 miles of potential greenway corridors has been identified by state and local governments.

To be included in the state's official greenway network, a corridor must be at least one quarter mile long, have long-term protection in place, have a management plan, and serve at least one of four broad greenway functions: wildlife corridor, stream buffer, conservation corridor, linear recreation.

Integrating Land Conservation with Regional Needs and Aspirations

Although greenways and open space preservation in Maryland is centered on protection of natural resources, the emphasis on regional efforts tends to bring together a variety of interests that can be linked to a particular landscape. An emerging trend is that of integrating a region's special heritage and cultural amenities with land conservation in an effort to promote tourism and a unique identity useful in economic development marketing. There are regional movements along the Potomac River, the Pocomoke River and the Susquehanna River that involve protecting the river corridors and capitalizing on the historic and cultural components of the region. This blend of preservation and economic exploitation is a departure from traditional roles of economic development professionals and conservationists.

On the North Branch Potomac, for example, protection of a nine-mile greenway corridor in West Virginia and Western Maryland is expected to bring tourism and small business development opportunities to one of the most economically depressed regions of the state. Capitalizing on a miraculous turn-around in water quality in this section of the Potomac, protection of this wilderness corridor and promotion of its exceptional trout fishery is expected to lure anglers from all over the country. The greenway corridor will allow Garrett County, whose largest industry is tourism, to increase visitation without compromising its rural character and pristine natural resources.

III-5

On the Susquehanna River, state and local officials are working with private businesses and area interest groups to establish a protected corridor between the Conowingo Dam and the Chesapeake Bay. Development plans in the towns and two counties that border the river are now being integrated with a larger, regional scheme to link the natural and cultural amenities within the Susquehanna River Valley. Although stiff in the early stages, the Lower Susquehanna Heritage Greenway is already included in Conowingo Power's recreation plan (required by the Federal Energy Regulatory Commission), the master plan for DNR's Susquehanna State Park, the recreation plans for Harford and Cecil Counties, the revitalization plan for the town of Port Deposit and the urban renewal plan for the town of Perryville. The museum community has expressed strong support for the greenway as have trail enthusiasts and many local residents.

Although recreation is often associated with open space projects and

greenway corridors, alternative transportation has surfaced as another useful pairing. Particularly in the densely populated urban areas where traffic congestion provides aggravation as well as air pollution, greenways can offer some relief. The Anacostia Headwaters Greenway is one such effort in Maryland. Located along tributaries to the Anacostia River in Prince George's and Montgomery Counties, this 24-mile network of trails will connect neighborhoods to several new metro stations. By providing this direct connection between population centers and mass transit, many commuters will be completely free from dependence on automobiles to get to work and school. By reducing the number of cold auto starts, it is believed that a greenway for commuters could have a significant impact on the region's air quality.

The possibilities for combining other functions with land preservation activities are numerous. In addition to those mentioned above, environmental and outdoor education are important uses of natural lands.

Costs/Benefits of Land Conservation

It is difficult to quantify the economic ramifications of various land uses. While there have been recent studies that indicate the costs associated with sprawling development (e.g., infrastructure and public

III-6

services) often outweigh the initial boost to local tax collections, little has been done to analyze the fiscal impact of land preservation.

Maryland has long been a national leader in funding open space projects. Program Open Space, funded through a one half percent transfer tax on real estate transactions, has been the primary source of funds for state and local land acquisitions. The transfer tax also provides funds for several other land conservation programs including agriculture easements, land trust grants and heritage conservation. Maryland is also a leader nationally in utilizing the new transportation enhancement funds for open space preservation and establishment of greenway corridors.

Yet with all the ecological benefits and amenities associated with open space, some continue to view land conservation as a non-essential expense rather than an important investment that pays long-term dividends to the citizens of Maryland. Although positive economic effects of open space have been demonstrated in various parts of the country, no such study has been undertaken in Maryland. For this reason, the Maryland Greenways Commission authorized a study of the economic impact of one of the state-sponsored greenways, the Northern Central Rail Trail.

The trail has become one of the most popular parks in the state with visitation exceeding 450,000. Although the project initially met with considerable skepticism by some local residents and elected-officials, it is now widely acclaimed as an asset to the community and the people

who live there. Following are the results of the study which included surveys of homeowners, trail users, and businesses in a defined area of northern Baltimore County.

Section IV

Benefit Analysis in Connection With The Northern Central Rail Trail

By

PKF Consulting, Inc.

IV-1

Physical and Locational Analysis

The conversion of the Northern Central Rail corridor to a trail was one of the first rail conversions after the Federal Railroad Revitalization and Regulatory Reform Act of 1976. Since the Trail's opening in 1984 the Trail now spans the entire length of the former rail corridor from Ashland, Maryland north to the Mason Dixon Line, a distance of 20 miles. A map locating the Trail within the region can be found on page IV-3. The Trail right-of-way constitutes a narrow corridor - at its narrowest the property is just over 60 feet wide and at its widest is just over 200 feet wide. The developed width of the Trail itself is planned to 12 feet (crushed stone) as funds permit. The Ashland entrance to the Trail is roughly 15 miles from downtown Baltimore and is the most heavily developed area near the Trail. As mentioned in the survey text and shown on the accompanying map, the access points along the southern half of the Trail receive the vast majority of usage. The landscape along the northern portions of the Trail is characterized by active farms and rural, low density, large lot residences.

The topography along the length of the Trail is nearly level, often with steep rock outcroppings, wetlands or wooded terrain along its narrow borders. Along part of the Trail, the Big Gunpowder Falls river and its tributaries add a relaxing tone to the Trail. With the exception of the historic hamlets at former rail line stops, the Trail remains largely free from impacts of residential development.

As part of the analysis, demographic and climatic data for the area was assembled and weighed into the impact formulas (see page IV-4). It was interesting to note population projections by Baltimore County planners and the U.S. Census Bureau predict 79 percent growth in the population of the Sparks District from 1990 to the year 2010, while anticipated growth for Baltimore County as a whole is expected to increase by 18 percent over the same period. The foregoing figures support the dramatic growth in demand for use of the Trail. Also

included in the attendance analysis were average climatic conditions for the region. The economic impact model was cross checked using both standard employment compensation charts, published household income figures for Baltimore County and IMPLAN employment,

IV-2

compensation and expenditure multipliers. Median household income for Baltimore County in 1991 was \$43,783, 36 percent higher than the national average of \$32,073.

A Brief History of the Northern Central Rail Trail

The history and significance of the Northern Central line is probably the Trail's most fascinating, yet least known assets. Although NCRT maps give a brief introduction to its history, no interpretive signs are present along the Trail for general information or for specific historic sites along the Trail. When the Northern Central was completed in 1838 it was the second oldest long distance railroad in the United States, stretching 320 miles from Baltimore, Maryland to Sodus, New York. Along its path numerous small hamlets developed, the vestiges of which are still standing today.

