

BENEFITS OF GREENWAYS: A PENNSYLVANIA STUDY



Prepared on behalf of the Pennsylvania Greenways Partnership Commission with Committee assistance, June, 2002.



Contents of Report

Introduction to Report	1
Purpose	1
Acknowledgements	1
Introduction to Benefits	3
Natural Resources	3
Protecting Rural Legacy	5
Economic Prosperity	7
Historical and Cultural Resources	10
Recreation, Health and Fitness	12
Education	14
Shaping Community Growth	16
Transportation	18
Conclusion	19
Case Study Chart	20



Introduction to Report

There are numerous examples of greenways that serve the communities in which they are located. The benefits they provide range from the preservation of the Commonwealth's natural resources and educating children and adults on the unique history and culture found within Pennsylvania to promoting public recreation, health and fitness activities and enhancing opportunities for economic prosperity. With the help of the Greenways Partnership Commission, eight examples of Pennsylvania greenways that have had a demonstratively positive effect on their surrounding regions were selected in an effort to highlight the substantial benefits they provide. A chart of those case studies, which were researched in detail, is provided at the end of this report.

Purpose of Report

The Benefits of Pennsylvania Greenways Report will be used as a foundation for future communication and outreach efforts focusing on educating the general public regarding the benefits that are and will continue to be provided by Pennsylvania greenways.

Acknowledgements

Significant effort was placed into the research, data collection and writing of this report. Recognition and thanks are extended to the following individuals, groups and agencies for their assistance in finalizing the draft Greenways Benefits Report. The dedication of time, energy and resources by those listed greatly enhanced the content of this document.

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Boxx

Allegheny Trail Alliance, Sandra Finley

Burke Lee's Boston Common, Terry Burke

Campbell Thomas and Company, Robert
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City of Pittsburgh, Department of City
Planning

City of York, Economic Development
Department, Eric Menzer

City of York, Planning Department, Veronica
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Coldwell Banker, Rita Halverson

Conservation Fund, Anne Gore

C.S. Davidson Incorporated, Jeff Shue

Dauphin County Parks and Recreation,
Edward Chubb

Fairmount Park Commission, Stephanie
Craighead

Fairmount Park Commission, Theresa
Stuhlman

Farmland Preservation Corporation, G. Allen
Houpt



Fort Mifflin on the Delaware, Dori McMunn	Oil Creek State Park, Carolyn Worley
Friends of Fox Chase Farm, James Kates	Oil Heritage Region Incorporated, Marilyn Black
Friends of Pennypack, Stan Grossman	Pennsylvania Environmental Council, Ellen Alamio
Howard Hanna Simon Real Estate Services, Tom Simon	Pennsylvania State Snowmobile Association, Don Clouser
Interactive Marketing Solutions, Carl Knoch	Pennypack Ecological Restoration Trust, David Robertson
Lower Makefield Township's Environmental Advisory Council, Scott Fegley	Pennypack Environmental Center, Peter Kurtz
Luzerne County Planning Commission, Adrian Merolli	Realen Homes, Michael Stadulis
Manayunk Development Corporation, Kay Smith	River's Edge Café and Bread and Breakfast, Anna Marie Yakubisin
Montgomery County Department of Parks, Ron Ahlbrant	Schuylkill River Greenway Association, Dixie Swenson
Montgomery County Planning Commission, John Wood	Somerset County Chamber of Commerce, Hank Parke
Natural Lands Trust, Ann Hutchinson	University of Pittsburgh, Graduate School of Public and International Affairs, Dr. Stephen Farber
Natural Lands Trust, Randall Arendt	York County Parks Rail Trail, Gwen Loose
Oil Creek Bicycle Trail, Trail User, Paula Bittenbender	York County Rail Trail Authority (Former Chair), Tim Fulton
Oil Creek State Park, Marcia Baker	



Introduction to Benefits

Pennsylvania is home to some of the nation's richest and most scenic natural areas, many of which are internationally known. Greenways throughout the Commonwealth are currently serving the communities in which they are located by:

- Protecting Natural Resources,
- Protecting Rural Legacy,
- Providing Communities with Economic Opportunities and Prosperity,
- Conserving Historic and Cultural Resources,
- Providing Opportunities for Public Recreation, Health and Fitness,
- Enabling Outdoor Educational Opportunities for People of all Ages,
- Assisting in the Planning and Shaping of Communities, and;
- Providing Alternative and Safe Modes of Transportation.

As an interconnected network of open space corridors, the statewide greenways system will enhance and support meaningful and lasting benefits such as those described above.



Photo of Mountains in Pocono Region, Photo Courtesy of Pocono Mountains Vacation Bureau.

Protecting Natural Resources

Greenways provide numerous direct and indirect ecological benefits to the communities in which they are located. Primarily, they function as protectors and preservers of our natural resources by:

- Preserving Vital Habitat Corridors,
- Promoting Plant and Animal Species Diversity,
- Absorbing the Contaminants on Surface Runoff, and Trees and Shrubs,
- Cleansing and Replenishing the Air,
- Buffering the Negative Effects of Development,
- Mitigating Noise, Water, Thermal and Air Pollution, and;
- Controlling Property Damage Due to Flooding.

Among the many examples of greenways in Pennsylvania that serve to protect and promote vital natural resources is Luzerne County's Levee Trail.

