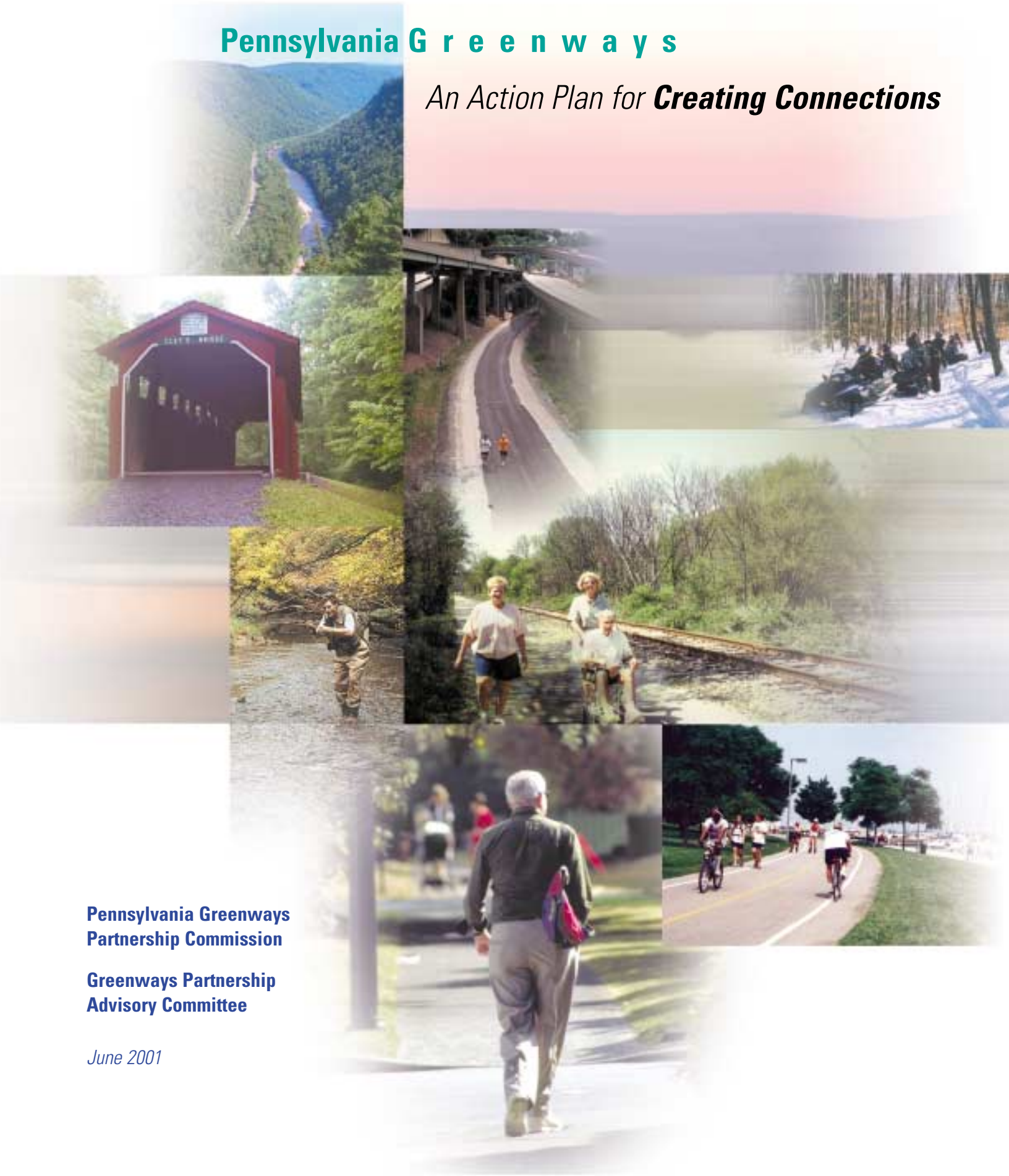
Pennsylvania Greenways

An Action Plan for ***Creating Connections***



Pennsylvania Greenways Partnership Commission

Greenways Partnership Advisory Committee

June 2001

PENNSYLVANIA GREENWAYS PARTNERSHIP COMMISSION

The Pennsylvania Greenways Partnership Commission was established by Governor Tom Ridge on April 29, 1998. The Commission consists of 22 individuals all appointed by the Governor. The Commission is chaired by the Secretaries of the Department of Conservation and Natural Resources (DCNR) and the Pennsylvania Department of Transportation (PennDOT).

GREENWAYS PARTNERSHIP ADVISORY COMMITTEE

The Greenways Partnership Advisory Committee is an interest group of approximately 120 individuals from around the state representing public and private sector greenways-related organizations.

FUNDING CREDITS

Pennsylvania Greenways: An Action Plan for Creating Connections was produced with funding allocated to the Pennsylvania Department of Transportation by the Federal Highway Administration through the Transportation Enhancements Program.

Produced by:
RBA
The RBA Group

LETTER FROM THE SECRETARIES

June 2001

To All Pennsylvanians:

In 1998, Governor Tom Ridge called on us to examine the potential of greenways - linear corridors of open space - in Pennsylvania. This commitment honors the strong tradition of open space preservation that William Penn set in motion in the 1600s. In keeping with that tradition, we are pleased to present *Pennsylvania Greenways: An Action Plan for Creating Connections.*

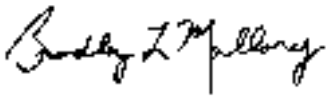
William Penn's vision for the Commonwealth recognized the need to preserve substantial portions of land, even while its communities grew and flourished. Today's greenways thread their way across our landscape providing limitless opportunities for conservation, recreation, alternative transportation and hands-on environmental education. Greenways encompass diverse types of corridors across both urban and rural Pennsylvania. They follow rivers and mountain ridges or include bicycle routes along roadways and through downtowns. Greenways allow us to walk or bicycle to work or school and encourage people and families to enjoy Pennsylvania's great outdoor heritage.

The goals set forth in this *Action Plan* reflect input from thousands of Pennsylvanians. They told us that the state's outdoor resources are vitally important and that a network of greenways should connect every community. This *Plan* provides a "greenprint" for communities, state government, the private sector and individual citizens to work as partners in developing an outstanding statewide network of greenways; a system that will be enjoyed by current and future generations of Pennsylvanians. Greenways can provide a strategic approach for our municipalities and regions to plan for "smarter" growth, enhance community character, provide for alternative transportation, and provide educational opportunities in conservation, ecology, and history.

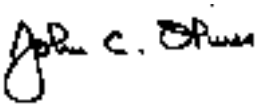
We are especially grateful for the work of the Pennsylvania Greenways Partnership Commission, who provided leadership and direction to a plan designed to make greenways a vital component of all Pennsylvania communities and the state's tourism economy. The result is visionary, comprehensive, and achievable.

Although this *Action Plan* is completed, the real work of implementation lies ahead. By building on the momentum and collaboration of this planning process, each of us can help to turn this *Action Plan* into a network of greenways that will be enjoyed by all Pennsylvanians and visitors to our beautiful state.

Sincerely yours,



Bradley L. Mallory, Secretary
Department of Transportation



John C. Oliver, Secretary
Department of Conservation and Natural Resources

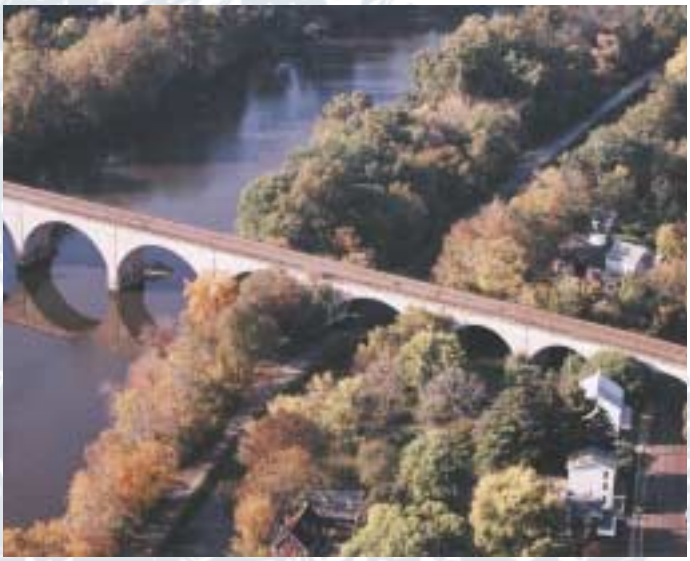
Click on title and advance to page indicated.

TABLE OF CONTENTS

	Page No.
Executive Summary	I
Chapter 1: Introduction	1
Chapter 2: A Vision for Pennsylvania's Greenways	5
Chapter 3: Methodology and Findings	13
Chapter 4: Goals and Strategies	21
Chapter 5: 12 Strategies for Implementation	27
"Hubs and Spokes"-a Statewide Network of Greenways	28
Greenway Plans: Greenprints for Growth	33
Places for All People	36
Pennsylvania Wellness	39
Alternative Transportation	41
Natural Resource Protection	43
Greenways Organizational Structure	46
Greenways Funding	53
Greenways Toolbox	57
Greenways Education and Training	60
Greenways Promotional Campaign	64
Greenways Volunteer Network: Adopt-a-Greenway	66
Chapter 6: Summary of Recommendations for Local Partnerships	68
Chapter 7: Summary of Recommendations for State Policies and Practices	73
Chapter 8: Conclusion	76
Acknowledgments	78
Photo Credits	

Executive Summary

A Synopsis of the Plan



Pennsylvania Greenways: An Action Plan for Creating Connections is designed to provide a coordinated and strategic approach to creating connections through the establishment of greenways in the Keystone State. Thanks to their appreciation for Pennsylvania's unparalleled natural, historic, and cultural assets, our residents and communities have for many years pursued a wide range of projects in conservation, outdoor recreation, heritage preservation and the promotion of tourism. Greenways are a new and powerful way to build on Pennsylvania's commitment to these pursuits.

Greenways contribute significantly to our quality of life, and increasingly are seen as a focal point for community design and land use strategies:

- Greenways enhance the sense of place in a community or region.
- Greenways accentuate the scenic beauty and majesty of our state.
- Greenways protect our state's water resources by buffering non-point sources of pollution.
- Greenways provide opportunities to protect and manage wildlife, forests and ecological systems.
- Greenways provide recreation opportunities for families and individuals of all ages and abilities.
- Greenways provide alternatives to automotive transportation, reducing traffic congestion.
- Greenways add positively to our economic climate.
- Greenways are a core component of strategies to foster health and wellness—especially as our population ages.

As experience with greenways has grown across Pennsylvania, local demand for them also has grown—and state agencies have begun to recognize their importance as well. This *Plan* is a response to this growing demand and recognition, envisioning a statewide network of greenways and advancing a sustainable program for greenways throughout Pennsylvania. This *Plan* calls for the creation of a central source of information about greenways and regular coordination among state agencies and local partners. And it addresses the wide variety of local and regional needs associated with greenways development: providing funding, organizational structure, and information and technical assistance. Meeting these objectives will take a sustained investment of time and money by government, nonprofit and private-sector partners.

This *Plan* is the direct response to Governor Ridge's Executive Order 1998-3, charging the Department of Conservation and Natural Resources (DCNR), the Department of Environmental Protection (DEP), and the Department of Transportation (PennDOT), assisted by the Pennsylvania Greenways Partnership Commission, to develop an action plan for advancing a Pennsylvania greenways partnership program into the 21st Century.

As a result of this *Plan*, by 2020 the Commonwealth should have a distinguishable greenways network, similar to the Interstate Highway System that is today the backbone of Pennsylvania's system of roadways. Users and beneficiaries of that well-developed greenways system should be able to clearly see the way in which this *Plan*—developed in the year 2000—established the necessary vision and direction that created it. Pennsylvania has within its reach a new treasure, one that reflects the state's long-standing love of the outdoors and its many special resources. May those who follow know and celebrate this new treasure as readily as we today celebrate the parks, rivers, historic sites, trails, and game lands that previous generations have bequeathed to us.

Pennsylvania's Greenways and a Vision for their Future

Since the 19th century, "greenway" has been used to describe a variety of linear corridors, all of which involve landscaping or open space, and usage of the term continues to evolve.

Here is the working definition used in this *Plan:*

A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wider corridors that incorporate diverse natural, cultural and scenic features. They can incorporate both public and private property, and can be land- or water-based. They may follow old railways, canals, or ridge tops, or they may follow stream corridors, shorelines, or wetlands, and include water trails for non-motorized craft. Some greenways are recreational corridors or scenic byways that may accommodate motorized and non-motorized vehicles. Others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway will protect natural, cultural, and scenic resources, provide recreational benefits, enhance natural beauty and quality of life in neighborhoods and communities, and stimulate economic development opportunities.

In Pennsylvania, many successful examples of local and regional grass roots efforts resulting in greenways are to be seen. The greenways movement here blossomed from a strong trails and conservation movement that has created many hiking, bicycling

and off-road vehicle trails, as well as protected open space, rivers and natural and cultural resources. Citizens and non-profits in partnership with local government created many of these projects. Pennsylvania's innovative grant programs in recent years have placed resources in the hands of those with the vision and drive to put greenways "on the ground," an effort that is largely responsible for the high number of successful greenways projects across the state, and for the ground swell of support for a statewide greenways program.

The vision for Pennsylvania greenways is:

Pennsylvania and its many partners will develop an outstanding network of greenways across the Commonwealth, creating an asset highly valued by Pennsylvanians and enhancing the quality of life for all. This network of greenways will connect Pennsylvania's open space, natural landscape features, scenic, cultural, historic and recreational sites, and urban and rural communities. Greenways will become one of the Commonwealth's most powerful tools to achieve sustainable growth and livable communities.

Pennsylvania's greenways network will ultimately take the form of "hubs and spokes." The "hubs" of this network will be the state's parks, forests, game lands, lakes and other destination areas, including our towns. The "spokes" of the network will be greenways—connecting our natural areas and recreational and cultural destinations with the places where we live. The landscape connections that will result throughout Pennsylvania will create a "green infrastructure" of open space vital to the health of Pennsylvania's ecological systems and human communities.

Greenways: A Priority for Pennsylvanians

It is clear that Pennsylvanians place a high value on greenways, based on a survey completed during the process of developing this *Plan.* Nearly half of all those surveyed said they know what greenways are and, after hearing a description, more than 80% said they have used one. Even more significantly, *93% of those surveyed support providing additional greenways in their communities.* When asked about the most important functions of greenways, those surveyed ranked protection of natural resources and wildlife habitat as the two most important functions of greenways, followed by open space protection and non-motorized recreation.

Greenways also support tourism. Pennsylvania's second-largest industry, tourism, supports thousands of jobs and attracts visitors of all types—among them hikers, canoeists, hunters, fishermen, bicyclists, and history buffs. According to the Office of Travel and Tourism, outdoor recreation is a prime motivating factor for one-fifth of all visitors to Pennsylvania—translating to $4.03 billion in tourism dollars documented for 1997.

Greenways are a priority for other reasons as well. From 1992 to 1997, Pennsylvania lost more than a million acres of crop land, forest, and open space. During the same period, the state's population growth was slowing. Each year, more land is used to accommodate the same number of people. According to the *21st Century Environment Commission Report,* land use will be Pennsylvania's most critical issue in the new millennium. By preserving open space in suburban and developing rural areas, greenways are becoming a key land use strategy throughout the state.

Finally, greenways are a priority for the more immediate issue of our health and wellness. According to the Pennsylvania Department of Health, the number-one health threat to our cit-

izens is obesity. Even more alarming is the fact that the risk factors for heart disease—obesity and diabetes—are evident across the nation among more children at earlier ages. Greenways are a natural way to bring outdoor recreation and fitness opportunities closer to our homes, schools, and work places.

Greenways: A Priority for State Agencies

Greenways are a natural fit with the missions, policies and programs of many of the Commonwealth's agencies. This is particularly so for those agencies that deal with environmental issues, recreation, land use and transportation. As pressure from the public builds to control sprawl, promote better land use, provide alternative transportation and reduce congestion, and protect and enhance our natural environment and resources, state agencies are increasingly looking for ways to assist in greenways development. This *Action Plan* supports the state's long-range transportation plan, called *PennPlan Moves!;* the 1998 report of the 21st Century Environment Commission; Growing Greener, which committed the Commonwealth to the largest environmental investment in the state's history when it was signed into law in December 1999; Growing Smarter, the amendments to Acts 67 and 68 of 2000; and the Pennsylvania Historical and Museum Commission's statewide historic plan, entitled *A Gift to Pennsylvania.* These initiatives will work together with this *Action Plan* to focus and coordinate state resources for maximum encouragement of greenways.

This *Plan* is based on the following steps:

- Review of the history of greenways in Pennsylvania
- Review of state government policies and practices
- Research on greenways benefits
- Public intercept surveys
- Regional greenways workshops for stakeholders
- Research on other state programs
- Funding analysis and research
- Numerous meetings with the Greenways Partnership Commission and its advisory committee and subcommittees

Needs Identified

Two key steps in creating this *Plan* were the greenways workshops and review of state government policies and practices. More than 200 municipal officials, representatives of local and regional planning organizations, state agency field representatives and members of greenways-related organizations attended regional workshops in Spring 2000. Participants were asked, "What kind of issues have you faced in getting your project implemented?" and "What policies, practices and programs would best serve your greenways project?" They identified a number of needs. In addition, throughout Spring and Summer 2000, more than 50 Commonwealth agency staff participated in meetings that focused on their support and interest in the greenways initiative. Here are highlights from the findings:

- **Need to map county/municipal greenways, to build a Geographic Information System (GIS) base map, and to facilitate regional coordination and cooperation among municipalities:** A lack of cooperation among municipalities is a barrier to development of a connected system of greenways, which should be planned in a regional context. Mapping of greenways at a county level was identified as a needed first step.

- **Need to accommodate all types of recreational users:** Greenways policies should recognize the needs of all user groups and make provisions to ensure that each group is properly accommodated, including the provision of facil-

ities for the use of off-highway vehicles (OHVs) and for use by those who are physically challenged.

- **Need for more public education about greenways and their benefits, and broad-based education and training:** More public education and outreach on greenways will help the public understand the uses and benefits of greenways and popularize the concept, building the base of support for greenways. There is a need for programs to educate individuals and organizations involved in greenways development, as well as local government officials, state agency personnel, landowners and students.

- **Need for a greater effort to conserve land and protect ecological systems:** Special attention should be given to greenways that conserve land and protect ecological systems. Efforts also should be made to provide assistance at the local and regional level in identifying opportunities to use greenways in support of conservation.

- **Need for dedicated funding sources for long-term support of greenways, and for the coordination of funding programs:** Although there are many potential sources of funding for different aspects of greenways projects, there are no dedicated sources or strong public/private partnerships capable of long-term support of the greenways program. Also, project sponsors are often unaware of the many types of funding opportunities that may be applied to greenways, or find that existing funding does not adequately address certain needs, such as acquisition and maintenance.

- **Need for a lead state agency for greenways initiatives:** The lead agency would help to focus a wide range of resources spread across numerous state agencies. The lead agency's coordination efforts would facilitate local and public access to information and resources that are critical to developing the statewide greenways network. Both state agency staff and stakeholders proposed DCNR as the most appropriate agency to provide this leadership.

- **Need for state agencies to revise their guidance documents, policies and practices, and to work cooperatively to better support greenways:** Most state agencies have some positive connection with or impact on greenways. State agencies should examine and amend their plans, guidance documents, and policies to include recognition and facilitation of greenways. State agencies should incorporate greenways principles into the everyday activities of state government.

From these needs, assisted by significant input from the Greenways Partnership Commission, arose four goals for Pennsylvania's greenways program:

Plan and Establish Greenways Connections
Create a Greenways Organizational Framework
Provide Greenways Funding
Provide Technical Assistance and Outreach

To support these goals, 12 major strategies with corresponding actions and targets were developed and are shown on the following page.

As conditions change and progress is made, the strategies in this *Plan* are intended to grow and flourish—like physical greenways. The key is to begin—to move on the various fronts laid out here. As state agencies work in close cooperation with local and regional partners, the many initiatives possible under this *Plan* can be expected to gain momentum and prove to be mutually reinforcing.

Twelve Strategies for Implementation

GOAL: PLAN AND ESTABLISH GREENWAYS CONNECTIONS

1. "Hubs and Spokes"—A Statewide Network of Greenways: Establish a statewide greenways network of "hubs" (parks, forests, game lands, conservation areas, historical, cultural and recreational sites, communities, etc.) and "spokes" (connecting corridors such as land and water trails, natural corridors, etc.) that includes greenways of statewide significance, as well as local and regional greenway networks.

Statewide Greenways:

- *2002: Map of Statewide Significant Greenways presented.*
- *2003: Greenways GIS comes online.*
- *2010: 25% of the Statewide Significant Greenways completed.*

Local and Regional Greenways:

- *2007: A greenways demonstration project selected and underway in every county.*
- *2010: Establish local greenways in 1,000 communities.*
- *2020: Establish a local greenway in every community.*

2. Greenway Plans—Greenprints for Growth: Promote the development of "greenway plans" by county and local governments as an integral part of their comprehensive planning and implementation efforts, encouraging them to link greenway concerns with programs that address sound land use, community revitalization, recreation needs and open space protection.

- *2007: All 67 counties complete and adopt Greenway Plans.*

3. Places for All People: Increase opportunities for diverse populations to enjoy greenways, across rural, suburban and urban landscapes, including motorized and non-motorized recreational users, persons with disabilities, and all cultural and ethnic groups.

- *2003: Complete a Statewide Comprehensive Outdoor Recreation Plan.*
- *2004: Complete a Motorized Recreation Study.*
- *2005: Designate 1,000 miles of water trails.*
- *2010: Designate 2,000 miles of water trails.*

4. Pennsylvania Wellness: Actively involve the health community in greenways to promote physical activity and mental wellness in the Commonwealth.

- *2002: Integrate greenways into the State Health Improvement Plan.*
- *2003: Undertake the Greenways and Healthy Communities initiative.*
- *Annually: Work with community–based health improvement partnerships to support and promote greenways with a physical activity focus.*

5. Alternative Transportation: Develop a trails system that provides transportation alternatives to the automobile, and is part of a comprehensive multi-modal transportation system.

- *Annually: Construct or enhance 100 miles of bicycle and pedestrian facilities (trails, roadway shoulders, on-road bike lanes and sidewalks).*
- *Annually: Increase bicycle accessibility of transit systems by 5% (translates to 2-3 transit providers per year).*

6. Natural Resource Protection: Promote strategically located greenways that protect the Commonwealth's natural resources and environmental quality.

- *2010: Add 600 miles of riparian buffers and work to conserve all existing buffers.*
- *2010: Incorporate green opportunities into 20 brownfields and integrate the sites into local greenway networks.*

GOAL: CREATE A GREENWAYS ORGANIZATIONAL FRAMEWORK

7. Greenways Organizational Structure: Issue an Executive Order (or amend Executive Order 1998-3) that establishes the Department of Conservation and Natural Resources (DCNR) as the lead agency for Greenways Program implementation; creates an Interagency Coordination Team; encourages agencies to integrate greenways into their policies and programs; and restructures the Greenways Partnership Commission and the Greenways Partnership Advisory Committee.

