

Schuykill County Open Space & Greenway Plan



2006

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Chapter One: Background/Planning Process

Chapter One: Introduction

Introduction

Schuylkill County is located in the middle of the eastern half of Pennsylvania, within 15 miles of Allentown and Reading and about 25 miles from both Harrisburg and Wilkes-Barre (Figure 1.1). It is a county steeped in mining history and culture that is today home to industry, agriculture, and a diverse mix of different sized communities set against a backdrop of natural landscapes. The surrounding counties are Dauphin and Lebanon Counties to the west, Northumberland and Columbia Counties to the northwest, Luzerne County to the north, Carbon County to the east, Lehigh County to the southeast and Berks County to the south.

Schuylkill County encompasses a physical area of 780 square miles, roughly half-a-million acres. It is located in the Appalachian Mountains in the Ridge and Valley Region just north of the Piedmont Plateau. The landscape of Schuylkill County is characterized by alternating mountain ridges and lowland valleys running in a northeast-southwest direction. Two significant drainage basins run through Schuylkill County - the Delaware and the Susquehanna. A number of streams and watersheds converge within the Delaware drainage basin to form the Schuylkill River, for which the county is named. Woodlands comprise approximately 45 percent of the land area of the county, with agriculture encompassing about 30 percent.

A prominent feature in both the county's history and landscape is the presence of two large anthracite coal belts which are located northeast to southwest through the center of the county. Many of the county's existing villages and boroughs were developed around mining centers to house workers and their families. Mining as a land use currently represents 10 percent of the total area of the county.

The county can be divided into four rough geographic areas or regions. The southern tier, which is bound by Hawk and Second Mountains is dominated by agricultural uses and woodlands. The central tier, between Second and Broad Mountains, overlays anthracite deposits, and has a history associated with mining activities. The northwest corner of the county is oriented to the Mahantongo Creek watershed and valley and is predominantly farmland and forest. The northernmost portions of the county are between Broad Mountain and Buck Mountain and are oriented to the Catawissa Creek watershed and the Ringtown Valley. Uses here are mostly farmland and forest.

The county may also be geographically understood by its three main transportation corridors. PA Route 61 is an important, mostly four-lane highway that runs from Reading to the Susquehanna River at Sunbury, passing through the center of Schuylkill County. PA Route 61 is the historic main spine of the county, reaching Pottsville and, today, providing access to

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numerous commercial and industrial businesses along its path. Interstate 81 crosses the northern tier of the county, en route from Harrisburg and points south to Wilkes-Barre/Scranton and New York State. The construction of this roadway has changed the conditions of access in a profound way for the northern half of the county over the last 40 years, and has spawned development of industrial parks, shopping centers, and three prisons. PA Route 309 is the spine road for the county's eastern side, linking Allentown to Hazleton, and passing through Tamaqua Borough in Schuylkill County.

According to the 2000 U.S. census, the total population in the county was 150,336 persons. The county is divided into 67 municipalities including: 36 townships, 30 boroughs and the City of Pottsville, which is the county seat. Its largest municipalities are Pottsville at 15,549 residents and Tamaqua Borough at 7,174 persons. Many of the county's municipalities have relatively small populations and may not be equipped to perform all of the functions of local government. Over half of the boroughs and townships do not have their own zoning ordinance or subdivision and land development ordinances, with the county administering activities related to zoning, subdivision of land and approval of land development.

Growth Trends and Issues

Compared to woodlands, agriculture, and mining, urban uses occupy a relatively small percentage of the total area of the county. However, despite the dominance of open space as a current land use, a gradual encroachment into formerly open areas is occurring. This phenomenon reflects a basic population shift in Schuylkill County, with older settlements losing population while new housing construction takes place in outlying areas. The 1990 census, for example, shows that the rural population grew by 6.4 percent from 1980 to 1990, whereas the urban population dropped by 17.4 percent. More recently, Norwegian Township's population grew by 12.1 percent from 1990 to 2000, while adjoining Pottsville was losing 6.3 percent of its population over the same period.

The effects of this population shift can be seen on the landscape with new development patterns occurring in formerly wooded, scenic and rural areas. Dispersion of residences and commercial businesses brings with it a number of potential problems, including lack of public services in rural areas, a near-universal dependence on private vehicles for mobility, a decline of local city, borough, and village business districts, and loss of the strong social fabric inherent in these communities. The scattered pattern of urban uses that has begun to occur in parts of Schuylkill County also represents potential threats to environmentally sensitive resources, visual intrusions into the countryside, and a weakening of the economic base of the county in agricultural production

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and tourism.