During the Civil War the Northern Central Railroad continued to serve as a main freight and commuter corridor as well as one of the Union Army's most important supply routes. Frequent hospital trains ferried wounded troops to hospitals along the Railroad's corridor. President Lincoln wrote his Gettysburg Address on the Northern Central while travelling to Gettysburg in 1863. Two years later, after his assassination the President's funeral train travelled the Northern Central en route to Illinois.

As the automobile flourished and the road system expanded in the east, the profitability of the Northern Central declined. By 1959 the last commuter service from Parkton was discontinued, and long distance service was phased out in 1971. When hurricane Agnes caused significant damage to a number of bridges along the line in 1972, freight service was also terminated. The corridor lay abandoned for the next 12 years before it was converted to a greenway.

NORTHERN CENTRAL RAIL TRAIL
AREA MAP

IV-3

Click [HERE](#) for graphic.

IV-4

CLIMATE: Based On 30 Year Averages

YEARLY PRECIPITATION (INCHES)	41.8
YEARLY SNOWFALL (INCHES)	21.9
SUMMER TEMPERATURE (DEG. F.)	74.9
WINTER TEMPERATURE (DEG. F.)	34.7
DURATION OF FREEZE-FREE PERIOD	186 days

Source: Maryland State Office of Climatology &
Maryland Department of Economic and Employment Development

1991 BALTIMORE COUNTY DEMOGRAPHIC PROFILE

POPULATION	697,116
AVERAGE AGE (years)	35
HOUSEHOLDS	275,700
91-96 PROJECTED HOUSEHOLD GROWTH	7.40%
PER CAPITA INCOME	\$24,852
MEDIAN HOUSEHOLD INCOME	\$43,783
EFFECTIVE BUYING INCOME	\$35,546
COST OF LIVING INDEX	110.3
CIVILIAN LABOR FORCE (COUNTY)	394,048
(REGION)	1,240,460
RETAIL SALES	\$7 BILLION
TOURISM GENERATED \$ (ROOM TAX RECEIPTS)+\$3.8 BILLION	

Source: Baltimore Regional Council of Governments, March 1992

HOUSEHOLDS:	1980	1990	1995	2010
BALTIMORE COUNTY	237,371	268,280	290,800	318,200
HEREFORD DISTRICT	2,897	3,843	4,060	4,350
SPARKS DISTRICT	1,148	2,243	3,210	4,030
TOTAL DISTRICT HOUSEHOLDS:	4,045	6,086	7,270	8,380
% OF TOTAL COUNTY HOUSEHOLDS	1.70%	2.27%	2.50%	2.63%

IV-5

Qualitative Values of the Northern Central Rail Trail:

From a historical perspective, parks and trails in the United States have been provided to the public as a means to conserve resources, improve residents' quality of life and as a tonic for the ills of urban life. Consistent with the preceding is the language of the 1916 legislation creating the National Park Service:

"To conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Until recently, the equation for assessing the implementation or success of a public open space has had little focus on economic impacts. Although the subject impacts can be significant and self sustaining, the impetus behind park creation remains an altruistic vision for improving peoples' quality of life and communities' unique sense of place.

Quantifying the value of aesthetic/intrinsic impacts is always difficult, subjective and to some people - meaningless. If someone enjoys something - whether a park or a Van Gogh painting, why try to attach an economic value (price tag) to it? The answer is that assigning value (economic value) is one of the few true quantifiable measures to assess the communities' perceptions. Even though the foregoing has been the focus of this study, caution should be taken not to belie the real intent behind providing resources like the Northern Central Rail Trail for the public, which is for the public good and is often difficult to assess. Accordingly, the public surveys conducted throughout the course of this study also focused on defining resident' values and gauging their interests, commitment, and "ownership" of the NCRT. It was interesting to note that over one-third of respondents offered to donate their time as a Trail volunteer.

Also worth noting are people's responses regarding the condition of the rail corridor before it was redeveloped as a trail/park. As is the case with most rail trails, the Northern Central was a derelict rail corridor - a popular destination for "undesirable" activities such as underage drinking, illegal dumping, car & motorcycle racing,

IV-6

and various sorts of vandalism and defacement. As mentioned earlier, since the NCRT's establishment, those undesirable activities have all but disappeared - partly because the Trail's users "police" the Trail as their own and the perpetrators of vandalism now congregate elsewhere. Accordingly,, reports of crime and vandalism along the corridor have dropped appreciably.

The broad acceptance of the NCRT by residents is perhaps best illustrated by the varied number of group events/activities that have taken place on the Trail recently. Some include:

GROUP:

Event:

Maryland Air National Guard
Church Rural Overseas Project
U.S. Driving for the Disabled
Hereford Recreation Council
Maryland Bible College & Seminary
Muscular Dystrophy Association

Bike for Vets
Cropwalk
Driving for the Disabled
Soccer Program Bike-a-thon
Walk-a-thon
Walk-a-thon

National Kidney Foundation	Walk-a-thon & Bike-a-thon
Richcroft, Incorporated	Walk-a-thon & Bike-a-thon
St. Judes Childrens Hospital	Bike-a-thon
First Evangelical Lutheran Church	Walk-a-thon
Patterson Park Food Bank	Tube for Food
Asthma and Allergy Foundation of America	Fun day
Baltimore Road Runners	Marathon
Civitan Club of Baltimore	Bike-a-thon
Club Maryland	Wellness Walk
Danielle Liver Transplant Foundation	Bike-for-Life
United Methodist Churches	Hayride
Rails to Trails Conservancy	Rails to Trails Day
Leukemia Society of America	Bike Rally
Hunts Methodist Church	Pediatric Aids Walk-a-thon
Department of Natural Resources	March for Parks

IV-7

Whereas part of the objectives of public open spaces is to educate and bring people and communities closer together, the identification of programs provided can also provide a measure of understanding of the success/failures of a park. As was found during the course of this study, even though the park is less than ten years old, it has already established a pattern/legacy for fulfilling this function for the surrounding communities.

A partial listing of community outreach programs hosted on the Trail includes:

Mothers Day events	Flag Day events	Senior bike rides
Fathers Day events	July Fourth celebration	Family Day
Junior Ranger programs	Full Moon bike rides	Labor Day bike rides
History walks	Nature walks	Autumn hikes
Halloween events	Apple cider walks	Crafts workshops
Bird Walks	Full moon hikes	Garden Club sale
Tubing on the Gunpowder Falls	Wildflower walks	Various foot races

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An Introduction to Survey Results and Analysis Section:

The remainder of the report is a compilation of the various survey question responses and a summary of the methodologies used to calculate both the economic impacts of the Trail and the results of the qualitative responses to intrinsic value questions.