- *September 2001: Issue or amend the Greenways Executive Order.*

GOAL: PROVIDE FUNDING FOR GREENWAYS

8. Greenways Funding: Assemble public and private funds that assist in planning, building and maintaining greenways, and in meeting grant requirements for local matches.

- *2002: Create the Pennsylvania Greenways Funding Guide.*
- *2003: Complete a feasibility study to create a Pennsylvania Greenways Trust for assembling private dollars to leverage public funds on a 1:1match ratio.*
- *2004: Identify a long-term funding stream that ensures the sustainability of the Greenways Program.*

GOAL: PROVIDE TECHNICAL ASSISTANCE AND OUTREACH

9. Greenways Toolbox: Develop a toolbox for all those involved in greenways implementation that includes technical resources for developing greenway plans, assembling "best practices" and addressing pressing needs such as liability mitigation and design standards.

- *2002: A Greenways Toolbox assembled and online.*

10. Greenways Education and Training: Incorporate greenways training into existing education programs for greenway partners and establish a strategy to integrate greenways into environment and ecology coursework for teachers and students of all ages.

- *2002: Integrate greenways training with Growing Smarter education and training programs.*
- *2003: Initiate a strategy to integrate greenways concepts into the instruction and assessment related to existing environment and ecology standards for grades K-12.*
- *2003: Launch a basic Greenways Information Clearinghouse.*
- *2004: Encourage incorporation of greenway concepts as part of teacher preparation curriculum or basic environmental science courses in all state-owned universities.*

11. Greenways Promotional Campaign: Enhance Pennsylvania's economy and tourism by showcasing its greenways in a promotion and marketing campaign that informs residents and visitors of the opportunities and benefits of greenways.

- *2006: 75% of Pennsylvanians know the definition and benefits of greenways.*
- *2010: Pennsylvania becomes the #1 state in greenways-based tourism.*
- *Annually: Increase inquiries at the Pennsylvania greenways website and 800-number by 10%.*

12. The Greenways Volunteer Network: Establish a corps of volunteers of all ages to maintain and promote local greenways through an "Adopt-a-Greenway" Program.

- *2004: Establish and implement the Pennsylvania Adopt-a-Greenways Program.*

A STATEWIDE NETWORK OF GREENWAYS

A Statewide Network of Greenways

A statewide network of greenways will be composed of various levels of greenways. The "spine" of the network will be formed from greenways of statewide and even national significance. Local and regional greenway networks may connect to these greenways of statewide significance. An interwoven network of local, regional and statewide significant greenways can provide a new connectivity within and among Pennsylvania's communities and create a green infrastructure of open space vital to Pennsylvania's environmental integrity.

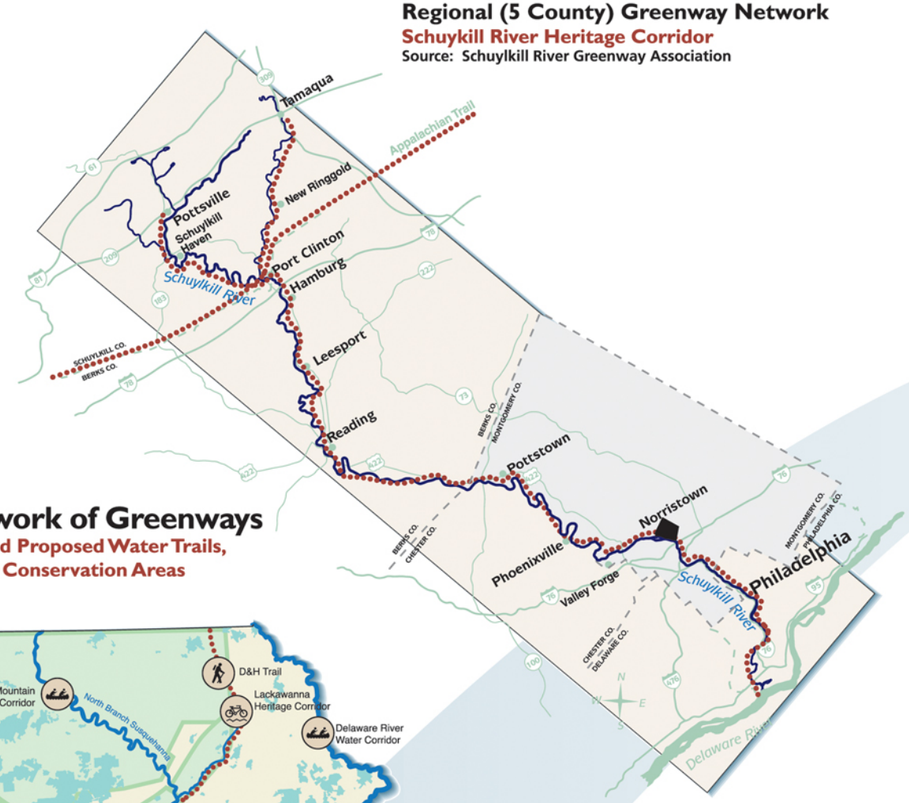
Greenways of Statewide Significance

Greenways that make connections beyond local and regional boundaries, connect major destinations or "hubs"—such as large public natural lands, communities, cultural or historical sites of statewide or national significance, provide long-distance recreational opportunities or are part of "heritage corridors," are examples of "greenways of statewide significance." Greenways that help to conserve or protect major rivers or significant natural areas may also be considered as greenways of statewide significance.

Regional (5 County) Greenway Network

Schuylkill River Heritage Corridor

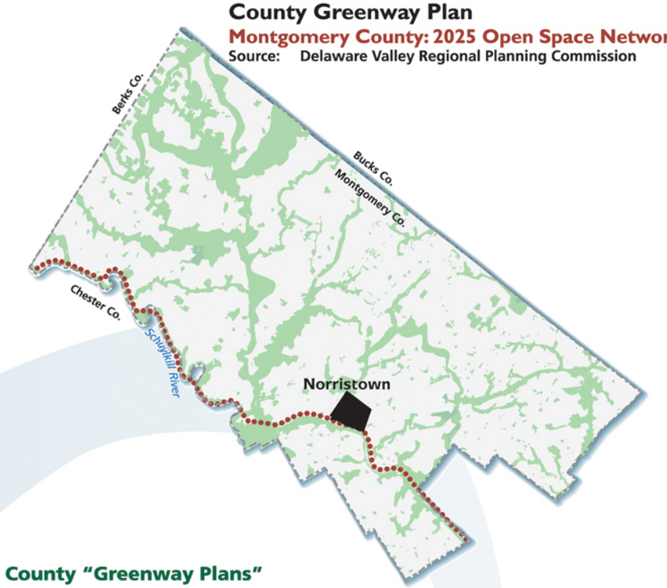
Source: Schuylkill River Greenway Association



County Greenway Plan

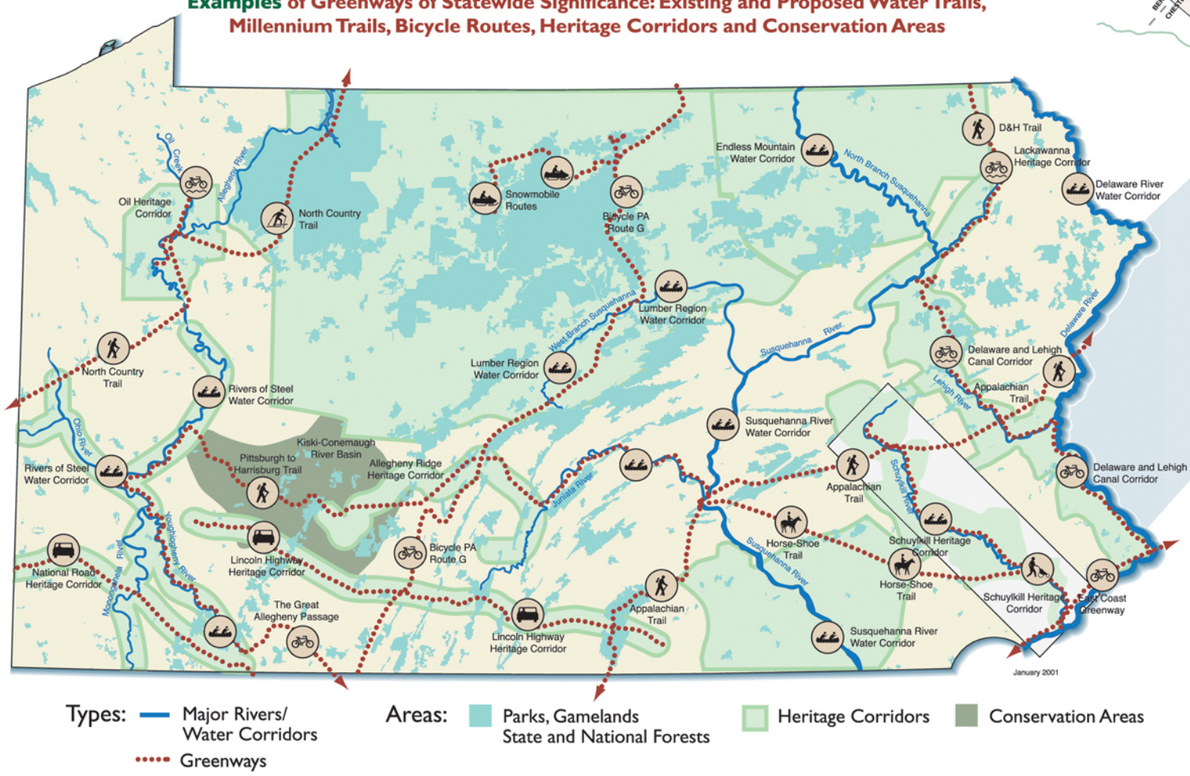
Montgomery County: 2025 Open Space Network

Source: Delaware Valley Regional Planning Commission



A Sample of Pennsylvania's Statewide Network of Greenways

Examples of Greenways of Statewide Significance: Existing and Proposed Water Trails, Millennium Trails, Bicycle Routes, Heritage Corridors and Conservation Areas



County "Greenway Plans"

Each county is encouraged to apply greenways as a land use strategy, and to map existing and proposed greenway hubs and spokes in a "greenway plan." These plans can include identification of open space and can link the mapping of greenway hubs and spokes with conservation, community planning and revitalization, and other comprehensive planning efforts. This information can be integrated and shared statewide through a Greenways Geographic Information System.

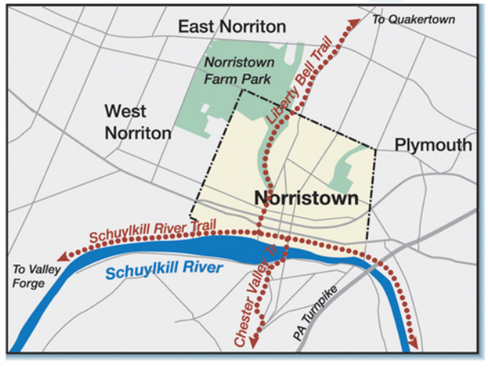
Local Greenway Networks

Local initiatives create important connections between neighborhoods and local destinations such as public lands, town centers and schools, or between natural areas or environmentally significant areas such as floodplains or streams. A major goal of the Greenways Program will be to identify and encourage linkages between and among local greenways, regional greenways and greenways of statewide significance. Urban, suburban and rural areas can each benefit from incorporating local greenways into their land use strategies.

Local Greenway Network

Norristown "Hubs" and "Spokes"

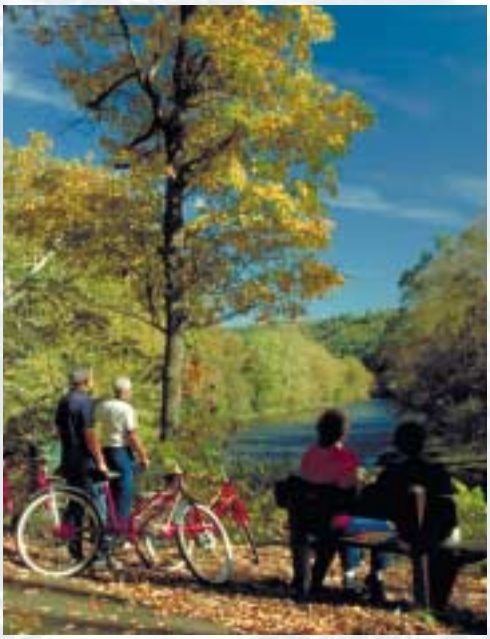
Source: Campbell, Thomas & Co.



Chapter 1

Introduction

Why a Pennsylvania Greenways Action Plan



"Developing an action plan for advancing a Pennsylvania greenways partnership program into the 21st century"

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Greenways contribute significantly to our quality of life, and increasingly are seen as a focal point for community design and land use strategies:

- Greenways enhance the sense of place in a community or region.
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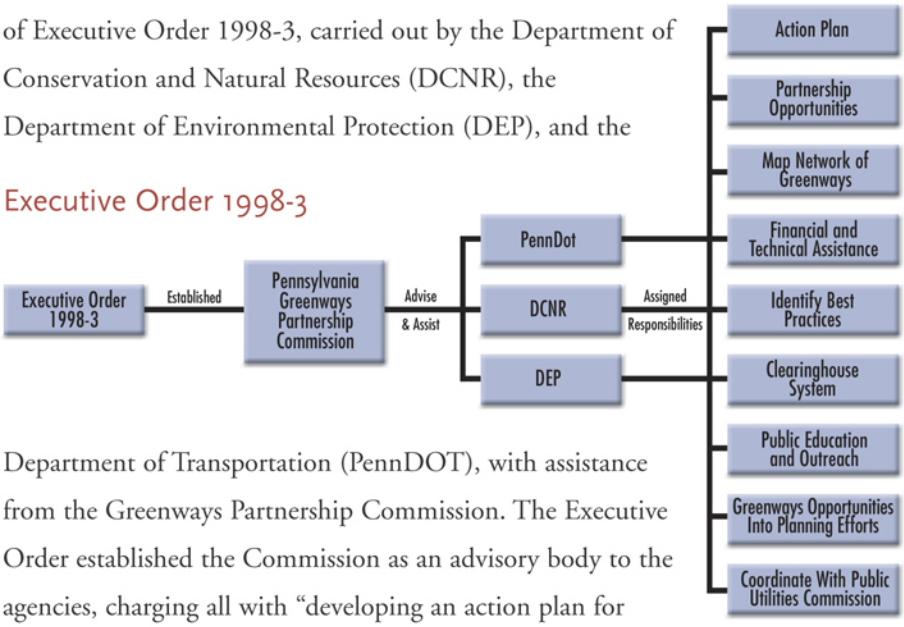
- Greenways protect our state's water resources by buffering non-point sources of pollution.
- Greenways provide opportunities to protect and manage wildlife, forests and ecological systems.
- Greenways provide recreation opportunities for families and individuals of all ages and abilities.
- Greenways provide alternatives to automotive transportation, reducing traffic congestion.
- Greenways add positively to our economic climate.
- Greenways are a core component of strategies to foster health and wellness—especially as our population ages.

Action Plan Purpose

As experience with greenways has grown across Pennsylvania, local demand for more opportunities and resources devoted to their creation also has grown—and state agencies have begun to recognize their importance as well. This *Plan* is a response to this growing demand, envisioning a statewide network of greenways. It is designed to provide cohesive direction and focus among all levels of government, interest groups and individuals, so that they can facilitate greenways. And it addresses the wide variety of local and regional needs associated with greenways development: providing funding, organizational structure, and information and technical assistance.

This *Action Plan* is the direct response to the requirements of Executive Order 1998-3, carried out by the Department of Conservation and Natural Resources (DCNR), the Department of Environmental Protection (DEP), and the Department of Transportation (PennDOT), with assistance from the Greenways Partnership Commission. The Executive Order established the Commission as an advisory body to the agencies, charging all with "developing an action plan for advancing a Pennsylvania greenways partnership program into the 21st century."

Executive Order 1998-3



The purpose of this *Plan* is to advance a range of actions that collectively constitute a sustainable program for greenways throughout Pennsylvania. This *Plan* describes the role that the Commonwealth and its partners can play in making greenways an integral feature of Pennsylvania's landscapes and communities. It calls for the creation of a central source of information about greenways and regular coordination among state agencies and local partners. Meeting these objectives will take a sustained investment of time and money by government, non-profit and private-sector partners.

The process for arriving at this *Plan* involved a three-part strategic planning process that addressed these questions:

- Where are we now?
- Where do we want to go?
- How do we get there?

The chapters that follow answer each of these questions.

This *Action Plan* is not, however, a listing of specific greenway projects at the statewide, regional or local levels. Rather, it outlines a strategy for the development and implementation of a statewide greenways program that can respond to opportunities as they arise. It also contemplates the need for updates and reassessment of priorities, and a program to monitor this *Plan's* effectiveness.

Every plan should have some means of measuring success. This *Plan* proposes specific targets for each of 12 implementation strategies with an overarching measure of success—by 2020, the Commonwealth should have a distinguishable greenways network, similar to the Interstate Highway System that is today the backbone of Pennsylvania's system of roadways.

Users and beneficiaries of a well-developed greenways network should be able to clearly see the way in which this *Plan*—developed in the year 2000—established the necessary vision and direction that created it. Pennsylvania has within its reach a new treasure, one that reflects the state's long-standing love of the outdoors and its many special resources. May those who follow know and celebrate this new treasure as readily as we today celebrate the parks, rivers, historic sites, trails, and game lands that previous generations have bequeathed to us.

Document Organization

Here is what the reader will find in this *Action Plan:* Chapter Two discusses the vision that guided development of this *Plan,* which will ultimately guide the development of a system of interconnected greenways of various types and functions located throughout the state—a statewide greenways network. Chapter Three discusses the methodology and findings associated with the early phases of the planning process, outlining how state agency, stakeholder and public input was collected and incorporated into the *Plan*. Chapter Four discusses how the findings were crafted into four goals. These goals were the basis for creating 12 strategies that include specific actions and targets for meeting the goals. Each of the 12 strategies is discussed in separate sections of Chapter Five.

Chapter 6 discusses 12 strategies from the perspective of local partners, both government and private, who are the key to successful greenways program implementation. Chapter 7 discusses key actions that could be taken by state agencies to align their policies and practices with the proposed greenways program objectives.

> "Promoting environmental stewardship may be the most important issue, but correcting our land use patterns is the most pressing."
>
> ***Source:*** *Report of the Pennsylvania 21st Century Environment Commission, September 1998, ExecSum.*

Supporting Documentation

A large amount of research, analysis and work went into the creation of this *Action Plan.* The numerous tasks and work efforts are summarized in separate technical memoranda that support this *Action Plan.* These technical memoranda include:

1. **Policies and Practices: How Pennsylvania's State Agencies Can Support Greenway Projects**—This technical memorandum presents research, and documents a series of interviews with state government representatives, their evaluations of agency policies and

practices for the purpose of identifying and modifying those that hinder greenways establishment, and for consideration of new ways that state government can support greenways development through existing programs.

2. **Pennsylvania Greenways Geographic Information System (GIS) Strategic Plan**—This technical memorandum identifies the strategies and resources needed to develop a geographic information system that maintains an inventory, plan and map of the network of greenways and trails in the state.

3. **Pennsylvania Greenways Clearinghouse**—This technical memorandum evaluates strategies to implement a state greenways clearinghouse, a technical support program that would distribute information on greenways topics.

4. **Public Involvement in the Creation of Pennsylvania's Greenways Action Plan**—This technical memorandum documents the greenways program input of the general public, greenways stakeholders, the Pennsylvania Greenways Advisory Committee and the Greenways Partnership Commission at several different events. These events included an intercept survey conducted of the general public at various venues across the state; regional open houses held for greenways stakeholders to provide input; and regional Commission and Advisory Committee meetings held to gain the input of greenway leaders at key stages of the *Action Plan* development.

5. **Benefits of Greenways: A Pennsylvania Study**—This technical memorandum describes the many benefits of greenways to the communities in which they are located. This report on the benefits of greenways to Pennsylvanians may be used as a foundation for future outreach efforts focusing on educating the general public.

6. **A Funding Strategy for Pennsylvania Greenways**—This technical memorandum outlines a variety of local, state and federal funding initiatives as well as private and non-profit sources that could be used to fund greenway projects in the state.

7. **Choosing an Operating Framework: An Analysis of Greenways Programs in Other States**—This technical memorandum describes different model operating structures that currently exist throughout the United States and defines four different types of operating structures for consideration for the Pennsylvania greenways program.

Chapter 2

A Vision for Pennsylvania's Greenways

What Pennsylvania will look like in the year 2020

The centerpiece for this chapter is a vision for the Pennsylvania greenways program. This vision is an important statement intended to guide the overall direction of the program and create a general understanding of the results to be expected from Pennsylvania's greenways program. Before we state the vision, however, it is well to establish our definition of greenways and describe what Pennsylvania's experience with greenways has been to this point.

Greenways Defined

The word "greenway" means different things to different people. Since the 19th century, "greenway" has been used to describe a variety of linear corridors, all of which involve landscaping or open space, and usage of the term has continued to evolve. The working definition used in this *Plan* has evolved from the one adopted by the Pennsylvania Greenways Partnership (precursor to the Pennsylvania Greenways Partnership Commission), as documented in the Partnership's publication *Creating Connections: The Pennsylvania Greenways and Trails How-To Manual* (Pennsylvania Environmental Council, 1998).

Here is our working definition, with thanks to the Partnership:

A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wider corridors that incorporate diverse natural, cultural and scenic features. They can incorporate both public and private property, and can be land- or water-based. They may follow old railways, canals, or ridge tops, or they may follow stream corridors, shorelines, or wetlands, and include water trails for non-motorized craft. Some greenways are recreational corridors or scenic byways that may accommodate motorized and non-motorized vehicles. Others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway will protect natural, cultural, and scenic resources, provide recreational benefits, enhance natural beauty and quality of life in neighborhoods and communities, and stimulate economic development opportunities.

Foundations of the Pennsylvania Greenways Program

In Pennsylvania, the development of greenways has been a grassroots, "bottom up" experience from the outset. The greenways movement blossomed from a strong trails and conservation movement, and across the state can be found many successful examples of local and regional grass-roots efforts resulting in hiking, bicycling and off-road vehicle trails, as well as protected open space, river and stream corridors, and natural and cultural resources. Many of these projects were spurred by citizens and non-profits in partnership with local government. Unlike many other states, Pennsylvania directs funds to these non-profits and local governments through innovative grant programs that have fueled many greenway projects in recent years. Placing resources in the hands of those with the vision and drive to put greenways "on the ground" is largely responsible for the high number of successful greenway projects across the state, and for the ground swell of support for a statewide greenways program.

In response to the growing number of greenways projects and supporters, the Department of Conservation and Natural Resources (DCNR) and non-profit groups, including the Pennsylvania Environmental Council, The Conservation Fund, and the Rails-to-Trails Conservancy, spearheaded the Pennsylvania Greenways Partnership Initiative. In 1995, this initiative began to hold meetings for greenways "stakeholders" across Pennsylvania. In this new context of discussion, persistent issues found new solutions, such as the protection of abandoned railroad crossings for future use as trails.