Schuylkill County has also endeavored to increase employment opportunities as the region has experienced the decline of the coal industry. New businesses along PA Route 61 and industrial parks along Interstate 81 have provided local jobs. The county also updated the land use component of its 1973 Comprehensive Plan in 1995, seeking to guide growth in a manner that would maintain the attractive rural environment that characterizes the area. In addition, a county-wide water supply study has recently been completed.

Open Space and Greenway Plan

Despite the dominance of open space as a land use component in Schuylkill County, with approximately 44 percent of the county as woodlands and 30 percent of the county as agricultural lands, a gradual encroachment into these areas is occurring. This phenomenon reflects a basic population shift in Schuylkill County, with older settlements losing population and new housing construction taking place in outlying areas.

The Schuylkill County Board of Commissioners has identified the need for this Open Space and Greenway Study to promote the importance of these features, ensure a high quality of life for residents, and protect natural resources within the county. The concern for open space conservation in the county is becoming more pronounced as land continues to be developed. As development progresses, it becomes more difficult to set aside significant areas of open space and to maintain greenway connections throughout the county.

This plan presents a physical framework for open space and greenways and examines ways in which Schuylkill County can create an open space and greenway network in the county through collaborative efforts of public and private entities. The plan is funded in part by a grant from the Community Conservation Partnerships Program under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation. The planning process undertaken by Schuylkill County to complete this plan has been designed to meet the requirements of this program.

The opportunity to examine open space and greenway issues in depth as part of the preparation of a County Open Space and Greenway Plan at the same time that the county is preparing a new comprehensive plan has proven invaluable. The two plans together have identified areas of the county that are most important to maintain as open space, the mechanisms by which these areas may be established and preserved, priorities in terms of open space and facility creation, and ways of coordinating with adjacent counties to develop a regional open space network.

Chapter One: Introduction

Planning Process

As an integral part of the preparation of a County Open Space and Greenway Plan, the County Commissioners directed the creation of an Open Space and Greenway Plan Task Force to guide the plan preparation and oversee the work of the consultant. The committee was composed of stakeholders representing different geographic areas of the county, members of conservation organizations, municipal elected and appointed officials, and other interested parties. Through the plan preparation process, the Task Force met on a regular basis with the consultant. The Task Force has had several critical roles to play, including:

- Monitoring progress on the Work Program Schedule, including scheduling and coordinating all Workshops and Public Information Meetings according to the Open Space and Greenway Plan Work Program Schedule;
- Reviewing study products of the consultant, providing feedback to the consultant, and participating in the consensus-building process;
- Providing information and ideas to the consultant and providing data/contacts/leads and direction to the consultant for upcoming tasks in the Work Program Schedule as the process was underway;
- Publicizing the plan, encouraging community participation and media coverage, and advertising specific Public Information Meetings and Public Hearings.

Questionnaire

An initial task for the Task Force members, county staff, and other key stakeholders was to complete a survey on various topics relevant to the Comprehensive and Open Space and Greenway Plan preparation processes. The intent of this questionnaire was to solicit initial perceptions as to important planning issues, problems, future opportunities and needs, and desirable goals for the county.

Key Person Interviews

In addition to the questionnaire, key person interviews were held. The interviews contained in-depth discussions on topics such as open space conservation, other land preservation activities, greenways, trails, recreation facilities, outdoor education, land development activity, and planning issues. Also discussed in the interviews were general county trends, resource protection issues, and perceived potential open space and greenway conservation opportunities. These interviews provided the Open Space and Greenway Plan Task Force, county staff, and the consultant team with important stakeholder perspectives on current conditions in the county as well

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as on future prospects. A summary of the interviews is contained in Appendix A.

Public Involvement

Community participation was a hallmark of the planning process, in order to fully inform residents and to create a strong consensus as to the most desirable and achievable common open space and greenway future for Schuylkill County.

Three Public Information Meetings were held during the course of the plan preparation. The first, held in October 2003, was an introduction to the process being undertaken and an opportunity for the Task Force and consultant to present the range of issues and choices to be examined in the overall Open Space and Greenway Plan preparation process. The second occurred in February 2004, when serious decisions needed to be made as to a direction for the community to take in the coming years, based upon the examination of Alternative Futures in Phase B of the process. The third meeting took place in June 2004, when a Preliminary Draft of the Open Space and Greenway Plan chapter was under review by the Task Force.

The response of the public to the information and concepts presented was an important consideration in the decision making of the Task Force. These Public Information Meetings served to update local residents, business operators, landowners, and other interested parties on progress on the new Schuylkill County Open Space and Greenway Plan and elicited feedback on the ideas being put forward by the Task Force.