Aggregate Survey Results

Question 1.

Approximately how far is your residence from the Trail?

(Percents;	Counts):	
4.21%;	28	-My property is adjacent to the Trail
8.27%;	55	-My property is less than 300 yards from the Trail
12.48%;	83	-Less than one mile
35.19%;	234	-1-3 miles
14.74%;	98	-4-5 miles
11.73%;	78	-6-10 miles
13.38%;	89	-Greater than 10 miles

Question 2.

What is your zip code?

Users survey Responses (184 total):

[18] 21111...[15] 21152...[15] 21093...[14] 21131...[12] 21030...[7]
 21234...[6] 21161...[6] 21286...[5] 21214...[5] 21053...[4]
 21074...[4] 21209...[3] 21120...[3] 21244...[3] 21047...[3]
 17349...[3] 21218...[2] 21013...[2] 21158...[2] 21236...[1]
 21014...[1] 17404...[1] 21230 [1] 21155 [1] 21201...[1] 21211 [1]
 21212-2016 [1] 21219...[1] 21206...[1] 21085...[1] 21208...[1] 21015-
 5613...[1] 21239...[1] 21040...[1] 21228...[1] 21111-1507...[1] 21094
 ...[1] 21237...[1] 21202...[1] 02130...[1] 21050...[1] 20705...[1]
 21045

Property owners survey Responses (423 total):

[129] 21030...[80] 21152...[77] 21111...[40] 21131...[35] 21093...[24]
 21120 [17] 21053...[2] 21013...[1] 21077...[1] 21009...[1] 21115...
 [1] 21052...[1] 21023 [1] 21234...[1] 21111-1427...[1] 21220...[1]
 21014...[1] 51152...[1] 21286...[1] 21111-1515...[1] 21108...[1] 21093
 ...[1] 21111-1112...[1] 21030-2629

Question 3. Property Owners

How often do you use the Trail?

(Percent;	Counts)		
23.54%	101	-	Once per month
35.43%	152	-	Once per week
14.22%	61	-	Between 1-3 times per week
6.53%	28	-	Between 3-5 times per week
2.10%	9	-	Daily
18.18%	78	-	Never

Question 3. Trail Users

How often do you use the Trail?

(Percent;	Counts)		
20.63%	39	-	Once per month
24.87%	47	-	Once per week
27.51%	52	-	Between 1-3 times per week
19.58%	37	-	Between 3-5 times per week
7.41%	14	-	Daily

Question 4.

How do you travel from your home to where you enter the Trail?

(Percent;	Counts)		
71.43%	465	-	Car
14.13%	92	-	Bike
12.90%	84	-	Walk
1.54%	10	-	Horseback

Question 5.

How many people typically use the Trail with you?

Average: 3.3 people per group

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Question 6.

Please identify your age group:

(Percent;	Counts)		
1.35%	8	-	15 and under
3.21%	19	-	16 to 25
17.09%	101	-	26 to 35
28.43%	168	-	36 to 45
27.41%	162	-	46 to 55
12.69%	75	-	56 to 65
9.81%	58	-	65+

Question 7.

What is your primary activity on the Trail?

(Percent;	Counts)		
46.55%	270	-	Walking/hiking
40.86%	237	-	Biking
10.34%	60	-	Jogging
.52%	3	-	Horseback riding
.17%	1	-	Commuting
.34%	2	-	Picnicking
1.03%	6	-	Fishing
.17%	1	-	Cross Country Skiing

Question 8.

Generally, when do you use the Trail?

(Percent;	Counts)		
56.37%	323	-	Weekdays
43.63%	250	-	Weekends

IV-12

Question 9.

Is there a particular time of the day that you are more likely to use the Trail?

(Percent;	Counts)		
32.12%	185	-	Morning
32.12%	185	-	Afternoon
4.69%	27	-	Evenings
31.08%	179	-	All times

Question 10.

What portion of the Trail do you use most often?

(Percent;	Counts)		
57.34%	328	-	Ashland to Monkton
26.22%	150	-	Monkton to Freeland
16.43%	94	-	Entire length

Question 11.

How much time do you spend on the Trail?

(Percent;	Counts)		
4.39%	24	-	Under 30 minutes
43.51%	238	-	About one hour
52.10%	285	-	more than one hour

Question 12.

Which parking lots do you generally use?

(Percent;	Counts)		
21.27%	144	-	Monkton
18.32%	124	-	Ashland
15.21%	103	-	Phoenix
13.29%	90	-	Paper Mill
12.70%	86	-	Sparks
7.39%	50	-	Whitehall

IV-13

4.73%	32	-	Parkton
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3.25%	22	-	Bentley Springs
3.84%	26	-	Freeland

Question 13.

How did you find out about the Trail?

(Percent;	Counts)		
72.30%	402	-	Word of mouth
14.57%	81	-	Driving past
9.17%	51	-	Newspaper
3.96%	22	-	Road Map

Question 14.

Has your use of the Trail influenced you to purchase?

(Percent;	Counts)		
31.81%	223	-	Bike
24.25%	170	-	Bike supplies
22.40%	157	-	Running, walking shoes
14.12%	99	-	Clothing
7.42%	52	-	Film

Question 15.

How do you value this type of linear park (Trail) compared to a traditional, more confined park?

(Percent;	Counts)		
66.03%	383	-	I like this type of park better
2.41%	14	-	I like more traditional parks better
31.55%	183	-	About the same

IV-14

Question 16.

Do you feel the North Central Rail Trail is a good use of State funds?

(Percent;	Counts)		
93.72%	612	-	Yes
6.28%	41	-	No

Question 17.

How strongly do you value the presence of the Trail?

(Percent;	Counts)		
88.04%	530	-	-I value the Trail as a strong asset of the community
7.64%	46	-	-The Trail is of limited value to the community
2.49%	15	-	-I do not think the Trail is of any real value to the community

1.83% 11 -The Trail is a negative influence on the community

Question 18.

How much value do you think the Trail adds to properties within walking distance to the Trail?

(Percent;	Counts)		
30.46%	166	-	None
6.97%	38	-	Lowers the value
16.51%	90	-	Between \$500 - \$1,000
18.17%	99	-	\$1,000
14.68%	80	-	\$3,000
4.40%	24	-	\$5,000
8.81%	48	-	More than \$5,000

Question 19.

What is your gender?

(Percent;	Counts)		
60.09%	396	-	Male
39.91%	263	-	Female

IV-15

Question 20.

Are you aware of other rail-trails in Maryland?

(Percent;	Counts)		
57.27%	374	-	Yes
42.73%	279	-	No

Question 21.