The Levee Trail

In 1936, a hurricane tore through North Eastern Pennsylvania causing severe damage to residential areas located close to the Susquehanna River. As a result of this damage, and in an effort to prevent it from happening again, the County initiated the construction of a series of levees. The levees served their purpose in keeping storm damage to a minimum until 1972. In that year, Hurricane Agnes topped the reservoir causing mass flooding and prompted calls to raise the levee



Photo of the Susquehanna River in Luzerne County. Photo courtesy of the RBA Group.

Charged with this undertaking, the Army Corp of Engineers and the County of Luzerne soon determined that enhancing the levee with proper design could also mean enhancing the benefits being provided to the community. After noticing a dirt path running along the levee, the engineering team decided to initiate construction on a trail network. The goals of the trail network were to ensure that the primary functions of the levees were not compromised while providing residents an opportunity to enjoy this natural resource.



Construction on the Levee Trail in Luzerne County. Photo courtesy of the RBA Group

“Using the levee to further enhance the natural environment by making it a part of the commu-

nity benefits everyone. I believe that we will preserve that which we appreciate, and we can only appreciate that which we see and know. The Susquehanna River is our treasure and instead of being removed from our consciousness and perceived as little more than a threat it will be seen, admired, and hopefully preserved and valued.”
Ellen Alamio, Director of the Northeast Office of the Pennsylvania Environmental Council

While the primary purpose of each levee is flood control, the levees, or greenways, have also become important to the natural surroundings by acting as corridors for wildlife and enabling protection from encroaching development for the Susquehanna River. The added value of a signed trail adds both recreational and educational benefits to this greenway and it enables residents to enjoy the natural resources found along the river.

“Before development began on the trail it was difficult for the community to access the river. In fact many residents felt it was more of a burden than a prized resource. The river was out of site, out of mind to the people of Luzerne County and we needed to turn that around.” Adrian Merolli, Luzerne County Planning Commission.



Photo of the Susquehanna River in Luzerne County. Photo courtesy of the RBA Group



Benefits of The Levee Trail:

- Assists with Flood Control,
- Provides Wildlife Corridors,
- Provides Education and Awareness of the River and its Natural Resources,
- Promotes and Encourages Safe Recreational Activities, and;
- Enhances Quality of Life.

Protecting Rural Legacy

Pennsylvania's rural landscape is an inextricable link to its history as well as a demonstration of the success that continues to be achieved by its farming community. Studies demonstrate that Pennsylvania has lost much of its agricultural land over the last 25 years to urban areas. This rate of loss has a sizeable economic impact, but it also threatens the unique characteristics that encompass Pennsylvania such as its rural legacy. Development without preservation of this rural character significantly impacts on the future course of the Commonwealth.

Greenways help to preserve the rural character of a community by:

- Protecting Ridge Lines, River Corridors, and Scenic Resources,
- Providing Visual Relief by Framing and Distinguishing Neighborhoods in the Face of Sprawl, and;
- Preserving Farmland, Small Country Settlements and Surrounding Open Space.

Among the greenways within the Commonwealth that serve to protect and enhance Pennsylvania's rural legacy is the Pennypack Greenway Corridor.

The Pennypack Greenway Corridor

The Pennypack Greenway Corridor is a winding creek corridor in Montgomery and Philadelphia Counties made up of public parks, privately owned preserved open space and old-growth forest, working farms, abandoned rail lines, and countless trails. The 25-mile-long corridor extends from the Delaware River to Hatboro and is surrounded by urban and suburban communities in the most densely populated area of the state.



Grain and dairy farms surrounded the Pennypack watershed from the late 17th century to the middle of the 20th. Railroads constructed in the late 1800s did not interfere with the rural settlement but enhanced it with the creation of country estates and villages and towns. The turn of the 19th century brought additional settlement to Philadelphia but the Pennypack watershed as a whole did not begin to change significantly until after WWII with widespread construction of paved roads and suburban sprawl.

Efforts to preserve the natural and rural setting of this region began as far back as 1905 when legislation, aimed at preserving the watershed, was passed. Other planning initiatives followed, which helped create the current corridor. The greenway



is continuous in Philadelphia and with the realization of Montgomery County's initiative, "Pennypack Connection" the final two parcels of land will be purchased or leased making the greenway continuous in this county as well.



In addition to these programs, Fairmount Park conducts festivals and special events such as Family Farm Day, and Sheep Shearing Day and Sunday tours which are open to the public and bring over 10,000 visitors a year to the greenway.

The environmental, cultural, and economic benefits of Pennypack Greenway are immeasurable. One benefit with particular significance is the protection of rural legacy that has been realized with the development of this greenway. The rural legacy is inherent in two farms and the adjacent valleys and hillsides and small country settlements that exist around them. Both Fox Chase and Raytharn farms and their surrounding countryside were saved from private development with a combination of Federal, State and local fundraising efforts.

Fox Chase Farm, owned by The Philadelphia Fairmount Park Commission and leased by the Philadelphia School District, conducts year-round educational programs for Philadelphia public school students. The Friends of Fox Chase Farm President said,

"The public school programs are so popular that within the first three days of the school year, the programs are booked."

Raytharn Farm, owned by a private nonprofit organization, Pennypack Ecological Restoration Trust, is located in the midst of over 690 acres of protected meadows and woodlands in central Montgomery County. This working farm, countryside and trail system offer numerous opportunities to see and learn about rural life. Trail maps, available through the Visitor's Center, highlight the scenic overlooks from the hilltops. Included along the trail is a spectacular view of a nearby farmhouse, as well as of the valley and wooded hillside with the medieval architecture of Bryn Athyn Cathedral.