Recognition that Pennsylvania was ready for a statewide greenways program grew with a series of conferences held between 1997 and 1999. These conferences attracted unprecedented numbers, bringing together representatives from every type of organization interested in greenways. The Governor's Conference on Greenways and Trails held in 1997 proved the governor's interest and support. In 1998, Governor Tom Ridge issued Executive Order 1998-3, which created a new group called the Pennsylvania Greenways Partnership Commission (Commission) and charged the Commission with advising and assisting the Secretaries of DCNR, the Department of Transportation (PennDOT), and the Department of

Environmental Protection (DEP) in developing an action plan for advancing a Pennsylvania greenways partnership program into the 21st century. The Commission and the agencies were also charged with "pursuing the creation of partnership opportunities to plan, implement, maintain, and fund a greenways network for the Commonwealth."

The Vision

Executive Order 1998-3 declares that greenways are an important asset and land use strategy that can achieve many benefits associated with quality of life and place. It remained for those involved in the planning process to translate this declaration into a vision, based on input gathered from many stakeholders and agencies involved in establishing greenways throughout the Commonwealth. Requirements were many for this "vision": it must not only set a clear direction for the program, but it must be concise enough to immediately strike a chord with all stakeholders and the general public. The vision must also emerge from the history of greenways in Pennsylvania, promise a new foundation of knowledge about the issues and benefits of greenways, and build public support. Finally, the vision must mirror the voices of those who have been instrumental in moving greenways forward.

Here is the vision for Pennsylvania greenways:

Pennsylvania and its many partners will develop an outstanding network of greenways across the Commonwealth, creating an asset highly valued by Pennsylvanians and enhancing the quality of life for all. This network of greenways will connect Pennsylvania's open space, natural landscape features, scenic, cultural, historic and recreational sites, and urban and rural communities. Greenways will become one of the Commonwealth's most powerful tools to achieve sustainable growth and livable communities.

It is envisioned that Pennsylvania's greenways network will consist of individual greenways and regional networks of greenways of all kinds. While every greenway is important and adds value to Pennsylvania's landscapes and communities, a statewide greenways network achieves broad connections that are fundamental to sustainable environments in rural, suburban and urban settings. The landscape connections that will result throughout Pennsylvania will create a "green infrastructure" of open space vital to the health of Pennsylvania's ecological systems and manmade communities. The statewide greenways network also can provide a new connectivity within and among Pennsylvania's communities, and promote healthier lifestyles with more abundant recreational opportunities and transportation alternatives, and stronger connections to cultural and historic places. This connectivity can be represented by the metaphor of the "hubs" and "spokes" of a wheel.

"Hubs and Spokes"

Pennsylvania's greenways network will ultimately take the form of "hubs and spokes." The "hubs" of this network will include parks, forests, game lands, lakes, headwaters, or destination areas, including our communities. The "spokes" of the network will be greenways—connecting our natural areas and recreational and cultural destinations with the places where we live. A greenways network can encompass many types of "hubs" or sites that greenways, acting as "spokes," serve to connect, including natural, recreational, cultural and historic sites on a statewide, regional or local level.

Common hubs of a greenways network can include:

- Natural Areas: These include large blocks of publicly owned open space such as national and state parks, forests, game lands, and conservation areas that serve to protect important ecological landscapes and natural features, preserve scenic vistas, provide habitat for wildlife, protect water resources and provide recreational opportunities. Regional and local parks, preserves and ecological sites may also serve as hubs.

- Cultural, Historic and Recreational Sites: Community parks or cultural/historic sites that protect and interpret Pennsylvania's heritage also may be incorporated into the greenways network as destinations or "hubs."

- Urban and Suburban Areas: On a statewide or regional level, cities and towns can serve as origins or destinations within the greenways network. Within urban and suburban areas, opportunities abound to connect neighborhoods, schools, work places, recreation facilities, natural areas and parks through greenways. A greenways network also can incorporate former industrial sites, or brownfields, and spur the creation of new green space.

Common spokes of a greenways network can include:

- Greenways that are ecologically or conservation oriented, such as riparian buffers.
- Greenways that provide non-motorized public access and that connect neighborhoods with destinations, and provide recreation and physical fitness opportunities close to home.
- Greenways that have a strong interpretative element showcasing historic or cultural events.
- Greenways that are water trails and serve recreational users.
- Greenways that accommodate motorized recreational vehicles such as snowmobiles or ATVs.

"Communities across Pennsylvania and in other states are realizing that they can conserve their farmland, wooded habitat, and natural areas at the same time they accommodate inevitable development. These critical elements of the community's 'green infrastructure' are just as important as the more conventional 'gray infrastructure' of roads, wires, pipes, and drains."

Source: *Secretary John Oliver, Pennsylvania Department of Conservation and Natural Resources, Growing Greener: Putting Conservation into Local Plans and Ordinances, 1999, Forward.*

The Many Benefits of Greenways

There are many benefits of greenways to be fostered by the new Pennsylvania Greenways Program:

- **Preservation of Pennsylvania's Natural Resources**—Pennsylvanians attach a high priority to preserving and enhancing their natural resources. Greenways present significant opportunities to protect and manage wildlife, forests and ecological systems throughout the state and to add to scenic quality and the public's appreciation of natural resources.

- **Protection of Water Resources**—Non-point source pollution from urban stormwater runoff and other sources is a primary contributor to poor water quality in Pennsylvania's lakes and streams. Providing a vegetation buffer between surface water resources and development can help curb this problem. Greenways can effectively serve this function while at the same time providing recreational and other amenities in a community. Greenways and associated open spaces also provide recharge areas for groundwater aquifers, critical to the Commonwealth's drinking water supplies, especially in times of drought.

"Conservation subdivisions [incorporating greenways] are simply better places in which to live. When well designed, the majority of lots in these subdivisions abut or face onto a variety of open spaces, from formal 'greens' or 'commons' to wildflower meadows, farm fields, mature woodlands, tidal or freshwater wetlands, and/or active recreational facilities."

Source: *Randall Arendt, Growing Greener: Putting Conservation into Local Plans and Ordinances, 1999, p.5.*

- **Stewardship of Pennsylvania's Rural and Farmland Legacy**—Pennsylvania is blessed with a unique legacy of land use development patterns that reflect its history of reliance on agriculture and natural resources. Greenways and other sound land use practices are now being promoted by the Commonwealth to help protect and preserve this legacy.

- **Conservation of Historic and Cultural Resources**—The greenways program can effectively complement Pennsylvania's tremendous historic and cultural assets. Projects such as Heritage Parks and greenways along historic canals and rivers enhance the value of and public appreciation for these assets. Regional historic and cultural interests add diversity to local greenways support.

- **Conservation of Scenic Resources**—For many residents, the beauty of Pennsylvania contributes to their quality of life. For visitors, scenic quality is a distinguishing feature that draws them to the state. The Pennsylvania Greenways Program can help residents protect, promote and enjoy their outstanding scenic resources.

- **Fostering of Public Recreation, Health and Fitness**—According to the Department of Health, prominent health problems in Pennsylvania (as well as across the United States) result from a lack of physical activity from the young to the old. Further, the graying of our population will require a fundamental shift in our thinking about public facilities, such as greenways, and the role they play in wellness and health care. Greenways offer many diverse forms of recreational opportunities conducive to mental and physical wellness.

- **Creation of Educational Opportunities**—Greenways are a virtual laboratory for learning for all Pennsylvanians. The various forms of greenways bring people into direct contact with our natural environment and cultural and historic places. A greater emphasis on hands-on and lifelong learning will heighten the value of greenways to all Pennsylvanians.

- **Support of Economic Prosperity**—Today's economy entails competition on all fronts. Pennsylvania's communities and businesses can benefit from greenways tourism dollars in the rapidly growing outdoor/adventure tourism industry. Further, quality of life is emerging as a key factor affecting the retention of the best and brightest of Pennsylvania, and the state's ability to attract new companies.

- **Promotion of Sustainable Development and Sound Land Use**—Most Pennsylvanians now acknowledge that the quality of life and character of their communities are under pressure from suburban sprawl and unplanned development. Greenways represent a significant opportunity to guide land use to help ensure that as communities grow, protected green space and recreational opportunities are built into their futures. Further, greenways are a redevelopment tool to help to "green" brownfields and urban areas.

- **Provision of Alternative Transportation**—In some of our most highly congested areas, greenways offer an alternative to single-occupant vehicle use. Urban and suburban trails and river walkways are examples of greenways that serve transportation purposes. These facilities should receive even greater attention when we consider their dual value as both recreational trails and transportation alternatives—improving air quality, saving energy and reducing congestion.

- **Building Partnerships**—As the above goals suggest, greenways have many stakeholders and beneficiaries. The planning and development of greenways naturally lead to the formation of broad-based partnerships, bringing together civic groups, regional planners, community leaders, educators, business owners and others. The partnership approach not only provides resources but also builds public support or "community capital" and consensus for more greenways investment.

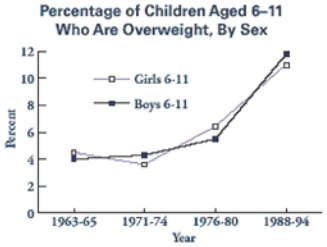
Greenways: A Priority for Pennsylvanians

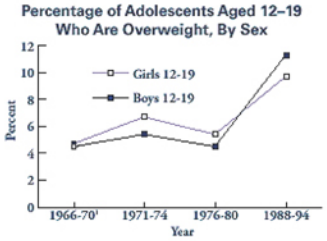
Based on an intercept survey conducted at several public venues across the state, Pennsylvanians place a high value on greenways. Despite the fact that "greenway" is a relatively recent term, nearly half of all those surveyed said they know what greenways are, and more than 80% said they have used one. Even more significantly, *93% of those surveyed supported providing additional greenways in their communities.* When asked about the most important functions of greenways, those surveyed ranked protection of natural resources and wildlife habitat as the two most important functions, followed by open space protection and non-motorized recreation.

Greenways do not simply protect the environment—they also promote sustainable economic development through tourism. As Pennsylvania's second-largest industry, tourism supports thousands of jobs and attracts visitors of all types—among them hikers, canoeists, hunters, fishermen, bicyclists and history buffs. According to the Office of Travel and Tourism, outdoor recreation is a prime motivating factor for one-fifth of all visitors to Pennsylvania—translating to $4.03 billion in tourism dollars documented for 1997. Additionally, according to a Pennsylvania Heritage Tourism Study conducted for DCNR in 1999, "scenic" qualities were one of the most important attractions for heritage tourists.

Greenways are a priority for other reasons as well. From 1992 to 1997, Pennsylvania lost more than a million acres of crop land, forest and open space. During the same period, the state's population growth was slowing. Each year, more land is used to accommodate the same number of people. According to the *Report of the 21st Century Environment Commission,* land use will be Pennsylvania's most critical issue in the new millennium. By preserving open space in suburban and developing rural areas, greenways are becoming a key land use strategy throughout the State.

Finally, greenways are a priority for the more immediate issue of our health and wellness. The health care community in Pennsylvania is becoming increasingly concerned about the sedentary lifestyles of adults and children. According to the Pennsylvania Department of Health, the number-one health threat to our citizens is obesity. This situation mirrors national trends showing that Americans are eating more and exercising less—overweight children and adults are the number-one concern of the Center for Disease Control and Prevention. Even more alarming is the fact that the risk factors for heart disease—obesity and diabetes—are becoming evident among more children at earlier ages. Greenways are a natural way to bring outdoor recreation and fitness opportunities closer to our homes, schools and work places.





[1]Data for 1966–70 are for adolescents 12–17, not 12–19 years.

NOTE: Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile cutoff points from the revised CDC Growth Chart: United States.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Health Examination Statistics. Unpublished data.

Greenways: A Priority for State Agency Programs

Greenways are a natural fit into the missions, policies and programs of many of the Commonwealth's agencies. This is particularly true for those agencies that deal with environmental issues, recreation, land use and transportation. As pressure from the public builds to control sprawl, promote better land use, provide alternative transportation and reduce congestion, and protect our natural environment and resources, state agencies are viewing greenways as a strategy to meet these challenges.

For example, by funding this *Action Plan* and participating in its implementation, PennDOT is reaffirming the commitments made in the state's long-range transportation plan, called *PennPlan Moves!* At the heart of *PennPlan Moves!* recommendations is a core set of 10 goals that will guide the development and maintenance of the state's transportation system for the next quarter century. Participation in greenways at the local level will help PennDOT meet all 10 of its core goals, with public support for a greener, more environmentally conscious PennDOT.

In addition to the implementation of *PennPlan Moves!,* the policies and actions outlined in this report will be accomplished in conjunction with several other statewide initiatives that are pivotal to the greenways program:

- **21st Century Environment Commission:** This Commission issued its final report in 1998. The Governor directed all affected state agencies to implement its recommendations, including promoting responsible land use, conserving natural resources, creating a healthy environment for citizens, developing a new foundation for teamwork, and prescribing environmental education, training and stewardship. The Greenways Program will help to meet these goals.

- **Growing Greener:** Signed into law in December 1999, Growing Greener committed the Commonwealth to the largest environmental investment in the state's history. Many programs funded through Growing Greener, such as watershed planning, implementation of "best practices" and abandoned mine reclamation, are closely related to the greenways initiative, and can be further coordinated in the future.

- **Growing Smarter:** This initiative represents the state's strong commitment to local land-use planning efforts. Through Acts 67 and 68 of 2000, amendments to the Pennsylvania Municipalities Planning Code, "Growing Smarter," empowers local governments to promote land-use strategies that favor both economic growth and environmental goals. The *Action Plan* dovetails with this initiative, since greenways are a fundamental tool for local governments to use in pursuing sound land use.

- **The Historic Preservation Plan: A Gift to Pennsylvania:** Historic and cultural resources are an important feature of many greenways in Pennsylvania. The Pennsylvania Historical and Museum Commission (PHMC) has adopted a new statewide preservation plan that calls for increased efforts to preserve these resources.

These statewide initiatives will work together with the *Action Plan* to move Pennsylvania into a sustainable future. Pennsylvania's state agencies today have a significant focus on the environment and the value of natural resources. Greenways have many varied and valuable applications to support this focus. This *Action Plan* is intended to coordinate various state resources for maximum encouragement of greenways.

Chapter 3

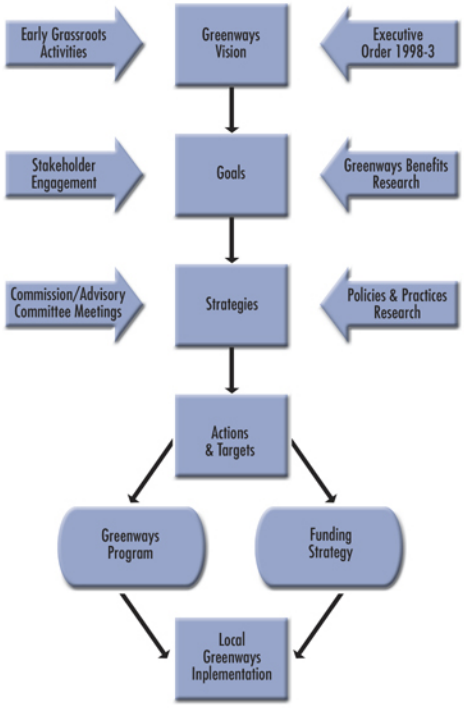
Methodology and Findings

How we arrived at the ideas presented in this Plan

The methodology summarized in this chapter was designed to seek a significant level of understanding about the present needs and future opportunities for greenways across Pennsylvania. The outreach undertaken to achieve this understanding involved greenways stakeholders, the general public and government agencies.

In short, this methodology was intended to ensure that goals, strategies and actions detailed in the following sections of this *Plan* would be properly focused on the issues that count. These issues are presented in this chapter, along with a summary of findings.

Greenways Planning & Implementation Process



This *Plan* is based on data gathered from many sources. Data collection and analysis included:

- **History of Greenways in Pennsylvania:** Researched the history of land development and conservation practices in Pennsylvania with a focus on current greenway project development.

- **Review of State Government Policies and Practices:** Interviewed state agency staffs regarding current policies and practices and their relationship to greenways. Also reviewed relevant policy or strategic documents, such as *PennPlan Moves!* The meetings included all major state agencies and commissions.

- **Greenways Benefits:** Documented the benefits of greenways to Pennsylvania residents including economic, recreational, environmental and quality-of-life factors.

- **Public Intercept Surveys:** Conducted intercept surveys at seven locations throughout the Commonwealth to assess the general public's knowledge, interest and support for greenways. These surveys were conducted at high-traffic locations such as central business districts and shopping malls.

- **Regional Workshops:** Conducted nine regional workshops with local public officials and other key stakeholders to gather their input on existing policies and practices, barriers to project implementation and suggestions for improving the process of developing greenways.

- **Research on Other State Programs:** Evaluated the greenways programs of other states as potential models for application to Pennsylvania.

- **Funding Analysis and Research:** Researched available funding sources for greenways projects at federal, state and local levels, including public and private partnership opportunities. Inventoried existing funding programs that could be used for greenway projects.

In addition to these research efforts, meetings with the Pennsylvania Greenways Partnership Commission, conducted quarterly, as well as meetings with the Commission's advisory committee and subcommittees, often included brainstorming sessions to gather perspectives and recommendations. The subcommittees were particularly helpful in addressing education and outreach, partnership opportunities, and the development of geographic information systems.

Important building blocks to arrive at the findings presented in this chapter were the public surveys, regional greenways workshops and the agency policy reviews. The public intercept surveys helped the Commission to understand the extent to which Pennsylvanians value trails and greenways. The regional greenways workshops provided the Commission with first-hand accounts of local project sponsors' needs for both resources and technical assistance, if they are to implement the statewide greenways network. The agency policy review yielded an in-depth understanding of programs, policies, and practices that are relative to current greenways activity as well as future directions of each agency. The result of many of the agency policy reviews were various recommendations for unified and coherent state-level action to achieve the greenways vision.

"Participants at many of the forums offered that 'greenways should be contiguous land parcels, not disconnected and scattered throughout the community.'"

Source: *Pennsylvanians Speak: Sound Land Use Forums Report, January 2000, page 18.*

Soliciting Views from the Public

An intercept survey of the general public's perception of greenways was undertaken during Spring and Summer 2000. At seven public venues across the state, field staff interviewed approximately 360 individuals, asking them to respond to a verbal questionnaire. Participants were asked about their use of greenways, whether they would support additional greenways and whether they would support the use of public funds to develop greenways in their communities. They were also asked what types of greenways should be developed.

Figure 3.1: Have you ever used a greenway?

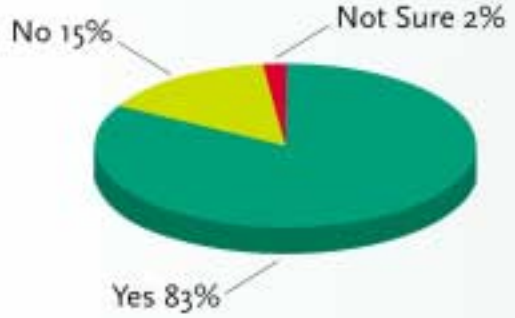
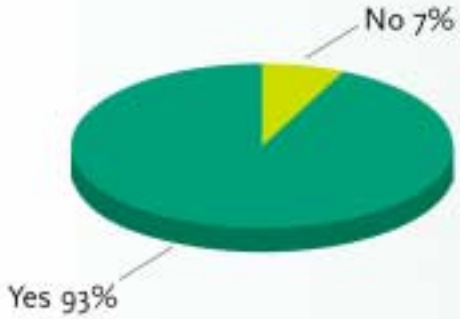


Figure 3.2: Do you support providing additional greenways in your community?



Source: Public Intercept Surveys, Statewide Greenways Program Consultant Team, Spring 2000.

Most respondents (83%) had used a greenway. Almost all (93%) supported the idea of providing additional greenways in their community (see Figures 3.1 and 3.2), with 86% supporting the use of public funds to develop the greenways. Popular reasons for developing greenways included enhancing wildlife habitat, developing recreational trails and protecting natural resources. A summary of survey findings is available in the technical memorandum, *Public Involvement in the Creation of Pennsylvania's Greenways Action Plan.*

Soliciting Ideas from the Stakeholders

In Spring 2000, more than 200 municipal officials, representatives of local and regional planning organizations, state agency field representatives and members of greenways-related

organizations attended regional open houses held in Meadville, Pittsburgh, State College, Johnstown, Harrisburg, Norristown, Stroudsburg, Scranton and Williamsport, PA. Participants were asked, "What kind of issues have you faced in getting your project implemented?" and "What policies, practices and programs would best serve your greenways project?"

Greenways-related Needs Identified at Regional Open Houses

- Need to map county/municipal greenways, to build a GIS base map, and to facilitate regional coordination and cooperation among municipalities.
- Need for the various types of users to have access to greenways.
- Need for a greater effort to conserve land and protect ecological systems.
- Need for more funding for acquisition and maintenance of greenways.
- Need for more public education about greenways and their benefits.
- Need for a "toolbox" of specialized educational materials.
- Need for broad-based education and training.
- Need for a lead agency for greenways initiatives.
- Need for state agencies to review their policies and practices and to work together.
- Need for state agencies to respect and support local greenways efforts.

The following summary highlights the needs identified by open house participants. These needs and other ideas generated during the wide-ranging discussion of the open houses form the basis for developing corresponding actions in the *Plan.* The key findings are:

- **Need to map county/municipal greenways, to build a GIS base map and to facilitate regional coordination and cooperation among municipalities.** Many participants identified lack of cooperation among municipalities as a barrier to development of a connected system of greenways. They commented that greenways should be planned in a regional context. Mapping of greenways at the county level was identified as a needed first step. They noted that if county greenways plans could be incorporated into a GIS base map, then it would be much easier to identify gaps in a statewide network and opportunities for connections would be obvious. The participants also saw the mapping effort as a tool in identifying and easing development pressure.

- **Need for the various types of users to have access to greenways.** Participants noted that greenways policies should recognize the needs of all user groups and make provisions to ensure that each group is properly accommodated. For example, most of the open houses were attended by greenways users who asked for more opportunities to use off-highway vehicles (OHVs), including snowmobiles, 4x4 trucks, off-road motorcycles, and all-terrain vehicles. Some proposed sharing existing trails, but most suggested the development of new trails dedicated to OHV use, including the use of abandoned mine lands for OHV trails. They also asked for support in changing the public's negative perception of OHV trail use.

- **Need for a greater effort to conserve land and protect ecological systems.** The participants cited the need for policies that protect and preserve land and wildlife. Some thought that not enough emphasis has been placed on conservation-oriented greenways. They observed that during mapping efforts, it was important to identify ecologically sensitive areas and wildlife habitat. They appreciated the idea of having another tool available to preserve Pennsylvania's natural resources.

- **Need for more funding for acquisition and maintenance of greenways.** While it can be expected that people developing greenways would suggest the need for more funding, participants were quite specific in identifying the need for funding for two important aspects of greenways development: acquisition and maintenance. Funding for acquisition is limited, especially in view of a growing need to secure strategic land for conservation and holdings to connect greenways. Moreover, participants also were concerned about a lack of funding to maintain greenways and provide staff to oversee them. While many greenways have been planned and constructed with grant funding, the resources to maintain, police and upgrade them are difficult to obtain.