Would you like to see more trails developed in the state?

(Percent;	Counts)		
91.87%	576	-	Yes
8.13%	51	-	No

Question 22.

Do you find the trail to be well maintained?

(Percent;	Counts)		
53.95%	328	-	Excellent
40.62%	247	-	Good
4.11%	25	-	Fair
1.32%	8	-	Poor

Question 23.

Do you find the trail to be safe?

(Percent;	Counts)		
40.94%	244	-	Excellent
47.82%	285	-	Good
9.56%	57	-	Fair
1.68%	10	-	Poor

IV-16

Question 24.

Do you find the trail to be private/secluded?

(Percent;	Counts)		
39.02%	231	-	Excellent
44.76%	265	-	Good
12.84%	76	-	Fair
3.38%	20	-	Poor

Question 25.

Do you find the trail to be clean?

(Percent;	Counts)		
58.54%	353	-	Excellent
36.32%	219	-	Good
4.64%	28	-	Fair
.50%	3	-	Poor

Question 26.

Would you like to receive information on becoming a Trail volunteer/supporter?

(Percent;	Counts)		
34.88%	203	-	Yes
65.12%	379	-	No

Question 1B.

How long have you lived in close proximity to the Trail?

(Percent;	Counts)		
68.60%	308	-	Greater than five years
22.49%	101	-	Between three and five years
8.02%	36	-	Between one and three years
.89%	4	-	Under one year

IV-17

Question 2B.

If you were to sell your house, do you think your house's proximity to

the Trail would be a positive selling point?

(Percent;	Counts)		
68.33%	302	-	Yes
31.67%	140	-	No

Question 3B.

If you were to buy a new house, would the proximity of another trail/park influence your decision?

(Percent;	Counts)		
61.68%	272	-	Yes
38.32%	169	-	No

Question 4B.

Which of the following most closely matches your impressions on future property values in your area?

(Percent;	Counts)		
59.91%	269	-	I expect property values to increase slightly
22.49%	101	-	I expect property values to remain about the same
15.14%	68	-	I expect property values to increase greatly
2.23%	10	-	I expect property values to decline slightly
.22%	1	-	I expect property values to decline greatly

IV-18

Question 5B.

Which of the following most closely matches your impressions of property values in your area over the past few years?

(Percent;	Counts)		
39.60%	177	-	Property values have increased over the past few years
33.56%	150	-	Property values have remained the same over the past few years
22.82%	102	-	Property values have declined slightly over the past few years
4.03%	18	-	Property values have declined substantially over the past few years

IV-19

GREENWAY SURVEYS: METHODOLOGY AND ANALYSIS

Three surveys were administered throughout the course of the investigation: one for Trail users, one for nearby property owners, and a third for businesses in the region that may be impacted by the presence of the Trail. Surveys for Trail users were distributed directly on the trail or via intercepts at parking facilities located

along the Trail. Parks personnel were quite helpful in providing assistance to this end. Property owner surveys were targeted via tax assessors roles and random distribution throughout Baltimore County. In order to enable a broader sampling and greater level of cross tabulation, both the user and property owners' surveys contained many of the same questions. Business surveys were handled as interviews - either in person or via telephone. In all, over 130 interviews were conducted both with professionals associated with the Trail (Park employees) as well as professionals with a unique perspective of the Trail as related to impacts on land values (brokers, appraisers, developers, etc).

Response Rates:

Response rates for the surveys were favorable, especially given that the distribution period was largely during the Christmas and New Years holidays. Distribution and returns were as follows:

Total Combined Results:

Total Distributed:	2,968
Total Received/Tabulated:	664
Total Response Rate:	22.4%

Property Owners Surveys:

Distributed:	1,742
Received/Tabulated:	465
Response Rate:	26.7%

Users Surveys:

Distributed:	1,226
Received:	199
Response Rate:	16.23%

IV-20

An Analysis of the Combined Survey Questions:

Distribution and Usability:

Total number of usable surveys responses:	664
Total number of usable Property Owners surveys:	465
Total number of usable Users surveys:	199

Question 1.

Approximately how far is your residence from the Trail?

(Percent;	Counts):	
4.21%;	28	-My property is adjacent to the Trail
8.27%;	55	-My property is less than 300 yards from the Trail
12.48%;	83	-Less than one mile
35.19%;	234	-1-3 miles
14.74%;	98	-4-5 miles

11.73%; 78 -6-10 miles
 13.38%; 89 -Greater than 10 miles

Data obtained from this question, question 3 and the total attendance provided by the Park's personnel were used to arrive at the gasoline inputs directly associated with the Trail; the methodology used is as follows:

Total 1993 Attendance: 457,540
 Percent arriving by car: (326,821) 71.43%
 Average number of people per car: 3.3 (DNR SOP formula)

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Percent of total car users:

14.26% people travelling 1 mile in each direction
 40.21% people travelling 2 miles in each direction
 16.84% people travelling 4 .5 miles in each direction
 13.40% people travelling 8 miles in each direction
 15.29% people travelling approximately 12 miles in each
 direction

326,821 / 3.3 * 14.26% * 2 miles = 28,245 miles
 326,821 / 3.3 * 40.21% * 4 miles = 159,291 miles
 326,821 / 3.3 * 16.84% * 9 miles = 150,100 miles
 326,821 / 3.3 * 13.40% * 16 miles = 212,335 miles
 326,821 / 3.3 * 15.29% * 24 miles = 363,425 miles
 Total miles = 913,396

The total mileage figure (913,396) was then divided by the average miles per gallon of the 1993 on-road fleet of automobiles and then multiplied by the average 1993 price for self service regular unleaded gasoline in the state of Maryland (figures provided by American Automobile Association).

913,396 / 20.9 miles per gallon = 43,704 gallons of fuel

43,704 gallons * \$1.149 gal. = \$50,216 spent by Trail users on gasoline

43,704 gallons * \$.235 = \$10,271 Maryland state gasoline tax revenues
 43,704 gallons * \$.184 = \$8,042 Federal gasoline tax revenues

IV-22

Question 2.

What is your zip code?

Exhibit C on the following page illustrates both the sampling area as well as the general draw area, by postal zip code, for the Trail. It

was interesting to note that the vast majority (of Trail users are from the general area (within 15 miles of the Trail). An insignificant number of users could be classified as tourists. For interpretive purposes, the answers for the users' survey and property owners' survey are displayed separately. The results of this question confirm distance estimates from question one and illustrate both the sample core, for the surveys as well as the general draw area for the Trail.

PKF crosschecked the relatively low number of users that would characteristically fall under the "tourist" category by comparing the survey findings with both the previous survey interviews with park management and four years of visitor log entries at Monkton Station. Repeatedly, the perception that the NCRT is overwhelmingly a local resource was confirmed/reaffirmed by all.