Rayiharn Farm found along the Pennypack Ecological Restoration Trust Lands, Montgomery County. Photo courtesy of Campbell Thomas and Company

Pennypack Greenway with its creek valley and woods, farms and surrounding countryside, is quite spectacular in that it offers a taste of rural life in the midst of bustling urban and suburban neighborhoods. The Executive Director of Pennypack Trust, David Robertson claims that *“In addition to restoring our natural lands, the [Pennypack Greenway] maintains community character”*.

Benefits of The Pennypack Greenway:

- Provision of Rural Quality of Life in the Midst of Urban and Suburban Development,
- Environmental Preservation and Education,
- Provision of Historical Architecture,
- Outdoor Recreational Opportunities,
- Reduces Sprawl, and;
- Economic Benefits Stemming from Visitors to the Greenway.

Economic Prosperity

A recent Department of Conservation and Natural Resources survey indicated that nearly one-fifth of Pennsylvania’s tourists are traveling primarily for outdoor recreation activities. Last year, the in-

dustry supported 459,000 jobs, an increase of nearly 100,000 jobs compared to four years ago.

Greenways promoting outdoor activities continue to ensure that tourism is Pennsylvania’s second-largest industry. The growing popularity of such recreational pursuits has created opportunities for economic growth by generating revenue from:

- Lodging,
- Food, and;
- Rental Equipment Sales.

Aside from tourism, there is also evidence to demonstrate that communities with recreational greenways have witnessed significant increases in real estate values.

Among the numerous greenways throughout the Commonwealth whose presence has generated tremendous economic benefits is the Pittsburgh to Cumberland Trail Corridor.

The Pittsburgh to Cumberland Trail Corridor

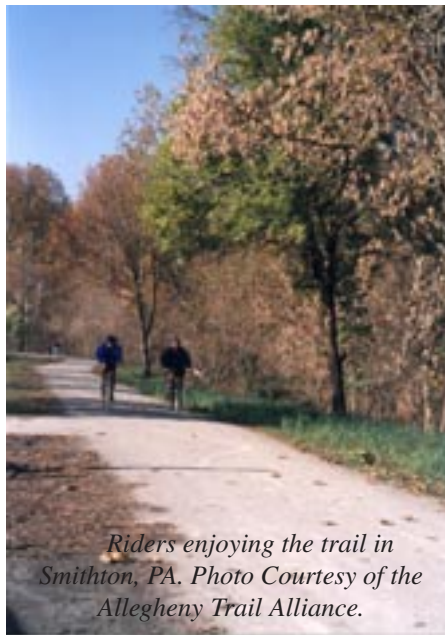
In 1975, members of the Western Pennsylvania Conservancy purchased 17 miles of abandoned railroad for Ohiopyle State Park. Eleven years later, the first nine miles of trail opened at Ohiopyle attracting an influx of people from all over the region. *“This effort, and its enthusiastic endorsement by the community, led to the formation of several trail groups from Pittsburgh to Cumberland and the dream of a continuous trail began to take shape.”* Linda McKenna Boxx, President of the Allegheny Trail Alliance.



The Mile Marker Cafe and Lounge located along the Pittsburgh to Cumberland Trail Corridor in Connellsville, PA. Photo Courtesy of the Allegheny Trail Alliance.

Thanks to the efforts of those trail groups and their hard-working volunteers, 124 miles of the 204-mile trail system in the Pittsburgh to Cumberland Trail Corridor is now completed. The trail system meanders through five counties in Pennsylvania and one in Maryland and boasts over 500,000 visitors per year and growing.

The history of the trail as a major transportation corridor dates back to early colonial days when young George Washington identified these rivers as a means to cross the Alleghenies. The “Endless Mountains,” as he referred to them, would connect the eastern seaboard to the forks of the Ohio. In the 1800’s, it became a railroad corridor carrying coal, coke and steel. Now, this trail system has helped to transform the landscape of this region and also restored its economic prosperity as visitors continue to flock to the trail.



Riders enjoying the trail in Smithton, PA. Photo Courtesy of the Allegheny Trail Alliance.

Aside from the appeal of this greenway to its many users, its creation has also meant incredible opportunities for those with a mind for business. Anna Marie Yakubisin owns and operates the River’s Edge Café Bed and Breakfast and the River’s Edge Antiques in Confluence. *“One of the main reasons why we moved to Confluence was because of the Pittsburgh to Cumberland Trail. We saw a definite business opportunity with the trail and are now going into our 11th season.”*

Examples of businesses and employment opportunities may be found all along the trail as entrepreneurs continue to take advantage of the incredible possibilities that continue to emerge. Terry Burke, owner of Burke-Lee’s Boston Commons says that she and her husband first started their business in 1997. *“People laughed at us when we said we were going to open a Bed and Breakfast. We took three dilapidated properties and built them up and we now operate seven businesses and have plans to continue expanding.”*



The Duck House Trading Company located in Connellsville, PA is an example of one of the numerous businesses found along the trail corridor. Photo courtesy of the Allegheny Trail Alliance

Hank Parke, Executive Director for the Somerset County Chamber of Commerce, has witnessed the changes in the way the trail has influenced property values along the Allegheny Highland portion of the trail. He points out that properties that were once abandoned have been given new life with the creation of this greenway. *“Several properties near the trail in Somerset County, that were once in dire disrepair have been purchased and renovated into bed and breakfast operations. There has also been a mushroom effect associated with the changes to these properties for adjacent and nearby land. Quite simply, these locations had no meaning before the trail went in.”*

Rita Halverson, a Realtor with Coldwell Banker has also noticed the positive effect the trail has had for properties located near the trail. *“I have a number of agents who often receive phone calls from people who are specifically asking for properties close to the trail.”*

Tom Simon, President of Howard Hanna Simon Real Estate Services in West Newton says, *“living close to the trail is so popular among potential home buyers that our agents now add proximity to the trail in the advertisement for the home. The*

trail has been the biggest draw in West Newton since I’ve been in business over the last twelve years. It has really put West Newton on the map.”