Following the Task Force's three public meetings, held throughout the planning process, an additional public meeting was conducted by the County Planning Commission to allow that body to hear public comment and consider the Draft Open Space and Greenway Plan then under review. The Public Hearing formal review process rounded out the extensive community participation program, with adoption action by the Schuylkill County Commissioners.

Work Program Schedule

The Work Program Schedule (Figure 1.2) outlines graphically the open space and greenway plan preparation process that was followed, consisting of three distinct phases.

The first phase ('Phase A') was primarily devoted to background data collection. Tasks within this phase included a review of earlier planning documents and data, creating the base maps of the county for the study, an inventory of natural and cultural features, documentation of open space and recreation facilities, documentation and projections of demographics and

Chapter One: Introduction

development activity, a land use inventory, documentation of infrastructure, and documentation of physical change.

As a foundation for the work in Phase B, Phase A concluded with the setting of preliminary goals and objectives for the plan. Phase B itself incorporated a systematic exploration of a variety of open space and greenway planning issues and alternative development patterns, culminating in the definition of preliminary open space plan recommendations based upon the approach to the future of the county selected by the Task Force.

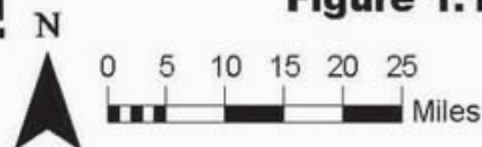
The third phase, Phase C, focused on the actual preparation of the Open Space and Greenway Plan for Schuylkill County. The plan was prepared as preliminary drafts, reviewed by the Open Space and Greenway Task Force, and revised to final draft form. The end of Phase C encompassed the period of public reviews and hearings on the final draft of the plan. Revisions were made based on those reviews and hearings and a camera-ready original of the plan was prepared for printing and public distribution.