Users-survey Responses (184 total):

[18] 21111...[15] 21152...[15] 21093...[14] 21131...[12] 21030...[7]
 21234...[6] 21161...[6] 21286...[5] 21214...[5] 21053...[4]
 21074...[4] 21209...[3] 21120...[3] 21244...[3] 21047...[3] 17349...
 [3] 21218...[2] 21013...[2] 21158...[2] 21236...[1] 21014...[1] 17404
 [1] 21230...[1] 21155...[1] 21201...[1] 21211...[1] 21212-2016...[1]
 21219...[1] 21206...[1] 21085...[1] 21208...[1] 21015-5613...[1]
 21239...[1] 21040...[1] 21228...[1] 21111-1507...[1] 21094...[1] 21237
 ...[1] 21202...[1] 02130...[1] 21050...[1] 20705...[1] 21045

Property owners survey Responses (423 total):

[129] 21030...[80] 21152...[77] 21111...[40] 21131...[35] 21093...[24]
 21120...[17] 21053...[2] 21013...[1] 21077...[1] 21009...[1] 21115...
 [1] 21052...[1] 21023...[1] 21234...[1] 21111-1427...[1] 21220...[1]
 21014...[1] 51152...[1] 21286...[1] 21111-1515...[1] 21108...[1] 21093
 ...[1] 21111-1112...[1] 21030-2629

Click [HERE](#) for graphic.

IV-24

HOW OFTEN DO YOU USE THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 3. Property Owners

How often do you use the Trail?

(Percent;	Counts)		
23.54%	101	-	Once per month

35.43%	152	-	Once per week
14.22%	61	-	Between 1-3 times per week
6.53%	28	-	Between 3-5 times per week
2.10%	9	-	Daily
18.18%	78	-	Never

IV-25

HOW OFTEN DO YOU USE THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 3. Trail Users

How often do you use the Trail?

(Percent;	Counts)		
20.63%	39	-	Once per month
24.87%	47	-	Once per week
27.51%	52	-	Between 1-3 times per week
19.58%	37	-	Between 3-5 times per week
7.41%	14	-	Daily

IV-26

Results of this question were applied to annual attendance figures supplied by the Trail's personnel: see exhibits D, E, and F on pages IV-27 and IV-28. The methodology used by park personnel to estimate total attendance is done in shift reports:

There are three full time rangers assigned to the Trail as part of their duties. The ranger on duty counts cars in the Trail's parking facilities, which according to standard operating procedure (SOP) is applied to a multiple of 3.3 persons per vehicle. The figure of 3.3 persons per car is specific to the Northern Central Rail Trail and was cross checked in the field by PKF's staff and deemed to be accurate.

Using the percentage breakouts of the 1993 attendance figure of 457,540 and subtracting non-users from the survey formula, a total of 14,320 individuals use the Trail. Applying this figure to the surrounding population in the draw area for the Trail, we find a surprisingly high popularity of the Trail with residents (see population chart, page IV-4). Cross-referencing this information with both the property owners survey respondents and local interviews we found that over half the residents in the local area use the Trail.

IV-27

Exhibit D
NORTHERN CENTRAL RAIL TRAIL
ATTENDANCE BY YEAR

YEAR	ATTENDANCE
1984	9,820
1985	38,085
1986	47,933
1987	41,430
1989	91,658
1990	130,165
1991	125,291
1992	170,565
1993	249,413
1994	457,540

Source: Maryland Department of Natural Resources

Exhibit E
ATTENDANCE BY YEAR

Click [HERE](#) for graphic.

IV-28

Click [HERE](#) for graphic.

IV-29

HOW DO YOU TRAVEL FROM YOUR
HOME TO WHERE YOU ENTER
THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 4.

How do you travel from your home to where you enter the Trail?

(Percent;	Counts)		
71.43%	465	-	Car
14.13%	92	-	Bike
12.90%	84	-	Walk
1.54%	10	-	Horseback

With the limited exception of a few townhouse/condominium developments at the southern terminus of the Trail, there are few residences in close proximity to the Trail's access points. Many survey respondents mentioned a primary reason for both driving to and using the Trail as much as they do is because local roadways are geared almost exclusively for the automobile and that walking and/or bicycle riding along these routes is too dangerous.

IV-30

The degree of incompatibility of local roads with residents' desire for recreational walking and bicycling is perhaps the greatest reason for people to use the Trail. In the course of the study it became clear that the absence of private/public open spaces to meet the public's use demands, has contributed significantly to residents' viewing the Trail as a prized commodity.

Question 5.

How many people typically use the Trail with you?

Average: 3.3 people per group

IV-31

PLEASE IDENTIFY YOUR AGE GROUP: (1)

Click [HERE](#) for graphic.

Question 6.

Please identify your age group:

(Percent;	Counts)		
1.35%	8	-	15 and under
3.21%	19	-	16 to 25
17.09%	101	-	26 to 35
28.43%	168	-	36 to 45
27.41%	162	-	46 to 55
12.69%	75	-	56 to 65
9.81%	58	-	65+

IV-32

The results of question six identify a profile of trail users by age group. As expected, we found the majority of users fit the Baltimore County demographic profile of 30+ years old. As displayed in the proceeding bar graph it should be anticipated that the age groupings will increase in the more mature brackets in the near future, and thus would increase, the number of Trail users.

WHAT IS YOUR PRIMARY ACTIVITY ON THE TRAIL?

Click [HERE](#) for graphic.

Question 7.

What is your primary activity on the Trail?

(Percent;	Counts)		
46.55%	270	-	Walking/hiking
40.86%	237	-	Biking
10.34%	60	-	Jogging
.52%	3	-	Horseback riding
.17%	1	-	Commuting
.34%	2	-	Picnicking
1.03%	6	-	Fishing
.17%	1	-	Cross Country Skiing

As mentioned previously, the primary motivation for most people to use the Trail is the lack of enjoyable and safe locations to walk, run and bicycle. Changes in land use patterns to higher densities and an

IV-34

increased acceptance of the automobile, as the primary consideration of roadway engineering have made residents feel unsafe to walk or bicycle for health and recreation purposes on or along road corridors. Given the proximity of the Trail in a developing residential area, pressure on the Trail may be anticipated to increase accordingly with the anticipated 25 percent growth in Baltimore county households projected over the next 16 years.

IV-35

Questions 8 and 9 confirmed beliefs regarding the uniformity of use of the Trail by day and time. Respondents answered that part of the reason for such a broad use of days and times was that during "peak hours" (after work and on weekend afternoons) parking for the Trail can be difficult to find and the Trail can become too crowded. At any given time during daylight hours there is an average of over 102 people on the Trail.