Statistics demonstrating such profound economic benefits resulting from the Pittsburgh to Cumberland Corridor were collected and analyzed by the Pennsylvania Economy League, Inc and Dr. Stephen Farber, Graduate School of Public and International Affairs at the University of Pittsburgh in January 1999. The economic impact study found that “spending in trail head communities by trail users in 1998 ranged from \$5.4 to \$14.1 million”. In contrast, maintaining the greenway costs, on average, approximately \$1,000 per mile per year. Dr. Farber adds, *“the areas along the trail are, for the most part, isolated communities with very little economic opportunity. From an economic prosperity perspective, development of this trail system has been and will continue to be critical to sustaining the economies of these communities”*



The John Butler House Bed & Breakfast located 500 yards from the trail in Buena Vista, PA. Photo courtesy of the Allegheny Trail Alliance.



“Aside from the recreational and scenic enjoyment that people derive from this greenway, the effects it has had on local communities and residents throughout the region have been tremendous and there is potential for much more.” Linda McKenna Boxx, President of the Allegheny Trail Alliance.

Benefits of the Pittsburgh to Cumberland Trail Corridor:

- Increased Employment Opportunities,
- Soaring Real Estate Sales,
- Increased Property Values,
- Recreational Connection Between Two States,
- Created an Alliance of Seven Trail Organizations, and;
- Motivated Hundreds of Local Volunteers.

Conservation of Historic and Cultural Resources

Our best link to our future is through our past. Greenways serve to promote the unique history and culture of towns, cities and villages all across the United States by providing:

- Access to Buildings of Historic and Architectural Significance in a Community,
- A Look Back at the Events and People that Shaped the Present, and;
- An Opportunity to Preserve Historic Assets and Archeological Artifacts.

Since its official heritage designation five years ago, the Schuylkill River Heritage Corridor has proven to be a valuable historic and cultural resource for South Eastern Pennsylvania.

The Schuylkill River Heritage Corridor

The Schuylkill River Heritage Corridor is a 135-mile long, roughly three-mile wide corridor along the Schuylkill River and is comprised of countless natural landscapes and varieties of rural, suburban and urban settlement. The boundary is not a standard delineated greenway boundary but varies to incorporate cultural and geographic regions, which help showcase the legacy of this five-county region. The entire corridor was designated a State Heritage Corridor in 1995 and the Schuylkill River is part of the Pennsylvania Scenic Rivers System. This river is also one of six state fish and boat water trails.

Historic and cultural resources along the Corridor date back hundreds of years. Lenape Indians lived along the Schuylkill and used the river for water, food, recreation and transportation during the 1500s and 1600s. European settlers then took over the area, and in the mid 1600’s made Philadelphia a commercial and cultural center. Upstream, they created agricultural settlements and later coal mining and manufacturing centers.

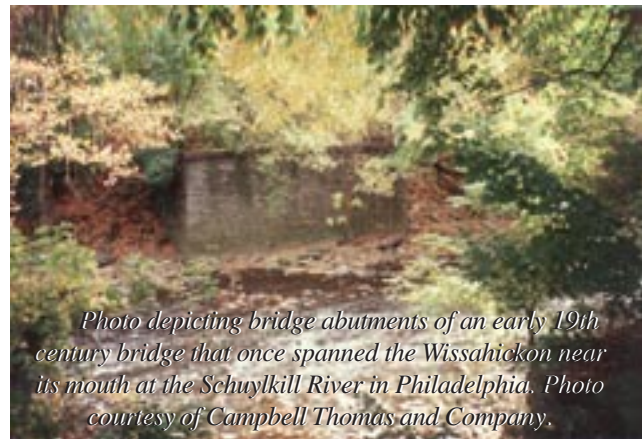
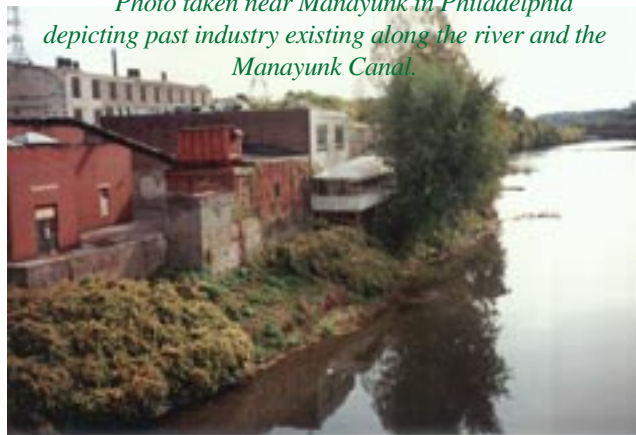


Photo depicting bridge abutments of an early 19th century bridge that once spanned the Wissahickon near its mouth at the Schuylkill River in Philadelphia. Photo courtesy of Campbell Thomas and Company.