- **Need for more public education about greenways and their benefits.** Among the comments most often made by the participants was the need for more public education and outreach on greenways to help the public understand the uses and benefits of greenways and popularize the concept. The public needs to understand that greenways are more than just trails, that they can be natural resource connections, paths to history and waterways. Educating the public builds the base of support for greenways.

- **Need for a "toolbox" of specialized educational materials.** Greenways developers and facilitators asked for tools—specialized educational materials—to carry out their greenways plans. They cited the need for a "Greenways Toolbox" with information on "Best Practices" in greenways development, liability mitigation options, and design standards. The toolbox also could include a listing of contacts and resources, guidance on funding opportunities and assistance on submitting grant applications.

- **Need for broad-based education and training.** Participants expressed the need for programs to educate individuals and organizations that are involved in greenways development. In addition to greenways developers, special attention should be given to addressing the education and training needs of local government officials, state agency personnel, landowners and school-and college-age students. Educational opportunities could come in the form of preparing and disseminating printed materials, offering seminars and conferences for targeted groups, developing school and college curricula, encouraging peer interaction, and establishing a clearinghouse of information on greenways and their development. Landowners would need specialized educational materials and seminars addressing easements, property rights and liability.

- **Need for a lead agency for greenways initiatives.** Participants called for a state agency to take the lead in implementing greenways initiatives. The lead agency would help to focus a wide range of resources spread across numerous state agencies. The lead agency's coordination efforts would facilitate local government and public access to information and resources that are critical to developing the statewide greenways network.

- **Need for state agencies to review their policies and practices and to work together.** Participants expressed the importance of all appropriate state agencies "buying into" a greenways program and amending their policies and practices to include recognition and facilitation of greenways. They stated the need for agencies to work cooperatively and to streamline their processes, especially in the area of grant administration. The common phase was "cut the red tape." It is recognized that each agency generally has its own unique policies, programs, and practices, but the expectation is that a systematic approach to greenways will afford some consistency among agencies.

- **Need for state agencies to respect and support local greenways efforts.** One of the strongest and most consistent messages conveyed by local greenways advocates and managers is that some state agency staff have failed to support greenways development, and have been reluctant to provide assistance with projects. Although the majority of state agency staff do not take this approach, the few that do have left a lasting negative impression on local greenways partners. This is a situation that must be reversed through policy directives, field staff training and the incorporation of greenways into job descriptions and performance reviews of key staff throughout state government.

Soliciting Input from State Government

As implied in a number of the needs expressed above by greenways stakeholders, development of greenways at the local level hinges in part upon support from state agencies. Broad support and coordination at the state level is needed to lay the foundation for successful local planning and implementation. Numerous state agencies provide resources, both technical and financial, for greenways projects. To achieve the vision of a statewide greenways network, however, local greenways advocates will need simplified access to the resources that the Commonwealth offers, and a more coordinated approach by state agencies across the board.

To address this situation, more than 50 Commonwealth agency staff participated in meetings throughout Spring and Summer 2000 that focused on their interest in and support for the greenways initiative. The participating agencies provided their perspectives on the greenways initiative and offered their insights on the policies and practices that would best support implementation of a true statewide greenways program.

The following summary highlights the findings of the state agency policy and practice meetings.

- **A greenways program should be established within one state agency to serve as a central source of information and coordination on greenways.** It was clear that the Commonwealth is at a critical juncture in the development of greenways across the state. Central leadership is clearly needed to foster continued coordination among agencies and local partners, and to provide a central source of technical assistance on greenways development. From the input of various state agency staff, DCNR is the most appropriate agency to provide this leadership.

- **A number of other key state agencies should bear a shared responsibility to support greenways in their respective areas of influence.** Many greenways support programs already exist within state agencies, although they may not use the term "greenway." With a minimal level of effort, these programs could include the concept of greenways in their lexicon, and have an immediate impact on general awareness. The job of coordinating and advising these various efforts will be a key function of the new greenways program. The key agencies identified were DCNR, PennDOT, DEP, DCED and PHMC.

- **Most state agencies have a connection to greenways.** From all of the meetings, it is clear that most state agencies have some positive connection with or impact on greenways. These connections range from wellness initiatives of the Department of Health to agricultural preservation initiatives of the Department of Agriculture, as well as many others. These agencies should internally examine their policies to accommodate greenways appropriately, and should have a role in coordinating greenways implementation.

- **State agencies should revise their plans and guidance documents to reflect greenways principles.** State agencies should incorporate greenways planning principles into the everyday activities of state government—setting aside rights-of-way for greenways (or as dual-use corridors), connecting paths to existing trails, extending streamside buffers, etc. This applies to maintenance and operation of existing state facilities as well as new construction.

Summary of Key Findings

In addition to the public surveys, stakeholder workshops, and agency policy meetings, the Commission had several meetings that provided input into the *Action Plan.* Also, the staffs of DCNR, PennDOT, and DEP have worked hard to provide input and guidance towards the *Plan* development. Based on this input and the findings presented earlier, provided below is a summary of key findings:

- **Greenways Planning and Implementation**
  - Accessing the many levels of government in Pennsylvania complicates planning and implementation of greenways.
  - Local project sponsors need to better understand the greenways project development process.
  - The efficiency and consistency of greenways design, development, and maintenance could be enhanced.

- An opportunity exists to provide an interconnected system or network of greenways linking public/private lands in the Commonwealth.
- The synergy created by this project provides an opportunity for more consistent and uniform greenways planning across the state.

- **Policies and Practices of State Agencies**
  - Most state agencies/commissions have programs and practices that could be easily modified to accommodate greenways objectives and principles.
  - State agencies' staffs do not have the time required to implement a greenways program.
  - Greenways familiarization and training sessions for state agency staff would assist them in mainstreaming greenways into the daily practices of the agencies.
  - There are many potential sources of funding for greenways projects, but there is no dedicated source or strong public/private partnerships capable of long-term support of the greenways program.
  - Each state agency needs to provide focus, organization, and leadership to the program. An overall framework will need to be formed to carry out recommendations.

- **Public and Stakeholder Input**
  - A high proportion of the public is in favor of more greenways in their communities, but their understanding of greenways and related benefits needs to be enhanced. The public also shows strong support for the ecological and wildlife functions of greenways.
  - The motorized trail users feel that, to date, greenways in perspective do not adequately meet their needs. With the popularity of OHVs and snowmobiling skyrocketing, the needs of motorized trail users need to be carefully considered.
  - Greenway projects may be eligible for a myriad of funding sources through different state agencies. Project sponsors are often unaware of all the funding sources for which their projects may be eligible. State agencies need to coordinate their resources to provide local project sponsors access to the most appropriate funding sources.

Action Plan Review

Several strategies were employed to obtain public, stakeholder and state government input and incorporate it into the draft of this *Action Plan.* The public was able to visit the DCNR website to review the draft of the *Action Plan*. Additionally, the draft *Action Plan* was widely distributed for comment to key state government personnel, stakeholders and those who had previously participated in its development. Many of these individuals were invited to regional focus group meetings to discuss the draft of the *Action Plan* and implementation of the Pennsylvania Greenways Program.

Now that the *Action Plan* is finalized, involvement of greenways partners will be critical to ensuring successful implementation of the greenways program. Maintaining the momentum that produced this *Action Plan* and building on the base of public support are essential. Keeping the lines of communication open among greenways partners through such means of communication as a "Pennsylvania Greenways" website and periodic meetings is important as a multifaceted program for greenways is institutionalized in Pennsylvania.

Chapter 4

Greenways Program Goals and Strategies

What needs to be accomplished to achieve the vision

To achieve the vision for greenways in Pennsylvania, specific goals, strategies, actions and targets are required. This chapter describes four goals—policy-oriented statements of what needs to be accomplished to produce the vision—and summarizes the key aspects of 12 strategies. Strategies are more specific directives that identify actions required to achieve the goals. The actions—steps that state agencies and greenways partners must take to implement the *Plan's* strategies—and targets, or performance measures, are detailed in Chapter Five.

As conditions change and progress is made, the strategies in this *Plan* are intended to grow and flourish—like physical greenways. The key is to begin—to move on the various fronts laid out here. As state agencies work in close cooperation with local and regional partners, the many initiatives possible under this *Plan* can be expected to gain momentum and prove to be mutually reinforcing.

Greenways Program Goals

Key to the development of this *Action Plan* was the identification of the core needs, opportunities and issues that a greenways program must address. The involvement of the public, stakeholders, state agencies and the Commission had a common thread—the aim of determining those initiatives with the greatest potential for positive effects on greenways development. The goals and strategies presented here are directly responsive to the input received.

This dialogue resulted in the identification of four goals for Pennsylvania's greenways program, each of which is required for successful implementation of the greenways vision. These are:

Greenways Program Goals

Plan and Establish Greenways Connections

Create a Greenways Organizational Framework

Provide Greenways Funding

Provide Greenways Technical Assistance and Outreach

Goal: Plan and Establish Greenways Connections: Establish a physical network of greenways throughout the Commonwealth.

A major starting point for developing a statewide greenways network will be the strong and consistent integration of greenways into regional and local planning. Although greenways planning is already taking place in Pennsylvania, progress to date is uneven. Given the potential for greenways in Pennsylvania, one should reasonably expect a larger number of greenways initiatives and planning than is currently seen. Only four out of 67 counties have adopted greenways plans, and only a few municipalities have done so.

> "Preserving open space (i.e., parks, recreation areas, historic and scenic resources, greenways, and forests) was also a high priority for creating livable communities."
>
> ***Source:*** *Pennsylvanians Speak: Sound Land Use Forums Report, January 2000, ExecSum.*

Pennsylvania's strong, extensive municipal government structure makes it imperative to create a statewide program that fosters and supports local and regional planning and projects, rather than a program that is imposed "top down" from the state level. The network must be built from the "bottom up."

Statewide planning for greenways in Pennsylvania is complicated by the diversity of greenways projects being undertaken throughout the Commonwealth—a single planning process at the state level cannot efficiently address all types of greenways. At the local and regional levels, however, planning can easily be adjusted to accommodate a variety of greenways.

At the state level, a strong program is needed to support the successful planning and implementation of greenways through county and local planning efforts. State government can provide the tools, training, technical assistance and financial support for development of greenway plans at the local, county and regional levels. These greenway plans can then be utilized to drive both state and local efforts to develop the statewide network.

By gaining the "buy-in" of local greenways supporters, this *Action Plan* can create an environment of cooperative partnerships at the local level. This approach builds on progress made in creating greenways in Pennsylvania by enhancing the process with additional resources and tools. All of these suggestions are targeted to address the needs of the people and organizations that build greenways.

Goal: Create a Greenways Organizational Framework: Create a framework to enable coordination of the activities of state agencies and stakeholders.

A goal of this *Action Plan* is to establish a central organizational structure or focal point for greenways activity. Unlike other states with successful greenways programs such as Florida and Maryland, Pennsylvania currently lacks such a structure. The strategy that is associated with this goal, described in the next chapter, recommends that a division be created within DCNR to coordinate greenways activities and provide technical assistance to local greenways partners.

From a review of existing policies and practices of state agencies, and information gathered from greenways stakeholders, it is clear that the Commonwealth has a number of supportive programs that can facilitate greenways development. Coordination of these programs can be challenging given the numerous interest groups, more than 2,600 municipalities, many county and regional planning commissions, and multiple state agencies that may be involved in greenway projects.

In addition, staffing constraints may limit the ability of state agencies individually to provide technical support and greenways informational materials. Pennsylvania needs an operating framework to bring greenways information and resources under one roof to establish a coordinated approach in serving the needs of local and regional governments, local project sponsors and the general public.

Goal: Provide Greenways Funding: Develop and implement a greenways funding strategy.

Currently, Pennsylvania has no dedicated funding source for greenways, and so an important goal is to establish a significant level of state funding to leverage corporate and other funds. Several opportunities exist to effectively coordinate and combine funding from a variety of sources. By pooling the funds from existing state programs and adding new funding from future programs, the state could more effectively meet the growing demand for greenways and greenways-related programs. Several other opportunities exist to creatively leverage existing funding, match public dollars with private donations, and provide funding for the maintenance of greenways.

Goal: Provide Technical Assistance and Outreach: Build the capacity of all greenways partners by creating a broad program of technical assistance and support.

Pennsylvania has often marshaled its resources to assist in developing plans and implementing such projects as the Main Street program and the PennDOT bicycle and pedestrian program. The final goal of this *Action Plan* is to assure the state's commitment to assist local greenways developers through a wide range of state government resources. This will include technical assistance and technology transfer, training, a dynamic greenways clearinghouse, outreach and education activities, and cooperation with local interests to support project development. It also will include greenways promotion and marketing, with the goal of creating broad public support for greenways implementation and use.

Greenways Implementation Strategies

In addition to these four goals, 12 major strategies with corresponding actions were developed. Collectively, these strategies and actions create a comprehensive greenways program for Pennsylvania. These actions establish an implementation framework for a strong commitment to planning, promoting and establishing greenways throughout Pennsylvania.

The actions also address roles, responsibilities and initiatives for all greenways stakeholders, from local project sponsors to state agencies.

Each of the strategies identified as critical to the success of the greenways program is summarized below, along with accompanying targets that set desired outcomes. Each is discussed in detail in the sections of the following chapter.

GOAL: PLAN AND ESTABLISH GREENWAY CONNECTIONS

1. "Hubs and Spokes"—A Statewide Network of Greenways: Establish a statewide greenways network of "hubs" (parks, forests, game lands, conservation areas, historical, cultural and recreational sites, communities, etc.) and "spokes" (connecting corridors such as land and water trails, natural corridors, etc.) that includes greenways of statewide significance, as well as local and regional greenway networks.

2. Greenway Plans—Greenprints for Growth: Promote the development of "greenway plans" by county and local governments as an integral part of their comprehensive planning and implementation efforts, encouraging them to link greenway concerns with programs that address sound land use, community revitalization, recreation needs and open space protection.

3. Places for All People: Increase opportunities for diverse populations to enjoy greenways across rural, suburban and urban landscapes, including motorized and non-motorized recreational users, persons with disabilities, and all cultural and ethnic groups.

4. Pennsylvania Wellness: Actively involve the health community in greenways to promote physical activity and mental wellness in the Commonwealth.

5. Alternative Transportation: Develop a trails system that provides transportation alternatives to the automobile, and is part of a comprehensive multi-modal transportation system.

6. Natural Resource Protection: Promote strategically located greenways that protect the Commonwealth's natural resources and environmental quality.

GOAL: CREATE A GREENWAYS ORGANIZATIONAL FRAMEWORK

7. Greenways Organizational Structure: Issue an Executive Order (or amend Executive Order 1998-3) that establishes the Department of Conservation and Natural Resources (DCNR) as the lead agency for Greenways Program implementation; creates an Interagency Coordination Team; encourages agencies to integrate greenways into their policies and programs; and restructures the Greenways Partnership Commission and the Greenways Partnership Advisory Committee.

GOAL: PROVIDE FUNDING FOR GREENWAYS

8. Greenways Funding: Assemble public and private funds that assist in planning, building and maintaining greenways, and in meeting grant requirements for local matches.

GOAL: PROVIDE TECHNICAL ASSISTANCE AND OUTREACH

9. Greenways Toolbox: Develop a toolbox for all those involved in greenway implementation that includes technical resources for developing greenway plans, assembling "best practices" and addressing pressing needs such as liability mitigation and design standards.

10. Greenways Education and Training: Incorporate greenways training into existing education programs for greenway partners and establish a strategy to integrate greenways into environment and ecology coursework for teachers and students of all ages.

11. Greenways Promotional Campaign: Enhance Pennsylvania's economy and tourism by showcasing its greenways in a promotion and marketing campaign that informs residents and visitors of the opportunities and benefits of greenways.

12. The Greenways Volunteer Network: Establish a corps of volunteers of all ages to maintain and promote local greenways through an "Adopt-a-Greenway" Program.

Chapter 5

12 Strategies for Implementation

Introduction to the Strategies and Actions

"I would like to see a statewide system of greenways all connected."

Source: *Open House Attendee*

The following sections present the 12 strategies and corresponding actions that comprise the *Action Plan* for the Pennsylvania Greenways Program. For each strategy, a description is provided along with a listing of the anticipated benefits. Also provided are specific actions that are required to implement the strategies. The targets suggested for each action recommend time frames for implementation and major milestones. The order and priority for actions will be determined as opportunity and resources allow.

The strategies, listed in an order corresponding to the four goals described in Chapter 4, and are not presented in any priority order. They are numbered for ease of reference. Together, the strategies, actions and targets represent a coordinated program, each part of which contributes to the success of the others.

Plan and Establish Greenways Connections

1. "Hubs and Spokes"– a Statewide Network of Greenways

OVERVIEW:

Establish a statewide network of greenway "hubs" (such as national, state, or local parks, forests, game lands, historical, cultural and recreational sites, community facilities, etc.) and "spokes" (connecting corridors such as water trails, natural corridors, hiking and bicycling trails, etc.) that includes greenways of statewide significance, as well as local and regional greenways networks.

To begin to realize the vision of a network of greenways across Pennsylvania, existing and planned greenways should be identified and documented through the development of a Greenways Geographic Information System (GIS) for Pennsylvania. Information about local and regional greenways can be collected through the Greenprints for Growth Strategy, which recommends that each county, or participating municipalities and regional organizations, map their "green infrastructure" of greenway hubs and spokes.

In addition to local and regional greenway hubs and spokes, the statewide network of greenways also should include greenways of statewide and even national significance. These are greenways that make connections beyond regional boundaries, connect major destinations or provide long-distance recreational opportunities. They will form the "spine" of the statewide network of greenways to which regional and local greenways can connect. Information about greenways of statewide significance may be collected through a variety of methods under the direction of DCNR, including review of local, county and regional greenways plans, as well as greenways-related programs of government agencies. Greenways of statewide or national significance also should be documented in the Greenways GIS, and may be separately depicted in a "map of greenways of statewide significance."

After these two levels of greenways are identified and mapped, a gap analysis may be conducted to determine where to place emphasis to establish a comprehensive network of greenways throughout Pennsylvania. Establishing this comprehensive network of greenway hubs and spokes will help to preserve a green infrastructure for future generations and provide "green" connections for people and wildlife.

Target

Statewide Greenways:

- 2002: Map of Statewide Significant Greenways presented.
- 2003: Greenways GIS comes online.
- 2010: 25% of the Statewide Significant Greenways completed.

Local and Regional Greenways:

- 2007: A greenways demonstration project selected and underway in every county.
- 2010: Establish local greenways in 1,000 communities.
- 2020: Establish a local greenway in every community.

Greenways of Statewide Significance: Greenways that make connections beyond local and regional boundaries; connect major destinations or "hubs"—such as large public natural lands, communities, cultural or historic sites of statewide or national significance; provide long-distance recreational opportunities; or are "scenic byways" (if such a program is developed)—are examples of "greenways of statewide significance." Greenways that help to conserve or protect major rivers or significant natural areas key to Pennsylvania's environmental integrity also may be considered as greenways of statewide significance. These greenways will form the "spine" of the statewide network of greenways to which local and regional greenways networks may connect. Other examples of greenways of statewide significance could include multistate greenways (e.g., Appalachian Trail, East Coast Greenway, Millennium Trails), Pennsylvania Heritage Parks, significant rivers and water trails (e.g., Susquehanna, Allegheny and Delaware rivers), multiregional trails (e.g., The Great Allegheny Pass), etc. These greenways should be depicted on a map that can inform greenways planning throughout the Commonwealth.

Local and Regional Greenways Networks: A major goal of the Greenways Program will be to identify and encourage linkages between and among local and regional greenways, placing them in a wider context. Local initiatives create important community connections to local destinations such as public lands, town centers, neighborhoods and schools, and between natural areas, wildlife habitats and environmentally sensitive areas such as critical habitats, floodplains, wetlands or streams. Local and regional greenways networks also may include roadways that are improved to better accommodate bicycles and pedestrians. These local and regional greenways apply to urban, suburban and rural environments, and should be reinforced with technical and financial support through the Greenways Program. Opportunities to extend these connections beyond the local or regional boundaries will be recognized and encouraged as gaps are identified and the statewide network of greenways is established.

Partnerships and Roles: Establishing a statewide network of greenways is the collective responsibility of state, regional and local governments, and their nongovernmental partners. The Commonwealth's role will be to coordinate an integrated statewide network that emerges from identification of existing and planned greenways – from local greenways to those of statewide significance. The process includes collecting greenway "hubs" and "spokes" data into the Greenways GIS, analysis of gaps, identification of priorities and initiation of demonstration projects. Each step will require the collaboration of

greenways partners—state and local, public and private. Coordination of all greenways partners will be an important function of DCNR, along with periodic reporting on the status of the Greenways Program.

Acquisition, ownership and maintenance of greenways in the Pennsylvania greenways network may be public or private, or a combination. Affected private landowners should be consulted when a greenway is first proposed, and their participation in the planning process is vital to project success. Their rights and concerns should be respected throughout the process of establishing greenways. Local governments, quasi-public organizations and nonprofit groups should cooperate to determine greenways acquisition, ownership and maintenance strategies. There may be circumstances where the Commonwealth may play a larger role in acquiring, owning or maintaining greenways that have been identified as greenways of statewide significance, and state agencies should examine their potential for ownership. Opportunities also may arise for state acquisition of sites that may become greenway hubs. Through partnerships among state and local government, non-profit organizations, and private landowners, appropriate implementation strategies for key components of the statewide network of greenways can be determined.

BENEFITS:

- Provides vision and long-term direction.
- Provides greenways opportunities for recreation, fitness, transportation, and protection of open space, critical habitat and environmentally sensitive areas.
- Demonstrates the Commonwealth's commitment to work with regional and local government to build a statewide network of greenways.

- Uses a powerful tool, GIS, to identify and map greenways.
- Encourages collaboration among state, local and nongovernmental greenways partners.
- Positions Pennsylvania to be a national leader in the development of greenways.

ACTIONS:

1. Develop a map of the greenways of statewide significance.

Greenways of statewide significance make connections beyond regional boundaries, connect major destinations or provide long-distance recreational opportunities. A map of these statewide significant greenways should be developed to identify and delineate the spine of the statewide network of greenways. This initiative should be spearheaded by DCNR in partnership with other state agencies, regional planning organizations, adjacent states, federal agencies and nongovernmental greenways partners. The map should include examples of every type of greenway. Special attention should be given to greenways that link urban, suburban and rural centers, natural areas, recreation, historic and cultural sites, and to projects

that incorporate restored brownfields. This map will begin to depict Pennsylvania's greenways vision and can be an impetus to build a robust network of greenways. It should be widely distributed by DCNR and by regional and local planning organizations, and can be used for planning, marketing and coordination by all greenways partners. The map should be updated periodically as the greenways network grows.

2. Establish partnerships with federal and state agencies, and other managers of land and cultural sites that comprise the hubs and spokes of the statewide network of greenways.

DCNR should encourage participation in land acquisition and facilities development for greenways of statewide significance. National and state forests, game lands, headwaters and lakes are important hubs in the statewide network of greenways. DCNR could work with respective federal and state agencies to include these important hubs in the statewide network. Coordination with greenways efforts of adjacent states also can provide mutual benefits. While many of these "hubs" support greenways-based recreation, others may require physical (trail construction) or policy (user policies) updates to support their connections to the statewide network. The coordination required as part of this effort can be achieved largely through the participation in the Greenways Interagency Coordination Team (described in the Greenways Organizational Structure Strategy).