GENERALLY, WHEN DO YOU USE THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 8.

Generally, when do you use the Trail?

(Percent;	Counts)		
56.37%	323	-	Weekdays
43.63%	250	-	Weekends

IV-36

IS THERE A PARTICULAR TIME OF DAY THAT YOU
ARE MOST LIKELY TO USE THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 9.

Is there a particular time of the day that you are more likely to use the Trail?

(Percent;	Counts)		
32.12%	185	-	Morning
32.12%	185	-	Afternoon
4.69%	27	-	Evenings
31.08%	179	-	All times

IV-37

Question 10.

What portion of the Trail do you use most often?

(Percent;	Counts)		
57.34%	328	-	Ashland to Monkton
26.22%	150	-	Monkton to Freeland
16.43%	94	-	Entire length

As the draw area for the Trail is generally from the south (Baltimore suburbs), which includes the areas having the greatest population densities, the majority of use for the Trail is the southern half. However, as this portion of the Trail is often strained by the sheer numbers of users, many respondents iterated that they now drive to the northern half of the Trail because it is much more private and secluded. Because of its historical ambiance, parking availability and services such as bicycle rentals, snacks, restrooms, etc. Monkton Station remains the "centerpiece" of the Trail. To a limited degree, Monkton has become a destination/"springboard" for Trail users. The historic buildings, rail station headquarters and services provided by the adjacent small businesses attract many users seeking a bit of

history and country surroundings.

Question 11.

How much time do you spend on the Trail?

(Percent;	Counts)		
4.39%	24	-	Under 30 minutes
43.51%	238	-	About one hour
52.10%	285	-	More than one hour

Whether measuring by distance, type of use, or time it is clear that many Trail users spend a significant amount of time on the Trail. Accordingly, many visitors walk/bike as much as 6 miles each time on the Trail.

IV-38

Using local climatological data provided by the National Weather Service (Exhibits B and H, pages IV-4 and IV-40), it was determined and checked with this and other questions that on average, there are approximately 122 people using the Trail at any given time during daylight hours.

*Using 52 days of poor/extreme weather circumstances and 12 hour/day use averages.

Question 12.

Which parking lots do you generally use?

(Percent;	Counts)		
21.27%	144	-	Monkton
18.32%	124	-	Ashland
15.21%	103	-	Phoenix
13.29%	90	-	Paper Mill
12.70%	86	-	Sparks
7.39%	50	-	Whitehall
4.73%	32	-	Parkton
3.25%	22	-	Bentley Springs
3.84%	26	-	Freeland

Question 12 serves as a follow up, linking parking facilities to lengths of the Trail most commonly used. As expected, Monkton Station is the most popular parking facility. Currently over 150 parking spaces are made available to the public at the various access points along the Trail. While Trail users and nearby property owners both argue there are nowhere near enough spaces to meet demand, they recognize the Trail itself cannot accommodate more people. As the parking formulas adopted by the National Park Service for their properties are now based on resource management, this formula also works for the NCRT. Any further expansion of the parking facilities would probably lead to degradation of both the resource and the intrinsic value of the experience for the people using it (See Exhibit I, page IV-41).

IV-39

Exhibit G
NORTHERN CENTRAL RAIL TRAIL
MAJOR ACCESS POINTS

Click [HERE](#) for graphic.

IV-40

Click [HERE](#) for graphic.

IV-41

Click [HERE](#) for graphic.

IV-42

HOW DID YOU FIND OUT ABOUT THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 13.

How did you find out about the Trail?

(Percent;	Counts)		
72.30%	402	-	Word of mouth
14.57%	81	-	Driving past
9.17%	51	-	Newspaper
3.96%	22	-	Road Map

Even though road signs to guide people toward the Trail exist in over eight locations spread out over the length of the Trail, 72.3 percent

of the NCRT users became acquainted with it via word-of-mouth. Additionally, a few local businesses (bike shops, outfitters, horse stables) promote the Trail to customers. The adage "The best kind of advertisement is word-of-mouth" certainly seems to have been true in this circumstance.

IV-43

ECONOMIC IMPACTS ANALYSIS:

The methodology used for quantifying the economic impacts from the Trail involved survey interviews with all groups of respondents (users, property owners, and businesses alike). Figures provided by these interviews were used as the basis for assessing both the direct, indirect and induced economic impacts of purchases directly attributable to the Trail. For a largely rural area, the impacts are significant. On the most basic level, snowcone and drink stands are now located throughout the Trail, and as the investigation probed deeper, broad economic inputs consistent with typical trail user spending - both for soft and hard good purchases, were discovered.

Calculations derived from this data were then applied to the IMPLAN input-output economic modeling system developed by the U.S.D.A. Forest Service, Land Management Planning Staff. The IMPLAN input-output (I/O) model included appropriate multipliers for the Baltimore area and thus provided accurate data for total direct, indirect and induced spending inputs.

The final step in the impact analysis was to apply all tabulations from the input-output model to the 1993 operating expenditures for the Northern Central Rail Trail.

In summary, the State expenditures to maintain and operate the Trail for 1993 totaled \$191,893 (see breakout below). Economic benefits to the State attributable to the Trail are represented in three forms (goods sold, tax revenue and jobs created/supported). For 1993 these benefits are as follows:

- \$3,380,013 in goods sold because of the Trail
- \$ 171,885 in State sales tax revenue via goods sold
- \$ 132,257 in State income tax revenue via jobs supported
- \$ 72,742 in Baltimore County personal income tax surtaxes
- The creation/support of over 262 jobs

IV-44

-To that end State tax revenues alone attributable to the Trail totaled \$304,142 - a surplus of \$112,249 to the State coffers.

Break out of 1993 Operations Budget for the NCRT:

Contractual Services:	\$ 4,971
Telephone, Electric, Heat (Monkton Station):	\$ 4,191
Classified Salaries:	\$138,032
Seasonal Salaries:	\$ 27,973
Maintenance Figures:	\$ 5,228
Vehicle/Equipment (Maintenance and Fuel):	\$ 11,498
Total Operations Budget:	\$191,893

HARD GOODS

Question 14.

Has your use of the Trail influenced you to purchase?