With the overall goals of creating a greenway the length of the Schuylkill River and of encouraging the restoration and interpretation of historic landmarks, the Schuylkill River Greenway Association was formed in 1974. Today, several dozen miles of greenway open space and trail are available to the public. Art and cultural facilities have been funded as well and historic sites refurbished and interpreted so visitors may learn about the rich history of the river and its settlement.

Photo taken near Manayunk in Philadelphia depicting past industry existing along the river and the Manayunk Canal.



“Schuylkill River Greenway is so diverse. The corridor is like a laboratory ...” says Dixie Swenson, Executive Director, Schuylkill River Greenway Association. As an important resource for Native Americans, location of one of the first colonial settlements, and site of the first United States capital, the Schuylkill River Greenway offers one of the oldest and richest looks into our nation’s culture and history.



Photo depicting a portion of the Schuylkill River Greenway in the Philadelphia region that crosses over a boardwalk bridge. Photo courtesy of Campbell Thomas and Company.

According to the 1995 Management Action Plan, *“Few places in America can claim the Schuylkill River Valley’s importance in history.”* Throughout the greenway corridor, numerous examples of centuries of activity may be found. Some examples of what visitors can expect to see include 18th and 19th century country estates, 250-year-old German agricultural settlements with active mills, covered bridges, farmhouses and barns, coal mining towns built into the sides of mountains, canals, and the remnants of steel, textile, and paper mills. Fort Mifflin on the Delaware, the oldest fort in continuous use in the United States, is also featured along this greenway.

The Benefits of The Schuylkill River Heritage Greenway Corridor:

- Preservation and Restoration of Historic and Cultural Resources Dating Back Hundreds of Years,
- Opportunities to Educate and Create Awareness of the Resources Along the Corridor,
- Opportunities for Outdoor Recreation, and;
- Economic Benefits Resulting from Greenway Visitors.



Public Recreation, Health and Fitness

Greenways offer numerous opportunities for recreation, health and fitness. Studies have shown that as little as 30 minutes a day of moderate to intense exercise can improve a person's mental and physical health and prevent certain diseases. Studies also support the premise that Americans place a high priority on having trails and open space in their community for recreation purposes.

Greenways encourage healthier lifestyles by:

- Serving as Close to Home Outdoor Fitness Resources for Walking, Jogging, In-Line Skating, Bicycling, Horseback Riding and Other Forms of Exercise, and;
- Encouraging Safe and Interpersonal Interaction by Linking Neighborhoods.

The residents of York County are well served in this capacity as a result of York County's Heritage Rail Trail County Park.

York County's Heritage Rail Trail County Park

The lure of fresh air and the fun and fitness achieved from recreational activities have served to increase the priority which Americans now place on having trails and open space in their communities. York County residents are fortunate to have easy access to the Heritage Rail Trail County Park, also known as "York County's Big Adventure". Rated as one of the top 10 trails in the nation by television's "Today Show," this greenway continues to be a favorite among trail users from within the local communities as well as among those from out of State.

The history of this greenway dates back to its use in the 19th century as a vital railroad link between Washington D.C., Harrisburg, upstate New York and Lake Ontario. Over a century later, the bankruptcy of the Penn Central Railroad combined with the devastation caused by Hurricane Agnes, both in the early 1970's, left the future of the rail corridor in serious doubt.

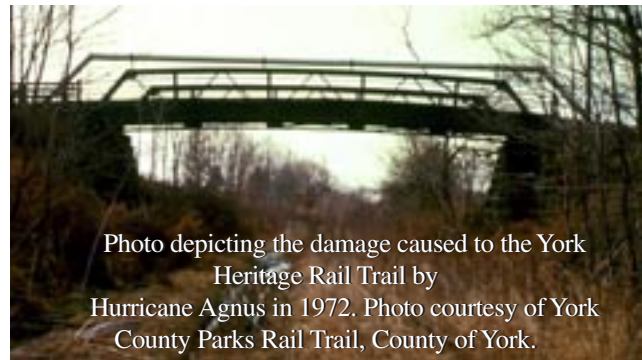


Photo depicting the damage caused to the York Heritage Rail Trail by Hurricane Agnus in 1972. Photo courtesy of York County Parks Rail Trail, County of York.

After being purchased and renovated by The Pennsylvania Department of Transportation, the corridor was eventually advertised for sale in the late 1980's. Thanks to the combined efforts of volunteers and local and state government agencies, the County of York was able to purchase the corridor in 1990. *"A decade later, 21 miles of the Heritage Rail Trail is completed and the trail now serves as a central spine of what has the potential to be an entire system of trails."* Tim Fulton, Former Chair of the York County Rail Trail Authority.



"Children and their Daycare Instructor Walking Along the York Heritage Rail Trail County Park. Photo courtesy of York County Parks Rail Trail, County of York."



“The trail has been so successful that the City now has a comprehensive greenway/bikeway strategy that uses the presence of this trail as a central element in its planning.” Eric Menzer, Director of Economic Development, City of York.

“York County’s Big Adventure” serves a multitude of users including walkers, hikers, and runners, cross country skiers and snowshoers. In 1999, a trail user survey, completed by Interactive Marketing Solutions, discovered a high frequency rate by a specific user group. Although the trail is used by people of all ages, almost 86% are over the age of 35. *“This truly is a greenway that serves many health and recreational needs for residents. People are drawn to it because they can feel comfortable, get some exercise and enjoy the fresh air. It’s just a nice place to be.”* Carl Knoch, President, Interactive Marketing Solutions.