> "Meaningful regional planning and cooperation [would best serve greenway projects]."
>
> ***Source:*** *Open House Attendee*

3. Collect and organize "hubs and spokes" data in a powerful GIS format.

GIS can provide a platform for tracking these greenways networks over time. DCNR should work with the Governor's Center for Local Government Services, DEP and other state agency partners initiating or maintaining GIS resources to develop a GIS capable of displaying and analyzing information about greenways across the state. A key data source will be counties, participating municipalities and regional organizations developing "greenway plans," as described in the Greenprints for Growth Strategy. Also important will be state and federal data collected on greenway hubs and spokes such as federal lands, state parks, game lands and recreation efforts, conservation areas, critical habitats, prime agricultural resources, flood plains, and watershed information. Additionally, the greenways of statewide significance should be represented in the GIS along with supporting information. Please refer to the technical memorandum on GIS for more information.

4. Perform a "gap" analysis using the GIS data to identify potential "preferred" connections.

DCNR should analyze the initial GIS data collected and create a baseline map of existing and planned greenways networks throughout the state. Several map layers may be necessary to emphasize different types of greenways and their associated connections. This mapping effort may be done in collaboration with non-profit organizations and institutions of higher learning. Once the baseline maps are generated, DCNR, through a consensus-building process with greenways partners, should identify where critical gaps occur in the statewide network of greenways. DCNR and its partners also should determine priorities for bridging the gaps. Results of the gap analysis should be widely distributed and this process should occur periodically as the GIS is updated.

5. Initiate demonstration projects at the county and local levels to implement key segments of the statewide network of greenways.

Within each county, at least one project should be selected to implement a key segment of the statewide network of greenways. Through gap analysis, DCNR can provide guidance in the selection of demonstration projects, with the goal of initiating these projects within seven years of launching the Greenways Program. A partnership of state, regional and local governments and nongovernmental greenways partners will be needed to accomplish these projects. Local sponsors will also need to develop a broad network of support among civic associations, parks and recreation departments, law enforcement departments, city and local planning departments, Chambers of Commerce, elected officials, business associations, managers of parks and forests, etc.

6. Establish processes for regular reporting on the progress of the statewide network of greenways.

The Greenways GIS effort will require regular review by state agencies, regional planning agencies, including Metropolitan Planning Organizations (MPOs) and Local Development Districts (LDDs) and regional or local task forces to ensure that the information reflects current activity. DCNR should track the progress of "infilling" gaps and establishing the statewide network of greenways.

7. Explore ways to maintain greenways in the statewide network of greenways.

DCNR should evaluate the costs and requirements of maintaining existing and planned greenways, and explore strategies that will address provision of this maintenance. For example, programs modeled after Business Development Districts, in which businesses and organizations that benefit from greenways participate in funding their maintenance, has been suggested. Other strategies may provide incentives for local and regional governments to maintain greenways. Strategies that can be applied to different types of greenways should be evaluated and documented through joint efforts of PennDOT, DCNR, DEP and PHMC, with assistance from other agencies. Programs can then be developed to provide guidance or direct assistance in appropriate circumstances.

Plan and Establish Greenway Connections

2. Greenway Plans: Greenprints for Growth

Target

- 2007: All 67 counties complete and adopt Greenway Plans.

Overview:

Promote the development of "greenway plans" by county and local governments as an integral part of their planning efforts to link greenways identification and implementation with programs that address "green infrastructure" identification, conservation and integration with community revitalization and economic development—the creation of "Greenprints for Growth."

The Greenways Program outlined in this *Plan* provides the resources and planning environment designed to guide and support local greenways identification and implementation efforts. County "greenway plans" can establish the local planning foundation upon which a statewide network of greenways is ultimately to be constructed.

Benefits:

- Identifies and maps existing, planned and proposed greenways in each county.
- Formalizes greenway mapping and planning throughout the state.
- Provides a framework for identification of local greenways needs.
- Promotes identification of green infrastructure, greenway hubs and spokes as a vehicle for local governments to achieve their goals for sound land use, environmental protection and enhanced quality of life.

Actions:

In general, while this strategy is directed towards planning and mapping efforts at the county level, similar to the emphasis currently placed on counties to develop "comprehensive plans" (land use and growth management plans), municipalities and regional organizations eager to plan and map their greenways also should be encouraged and supported to do so. County planning staff developing greenway plans should seek the input from all municipalities within their county and should recognize the greenway plans that have been developed by their municipalities. Similar to "comprehensive plan" development in some areas of the state, some counties may defer their greenways planning efforts to regional planning organizations. Regional planning organizations also should seek the input of the municipalities within their region. In addition to county greenway planning efforts, participating municipalities and regional organizations also should receive funding and technical support.

1. Provide training and technical assistance to county and local governments and planning officials.

The Greenways Education and Training and Greenways Toolbox Strategies, advanced later in this *Plan,* will provide county and local governments with the information and tools they need to successfully identify their greenways and develop "greenway plans." Background information, such as what comprises greenway hubs and spokes (green infrastructure), how to plan and map greenways, the benefits of establishing greenways, and the goals of the Greenways Program, will be included in the training. Tools or training aids such as a GIS Starter Kit and a "best practices" inventory can provide planners with the technical support they will need to develop their greenway plans.

2. Encourage every county to prepare a "greenway plan."

The Greenways Program should provide resources, both financial and technical, for all of Pennsylvania's 67 counties to develop and adopt "greenway plans" by 2007. DCED, DCNR and DEP should work together to facilitate and fund the counties' identification and documentation of greenway hubs and spokes. These greenway plans should be done in coordination with other comprehensive planning efforts to identify parks, recreation and open space, document conservation lands, and identify areas where development should be encouraged. The goal is to identify green infrastructure and form a true picture of existing and planned greenway hubs and spokes, in coordination with sound land use planning initiatives. Plan components should include:

> "[The] area [or region of my conservancy] lacks a shared perception of the danger of sprawl/growth in a 'no plan' [(no comprehensive planning)] environment."
>
> ***Source:*** *Open House Attendee*

- Inventory of existing and planned greenway spokes (connecting corridors such as natural corridors along rivers, hiking and biking trails, water trails, etc.).
- Identification of land uses that may be considered greenway "hubs" such as natural areas (parks, forests, game lands, wildlife refuges, bodies of water, wetlands, floodplains, steep slopes, scenic view sheds, and prime agriculture lands), cultural, historical and recreational sites, and urban and suburban areas (communities, neighborhoods, schools, senior centers and housing, etc.).
- Identification and prioritization of potential greenways that could provide recreation, protect natural and cultural resources, and make connections—people to facilities, people to natural areas, and wildlife to natural areas.
- Identification of the top five natural resource areas that need to be protected through a greenway, such as streams and their buffers, 100-year floodplains and habitats of threatened or endangered species.

- Identification of the top five historical and cultural resources that need an enhanced connection or need to be protected through a greenway.
- Inventory of scenic resources or view sheds for connection to or protection through a greenway.
- Identification of opportunities for incorporating greenways into proposed development projects and redevelopment of brownfield sites.

This greenways identification and planning initiative should be fully coordinated and integrated with the land use planning efforts of the Governor's Center for Local Government Services and should achieve the following objectives:

- Extensive public involvement during the development of the "greenway plans."
- Identification and mapping of greenway hubs and spokes should be accomplished in a format compatible with the Greenways GIS initiative, should be incorporated into the statewide GIS database and should be easily accessible to all greenways partners.

- Coordination with local and regional planning initiatives including comprehensive plans, zoning ordinances and recreation/open space plans.
- Coordination with the planning initiatives of surrounding counties and regional planning organizations (MPOs and LDDs).
- Greenway plans should be updated every five years and should supplement the statewide GIS repository.

3. Encourage the formation of regional or local task forces to take ownership of greenways planning and establishment.

Greenways advocates should be encouraged to unite and form task forces that take ownership for identifying greenways needs, guiding greenway plans, implementing greenways, and seeking project funding contributions as required by grant programs. County planning staff and local governments should take advantage of the commitment of these task forces and involve them in the development of greenway plans. The Greenways Program could recognize and reward a task force's dedication to a greenway project with special assistance and resources. DCNR and its greenways partners may consider also could set up an awards program to recognize the accomplishments of task force volunteers. Additionally, task forces could designate a representative to serve on the reconstituted Greenways Partnership Advisory Committee (as described in the Greenways Organizational Structure Strategy) to act as a conduit for information from the state level.

Plan and Establish Greenway Connections

3. Places for All People

OVERVIEW:

Increase opportunities for diverse populations to enjoy greenways across rural, suburban and urban landscapes, including both motorized and non-motorized recreational users, persons with disabilities, and all cultural and ethnic groups.

Land- or water-based, the Statewide Network of Greenways should strive to meet the outdoor recreation needs of all Pennsylvanians. The Greenways Program should seek to engage the participation of diverse populations in promotion and implementation of greenways, provide resources for all types of outdoor recreation, and accommodate all types of users.

Target

- 2003: Complete a Statewide Comprehensive Outdoor Recreation Plan.
- 2004: Complete a Motorized Recreation Study.
- 2005: Designate 1,000 miles of water trails.
- 2010: Designate 2,000 miles of water trails.

BENEFITS:

- Provides every Pennsylvanian with a place to recreate.
- Responds to the recreational demand of Pennsylvanians.
- Promotes cooperation among greenways user groups.
- Improves the quality of life found in Pennsylvania communities.

ACTIONS:

1. Complete a Statewide Comprehensive Outdoor Recreation Plan.

Recent interest in greenways-based recreation has skyrocketed across the Commonwealth, with an estimated development of 100 new miles of rail-trails each year and conservation of many acres of greenways. The synergy created through implementation of the *Action Plan* will likely bolster local interest in greenways. With increased interest often comes increased use. Guidelines are necessary to establish the most efficient use of funding to meet public needs. DCNR should develop a statewide comprehensive outdoor recreation plan that analyzes the supply and demand for greenways-based recreation facilities. Under-served user groups and geographic

areas would be identified as part of this study, which would allow local greenways development to be targeted to particular user groups or certain geographic locations. Additionally, the plan should assess where conflicts exist on multi-use greenways and identify opportunities for resolving them.

Aside from gaining an understanding of greenways-based recreation in Pennsylvania, the outdoor recreation plan could justify resource increases needed to service an increase in demand. The plan, to be conducted through a partnership of state agencies, educational institutions, local governments and the general public, would address the following questions:

- What types of outdoor recreation are popular in the Commonwealth?
- Where are Pennsylvanians pursuing particular types of outdoor recreation?
- How many Pennsylvanians are currently using certain outdoor recreation facilities?
- How many Pennsylvanians are projected to partake in outdoor recreation?
- Does the existing greenways network adequately serve the demand for outdoor recreation activities?
- Does the existing greenways network adequately meet the needs of various types of user groups?
- Where do significant conflicts exist on multi-use greenways?
- Where are additional greenways needed to satisfy increasing or unmet demand?

2. Develop an interagency plan to accommodate the needs of motorized users.

Although the Statewide Comprehensive Outdoor Recreation Plan should include motorized recreation, a special effort should be made to analyze current increases in demand for motorized recreation and to evaluate strategies to address the increasing demand and conflicts among greenways uses. Registration of all-terrain and off-highway vehicles (ATV and OHV, respectively) has grown from 60,000 to 80,000 in just two years. The increase in registrations has not been accompanied by an increase in new facilities designated for motorized recreation, despite the revenue generated by registration fees. The needs assessment should quantify the demand for motorized recreation and lead to the creation of an interagency plan that provides new opportunities for motorized recreation.

"[I] would like to see more ATV Trails. I'm a new rider and can't find any place to ride."

Source: *Open House Attendee*

3. Designate 1,000 miles of water trails through Pennsylvania in five years and 2,000 miles in 10 years.

This goal is intended to enhance public access for experiencing and enjoying Pennsylvania's waterways. The Pennsylvania Fish and Boat Commission (PFBC) and DCNR will continue to encourage local partnerships to expand and enhance the Commonwealth's network of local water trails. The PFBC will provide technical assistance and DCNR will make funding available through its grants program for water trail development.

The target for this action, establishing 1,000 miles of water trials by 2005 and 2,000 miles by 2010, exceeds the water trail goal established in the Chesapeake Bay 2000 Agreement. This Agreement serves as a blueprint for a multi-state effort to restore the Chesapeake Bay and was signed by Pennsylvania in 2000. The Agreement includes its own water trail goal of increasing designated water trails by 500 miles by 2005.

This action may include designating, mapping, and promoting the water trails. Accounting aspects of this action may include a tracking system to identify existing and proposed trails, preparing a water trails map and report outlining the total number and length of all designated water trails, and coordinating with federal and state agencies and local governments to enhance communication and cooperation in the identification and development of water trails.

4. Focus demonstration projects on meeting the identified needs of under-served or under-represented user groups.

As described in the Hubs and Spokes strategy, a demonstration program will stimulate development of key greenways to enable rapid implementation of the network. Special user group needs and greenways facilities identified in the Statewide Comprehensive Outdoor Recreation Plan should be regarded as strong candidates for the greenways demonstration program and be granted appropriate preferences in the application review process.

Plan and Establish Greenways Connections

4. Pennsylvania Wellness

Overview:

Actively involve the health community in greenways development to promote physical activity and wellness in the Commonwealth.

Most Pennsylvanians are aware of greenways' environmental benefits, yet do not recognize greenways for their benefits to health and wellness. This strategy encourages the development of greenways to promote physical activity and wellness programs for people of all ages in Pennsylvania's communities.

Benefits:

- Promotes physical activity and improved health through the use of greenways.
- Enhances greater public support and interest for greenways consistent with the public's growing interest in fitness.
- Provides for expansion of the greenways partnership base—as hospitals, HMOs and other health-related organizations become logical partners in the promotion and development of greenways.
- Increases development of greenways with a focus on health and wellness.

Target

- 2002: Integrate greenways into the State Health Improvement Plan.
- 2003: Undertake the Greenways and Healthy Communities initiative.
- Annually: Work with community–based health improvement partnerships to support and promote greenways with a physical activity focus.

Actions:

1. Include greenways in the State Health Improvement Plan.

The first State Health Improvement Plan developed by the Department of Health in 1999 outlined a process and action plan for establishing public/private partnerships to improve the health of residents of the Commonwealth's communities. The report includes objectives that seek to decrease the incidence of common health problems such as obesity and cardiovascular disease. Greenways can provide "close-to-home"

> "Given the numerous health benefits of physical activity, the hazards of being inactive are clear. Physical inactivity is a serious nationwide problem. Its scope poses a public health challenge for reducing the national burden of unnecessary illness and premature death."
>
> ***Source:*** *Physical Activity and Health. A Report of the United States Surgeon General, 1996.*

opportunities for residents to engage in physical activity, which reduces the risk of such diseases. The Department of Health should update the State Health Improvement Plan to promote the use of greenways as an effective strategy to improve the health and quality of life of Pennsylvanians.

2. Undertake a Greenways and Healthy Community Initiative.

DCNR, the Department of Health, the Commission and the Governor's Council on Physical Fitness and Sports should combine forces to initiate an outreach campaign aimed at promoting greenways. Healthy Community Initiatives seek to fulfill the overarching goal of the State Health Improvement Plan—to create community partnerships that work together to improve the health status of residents in Pennsylvania communities. The Initiative should emphasize the links between greenways-based physical activity and weight loss, disease prevention, mental health and longevity. Targeted audiences for this outreach plan could include:

- Community health improvement partnerships
- Elder care facilities
- Health care facilities
- Schools
- County and local governments.

3. Partner with community-based health improvement partnerships to support and promote greenways development in communities throughout the Commonwealth.

The Department of Health regularly works with community-based health improvement partnerships to improve health and wellness in local communities. Each partnership takes a

broad view of health and wellness and sets health priorities that respond to local issues. The Department of Health should encourage these community partnerships to take the lead in supporting and promoting local greenways.

4. Revise applicable health-related funding programs to include greenways projects.

Traditionally, greenways may have been considered unrelated to health improvement; however, with the growing recognition of greenways as "close-to-home" facilities for increasing physical activity within communities, the link between greenways and health improvement is becoming increasingly clear. In support of this realization, the Department of Health and the Governor's Council on Physical Fitness and Sports should evaluate and revise their current funding programs to include support for the planning and development of greenways.

Plan and Establish Greenways Connections

5. Alternative Transportation

Overview:

Develop a trails system that provides opportunities for transportation alternatives to the automobile, and is part of a comprehensive multi-modal transportation system. Trails provide opportunities for travelers to use alternative modes for all types of trips. Pennsylvania's transportation system will function at its peak only when all modes of transportation are accommodated and linked.

Benefits:

- Helps to revitalize downtowns and urban centers through convenient, auto-free access.
- Mitigates and reduces congestion.
- Reduces maintenance and investment costs for roadways.
- Optimizes and enhances transit system usage.
- Reduces dependence on oil products.
- Reduces environmental impacts and improves air quality.

Target

- Annually: Construct or enhance 100 miles of bicycle and pedestrian facilities (trails, roadway shoulders, on-road bike lanes and sidewalks).
- Annually: Increase bicycle accessibility of transit systems by 5% (translates to 2-3 transit providers per year).

Actions:

1. Leverage mitigation funds for greenway projects.

Developers of transportation projects with irreconcilable impacts on the environment are often required to pay for mitigation actions that enhance the environment of the surrounding area. These mitigation actions could include establishing greenways as remediation for the impacts of certain transportation projects. A "greenways banking" concept, following the model provided by wetlands banking, could be examined as an option to allow greenways to be established in one area to compensate for environmental impacts in another area. Additionally, Congestion and Air Quality funds could be leveraged to establish or develop greenway projects with identified transportation functions that reduce traffic congestion.

2. As a continuation of ongoing bicycle and pedestrian planning efforts, PennDOT should encourage all regional planning agencies to have up-to-date trail and bicycle and pedestrian plans.

Each MPO and LDD in the state developed a bicycle and pedestrian transportation plan as a component of the Statewide Bicycle and Pedestrian Master Plan. PennDOT should encourage MPOs/LDDs to keep these plans current

with regular updates that address greenways and trail-based transportation alternatives.

3. Initiate use of the "bicycle and pedestrian checklist" for all appropriate PennDOT transportation projects.

Developed as part of the statewide Bicycle and Pedestrian Master Plan, the "bicycle and pedestrian checklist" includes a comprehensive listing of the needs of pedestrians and cyclists that should be considered in appropriate transportation projects. Greenways and trail facilities would benefit from use of this procedure, designed to recognize cyclists and pedestrians as the most basic component of any transportation system.

4. PennDOT projects should ensure appropriate access to greenways.

Sometimes access to greenways is not accommodated in the design, construction, and maintenance of roadway systems, and as a result, opportunities for greenways to connect to neighborhoods, commercial and institutional facilities are lost. Where reasonably possible, PennDOT should ensure that access to greenways is provided and maintained for all the construction, reconstruction and maintenance activities they manage. These access points should be at distances appropriate for the potential use of the greenway.

5. PennDOT's Bureau of Public Transportation should consider development of a statewide plan for installing bike racks on buses.

Public transit's successful accommodation of cyclists increases the chances that greenways facilities will be used for transportation purposes. Through the use of transit enhancement funds, bike racks could be purchased to outfit bus fleets where opportunities for bicyclist internodal transport exist. In addition, PennDOT should consider developing guidelines for all new transit buses to include bike racks as part of this initiative. A statewide promotional campaign could be used to launch the program and promote the use of the racks by cyclists.

6. In appropriate regions, ensure that transportation planning efforts examine the potential for water-based transportation.

PennDOT should encourage Long-Range Transportation Improvement Plans prepared by regional planning agencies to have a water-based transportation element that addresses any potential applications. "Blueways" (waterways) can offer unique opportunities to serve a region's transportation needs. For example, Pittsburgh's commuters are shuttled via ferry across the river from remote parking areas in Station Square. In some instances, water-based transportation systems can be linked to terrestrial greenways systems that also serve transportation functions.

> "In fact, transportation projects are expected to include restoration and even improvement of the environment."
>
> ***Source:*** *PennPlan Moves!, January 2000, p. 39.*

Plan and Establish Greenways Connections

6. Natural Resource Protection

Target

- 2010: Add 600 miles of riparian buffers and work to conserve all existing buffers.
- 2010: Incorporate green opportunities into 20 brownfields and integrate the sites into a local greenway network.

Overview:

Promote strategically located greenways that serve to protect the Commonwealth's natural resources and environmental quality.

Although most greenways provide environmental benefits, some greenways have a primary function of protecting the environment or conserving natural resources. These types of greenways may provide corridors or connections between natural areas and expand species' habitat range. They may protect natural corridors such as river systems, or protect agricultural lands by providing buffers and conserving soils. The environmental benefits of greenways in urban areas include protecting floodplains inappropriate for development, and absorbing and filtering stormwater in developed areas.

The establishment of these types of greenways should complement other programs targeted to protect and conserve Pennsylvania's environmental and natural resources in urban, suburban and rural areas. Both public and private lands can be important greenways components. Because some greenways have important environmental benefits, it may be appropriate in some circumstances to limit public access to these greenways to avoid degradation of environmentally sensitive areas.

Benefits:

- Mitigates development impacts. Meets sound land use objectives.
- Improves water quality by buffering the impacts of non-point source pollutants.
- Preserves environmentally sensitive areas such as wetlands, floodplains, steep slopes, groundwater recharge basins, prime agricultural soils and riparian buffer zones.
- Protects natural areas that have rare, threatened or endangered species. Provides wildlife habitat and travel corridors, mediating fragmentation.
- Promotes biodiversity.

ACTIONS:

1. Include applicable elements of the Greenways Program in DEP's Stream Re-Leaf Program and the Department of Agriculture's Conservation Reserve Enhancement Program (CREP).

DEP's Stream Re-Leaf Program encourages partnerships at the local level to restore and conserve streamside buffers that improve water quality. Similarly, the Department of Agriculture's CREP provides farmers with compensation for taking marginal lands out of production and putting them into a conservation use. Both programs provide opportunities for using greenways to protect critical aquatic and terrestrial habitats while simultaneously protecting water quality. Lands included in these programs should be documented on county or local greenway plans.

2. Integrate the Pennsylvania Natural Diversity Index (PNDI) and the findings of other critical natural resource programs into the Greenways GIS.

The PNDI is the repository of known information on the location of threatened and endangered animal and plant species throughout the Commonwealth. The PNDI is commonly consulted during major development projects to ensure that threatened and endangered species are not adversely affected. DCNR, DEP, the Western Pennsylvania Conservancy and The Nature Conservancy should work to identify critical or sensitive habitat areas, derived from the PNDI, as a key component of the Greenways GIS. Additionally, information from other statewide and national conservation and natural resource programs that identify critical natural resources should be integrated in the greenways GIS, subject to appropriate safeguards on confidentiality. This information also can be used to manage existing greenways. This information is especially important for local project sponsors planning or establishing greenways that buffer, protect or connect critical habitats.