(Percent;	Counts)		
31.81%	223	-	Bike
24.25%	170	-	Bike supplies
22.40%	157	-	Running, walking shoes
14.12%	99	-	Clothing
7.42%	52	-	Film

70 percent of the respondents of the trail users survey had purchased "hard goods" in the past year, and 57 percent of the property owners surveyed had purchased goods for use on the Trail. Combined, 61 percent of the Trail users spent an average of \$203 per person in 1993 on goods for use on the Trail. The dollar figure was provided by a follow-up question asking respondents to estimate their per person

IV-45

expenditures over the past year. This effect resulted in the purchase of over \$1,773,246 worth of hard goods with a direct impact of over \$88,662.28 in tax revenue for the State of Maryland:

14,320 trail users * 61% * \$203 = \$1,773,246 Goods purchased for use on Trail

\$1,773,245 * 5% \$88,662.28 Maryland State tax revenues

SOFT GOODS:

Expenditures for soft goods purchases were calculated using the same methodology for hard goods with the exception that the final figure is based on total attendance (per person per visit). A qualifier asked respondents of this question to estimate their expenditures per person, per trip. The weighted average expenditure for the total attendance came to \$6.30 per person per visit - exclusive of transportation costs. Additionally, it is projected that 46 percent of the total Trail users made no purchases of soft goods. Also imported into the sales tax model is a "slippage" figure of 6 percent to take into account items not taxed or sold "under the table." Direct

impacts for soft goods purchases were calculated as follows:

457,540 people * 54% * \$6.30 = \$1,556,551 Total soft goods expenditures

457,540 people * 54% * \$6.30 = (.05 *94) = \$73,158 State tax revenue

IV-46

HOW DO YOU VALUE THIS TYPE OF LINEAR PARK
(TRAIL) COMPARED TO A TRADITIONAL,
MORE CONFINED PARK? (1)

Click [HERE](#) for graphic.

Question 15.

How do you value this type of linear park (Trail) compared to a traditional, more confined park?

(Percent;	Counts)		
66.03%	383	-	I like this type of park better
2.41%	14	-	I like more traditional parks better
31.55%	183	-	About the same

The unusual configuration of the NCRT (20 miles long and 60-200 feet wide) provides the Trail with a unique identity in the region. Given present recreation use and demographic trends, it was no surprise that approximately two-thirds of the total survey respondents favored linear parks (greenways) over the 2.41 percent preferring more traditional parks.

IV-47

DO YOU FEEL TRAILS SUCH AS THE NORTHERN
CENTRAL RAIL-TRAIL ARE A GOOD USE
OF STATE FUNDS? (1)

Click [HERE](#) for graphic.

Question 16.

Do you feel the Northern Central Rail Trail is a good use of State funds?

(Percent;	Counts)		
93.72%	612	-	Yes
6.28%	41	-	No

To ensure there was no uneven weighting, the combined response percentages of property owner surveys were tabulated as 91.41 percent in favor of using State funds for the Trail and 8.59 percent opposed.

IV-48

IMPACTS ON PROPERTY VALUES:

The third area of interest for the study was to assess the impacts (if any) of the Trail on nearby property values. In addition to quantifying the perceptions of local property owners and Trail users, interviews were conducted with local brokers, appraisers developers, and the tax assessors. Quantifying impacts (negative or positive) in today's turbulent real estate market proved difficult: Nearly all concurred that the Trail increases the attractiveness of the vast majority of properties within an easy walk of the resource. Some nearby developments, such as the Wesley Chapel subdivision, incorporate an equestrian trail linkage in the project. There are, however, a number of properties negatively influenced by the weekend convergence of Trail users. As certain popular parking facilities become full, users park on nearby private properties.

The greatest value that the Trail adds to nearby properties according to developers and brokers is the increased salability of listings. Hence, if two identical properties are for sale and one is near the Trail and the other is not - the Trail is used as a selling point, and helps many nearby owners sell their property faster. As one appraiser noted with regard to how brokers frequently advertise the proximity of a property listing to the Trail "...they wouldn't advertise the proximity of the Trail if it didn't help sell property.' Several developers with projects in the area felt the Trail may have increased the value of their units by approximately \$500, but the figure could not be substantiated. Presently there are several developments being planned in close proximity to the Trail.

While 63 percent of the survey respondents felt the Trail adds an average of \$2,459 to nearby properties, the figure could not be substantiated in the present market. Research to confirm/deny if these perceptions have indeed permeated the local market were explored in a number of ways:

- Analysis of comparable sales
- Rent scales
- Exchange values

IV-49

- Per square foot breakouts
- Tax assessments
- Sales listings where appropriate.

The results of the research show that no identifiable pattern of economic impacts has been established in the area. Part of the reason for this is the limited amount of development and few exchanges in the area of the Trail. In some areas, such as Monkton Station, property values on commercial enterprises are beginning to experience slight positive impacts. Conversely, a number of properties adjacent to the Trail appear to experience limited negative leverage on values, which relates to the 6.97 percent of respondents believing the Trail lowers nearby property values. As is the case with many impact analyses, properties very close (within 1,000 feet), but not abutting the resource, generally experience the greatest positive impacts on value. Revisiting this situation after more development occurs in the area may provide the data to demonstrate a pattern of impacts on land values. Presently it is premature for any definite conclusions to be drawn.

However, as perception is the basis of any value, the attitudes captured by this survey should not be discounted, but rather tested as additional weighted evidence is made available. We would recommend revisiting the issue of property value impacts in five to eight years time as the development climate matures and possibly stabilizes.

IV-50

HOW STRONGLY DO YOU VALUE THE PRESENCE
OF THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 17.

How strongly do you value the presence of the Trail?

(Percent;	Counts)		
88.04%	530	-	I value the Trail as a strong asset of the community
7.64%	46	-	The Trail is of limited value to the community
2.49%	15	-	I do not think the Trail is of any real value to the community
1.83%	11	-	The Trail is a negative influence on the community

Similar to the previous question, property owner responses were aggregated separately showing that 85 percent of respondents value the Trail as a strong asset of the community while only 2 percent of property owners feel the Trail is a negative influence on the community. Conversely, 94 percent of the respondents of the trail users survey value the Trail as a strong asset of the community, and 1 percent feel the Trail is a negative influence. Combined, an overwhelming percentage (95 percent) of residents view the Trail as an asset for their community.

HOW MUCH VALUE DO YOU THINK THE TRAIL ADDS TO
 PROPERTIES WITHIN WALKING DISTANCE OF
 THE TRAIL? (1)

Click [HERE](#) for graphic.

Question 18.

How much value do you think the Trail adds to properties within walking distance to the Trail?

(Percent;	Counts)		
30.46%	166	-	None
6.97%	38	-	Lowers the value
16.51%	90	-	Between \$500 - \$1,000
18.17%	99	-	\$1,000
14.68%	80	-	\$3,000
4.40%	24	-	\$5,000
8.81%	48	-	More than \$5,000

Question 19.

What is your gender?