Photo courtesy of York County Parks Rail Trail, County of York

Users were also asked for their comments regarding their experiences on the trail. *“The trail was overwhelmingly described with positive words and phrases,”* adds Carl Knoch, *“Many described the trail as the greatest thing to happen in a long time in the York area and as the most significant investment in South Central Pennsylvania this century.”*

Some of the unique and interesting features along the corridor include four bridges and the New Freedom and Hanover Junction railroad stations, all of which are listed on the National Register of Historic Places. The latter station is where President Lincoln stopped in route to give his famous Gettysburg Address.

The trail also connects the historic district of downtown York with Maryland’s Northern Central Rail Trail. “York County’s Big Adventure” serves a multitude of users including walkers, hikers, and runners, cross country skiers, snowshoers and equestrian riders .



Walkers from Pennsylvania Greet Equestrian Riders from Maryland along the York County Heritage Rail Trail County Park. Photo courtesy of York County Parks Rail Trail, County of York.

“It is projects like the York Heritage Rail Trail that make certain that the downtown of York remains a great place to work, live and to visit,” says York Mayor Charles Robertson.



Tim Fulton, former chair of the York County Rail Trail Authority, skiing along the trail. Photo courtesy of York County Parks Rail Trail, County of York.

Benefits of York County's Heritage Rail Trail County Park:

- Outdoor Recreation for a Multitude of Users,
- Economic Benefits Stemming from Trail Visitors,
- Restoration of Historic Sites,
- Connectivity Between Rural Areas and the Heart of the City of York,
- Enhances Quality of Life for Residents, and;
- Physically Connects Pennsylvania with its Neighboring State, Maryland.

Education

Natural areas that are set aside for educational purposes provide immeasurable opportunities for people of all ages to learn and interact with their natural surroundings.

Greenways:

- Act as Living Museums, Outdoor Classrooms and Laboratories,
- Provide Scenic Excursions Along Water

Trails or Wildlife Preserves,

- Assist Students, Both Young and Old, in Developing Concepts and Skills by Helping Them Become Effective Environmental Stewards and Decision Makers, and;
- Promote and Encourage Interaction with Natural Surroundings.

Oil Creek State Park is steeped in the unique and exciting history of Pennsylvania's oil boom. Throughout the park, particularly along the bicycle trail, there are numerous reminders of the area's oil past and the successful renewal of its landscape.

Oil Creek State Park Bicycle Trail

In August of 1859, Edwin L. Drake completed the world's first commercial oil well, Drake Well. This discovery significantly altered the communities and the landscape of a once quiet and unsettled area in Western Pennsylvania. Doves of people flocked to the oil region seeking to find their fortune.



Photo of Oil Boom Workers in the 1860's and Their Equipment. Photo Courtesy of Oil Creek State Park

Eventually, the oil boom period of 1859 turned to an oil bust and the boomtowns, associated with the activity and excitement of a discovery that would change the world, were eventually left abandoned. Today, in place of the sound of oil drilling, is Oil Creek State Park.



The Park was developed to preserve Oil Creek Gorge and to commemorate Pennsylvania's booming oil industry and the natural evolution of a once polluted landscape. Within the Park, there are numerous greenways that reveal the incredible history of Oil Creek Gorge. One such greenway is the Oil Creek State Park Bicycle Trail.



A group of bicyclists enjoy a ride along the Oil Creek State Bicycle Trail. Photo courtesy of Oil Creek State Park.

The greenway, which attracts 45,000 people per year, takes its visitors on an adventurous and educational journey from the historic site of Petroleum Center through the scenic river valley to Drake Well. Visitors are provided interpretive stations along the very route that was once used to transport barrels of oil from the wells in this, and adjacent valleys, to their destinations. *"This valley acts as a gateway to the past and provides people of all ages opportunities to learn and explore. It's a great place to visit."* Marilyn Black, Manager, Oil Heritage Region, Incorporated.

Visitors may also view the breathtaking landscape that has been dramatically altered over the course of the past century and a half. After an intense period of drilling and activity, nature restored the valley to the clean trout streams and forested hillsides that are present today. *"Using this greenway is a great way to get some exercise, and*

to learn about the ecological features found along the trail and about Pennsylvania's unique and exciting oil history." Paula Bittenbender, Trail User.

The events, the people and the excitement that transformed entire communities from unsettled areas to industrial centers to ghost towns are relived for those who use the Oil Creek State Park Bicycle Trail. *"People who use the trail are always pleased by the educational component that it provides. Teachers call frequently to gather information so they can bring their students out to learn more about the people and the events of this unique aspect of Pennsylvania's history."* Carolyn Worley, Oil Creek Park Clerk Typist 2, former Park Environmental Education Specialist.



Photo of visitors stopping at one of the numerous interpretive stations along the trail, Photo Courtesy of Oil Creek State Park

"This greenway truly acts as a museum for the past and an interactive stage for environmental learning. Visitors are provided the unique combination of enjoying the natural beauty of Oil Creek Valley and taking in traces of the oil boom that once dominated this area of Pennsylvania." Marcia Baker, Park Manager



Benefits Provided by Oil Creek State Park Bicycle Trail:

- A Fun Atmosphere for Environmental Education,
- A Fun Atmosphere for Historical Education,
- Outdoor Recreation Activities,
- Economic Benefits Resulting from Visitors to the Park and Surrounding Area, and;
- Enhances Quality of Life for Residents.