> "We would like to see the state [Action] plan promote the concept of creating recreation trails as separate from wildlife corridors."
>
> ***Source:*** *Open House Attendee*

3. Incorporate green opportunities into brownfield redevelopment projects.

DEP's Land Recycling Program identifies strategies to recycle old or abandoned industrial sites into economically viable properties or public open space. One successful strategy used along several of the state's once industrialized but now abandoned riverfronts establishes mixed-use development that integrates residential and commercial uses with green infrastructure including greenways, parks and open space. DEP is working in partnership with DCNR to identify areas of the state ripe for this type of redevelopment. DEP and DCNR should continue to work as partners to emphasize the benefits and importance of incorporating "green" opportunities into the redevelopment of brownfield sites and, where possible, integrating them into local greenways networks.

4. Use county and local "greenway plans" as a vehicle to inventory and protect natural resources.

As previously noted, county greenway plans should include an inventory of the county's environmentally sensitive areas and critical habitats. Counties can use greenways as a mechanism to encourage protection of natural resources and connection of open space. Greenway plans also can serve as a foundation to develop municipal zoning and subdivision ordinances that promote the use of greenways for conservation and sound land use practices.

5. Conduct a study of critical habitat locations and potential manmade conflict points (such as roadways, dams, utilities, etc).

Conflicts between wildlife and humans have become increasingly common as development pressures have reduced critical wildlife habitats or have fractured travel corridors. Automobile and wildlife collisions, nuisance complaints and the spread of disease are among the results of this unfortunate situation. Greenways can alleviate these problems by connecting critical habitats, providing new wildlife habitat areas, and providing for movement or migration corridors that minimize human and wildlife conflicts. The Game Commission should work cooperatively with DCNR and other relevant agencies to identify prevalent human and wildlife conflict points where greenways are a potential solution. Once identified, these locations should be integrated into the Greenways GIS and targeted for potential greenways establishment.

6. Establish greenways as riparian buffers and unimpeded floodways and floodplains through hazard mitigation programs such as the Hazard Mitigation Grant Program (HMGP), the Flood Mitigation Assistance Program (FMAP) and the Disaster Resistant Communities Program.

Riparian greenways afford flood mitigation and protection to the communities in which they are located. Greenways should be viewed as a mitigation device that can be incorporated into applicable programs of the Pennsylvania Emergency Management Agency. The HMGP, the FMAP, and the Disaster Resistant Communities Program all provide opportunities to advance greenways as effective tools for flood mitigation and protection.

Create a Greenways Organizational Framework

7. Greenways Organizational Structure

Target

- September 2001: Issue or amend the Greenways Executive Order.

Overview:

Issue an Executive Order (or amend Executive Order 1998-3) that establishes the Department of Conservation and Natural Resources (DCNR) as the lead agency for Greenways Program implementation; create an interagency coordination team; require agencies to examine their policies and programs; and restructure the Greenways Partnership Commission and the Greenways Partnership Advisory Committee.

Unlike other states with successful greenways programs such as Florida and Maryland, Pennsylvania currently lacks a central organizational structure or focal point for greenways activity. A key recommendation of this *Action Plan* is to establish a program within DCNR that will coordinate greenways activities and provide technical assistance to local, regional and state greenways partners. The creation of an interagency coordination team and a restructured Greenways Partnership Commission will provide assistance to DCNR.

Needs and Benefits:

From a review of existing policies and practices of state agencies, and information gathered from greenways stakeholders, it is clear that the Commonwealth has a number of supportive programs that can facilitate the planning and development of greenways. Coordination of these programs is cumbersome given the numerous interest groups, municipalities (over 2,600), county and regional planning commissions, and state agencies that may play a role in greenway projects. Likewise, staffing constraints limit the ability of state agencies to provide technical support and greenways information. Pennsylvania needs an operating framework to bring greenways information and resources under one roof and to establish an efficient, coordinated approach for serving the needs of local and regional governments, local project sponsors and the general public.

A successful operating framework for Pennsylvania must:

- Identify a lead agency responsible for the daily operation and coordination of the Greenways Program.
- Provide for stakeholder involvement and coordination that includes other state agencies, regional and local governments, and local greenways partners.
- Possess a strong vision for greenways implementation.

- Have staying power and some degree of permanence.
- Be highly visible.
- Be granted authority to take action and influence partners.
- Provide "value added" services.
- Have appropriate staffing and resources.
- Be accountable for all of its actions and activities.
- Provide policy direction.

The designation of DCNR as the lead agency responsible for implementing a statewide greenways program is recommended for the following reasons:

- Greenways program elements fall largely under the existing purview of DCNR – DCNR's existing programs align well with the functions and objectives of the greenways program. Existing DCNR programs, such as the Community Conservation Partnership provide funding and technical assistance for related initiatives, such as open space, parks, recreation, trails and conservation.
- DCNR's new structure supports greenways – DCNR recently reorganized its Bureau of Recreation and Conservation to include a Division of Greenways and Conservation Partnerships. This new division provides technical assistance, outreach and coordination for DCNR-funded projects. As greenways efforts increase in magnitude and scope, DCNR could explore elevating the stature of greenways within their organizational structure.

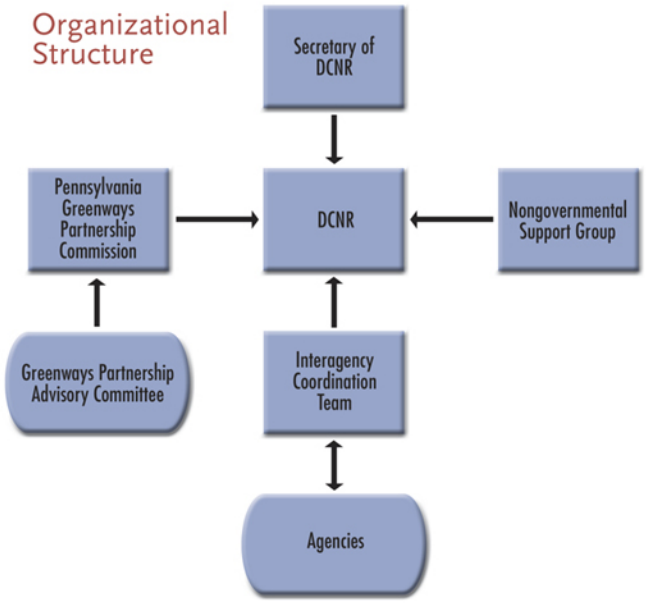
- DCNR has existing technical knowledge of greenways issues – DCNR is intimately familiar with greenways issues. DCNR's technical knowledge and wide experience across the state affords the agency the ability to deliver a successful greenways program that responds to the diverse needs of project sponsors statewide.
- DCNR management and staff are greenways supporters – DCNR personnel have expressed their willingness to spearhead implementation of the Greenways Program.
- Support for DCNR as the lead agency exists within other key agencies. Other state agencies recognize DCNR's greenways and trails aptitude and recommend a DCNR-led greenways initiative.
- Support for DCNR as the lead agency exists among other key partners, both public and private. Public and private greenways stakeholders also support DCNR's leadership role. These groups, some of whom are beneficiaries of existing DCNR programs, believe DCNR's technical competence and positive recognition by regional and local governments make the agency a favorite for leading the statewide Greenways Program.

ACTIONS:

1. Issue a new executive order that establishes a coordinated interagency approach to greenways or, if appropriate, amend Executive Order 1998-3.

Following the examples of the 21st Century Environment Commission and the Sound Land Use Initiative, the Governor should issue a new executive order or amend the existing greenways executive order (1998-3), to formally establish the organizational structure to support and encourage greenways programs throughout Pennsylvania. This organizational structure is illustrated below. The executive order should:

- Designate DCNR as the principal state entity responsible for the Pennsylvania Greenways Program.



- Establish a Greenways Interagency Coordination Team and outline its membership and functions.
- Direct state agencies to identify laws, regulations, practices or policies, including the disbursement of public funds, where their coordinated administration and strategic alteration, if appropriate, will advance Pennsylvania's Greenways Program.
- Restructure the Greenways Partnership Commission and identify its roles and responsibilities.
- Restructure the Greenways Advisory Committee and promote increased membership and participation.
- Establish annual reporting on the progress of the Greenways Program in Pennsylvania as part of DCNR's Annual Report, or in conjunction with other reporting requirements.

2. Provide DCNR with resources to implement the Greenways Program.

DCNR would require few organizational changes to lead the implementation of the Greenways Program. The newly established Division of Greenways and Conservation Partnerships is well positioned to house the Greenways Program. As greenways efforts increase in magnitude and scope, additional staff positions may be required. This new division would need to coordinate with the other divisions and bureaus within DCNR, as necessary, to enable Greenways Program implementation. Support and coordination from other state agencies would be facilitated by the newly created Greenways Interagency Coordination Team as described below.

3. Encourage DCNR to partner with various nongovernmental organizations to achieve many of the program elements outlined in this Action Plan.

Nongovernmental organizations such as stakeholder associations, universities, conservancies, land trusts and consultants have greenways expertise and resources, and can creatively support DCNR in its lead role. These organizations could carry out many of the actions described in this *Action Plan.* DCNR should explore these partnering options to minimize new state personnel investment and promote the cooperation necessary for successful implementation of the Greenways Program.

"More coordination at the state level, between DEP, DCNR, DCED and PennDOT, [is needed]."

Source: *Open House Attendee*

4. Promote coordination among the agencies through the formation of the Greenways Interagency Coordination Team.

The Greenways Executive Order should formally establish a Greenways Interagency Coordination Team, chaired and coordinated by DCNR, charged with ensuring communication and coordination among state agencies with roles in implementing the Greenways Program. Each state agency would appoint an appropriate representative to serve on the coordination team. The following state agencies would serve on the coordination team:

- PennDOT
- DEP
- DCED
- PHMC
- Department of Agriculture
- Department of Aging
- Department of Health
- Department of Education
- Governor's Policy Office
- Game Commission
- Fish and Boat Commission
- Public Utility Commission
- Department of General Services
- Turnpike Commission

The Coordination Team would convene on a regular basis to coordinate and advance implementation of the Greenways Program. Each agency would have an implementation role, but agencies with frequent involvement in greenways issues, such as PennDOT, DEP, and DCED, would play pivotal roles:

- Pennsylvania Department of Transportation – PennDOT could coordinate the allocation of its Transportation Enhancement funds with the other greenways-related programs in the state. PennDOT could provide technical assistance for greenway projects with an identified transportation (or congestion management) function. PennDOT could also integrate greenways elements into statewide, regional, county and municipal transportation planning, project development and maintenance.
- Department of Environmental Protection – DEP could coordinate the allocation of its Growing Greener funds with other greenways-related programs in the state. DEP could provide technical assistance for greenway projects that could be part of broader initiatives in watershed management, brownfields restoration, abandoned mine land reclamation and non-point source water pollution control.
- Department of Community and Economic Development – DCED could encourage the flexible and creative use of its funding sources with those of other state agencies to incorporate green infrastructure concepts and greenways in all county and local comprehensive plans, and support local greenway-related projects as they apply to sound land use and economic development. DCED could provide greenways training for county, regional and municipal planners in conjunction with its public education initiatives in land use being coordinated by the Governor's Center for Local Government Services. DCED could provide additional technical assistance for greenway projects related to economic development, travel and tourism, community development and land use planning.

Potential roles of the other members of the Greenways Interagency Coordination Team include:

- Policy and program review and reporting.
- Greenways awareness training for agency staffs.
- Information distribution and exchange.
- Education and outreach to agency constituencies.
- In-kind or volunteer services.

"Coordination between funding agencies [is needed] to make grant opportunities less intimidating."

Source: *Open House Attendee*

5. Direct state agencies to review their policies and programs and to develop implementation plans that promote greenways planning and development.

Successful implementation of the Greenways Program outlined in this *Action Plan* hinges upon agency program review and implementation of greenways concepts. Greenways must become an integral part of every key agency's daily operations. This action, to engage agencies in reviewing the impacts of their laws, regulation, programs and funding policies on greenways planning and implementation, is similar to the exercise recently completed by state agencies for the Growing Smarter land use initiative. The Sound Land Use Executive Order (1999-1) asked key agencies to conduct a review of the impact of their programs and policies on land use. The Greenways Executive Order could ask these agencies to again take a close look at their policies and programs to see how they can facilitate and not hinder greenways identification, planning, implementation and management. The Greenways Executive Order should also direct agencies to establish and implement plans that promote greenways.

For efficiency, agency reporting on greenways could be incorporated into existing reporting methods appropriate to each agency. Agency reporting may be coordinated through the Interagency Coordination Team. DCNR may include agencies' actions for implementing the Greenways Program in its annual reports. Chapter 7 lists some of the policies and programs that may require further review and may facilitate Greenways Program implementation.

6. Regional office staff of the state agencies participating in the Greenways Interagency Coordination Team will act as contacts for coordinating and providing technical assistance on greenways.

The state agencies of the Greenways Interagency Coordination Team should appoint greenways contacts in their appropriate regional offices. The contact person would be the primary point of contact for technical assistance and would be responsible for:

- Coordinating with the regional greenways programs of their agencies.
- Gathering input on program results from local greenways partners.
- Providing technical assistance to local greenway partners.
- Disseminating new information from their agencies to local greenways partners.

Appropriate state agency personnel should receive greenways training, be familiar with their agency's greenways programs, and be aware of greenway the projects in their region.

7. Reorganize the Pennsylvania Greenways Partnership Commission and the Greenways Partnership Advisory Committee.

The Governor appointed the Commission to advise DCNR, PennDOT, and DEP in the development of this *Action Plan* and to assist the agencies in implementing it. DCNR as lead agency should recognize the need for continuing this important stakeholder involvement in implementing the new Greenways Program. The new or amended executive order should enable DCNR to reconstitute the Commission and update its roles, functions and representation. Potential new roles could be:

- Monitoring implementation of the *Action Plan.*
- Providing guidance and leadership in executing strategies to support the Greenways Program.
- Serving as a resource and sounding board for DCNR.
- Continuing to provide a forum for building public/private partnerships.
- Overseeing implementation of the strategies for education, technical assistance, outreach and volunteering.
- Providing input into the reporting process.

Additionally, DCNR as lead agency should also reorganize the Greenways Partnership Advisory Committee and formulate its role as the Greenways Program unfolds. Potential new roles for this reorganized advisory body could be:

- Stimulating support for the implementation of the strategies of the Greenways Program.
- Assisting regionally with implementation of the Greenways Program.

This advisory body could meet periodically, on a regional basis, and should meet annually on a statewide basis.

8. Create a process for annual performance monitoring.

Similar to the 21st Century Environment Commission, the Governor's Center for Local Government Services' Annual Report on Land Use and the Governor's Green Government Council's Annual Green Plan, DCNR should report on the progress of the Greenways Program. For efficiency, reporting may be incorporated into existing reports such as DCNR's Annual Report. Members of the Greenways Interagency Coordination Team may submit material to DCNR to be included in reporting on the Greenways Program.

Provide Greenways Funding

8. Greenways Funding

Target

- 2002: Create the Pennsylvania Greenways Funding Guide.
- 2003: Complete a feasibility study to create a Pennsylvania Greenways Trust for assembling private dollars to leverage public funds on a 1:1match ratio.
- 2004: Identify a long-term funding stream that ensures the sustainability of the Greenways Program.

OVERVIEW:

Assemble public and private funds to assist in planning, acquiring, establishing and maintaining greenways and in meeting grant requirements for local matches. Currently the demand for funding far exceeds the supply available for greenways, and as the Statewide Network of Greenways is implemented, the demand is likely to increase. Identifying both short- and long-term funding to supplement existing programs will be necessary to increase greenways development. Ideally, these funds would be assembled through public and private partnerships.

FUNDING DEMAND:

Pennsylvania has been funding greenways projects through a number of existing programs over the past decade. Most notably, these programs include PennDOT's Transportation Enhancements Program and DCNR's Community Conservation Partnerships Program. A listing of programs is included in the technical memorandum on funding. Historically, the funding available for greenways is less than the demand. For example, in the year 2000 cycle of the Transportation Enhancements Program, greenways and greenways-related projects accounted for more than $55 million in funding applications, while only approximately $28 million was awarded (Figure 5-8.1).

> "[A] dedicated source [is needed] to fund management and implementation of greenways."
>
> ***Source:*** *Open House Attendee*

2000 Transportation Enhancements Program Summary

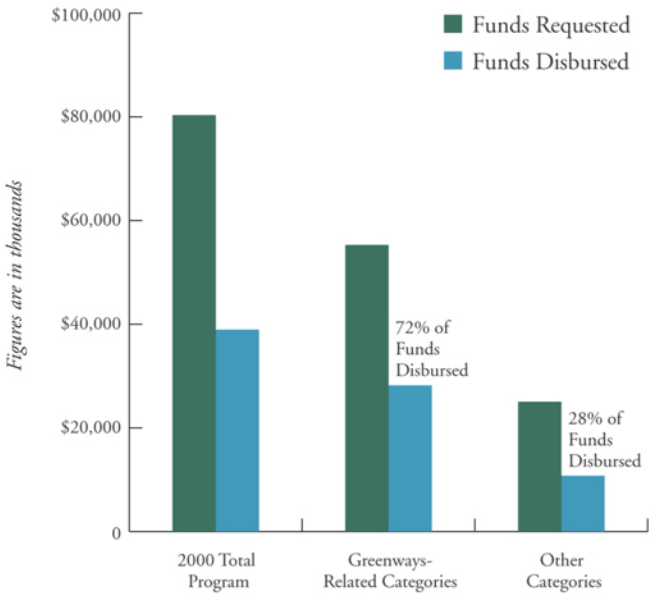


Figure 5-8.1: Demand vs. Supply for Greenways Funding in the Year 2000 Transportation Enhancements Program. (Source: PennDOT).

PennDOT disburses approximately $40 million every other year of the program, which was introduced through federal legislation in 1991 and reauthorized for another six-year period in 1997. The year 2000 funding cycle mirrors experience from previous years—only about 50% of the requests for funding were met.

The history of DCNR's Community Conservation Partnership Program (CCPP) is similar. Prior to year 2000, this funding program had been divided into the separate components: Community Recreation, Rivers Conservation, Rails-to-Trails, Land Trust Conservation, and Pennsylvania Recreational Trails. DCNR combined these components into a single Community Conservation Partnership Program application, with its funding originating from the state's Key 93, Growing Greener Program funds, and state and federal Recreational Trails funds. The CCPP includes greenways planning, acquisition and development as eligible funding activities. The program does not specifically allocate a set-aside for greenways projects, but the grant criteria recognize greenways as a priority activity. Some funding for greenways is also provided through DCNR's Pennsylvania Heritage Parks Program.

For fiscal year 2000-01, the CCPP's demand included 622 applications requesting $70 million in funding. Roughly $30 million (with the infusion of $8 million in Growing Greener funds) was available, less than 50% of the demand. This demand-supply gap has been consistent for the past several years as shown in Figure 5-8.2.

Community Conservation Partnership Program Funding History, 1994-2000

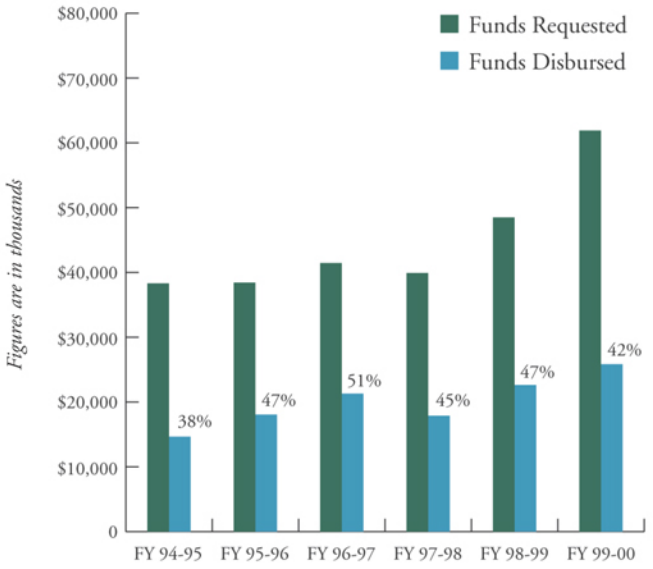


Figure 5-8.2: Demand vs. Supply for Greenways Funding in the Community Conservation Partnership Program, 1994-2000. (Source: DCNR)

Given the unmet funding need over the past several years, the expected increase in demand stimulated by a Pennsylvania Greenways Program and an expanding number of greenways initiatives, new funding sources to supplement existing programs should be considered. Funding sources can be leveraged more effectively than in the past through incentives and preferences for projects that attract multiple sources of funding—from local, regional, corporate and civic sources, as well as from state programs.

BENEFITS:

- Satisfies a portion of the unmet demand for greenways funding.
- Rewards strong community and regional support for greenways projects.
- Promotes public/private partnerships to finance greenways projects.
- Maximizes the efficiency of public sector funding by leveraging private dollars.
- Sustains the long-term viability of the Greenways Program.

ACTIONS:

1. State agencies should revise funding eligibility requirements to include greenways.

The organizational strategy described previously in this *Action Plan* proposes that an executive order be issued that every state agency reviews its policies and practices to identify ways to support implementation of the Greenways Program. As part of this review, where possible, state agencies should revise their applicable funding requirements to include a greenways component. State agencies should review their programs to see if they can be extended to fund greenways outright, or to fund them as components of larger projects.

State agencies also should examine ways to provide incentives in existing greenways funding programs. County or municipal governments that have successfully developed "greenways plans," as outlined in the preceding Greenprints for Growth strategy, should receive

funding preference. Counties or municipalities that partner across their boundaries to implement regional greenway projects also should be rewarded. These are examples of how funding programs could provide incentives to recognize cooperative efforts to establish greenways.

Some state agencies, especially PennDOT and DCNR, should investigate ways to meet funding needs that are not typically addressed in existing programs. According to public input, local funds for land acquisition and greenways maintenance are two areas commonly cited as falling far short of their need.

2. Create a "Pennsylvania Greenways Funding Guide."

Most state agencies have funding programs for which greenways projects could be directly or indirectly eligible. Local project sponsors are often unaware of all the potential sources of greenways funding. In conjunction with revisions to funding requirements, each state agency should inventory its funding programs that could be used for greenways or greenways-related projects. Each state agency would submit its inventory to DCNR to be compiled into a "Pennsylvania Greenways Funding Guide" that is made available to local project sponsors through electronic posting. The Guide also would include federal, local, non-profit and private sources for funding greenways planning and implementation.

3. Identify a long-term funding stream that ensures the sustainability of the Greenways Program.

Within the next four years, a dedicated funding stream should be identified to ensure the long-term viability of the Greenways Program. Current programs at the federal and state levels provide a modest amount of short-term funding. Funding sources such as the Community Conservation Partnership Program and the Transportation Enhancements Program are limited in their duration. Consequently, a long-term funding source must be identified that draws on both public and private support to create a viable, dedicated greenways funding stream.

Other states have successfully developed funding mechanisms to support their greenways programs that may be applicable to Pennsylvania. A study should be conducted to analyze the potential use and benefits of the programs of other states in Pennsylvania. The study also should explore all known innovative and "tried and tested" funding strategies.