(Percent;	Counts)		
60.09%	396	-	Male
39.91%	263	-	Female

The disproportionate relationship of men to women reflects a sentiment expressed by a large percentage of female respondents that although they feel the Trail is made as safe as any park can be, many women feel vulnerable by themselves and are reluctant to use the Trail without the company of a male. This sentiment appears to suggest a larger issue for safety rather than a direct concern based on the Trail. Interestingly, women living adjacent to, or nearby the Trail felt more safe alone on the Trail than females traveling to the Trail from the surrounding areas. This condition may partially explain why women living closer to the Trail are over 33 percent more likely to use the Trail alone.

Question 20.

Are you aware of other rail-trails in Maryland?

(Percent;	Counts)		
57.27%	374	-	Yes

42.73% 279 - No

As expected, Trail users were nearly twice as likely to be aware of other rail trails in the State than respondents who do not use the Trail.

IV-53

WOULD YOU LIKE TO SEE MORE TRAILS
DEVELOPED IN THE STATE? (1)

Click [HERE](#) for graphic.

Question 21.

Would you like to see more trails developed in the state?

(Percent;	Counts)		
91.87%	576	-	Yes
8.13%	51	-	No

As a separate analysis, 96 percent of the respondents of the Trail Users Survey were in favor, while slightly less (90 percent) of the respondents of the Property Owners Survey are also in favor of seeing the State develop more trails.

IV-54

Questions 22 - 25 were asked to assess people's attitudes toward the Trail as a resource and its operation.

DO YOU FIND THE TRAIL TO BE
WELL MAINTAINED? (1)

Click [HERE](#) for graphic.

Question 22.

Do you find the trail to be well maintained?

(Percent;	Counts)		
53.95%	328	-	Excellent
40.62%	247	-	Good
4.11%	25	-	Fair
1.32%	8	-	Poor

Very few respondents (1.32 percent) had negative comments as to the maintenance of the resource, and many noted near their response that they were genuinely appreciative of the Park's personnel and their

efforts to manage the Trail.

IV-55

DO YOU FIND THE TRAIL TO BE SAFE? (1)

Click [HERE](#) for graphic.

Question 23.

Do you find the trail to be safe?

(Percent;	Counts)		
40.94%	244	-	Excellent
47.82%	285	-	Good
9.56%	57	-	Fair
1.68%	10	-	Poor

As noted earlier, respondents generally felt safe on the Trail and commented that the Trail was as safe as could reasonably be expected. Others noted that as there are usually others using the Trail at the same time as themselves they feel more safe - experiencing "safety in numbers."

IV-56

DO YOU FIND THE TRAIL TO BE PRIVATE/SECLUDED? (1)

Click [HERE](#) for graphic.

Question 24.

Do you find the trail to be private/secluded?

(Percent;	Counts)		
39.02%	231	-	Excellent
44.76%	265	-	Good
12.84%	76	-	Fair
3.38%	20	-	Poor

The major complaint associated with this question is that the Trail often gets too crowded at certain times, on certain days and at certain locations. However, the lack of development adjacent or near the Trail and the presence of wetlands, steep slopes and rock outcroppings also contribute favorably to the aesthetic appeal of the Trail.

DO YOU FIND THE TRAIL TO BE CLEAN? (1)

Click [HERE](#) for graphic.

Question 25.

Do you find the trail to be clean?

(Percent;	Counts)		
58.54%	353	-	Excellent
36.32%	219	-	Good
4.64%	28	-	Fair
.50%	3	-	Poor

The most frequent notation respondents made with regard to this question involved the absence of trash receptacles from the Trail; some being for it, some against. Regardless, the overwhelming consensus was appreciative, with less than 1 percent of respondents expressing poor ratings for the Trail's condition.

Question 26.

Would you like to receive information on becoming a Trail volunteer/supporter?

(Percent;	Counts)		
34.88%	203	-	Yes
65.12%	379	-	No

We had not expected to receive such a favorable response (34.88 percent), which probably shows a level of commitment and "ownership" by many of the Trail's users.

ADDITIONAL QUESTIONS ASKED EXCLUSIVELY OF PROPERTY OWNERS:

Question 1B.

How long have you lived in close proximity to the Trail?

(Percent;	Counts)		
68.60%	308	-	Greater than five years
22.49%	101	-	Between three and five years
8.02%	36	-	Between one and three years
.89%	4	-	Under one year

The results of this question confirms the difficulty in defining the economic impacts the Trail has had on property values. With so few exchanges taking place since the Trail's inception, the perception of residents remains the single greatest qualifier to the impacts on

property value question.

IV-59

IF YOU WERE TO SELL YOUR HOUSE, DO YOU THINK
YOUR HOUSE'S PROXIMITY TO THE TRAIL WOULD
BE A POSITIVE SELLING POINT? (1)

Click [HERE](#) for graphic.

Question 2B.

If you were to sell your house, do you think your house's proximity to the Trail would be a positive selling point?

(Percent;	Counts)		
68.33%	302	-	Yes
31.67%	140	-	No

With distance to the Trail being the major variable for the respondents of this question, over 90 percent of respondents living within one mile of the Trail felt their property's proximity to the Trail was an amenity they could use to assist in the sale of their property.

IV-60

IF YOU WERE TO BUY A NEW HOUSE, WOULD THE
PROXIMITY OF ANOTHER TRAIL/PARK
INFLUENCE YOUR DECISION? (1)

Click [HERE](#) for graphic.

Question 3B.

If you were to buy a new house, would the proximity of another trail/park influence your decision?

(Percent;	Counts)		
61.68%	272	-	Yes
38.32%	169	-	No

The response to this question again confirmed the fact that the availability and proximity of recreational resources do influence a majority of people as to where they choose to live.

IV-61

Question 4B.

Which of the following most closely matches your impressions on future property values in your area?

(Percent;	Counts)		
59.91%	269	-	I expect property values to increase slightly
22.49%	101	-	I expect property values to remain about the same
15.14%	68	-	I expect property values to increase greatly
2.23%	10	-	I expect property values to decline slightly
.22%	1	-	I expect property values to decline greatly

Three-quarters of the respondents expressed degrees of optimism for future property values in the area, with less than 3 percent of respondents predicting a decline in property values.

Question 5B.

Which of the following most closely matches your impressions of property values in your area over the past few years?

(Percent;	Counts)		
39.60%	177	-	Property values have increased over the past few years
33.56%	150	-	Property values have remained the same over the past few years
22.82%	102	-	Property values have declined slightly over the past few years
4.03%	18	-	Property values have declined substantially over the past few years

APPENDIX

Appendix A
Economic Impact Analysis

MARYLAND RAIL TRAIL STATE AND COUNTY INCOME TAX REVENUE ANALYSIS

Click [HERE](#) for graphic.

Click [HERE](#) for graphic.

Click [HERE](#) for graphic.

Click [HERE](#) for graphic.

Click [HERE](#) for graphic.

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