Shaping Community Growth and Development

Across the United States, urban areas continue to grow and expand spilling over into the rural landscape. These once rural areas are often developed with inappropriate densities leading to problems associated with urban sprawl. As an example, Pennsylvania has lost over one million acres of cropland, forest and open space in just five years (1992-1997). According to the findings of Pennsylvania's 21st Century Environment Commission, land use is the Commonwealth's most critical issue heading into the new millennium.

Greenways can serve to promote sustainable growth and development by:

- Helping to Define Patterns of Development,
- Protecting Rural Character and Landscapes, and;
- Preserving Valuable Land and Meeting the Needs of Economic and Spatial Development.

The subdivision of Farmview, located in Lower Makefield Township has demonstrated how communities may use greenways as a central factor in the planing of development patterns.

Farmview Subdivision

In July 1986, Realen Homes, a residential developer headquartered in Yardley, Pennsylvania, purchased several contiguous farms in Lower Makefield Township, Bucks County, totaling 418 acres of land. Recognizing the agricultural and historic villages that characterize the Township, Realen Homes initiated an innovative development concept for a 418-acre parcel of land, Farmview. Their goal was to design a subdivision that would allow them to meet the housing market demand while also conserving a considerable amount of the tract's irreplaceable farmland.

"We recognized that homebuyers were attracted to the rural character of Bucks County and we wanted to design a subdivision to appeal to those interests. We also wanted to demonstrate that land conservation and development do not have to be mutually exclusive goals, and I think Farmview illustrates that premise very effectively." Michael Stadulis, Land Development Coordinator, Realen Homes

Photo of Pennsylvania Farmland. Photo courtesy of Greenways Incorporated.



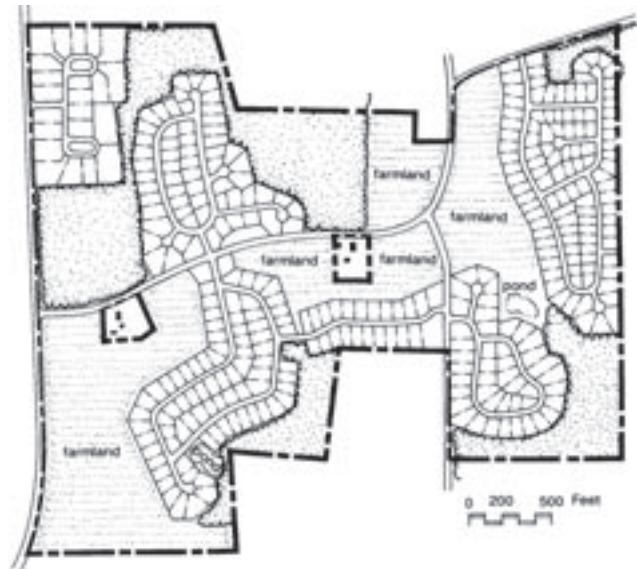
After negotiating changes to local land use regulations with the Township, Realen was able to develop the subdivision, while conserving more than half the land as permanent farmland and wood-

lands. When their design concept was implemented, 332 single-family houses were built on just half of the land that would ordinarily have been consumed, and 213 acres of prime agricultural land and forest were preserved at no cost to the community, the original landowner, or the developer.

As a part of their land planning strategy, Realen Homes had purposely maximized the number of home sites that had farmland vistas or that abutted woodlands. This, in turn, enabled them to strengthen their marketing position with prospective homebuyers by showcasing the permanent rural surroundings for most of the home sites in the various neighborhoods.

In addition to the obvious ecological benefits derived, the township continues to benefit from the reduced street and utility infrastructure maintenance costs that were a result of the smaller lot sizes. Another benefit of the plan is that the families that live in Farmview’s neighborhoods will always enjoy the social interaction that is the enviable result of compact neighborhoods

The 145 acres of farmland that were saved by Realen’s initiative were donated to the Lower Makefield Farmland Preservation Corporation. This non-profit corporation was founded to own and manage the farmland that would eventually be donated by Realen and subsequent developers. *With this arrangement we are able to help keep Lower Makefield green and maintain its character.*” G. Allen Houpt, Chair of the Farmland Preservation Corporation.



Farmview Subdivision as drawn by Stephen Kuter, Natural Lands Trust. Graphic Courtesy of Natural Lands Trust.

The example of Farmview is illustrative of the ways and means by which communities can grow according to design principles that promote the best use of land. *“The potential for replicating this concept and achieving similar results throughout the Commonwealth is enormous.”* Randall Arendt, Senior Conservation Advisor, Natural Lands Trust.

Benefits of Farmview:

- Preservation of Open Space,
- Protection and Enhancement of Natural Resources,
- A Model of Proactive Planning that Best Serves the Community and its Land Base,
- Cost Savings Stemming from Reduced Street and Utility Infrastructure Maintenance Costs, and;
- Increased Social Interaction and Enhanced Quality of Life for Residents.



Providing Alternative Transportation

Transportation in the United States has become increasingly focused on accommodating cars and trucks, creating congestion and increased stress on our roads and highways. People who cannot or do not drive a vehicle are increasingly limited in terms of mobility. Within Pennsylvania, governments, greenway organizations and individuals have undertaken considerable efforts to change our increasing dependency on motorized vehicles.

Greenways can provide alternative travel choices, connecting neighborhoods to transit, schools, workplaces and shopping areas. Alternative travel choices serve a community by:

- Reducing Congestion,
- Improving Air Quality, and;
- Providing Safe Alternatives to Residents Wishing to Bicycle or Walk to Nearby Destinations.