4. Consider the feasibility of creating a Pennsylvania Greenways Trust.

An innovative funding strategy that should be considered by private and non-profit greenways partners is the creation of a special endowment fund, a "Pennsylvania Greenways Trust," to further the goals of the Pennsylvania's Greenways Program. A Pennsylvania Greenways Trust could be formed from a broad-based consortium of private organizations and funding sources to target funds, not only to develop or establish greenways, but also to acquire and maintain them. The Trust could be seeded through grants and donations from endowments, corporations and individuals. The Trust would be an important source of match money to leverage public dollars, usually on a one-to-one (1:1) match ratio, particularly for priority projects for which private matching funds are insufficient. The Trust funds also could be used for projects that support the strategies outlined in this *Action Plan* but that do not fall within existing funding guidelines. A greenways-related non-profit group could manage the Pennsylvania Greenways Trust. Trusts have been successfully used to supplement greenways programs in North Carolina and Florida.

Provide Technical Assistance and Outreach

9. Greenways Toolbox

Target

- 2002: A Greenways Toolbox assembled and online.

Overview:

Develop a "toolbox" for all those involved in greenways planning and implementation that includes technical resources for "greenways plan" development, greenways establishment and implementation, a "best practices" inventory, and addresses pressing needs such as liability mitigation and design standards.

The Greenways Toolbox should be a package of useful information and recommendations that can be put to use immediately by local and regional greenways partners.

Benefits:

- Provides guidance to counties and municipalities developing "greenways plans."
- Provides convenient, targeted information for identified stakeholders.
- Provides a compilation of actual examples or practices that have been successfully implemented elsewhere and are suitable for local adaptation and use.

Actions:

Information for the Toolbox could be collected in conjunction with the Greenways Clearinghouse advanced as part of the Education and Training Strategy. Some of the information would be available in hard copy form, but most would be made available online. The work would be initiated by DCNR, and be accomplished through a variety of public/private partnerships with such groups as the Governor's Center for Local Government Services, the Pennsylvania State Association of Township Supervisors, Pennsylvania State Association of Boroughs, non-profit greenways partners and the Commission. Sources for the information would be greenways partners, as well as federal, state and local governments.

1. Assemble a toolbox for all those involved in greenways planning and implementation.

Once assembled, the toolbox would be made available to planners preparing "greenway plans" and to partners who are implementing greenway projects. The toolbox could contain or reference the following:

- Background Information – Background information will be developed as part of the Education and Training Strategy—including information on the definition, function and values of greenways, as well as general information on the operations, vision and goals of the new statewide Greenways Program.

- GIS Mapping Starter Kit – The GIS Starter Kit would provide planning staff with basic information that facilitates the mapping of greenway hubs and spokes and addresses coordination with other land use planning tools. The objective is to develop a statewide GIS database of greenways and related land uses. The Starter Kit would include desktop GIS applications software, mapping standards, data set standards, sample greenway plans, and guidelines for developing greenway plans and for prioritizing greenway projects.
- "Best Practices" Inventory – The "best practices" inventory would include descriptions and case studies of successful greenways planning and implementation throughout the Commonwealth. Regional and local project sponsors can learn from the experiences of others in acquiring, planning, conserving, constructing, and maintaining greenways and associated facilities. This inventory is further described in the action that follows.
- *Creating Connections: The Pennsylvania Greenways and Trails How-To Manual,* by the Pennsylvania Greenways Partnership – This greenways and trail "how-to" manual, published in 1998, leads greenways partners through all phases of project planning and development. This manual may be revised to include current information.
- *Land Use in Pennsylvania: Practices and Tools, An Inventory* – This manual, published by the Governor's Center for Local Government Services in January 2000, recommends land use methods and policies that would improve the environmental quality of the Commonwealth and measure results. This manual can assist planners with the integration of land use and greenways initiatives.
- *Growing Greener: Putting Conservation into Local Plans and Ordinances* – This workbook by Randall Arendt presents a new look at designing subdivisions while preserving green space and creating open space networks. It outlines strategies for shaping growth around a community's natural and cultural features and demonstrates ways of establishing or modifying municipal comprehensive plans and zoning and subdivision ordinances.

"Yes! [A statewide GIS would be beneficial.] We are searching for a way to create a 'base map' that includes property ownership, city streets, wetlands, floodplains...."

Source: *Open House Attendee*

- Landowner Information – Information of concern to landowners should address legal issues, liability and vandalism. References to studies such as the *Impact of Rail-Trails: A Study of the Users and Property Owners from Three Trails,* written by Roger Moore, could be included in the Greenways Toolbox. This book documents impacts of recreational greenways on property owners.
- Context-Sensitive Design Guidelines – These guidelines would suggest potential applications of greenways to context-sensitive design. They would include using greenways to mitigate environmental impacts of development and transportation projects.
- Ordinances and Design Standards – Ordinances and design standards could address motorized, non-motorized, ecological and multi-use greenways.
- The Greenways Funding Guide – This manual is described in the Greenways Funding strategy.
- Management Information – Organizational strategies for ownership and management could be included, along with information to address liability, safety and law enforcement coordination.
- Maintenance Information – Topics may include cooperative maintenance strategies, examples of maintenance costs for different types of greenways and use of volunteers.

2. Compile a "best practices" inventory.

A compilation of case studies or "best practices" on greenways planning and implementation could be posted on the Greenways Clearinghouse website. The "best practices" inventory should be specific to greenways and complement *Land Use in Pennsylvania: Practices and Tools, An Inventory.* Local and regional project sponsors could be encouraged to submit information to DCNR to include in the inventory.

Suggested topics are:

- Visioning and regional planning
- Zoning or planning models
- Public support
- Land acquisition and easements
- Legal and private landowner issues
- Practices and policies in other states
- Funding
- Design guidelines, including those for multi-use greenways
- Construction details
- Maintenance
- Volunteerism

Provide Technical Assistance and Outreach

10. Greenways Education and Training

OVERVIEW:

Incorporate greenways training into existing education programs for greenways partners and establish a strategy to integrate greenways into environment and ecology coursework for teachers and students of all ages.

Greenways partners need training and education to understand and manage the details of planning, conserving, developing and maintaining greenways, and to stay abreast of current opportunities and best practices. Greenways partners, such as state agency personnel, county and local planners, advocacy groups, private landowners, teachers and students, should be the focus of education and training efforts.

BENEFITS:

- Provides understanding of the functions and benefits of greenways.
- Provides understanding of the Greenways Program and the Statewide Network of Greenways.
- Provides assistance with managing the details of greenways planning and implementation.
- Promotes communication of current happenings and best practices.

Target

- 2002: Integrate greenways training with Growing Smarter education and training programs.
- 2003: Initiate a strategy to integrate greenways concepts into the instruction and assessment related to existing environment and ecology standards for grades K-12.
- 2004: Encourage incorporation of greenway concepts as part of teacher preparation curriculum or basic environmental science courses in all state-owned universities.
- 2003: Launch a basic Greenways Information Clearinghouse.

ACTIONS:

The following actions entail developing training programs to orient greenways partners. Follow-up to this training could occur through periodic conferences and workshops and through the development of an information clearinghouse. These actions should be overseen by DCNR. There are opportunities to coordinate with existing training programs, such as those administered by the Governor's Center for Local Government Services, the Pennsylvania State Association of Boroughs and the Pennsylvania State Association of Township Supervisors, to effectively reach targeted audiences. Other state agencies, nonprofit groups and universities could provide training assistance.

The reorganized Commission could assist with the scoping of the training programs, the Greenways Clearinghouse content and the annual Pennsylvania greenways gathering.

1. Develop standard presentation and educational materials to provide important background information to all greenways partners.

A standard educational presentation on greenways would provide all partners with important background information. Topics could include the definition and benefits of greenways and the vision for the Statewide Greenways Network, and could describe how building greenways meets Commonwealth goals for quality of life and wellness, tourism, environmental education, recreation, economic development and sound land use.

2. Coordinate greenways training with Growing Smarter education and training programs to reach a wide audience that includes state agency personnel and legislators, regional and local planners and elected officials, and private developers and landowners.

To assist in mainstreaming the Greenways Program, elected officials and appropriate state agency personnel should become familiar with greenways concepts for use in their work; to enable planning staffs to develop their "greenways plans" and to help stakeholders in planning, establishing or managing greenways, periodic training is needed. The Growing Smarter education and training programs currently under development by the Governor's Center for Local Government Services are directed to audiences that would benefit from greenways training, including state agency personnel, legislators, county and local planners, elected officials and developers. The Center's

Growing Smarter Education and Training Plan combines existing courses on local government with newly designed curricula that support Sound Land Use concepts. Greenways training could augment Growing Smarter education initiatives since establishing greenways throughout the landscape is a fundamental component of sound land use.

Greenways training would need to be customized to meet the needs of different agencies or groups. Greenways curricula should present background information, the relationship of greenways to sound land use, and instructions for developing greenways plans that are consistent with comprehensive plans. The training also may address the "how-to's" of planning, establishing, constructing and managing greenways. Topics may include working with landowners, funding and public support, and ownership and maintenance.

Private landowners often have many concerns about the establishment of greenways that would affect their property. The Growing Smarter Education and Training Plan could include sessions that address such common landowner concerns as issues related to ownership and easements, how to mitigate liability and how to combat loitering, trespassing and vandalism.

Training should occur within the first year of the issuance of the executive order, especially for key agencies implementing the Greenways Program. County and local planning staff should be trained within the first two years of launching the Greenways Program to expedite the development of greenways plans. Annual conferences and workshops and a greenways clearinghouse can provide ongoing supplemental information.

3. Provide training for greenways partners who are planning and implementing greenway projects.

Non-profits and private organizations planning and implementing greenway projects also need a clear understanding of the steps involved in establishing greenways, from planning and acquisition through construction and management. Many of the same topics recommended for planners, elected officials, landowners and developers are also appropriate for these greenways partners. Training programs should be ongoing and extend to all regions within five years of launching the Greenways Program. They also may be open to greenways advocates, sponsors and interested citizens. Conferences and workshops may provide venues for conducting training targeted to greenways partners.

4. Initiate a strategy to integrate greenways concepts into the instruction and assessment related to existing environment and ecology standards for grades K-12.

Students in grades K-12 should be given the opportunity to learn about the functions and benefits of greenways through the state-mandated environment and ecology standards. DCNR will assist the Department of Education in its efforts to establish a strategy to disseminate greenways information to supplement existing environmental and ecological curriculum, instructional materials and guidelines. Part of this strategy will include identifying professional development opportunities for teachers through annual conferences and hands-on workshops. Schools also could be encouraged by the Department of Education to develop outdoor teaching areas (on greenways) for students.

5. Encourage incorporation of greenways concepts as part of teacher preparation curriculum or basic environmental science courses in all of Pennsylvania's state-owned universities.

As a way of incorporating greenway concepts into the elementary and secondary curriculum, teacher preparation institutions will be encouraged to provide greenways instruction. Instruction on establishing and managing greenways also could be included in the curriculum of college students majoring in planning, landscape architecture, or environmental studies. The Department of Education also could encourage all of Pennsylvania's state-owned universities to incorporate greenways concepts into their basic environmental science courses.

> "Educational programs, presented to Tourism Promotion Agencies (TPAs), Chambers of Commerce, Borough Association (PSAB), Township Association (PSATS), County Commissioners, County Parks & Recreation Staff, Local Residents, etc..., [are needed]."
>
> ***Source:*** *Open House Attendee*

6. Hold periodic Pennsylvania greenways gatherings—both conferences and workshops.

Greenways conferences and workshops could either be held as separate functions or could be components of Growing Smarter, or other appropriate conferences and workshops. Conferences should inform participants of the status of the Greenways Program and highlight progress made in building the Statewide Network of Greenways . Workshops should supplement training initiatives and provide current information and "best practices." These periodic meetings also provide opportunities for peer interaction.

7. Develop and launch a basic Greenways Information Clearinghouse.

A centralized, accessible, comprehensive source of greenways information is needed to provide stakeholders with the tools they need to make the Pennsylvania Greenways Program a reality. Traditionally this information has come from a variety of uncoordinated sources; interested greenways stakeholders might have to perform an exhaustive search to find information on a certain trail or funding program. The clearinghouse and website would provide a "one-stop shop" for greenways information and links to other key sources. The clearinghouse should provide information and assistance to stakeholders in the following areas:

- Greenways functions and benefits
- Greenways trail maps and descriptions
- Sources of funding
- State agency contacts
- Stakeholder contacts
- Guidelines for and case studies of legal and liability issues
- Guidelines and best practices for greenways planning, design and construction
- Guidelines and best practices for greenways operation and maintenance
- Land management
- Establishing advocacy groups and public-private partnerships

The clearinghouse could include both staff and a website. Use of the Internet would provide an efficient means of maintaining and distributing timely information; it could be supplemented by staff activities. Staff activities may include providing telephone assistance (1-800 number), assembling information packages, providing special assistance to greenways of statewide significance, posting current affairs, and preparing Technical Briefs on common greenways issues. The clearinghouse could be administered by a university or a stakeholder organization, council or conservancy. If administered by a university, it could be staffed by students and graduates, and could encourage and distribute masters theses in addition to other sources of information.

Provide Technical Assistance and Outreach

11. Greenways Promotional Campaign

Target

- 2006: 75% of Pennsylvanians know the definition and benefits of greenways.
- 2010: Pennsylvania becomes the number one state in greenways-based tourism.
- Annually: Increase inquiries at the Pennsylvania greenways website and 800-number by 10%.

OVERVIEW:

Enhance Pennsylvania's economy and tourism by showcasing greenways in a promotional campaign that informs Pennsylvanians and visitors of the opportunities and benefits of greenways.

Greenways can offer extensive outdoor recreation opportunities, which already attract millions of visitors each year to Pennsylvania. Greenways also can contribute to a higher quality of life in Pennsylvania and can help to attract and retain companies and skilled workforce. Thus, greenways offer immense potential for tourism and economic development. To take advantage of these opportunities, DCNR should work with The Office of Travel and Tourism of the Department of Community and Economic Development (DCED), and other appropriate partners to launch a greenways promotional campaign directed towards both residents and visitors. The successful implementation of this public relations effort should position Pennsylvania as a national leader in drawing visitors to enjoy its greenways, and convey an image of Pennsylvania as an attractive place to live and work.

BENEFITS:

- Promotes Pennsylvania's natural, recreational, scenic, cultural and historic resources.
- Fosters a quality of life for Pennsylvania that is critical to attracting and retaining businesses and employees.
- Promotes greenways usage and support.
- Creates economic development opportunities.

ACTIONS:

1. DCNR and DCED should work together to conduct a customer-oriented market research survey of Pennsylvania residents and visitors.

The survey would quantify the number of people taking advantage of Pennsylvania's greenways resources and provide insight into the information resources and promotional media most likely to reach them. The survey would identify audiences that are the best targets for a promotional campaign; that is, a concerted effort among state, regional and local tourism and

"Educating and elevating the public's awareness [is very necessary in getting projects implemented]."

Source: *Open House Attendee*

recreation agencies to undertake marketing, advertising and promotion of greenways. Potential targets include Pennsylvania residents, visitors, resident and prospective companies, and travel agencies. A survey also could quantify the economic impacts of greenways in the Commonwealth.

> "Greenways can even, praise be, reduce public costs or produce public money for a locality, and sometimes they do both. They reduce costs by helping to eliminate bad development that can be a liability to a municipality. And greenways can produce money by helping to attract new development that creates jobs and tax-ratables."
>
> ***Source:*** *Charles E. Little, Greenways for America, 1990, p.30.*

2. DCNR should work with DCED and the state's Tourism Promotion Agencies (TPAs) to identify the major themes for a greenways promotional campaign.

Based on the results of the market research survey, DCNR and DCED should identify themes for a promotional campaign. The themes may include greenways identification, benefits, recreation, tourism and economic development.

3. DCNR and DCED should create and distribute greenways promotional materials for targeted groups.

Appropriate promotional materials on greenways should be developed for targeted groups. Promotional materials should be produced in many formats, including hard copy and digital.

The greenways message should be incorporated into all of Pennsylvania's existing marketing outlets to raise awareness of greenways opportunities among residents, and into national media to reach potential out-of-state visitors. Pennsylvania's existing marketing outlets include: website "experiencePA.com", interactive kiosks, media kits, event guides, visitor guides, and special events. Tourism partners such as Tourism Promotion Agencies and Convention and Visitors Bureau staff should be made aware of the benefits of promoting their local greenways to tourists. This marketing effort will generate calls to the visitor's hotline: 1-800-visitPA. Calls to the hotline that relate to greenways and inquiries at the Greenways Clearinghouse website should be tracked.

4. DCNR and DCED should identify a formal "kick-off" date for the greenways promotional campaign.

The kick-off date for the promotional campaign could include a media event on the steps of the state Capitol, lead by the Governor. The event could be recognized as "Greenway Day in Pennsylvania."

Provide Technical Assistance and Outreach

12. The Greenways Volunteer Network: Adopt-a-Greenway

Overview:

Establish a corps of volunteers of all ages to maintain and promote local greenways through an "Adopt-a-Greenway" Program.

The creation of an "Adopt-a-Greenway" Program for Pennsylvania would provide a recognized pool of volunteers devoted to the needs of greenways, ranging from children to senior citizens, who would perform such services as landscaping, ecological restoration and maintenance. This program is intended to supplement but not supercede existing greenways caretaker programs. Similar programs have been highly successful in other states, including Maryland and North Carolina, and provide excellent opportunities for communities to take ownership of greenways. In addition, these in-kind services often can be used as local matches to meet grant funding requirements.

Benefits:

- Stimulates a large and diverse volunteer network.
- Creates goodwill and community ownership of greenways.
- Provides focus on local initiative to support greenways development.
- Complements other *Action Plan* initiatives such as the greenways promotional campaign and the education and training strategies.
- Provides local in-kind matches for state or federal grants.

Target

- 2004: Establish and implement the Pennsylvania Adopt-a-Greenways Program.

Actions:

1. DCNR should work with its greenways partners to develop materials and guidelines for the program.

The reconstituted Commission and Committee (as described in the Greenways Organizational Structure Strategy) should be responsible for assisting in the development and implementation of this program. Given their local advocacy experience, these partners have the insight needed to make a community-based volunteer initiative succeed. These advisors should work with DCNR to develop informational and promotional materials for the program. Materials such as slide presentations and a speakers bureau could be used by greenways partners to inform local groups about the Adopt-a-Greenway Program. A resource kit also could be developed that would guide groups in organizing and motivating their volunteers. The advisors also would be responsible for publicizing the ongoing achievements of the local volunteer groups.

2. Develop charters for each Adopt-a-Greenway group.

Each Adopt-a-Greenway volunteer group should be required to develop a charter upon its inception. In addition to clarifying roles and responsibilities for all concerned, the charters would aid tracking the number of active groups in the Commonwealth. Each charter could:

- Identify the participants.
- Define the greenway or greenways being adopted.
- Describe the roles and responsibilities of the adoption group—as defined by the group.
- Identify the time period commitment of the group—2-3 year minimum will be encouraged.

3. Announce the formation of the Pennsylvania Adopt-a-Greenway Program.

The Commission could work with the Governor's Office to formally announce the Pennsylvania Adopt-a-Greenway Program. The program could potentially be announced as part of the "Greenway Day in Pennsylvania" initiative outlined in the Greenways Promotional Campaign strategy.

4. Reinforce the Adopt-a-Greenway Program through an annual awards and recognition program.

DCNR should include greenways efforts and volunteers in any awards or recognition program they administer. Each Adopt-a-Greenway group would be encouraged to submit their respective success stories for consideration of awards that recognize their community service. DCNR should develop various categories of recognition to mirror the diversity of volunteer and support activities for greenways across the state.

Chapter 6

Summary of Recommendations for Local Partnerships

What this Plan means to Local Greenways Partners

In Pennsylvania, the work of identifying opportunities and implementing greenway projects takes place through partnerships at the local level. The Commonwealth's operating philosophy for the state Greenways Program is to support local efforts through facilitation, information and promotion, technical assistance, and the funding and coordination of programs, policies and projects. Each point in this *Plan* supports local activity and assumes local leadership and involvement by government, nongovernmental organizations and greenways advocates. The preceding 12 strategies describe the roles and functions of state government in promoting greenways. This chapter reviews and summarizes the participation of local partners in each of these 12 strategies, and emphasizes the importance of local action and participation for the success of the statewide initiative.

The Role of Local Government: Pennsylvania's land use decisions are made and enforced by local governments. In June 2000, Pennsylvania adopted "Growing Smarter" legislation that enables counties and municipalities to plan together for both development and conservation of resources. These reforms in the Municipalities Planning Code (MPC) create new opportunities for cooperative agreements and consistent ordinances and actions, a necessity for greenways that cross municipal boundaries. These changes also may allow new strategies to emerge for planning, funding, implementing and maintaining greenways.

The reformed MPC also makes possible improved coordination between development and conservation strategies available to municipalities. Historically, community planners have designed the infrastructure of roads, sewers, sidewalks, parks and other municipal facilities as the initial components of a

municipal comprehensive plan. These essential elements support residential, commercial and industrial development. A new paradigm is emerging that includes planning for a community's green infrastructure as well, to ensure natural resource protection and to maintain connections between important community facilities and destinations.

Greenways along waterways and in flood plains that serve to buffer development impacts and protect communities from flooding, and greenways that link neighborhoods, parks, and commercial centers for pedestrian and bicycle travel are examples of green infrastructure components that should be incorporated into comprehensive municipal planning. A community's green infrastructure may be composed of both publicly owned lands, such as recreational trails, and privately owned lands without public access that are protected from development through easements or zoning regulations. The system of green infrastructure should be consistent with county comprehensive plans, and become part of a "community map" that guides developers to incorporate green elements into subdivision plans.

Partnerships and Coordination: Local and regional governments are therefore key partners in developing the statewide greenways network. Partnerships between local and state government, as well as with neighboring municipalities and greenways advocacy organizations, are necessary to create local, regional and statewide greenways networks. Local and regional government partners may include park and recreation boards, environmental advisory councils and planning boards, as well as elected officials. The Greenways Program will supplement existing assistance available to communities through other programs such as the Rivers, Trails, and Conservation Assistance (RTCA) program of the National Park Service, or those offered by non-profit groups that support greenways.

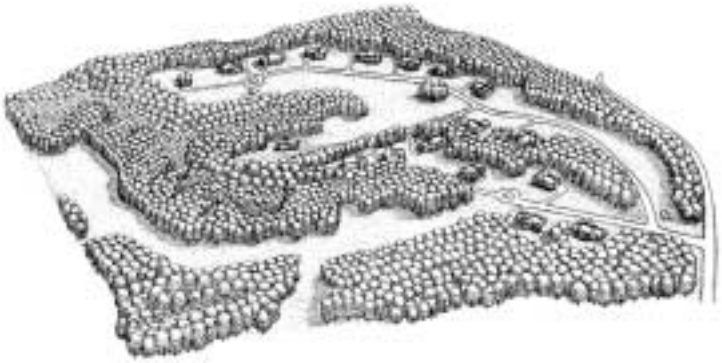
THE 12 STRATEGIES AS APPLIED TO LOCAL NEEDS

Creating greenways connections within communities will achieve the benefits of greenways that have been described in the *Plan.* Local government actions should be undertaken to support each of the 12 points described below.

"Hubs and Spokes" –a Statewide Network of Greenways

Local governments should incorporate greenways as a sound land use strategy and include greenways in their planning processes. Local and regional "hubs and spokes" networks will provide key linkages in the statewide greenways network, while restoring pedestrian connectivity within communities. Greenways can be used as a tool to help revitalize downtown centers, and provide greater access to parks, commercial areas and cultural destinations. Local governments should employ such land use measures as overlay zoning and official maps to preserve greenways corridors, especially where development pressure is intense.