Since becoming operational two years ago, the Eliza Furnace Trail has provided Pittsburgh area commuters with a safe, healthy and environmentally friendly transportation option.

The Eliza Furnace Trail

In the two years since its opening, the Eliza Furnace Trail has proven to be a success among commuters and recreational users alike. Paralleling the former Baltimore and Ohio rail tracks, the trail runs adjacent to Western Pennsylvania's busiest interstate highway and runs through the Riverfront Office Park.

As a connector to downtown Pittsburgh from the neighborhood of Greenfield, the trail has successfully decreased the number of motorized commuters. It's popularity has already initiated plans for expansion with the city's larger trail network. *"We've proposed changing what is largely a recreational system of bike trails and paths to a fully commuter system,"* said Richard Meritzer senior city planner in a June 11, 1999 interview with Post-Gazette Staff Writer Don Hopey. Meritzer went on to say, *"When it's completed, anyone will be able to get anywhere in the city by bike."*



The Eliza Furnace Trail located just off of I-376, The Penn-Lincoln Highway. Photo courtesy of the RBA Group.

The Eliza Furnace Trail has not only encouraged recreational activity, but it has encouraged the use of non-motorized transportation within the city. In doing so the trail has served its primary function as a safe transportation alternative and has also helped to create a sense of place and community pride in the greater Pittsburgh area.



Two runners enjoying recreational time on the Eliza Furnace Trail. Photo courtesy of the RBA Group.

Benefits of The Eliza Furnace Trail:

- Provides Safe and Environmentally Friendly Transportation Options,
- Provides a Physical Link Between Neighborhoods and the City of Pittsburgh,
- Provides Recreational Opportunities,
- Enhances Quality of Life, and;
- Provides Cost Savings in Car and Road Maintenance.

As a result of the substantial direct and indirect values provided by open space corridors, greenways are influencing how we plan and develop our communities. Increasingly, individuals, families, organizations and governments are focusing their efforts on the continued development of greenways as tools for planning sustainable communities that offer an enhanced quality of life for residents.

Pennsylvania Greenways:

- Protect and Enhance Natural Resources,
- Protect Unique Rural Legacy,
- Provide Economic Prosperity Communities,
- Conserve Historic and Natural Resources,
- Provide Opportunities for Public Recreation, Health and Fitness,
- Provide Educational Opportunities,
- Help Communities Shape Growth and Development, and;
- Provide Choices for Alternative and Safe Modes of Transportation.

Conclusion

Greenways connect neighborhoods and communities, connect wildlife with habitat corridors, protect open space, provide opportunities for outdoor recreation, increase economic development opportunities and serve to increase environmental awareness. Greenways also provide important value to the health, well being and aesthetic needs of human communities and are vital to the functions of ecosystems.

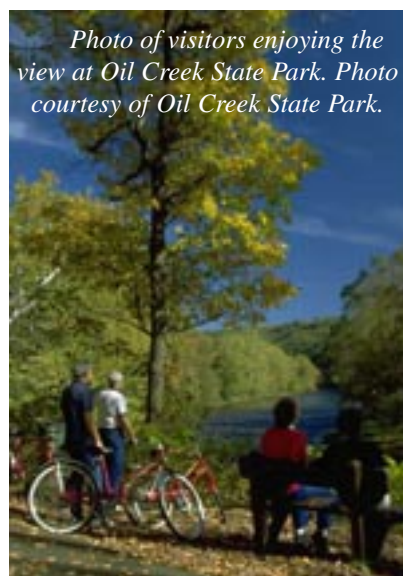


Photo of visitors enjoying the view at Oil Creek State Park. Photo courtesy of Oil Creek State Park.



Case Study Chart

Case Study	Benefit	Unique Features	Region	Key Contact
1)The Levee Trail	Protection of Natural Resources	Flood Control and Recreation.	North Eastern	J. Brozena, Engineer, Luzerne County 570-825-1600
2)The Pittsburgh to Cumberland Trail Corridor	Economic Prosperity	Grass Roots Support, Connects Two States.	South West	Linda Boxx, President of the Allegheny Trail Alliance 724-537-6900
3) The Oil Creek State Park Trail	Education	Highlights Oil Creek's Unique Past and Evolution of its Landscape.	North West	Marilyn Black, Manager, Oil Heritage Region Incorporated 814-677-3152
4) York County's Heritage Rail/Trail County Park	Public Recreation, Health and Fitness	Rated as one of the top 10 trails in the nation by the Today Show.	South	Gwen Loose, Development Coordinator, York County Parks Rail Trail 717-840-2360
5) The Schuylkill River Heritage Corridor	Historic and Cultural Resource	A State Heritage Corridor Since 1995.	East	Dixie Swenson Executive Director Schuylkill River Greenway Association 610-372-3916.
6) The Farmview Subdivision	Shaping Urban Form	Met Consumer Demands for Land While Preserving Farmland and Open Space.	South East	Randall Arendt, Senior Conservation Advisor, Natural Lands Trust 610-353-5587
7) Pennypack Greenway Corridor	Protection of Rural Legacy	A Region That Has Maintained its Rural Character for Over 300 Years.	South East	Pennypack Ecological Restoration Trust 215-657-0830 Montgomery County Parks 610-278-3736
8) Eliza Furnace Trail	Transportation	Successful Commuter and Recreation Greenway.	West	Patrick Hassett, Office of the Mayor of Pittsburgh 412-255-2256