Coordination with neighboring municipalities will expand local opportunities for greenways. Intergovernmental agreements should be pursued to define partner roles for greenways that span political boundaries. Local governments also should pursue partnerships with local commercial developers, residential developers and local businesses to include greenways as part of new construction projects or to retrofit existing projects. If developers are familiar with greenways benefits and the value people place on greenways, they are likely to include greenways concepts in their site and development plans. Municipalities should adopt subdivision ordinances and zoning regulations that support incorporating green infrastructure elements into development and subdivision plans.



Local and regional governments should act as a conduit from state-level government to provide information and support to project sponsors. Municipalities should support project sponsors in the acquisition, development and maintenance of greenways, and where appropriate, assign representatives to serve on greenways task forces and advisory committees.

Greenway Plans: Greenprints for Growth

County greenway plans should be developed with input from regional and local greenways task forces and local governments. In addition, local municipalities may develop local greenway plans that parallel and support county planning. There are many opportunities to apply greenways strategies to achieve community goals in recreation, environmental conservation and alternative transportation. The concept of "hubs and spokes" in planning greenways can be successfully applied in every municipality, whether urban, suburban or rural, to make connections that enhance the quality of place and extend opportunities for outdoor activities. The planning guidelines developed for county greenway plans can be used in local planning efforts.

Places for All People

Advocates representing every type of greenway should be represented on regional greenways task forces (described in the Greenprints for Growth strategy) along with local government officials to support the development of county plans that address all constituencies. Local and regional greenways partners should engage diverse populations in promotion and implementation of multi-objective and multi-access greenways in greenways networks. The Statewide Outdoor Recreation Needs Assessment will provide guidance for local and regional planning. Direction provided by the Commonwealth's interagency plan for motorized recreational use also should be helpful to regional and local greenways partners.

Pennsylvania Wellness

Local greenways efforts will benefit from the support of new constituencies in the health care sector. Regional greenways task forces should conduct wellness events and encourage greenways connections with health facilities and providers with schools to support the statewide initiative. Developing local contacts for the wellness initiative and conducting activities under the greenways wellness promotion are key activities that should be carried out at the local level.

Alternative Transportation

Alternative transportation initiatives depend on local government and citizen support. Participation by local and regional greenways task forces can support PennDOT transportation planning to identify opportunities for community connections utilizing greenways. Task force membership should include Transportation Planning Advisory Committee members that advise Metropolitan Planning Organizations and Local Development Districts transportation committees.

Natural Resource Protection

Programs such as the Department of Environmental Protection's Stream Re-leaf Program and the Department of Agriculture's Conservation Reserve Enhancement Program can provide tools necessary for protection of local environmental and natural resources. Municipalities should take advantage of programs that offer training or other assistance in protecting natural resources through greenways implementation.

Greenways Organizational Structure

The proposed framework for the Greenways Program increases technical assistance available at the local level through the assignment of state agency staff liaisons in key

agencies such as DCNR, PennDOT, DCED and DEP. The reorganized Greenways Partnership Commission will continue to advise and support the statewide effort with representation from local and regional greenways leaders. Participation on the Greenways Advisory Committee will reinforce the exchange of information between statewide initiatives and local greenways advocates. It is this exchange of information that will ensure continual improvements to the Greenways Plan and Program. Municipalities committed to greenways development should strongly consider designating a lead staff person to champion and coordinate this activity.

Greenways Funding

The Commonwealth is streamlining and simplifying greenways funding, and expanding resources to better support local greenways sponsors. A Greenways Funding Guide will be an important tool to connect local sponsors with funding sources. A greenways trust or endowment could direct private funding to address special needs or opportunities when local resources are inadequate.

Incentives that encourage local government participation in greenways planning and implementation also will benefit local sponsors. Funding incentives can be structured to encourage local governments' formal endorsement of greenways plans or their participation in owning or maintaining greenways.

Local governments should explore innovative direct and in-kind funding mechanisms to leverage funds for greenways. Municipalities should explore the use of development impact fees and other strategies to apply to greenways implementation. Technical assistance provided to municipalities could address local funding strategies such as bond initiatives.

Greenways Toolbox

The Greenways Toolbox initiative will directly benefit all local and regional partners. Materials will be developed to support all activities, from planning through implementation. Regional task forces and the Greenways Advisory Committee should guide the development of additional toolbox materials.

Greenways Education and Training

The education and training initiatives and the clearinghouse will help to strengthen local capacity to conduct greenway projects. Local partners should take advantage of education and training programs, and assist in informing local constituencies of educational opportunities.

Local governments can benefit from training programs offered through government agencies and organizations such as DCED and the Center for Local Government. Other agencies such as Pennsylvania Emergency Management Agency offer training and assistance to municipalities that can encourage the use of greenways in land use decisions in floodplains. Through consistent inclusion of greenways concepts in state agency programs for local government, local officials will be more likely to envision and support the use of greenways in floodplain management and in residential and commercial development.

Greenways Promotional Campaign

A statewide public promotional campaign will generate public support for greenways projects around the state. Existing greenways that have tourism potential will benefit from the promotional materials developed as part of this initiative. Local greenways project sponsors should assist in distributing the publicity materials and conduct media events in coordination with statewide promotional events.

Greenways Volunteer Network

Local project sponsors and greenways managers should take advantage of the statewide volunteer network initiative. Through volunteer participation, new constituencies are formed that will offer the necessary public support for greenways implementation.

Chapter 7

Summary of Recommendations for State Policies and Practices

What we heard from state agencies

The recommendations presented in the last chapter speak to the need for a coordinated approach to greenways policies and practices among state governmental agencies—a need that was mentioned frequently during the regional open houses. A key part of the methodology employed to produce this *Plan,* as described in Chapter 3, was to research the policies and practices of state agencies in order to identify actions that each agency can take to support local greenway projects. The purpose of the analysis was to:

- Identify current activities and programs related to greenways;
- Determine how best to design a cohesive policy approach across state agencies; and
- Identify opportunities to encourage greenways development through existing programs and resources of state government.

In meeting these objectives, more than 25 formal meetings were held with state agencies to discuss their respective roles in implementing the *Greenways Action Plan.* The input and enthusiasm of state agency staff who participated in these meetings was excellent, and a host of ideas, initiatives and partnering opportunities were discussed. The complete listing of these findings and recommendations are available in a separately bound technical memorandum, *Policies and Practices: How Pennsylvania's State Agencies Can Support Greenway Projects.*

KEY RECOMMENDATIONS FOR STATE GOVERNMENT INVOLVEMENT IN THE STATEWIDE GREENWAYS PROGRAM

A summary of the top recommendations for each state agency is provided in Figure 7.1. Full policy analyses for each state agency and other state organizations with roles in implementing this *Action Plan* can be found in the technical memorandum on policies and practices.

Figure 7.1 Key Recommendations for State Government Involvement in the Statewide Greenways Program

AGENCY	RECOMMENDATIONS
Department of Aging	1. Provide a source of greenways volunteers through the Senior Environmental Corps program. 2. Promote the health benefits of greenways among seniors.
Department of Agriculture	1. Provide voluntary incentives for farmers to preserve conservation greenways on their land through programs such as the Conservation Reserve Enhancement Program. 2. Integrate greenways into the planning activities of the County Conservation Districts and the Natural Resource Conservation Service's technical assistance in those districts. 3. Assist in developing a greenways informational package targeted at farmers that highlights the benefits of greenways.
Department of Community and Economic Development	1. Integrate greenways into the Growing Smarter initiative's education, training and outreach efforts. 2. Revise funding eligibility requirements to include greenway projects that have a relationship to economic development, community development, sound land use, and travel and tourism. 3. Assist in developing a promotional and marketing campaign that attracts visitors to take advantage of Pennsylvania's greenways resources.
Department of Conservation and Natural Resources	1. Assume the lead role for implementation of the greenways initiative. 2. Revise and streamline existing grant programs to facilitate access and expand eligible uses for funding. 3. Conduct an outdoor recreation needs assessment that analyzes the supply and demand for outdoor recreation facilities, such as greenways. In concert with this effort, develop a motorized recreation plan to address the increasing demand for motorized recreation. 4. Partner with local greenways advocates to create connections between public lands (state parks and forests) and local greenways projects.
Department of Education	1. Integrate the greenways concept within the instruction and assessment related to the existing environmental and ecology standards. 2. Encourage local schools to develop outdoor teaching areas (greenways) for students. 3. Encourage the education of all teachers through professional education programs and activities. 4. Encourage inclusion of greenways concepts in the teacher preparation curriculum at colleges and universities.
Department of Environmental Protection	1. Include greenways development as a stormwater management best practice in support of new NPDES Phase II implementation guidelines. 2. Promote greenways development as part of the Stream Re-Leaf Program to encourage partnerships in the restoration and conservation of streamside buffers that improve water quality. 3. Continue to promote greenways development on brownfield sites. 4. Promote greenways development as part of Reclaim PA and other mining reclamation initiatives.

AGENCY	RECOMMENDATIONS
Fish and Boat Commission	1. Increase resources to support greenways-related technical assistance and grant programs. 2. Strengthen the water trails program and integrate it into the activities of other agencies. 3. Partner with DEP and DCNR to develop a local assistance program that targets polluted and "at-risk" streams for greenways-related improvements.
Game Commission	1. Support and promote conservation greenways that provide wildlife habitat on lands open to public hunting. 2. Continue the existing land acquisition program. 3. Review and revise State Game Land use regulations as appropriate.
Department of General Services	1. Include greenways as a component of state agency projects. 2. Promote greenways in surplus land sales.
Governor's Green Government Council	1. Coordinate Green Plan updates and support the inclusion of greenways in the plans where applicable. 2. Appoint a representative to serve on the Interagency Coordination Team.
Governor's Policy Office	Work with the state agencies to provide support in the following areas: 1. Issuance of an Executive Order. 2. Public relations. 3. Guidance on strategic partnering and linkages. 4. Commonwealth policies, programs, and budget revisions. 5. "Big picture" thinking, especially within the context of political considerations. 6. Federal policy and intergovernmental relationships.
Department of Health	1. Link greenways to the Department of Health's healthy lifestyles and communities initiatives. 2. Partner with the State Health Improvement Partnerships to promote greenways in communities throughout the Commonwealth. 3. Include greenways in the next generation of the State Health Improvement Plan.
Pennsylvania Emergency Management Agency (PEMA)	1. Provide funding assistance for municipalities that include greenways planning as part of a Hazard Mitigation Plan. 2. Develop promotional materials highlighting PEMA's land acquisition program for distribution to non-profit groups, counties and municipalities interested in owning and maintaining lands for greenways. 3. Coordinate with the Greenways GIS initiative by providing information on flood-prone areas, deed-restricted lands and information from a Hazard Mitigation Plan. 4. Include greenways as a best practice in the "Hazard Mitigation Planning Guide" and include this document in the Greenways Toolbox.
Pennsylvania Historic and Museum Commission	1. Develop a standardized mitigation procedure and improve design standards for development of trails where archaeological sites are likely to be affected. 2. Work closely with DEP, DCNR, PennDOT and the other state agencies in developing/supplying information and applications for the Greenways GIS. 3. Boost heritage education programs relating to learning opportunities along greenways.
Public Utility Commission	1. Continue to be responsive to rail-trail issues. 2. Cooperate with DCNR and partners to develop and distribute information on appropriate co-use of utility corridors with greenways.
Department of Transportation	1. Develop a greenways planning and development guide that provides guidance on how greenways projects fit within the project development process and outlines PennDOT's requirements with respect to greenways or trail projects. 2. Institutionalize greenways planning by including greenways concepts into the next update of the Design Manual and making greenways a component in applicable sections of the next updates of District Business Plans. 3. Examine ways to expand existing funding programs or identify new programs to support greenways development.
Turnpike Commission	1. Incorporate greenways into the property disposition program. 2. Integrate greenways into the current Service Plaza Strategic Plan effort, where appropriate. 3. Partner with greenways advocates to provide crossings over the turnpike, where appropriate.

Chapter 8

Conclusion

Where do we go from here?

The completion of this *Action Plan* results from the commitment of many people and effective partnerships among many organizations. The work that has been accomplished prepares a strong foundation for implementing these action recommendations in Pennsylvania's Greenways Program. The work ahead will depend just as much on these commitments and partnerships, and others, as the intent of this *Plan* is intended to enable many to work together effectively to reach common goals. The statewide greenways network can only be achieved with wider and wider participation. It is the responsibility of all who worked to develop these strategies to participate in implementing them and to engage others in forming new partnerships.

Although the strategies in *Pennsylvania Greenways: An Action Plan for Creating Connections* were informed by the review of other state's programs, they are unique to Pennsylvania. The statewide network of greenways will be just as unique, tailored to fit Pennsylvania's land and people. All Pennsylvanians stand at the threshold of an exciting period that will result in improved land use, more livable communities, alternative transportation modes, increased conservation and improved health and wellness.

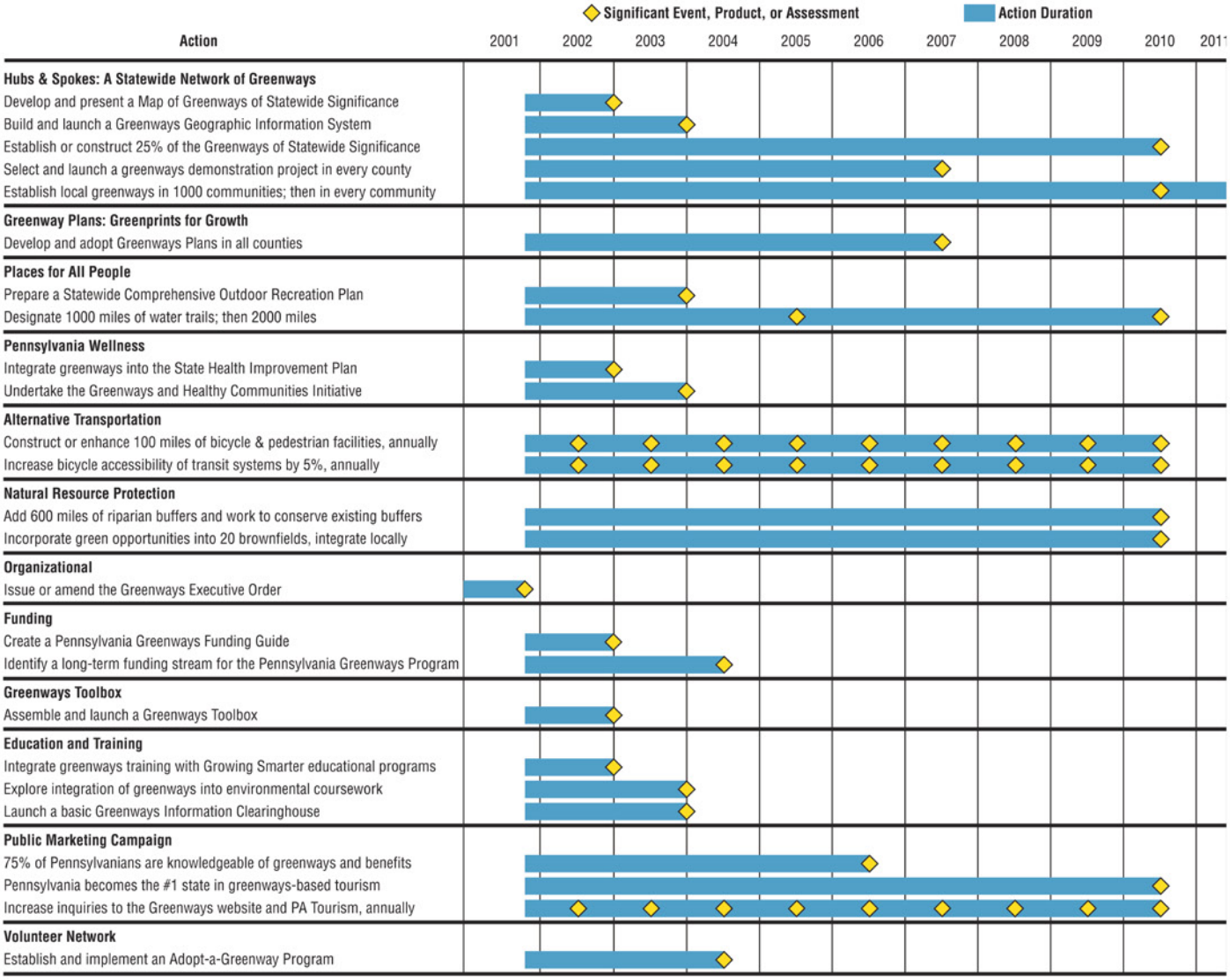
Next Steps

This *Action Plan* is now complete, but the Greenways Program is just beginning and much work lies ahead. The strategies and targets suggest a critical path to success. Some actions should be commenced in the near term to build upon the momentum and enthusiasm of the process of creating this *Plan.* These actions include building the organizational framework for implementation, informing greenways sponsors of funding opportunities, and providing technical assistance and outreach. There are other actions that naturally follow and con-

tinue to build the parts of the Greenways Program. Finally, there are actions to assist in implementing the statewide network of greenways. While greenways have been planned and put into place for many years, the Greenways Program will identify and encourage a statewide network, as well as promote local and regional greenway networks. The table below proposes targets or milestone to be met up to the year 2020. These are organized by the goals described in the *Plan.*

The timing for each action and the steps that will ultimately be taken to implement the statewide Greenways Program will ultimately depend on many factors that will be determined through discussion and consensus building among all partners. This *Plan* will be the guide for these decisions, but the details will be defined as the strategies are undertaken. The vision this *Plan* expresses will remain the same, but the *Action Plan* will grow and change to take advantage of opportunities that will emerge as all partners work together.

Greenways Program Timeline



Acknowledgments

Pennsylvania Greenways: an Action Plan for Creating Connections was produced with funding allocated to the Pennsylvania Department of Transportation by the Federal Highway Administration through the Transportation Enhancements Program.

Pennsylvania Greenways Partnership Commission

The Pennsylvania Greenways Partnership Commission was established by Governor Tom Ridge on April 29, 1998. The Commission consists of 22 individuals all appointed by the Governor. The Commission is chaired by the Secretaries of the Department of Conservation and Natural Resources (DCNR) and the Pennsylvania Department of Transportation (PennDOT).

The following are members of the Commission: (Alternates are listed in italics)

The Honorable John C. Oliver *Richard G. Sprenkle*	Co-Chair: Secretary, Pennsylvania Department of Conservation and Natural Resources *Deputy Secretary for Conservation and Engineering Services, Pennsylvania Department of Conservation and Natural Resources*
The Honorable Bradley L. Mallory *Michael M. Ryan*	Co-Chair: Secretary, Pennsylvania Department of Transportation *Deputy Secretary for Highway Administration, Pennsylvania Department of Transportation*
The Honorable James M. Seif *Meredith Hill*	Former Secretary, Pennsylvania Department of Environmental Protection *Executive Policy Specialist, Pennsylvania Department of Environmental Protection*
Marilyn Black *Todd H. Marsteller*	Oil Heritage Region, Inc.
Linda McKenna Boxx *James T. Linaberger*	Allegheny Trail Alliance
August R. Carlino *Dixie F. Swenson*	PA Heritage Parks Association
Joanne Denworth, Esq. *Mark McGuigan*	10,000 Friends of Pennsylvania
Howard Greenberg *Neil Korostoff*	PA Rivers Resource Advisory Council
Robert D. Griffith *Edward H. Chubb*	PA Recreation and Park Society
Catherine Harper, Esq. *Elam M. Herr*	PA State Association of Township Supervisors
Keith Klingler	Pennsylvania Landowner's Association
Edward T. McMahon *Elizabeth M. Kitchel*	The Conservation Fund
G. Lowell Morton *Donald A. Clouser*	Pennsylvania State Snowmobile Association, Inc.
Andrew Pitz	PA Land Trust Association
Jack Rawlings *Wayne Fish*	PA Recreational Trails Advisory Board
Judy Rimple *Tom Ruskey*	Anthracite Scenic Trails Association
Marie Rust *Helen Mahan*	National Park Service
Richard Schmoyer *Jerry Walls*	PA Planning Association

Thomas P. Sexton III	Rails-to-Trails Conservancy
Robert Smeigh *Jeffrey A. Wilbur*	Sportsmen Representative
Floyd Warner *Gene Barr*	PA Chamber of Business and Industry
Davitt Woodwell, Esq. *John Walliser, Esq.*	PA Environmental Council

Gary Elston is a Special Advisor to the Commission for the Physically Challenged.

COMMITTEE CHAIRS

Howard Greenberg	Partnership Committee
Helen Mahan	Education and Outreach Committee
Thomas P. Sexton, III	Plan and GIS Mapping Committees
Richard G. Sprenkle	Monitoring and Evaluation Committee

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Mary Bender, Department of Agriculture
Roland Bergner, PA Game Commission
Susan Colwell, PA Public Utility Commission
Glen Dunbar, Department of Aging
Tom Ford, PA Fish and Boat Commission
Ellen Kight, Department of Community and Economic Development
Georgia Earp, Department of Community and Economic Development
Ron Killins, Sr., PA Emergency Management Agency
Doug Reynolds, PA Historical and Museum Commission
Emilie Tierney, Department of Health

Pennsylvania Greenways Partnership

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John Milner Associates, Inc. – A. Elizabeth Watson
SSI Services, Inc. – Todd Plank

In Association with:

Campbell Thomas & Co. – Robert Thomas
Greenways Incorporated – Charles Flink
Sprinkle Consulting Inc. – Jennifer Toole
Steve Spindler Cartography – Steve Spindler

Additional Acknowledgements

This *Plan* was developed with the participation of many enthusiastic people from around the Commonwealth, in government, non-profit organizations, businesses and as property owners who believe in the tremendous value of greenways. Among those deserving special thanks is Wayne Kober, former Director of the Bureau of Environmental Quality, Pennsylvania Department of Transportation, who retired before publication of this Plan. His interest and involvement was instrumental in the formation of the Commission and this *Plan.* He helped to initiate and to guide the early direction of this *Plan* with great attention and personal commitment.

The Greenways Partnership Commission's Subcommittee Chairs, Tom Sexton, Helen Mahan, Howard Greenberg and Richard Sprenkle also deserve special recognition for offering their time and expertise. Special mention is owed to the staffs of the Pennsylvania Department of Transportation and the Department of Conservation and Natural Resources, especially Dan Accurti, Larry Williamson, Anne Ketchum and Vanyla Tierney. Additionally, special mention is owed to Anna Breinich of the Pennsylvania Environmental Council. These individuals directed the planning process and made every effort to ensure that this *Plan* will be a useful tool for all greenways advocates, striving to be fair and to include every voice.

Also deserving recognition are the state agency liaisons. As representatives of state agencies, they will play a key role in implementing greenways-related programs and policies, and they have been fundamental in shaping this *Action Plan.*

Finally, deserving special thanks are members of the Greenways Partnership Advisory Committee, an interest group of approximately 120 interested individuals from around the state representing public and private sector greenways-related organizations. Many traveled long distances to volunteer their participation and to share valuable insights that enriched this *Plan.*

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