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

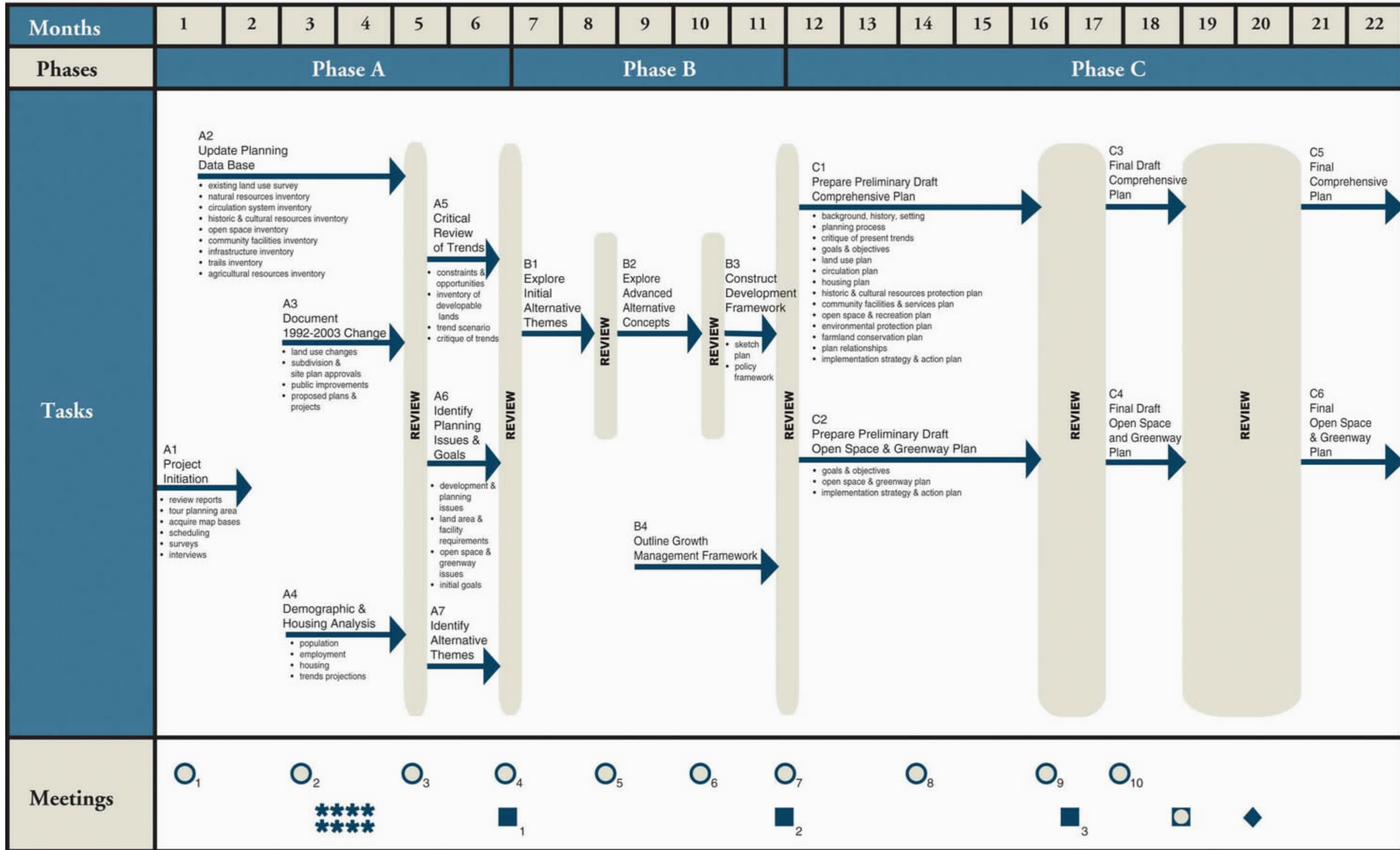
Location of Schuylkill County

Figure 1.1



Work Program Schedule

Schuylkill County Comprehensive Plan & Open Space & Greenway Plan



○ Planning Committee Workshops
 ■ Public Information Meetings
 ***** Key Person Interviews
 □ Planning Commission Public Meeting
 ◆ Public Hearing

Chapter Two: Existing Conditions

Chapter Two: Existing Conditions

SECTION 1: INTRODUCTION

The purpose of this chapter is to summarize existing conditions in Schuylkill County. In particular, it seeks to develop a clear understanding of the county's physical, demographic, social, and economic conditions, based on current circumstances and historical development. Through an analysis of existing natural, historic, and cultural features, as well as accessibility and servicing factors, areas in the county better suited for future development and areas better suited for conservation and preservation measures can be identified.

The material in this chapter is based on information compiled and maintained by state, county, and local government agencies and offices as well as information produced during this phase of the planning process. This chapter consists of four sections in addition to this introduction: Existing Land Use, Resources, Trends, and Suitability.

The Existing Land Use section provides a description of existing land use patterns and their implications for future development and future land conservation. The Resources section provides a summary of environmental, historical, community facility, and transportation factors, as well as other variables that influence the county. The Trends section summarizes selected socio-economic characteristics of county residents, employers, and employees, and reviews housing development as well as past and future growth patterns. The Suitability section includes analyses of levels of accessibility and suitability for development in the county.

Chapter Two: Existing Conditions

SECTION 2: EXISTING LAND USE

Using information from Schuylkill County, recent aerial photography and relevant recent planning documents, a generalized full-color map of current land use in the county has been constructed (Figure 2.2.1). The inventory includes major categories of non-urban uses (agriculture, woodlands, mining areas, and open land) as well as the traditional full range of urban land uses. These uses include residential, industrial, commercial, and utilities as well as some specialized uses including open space, landfills, and prisons.

The purpose of the land use inventory is to assess the pattern and intensity of utilization of land in Schuylkill County. Based on this assessment, it is possible to evaluate the compatibility of existing uses, the extent of land consumption, and to predict the direction that future development may be expected to take in light of existing conditions. The inventory also makes apparent the extent and location of land potentially available for future development and land potentially available for permanent open space and greenway uses.

Most areas of Schuylkill County remain nonurbanized, consisting of lands under cultivation, open fields, mining areas, woodlands, surface water bodies, and wetlands. Agricultural land interspersed with wooded areas prevails over much of the county. Surface waters and wetlands are mainly confined to stream valleys.

Urban land uses are concentrated in the boroughs and along major roads. Residential uses predominate, comprising the major land use in the boroughs and villages as well as the most significant type of urban land use along roadways. Outside existing communities, dwelling units are almost exclusively of the single-family detached type, consisting of either conventional or mobile home units. Development densities are low in the outlying areas, with the exception of occasional subdivisions and mobile home parks.

Commercial activity predominates at the cores of the larger communities, including the City of Pottsville as well as the boroughs of Tamaqua, Frackville, Minersville, Port Carbon, Schuylkill Haven, St. Clair, Shenandoah, Ashland, Ringtown, Pine Grove, and Tremont. Commercial activity is also present alongside the major transportation routes that serve these cities and boroughs, and frequently between built-up areas along PA Routes 61 and 309 as well as at interchanges along Interstate 81.

Industrial land uses are generally close to the urban places, but more remote

Chapter Two: Existing Conditions

locations are also found. Planned business parks and large industrial districts are rare, except for the High Ridge Industrial Park along Interstate 81 in Cass and Foster Townships; the Humboldt Industrial Park in East Union, Delano, and Walker Townships; and the Tidewood East Industrial Park in Rush Township, near Tamaqua.

Government and community facilities, including fire stations, schools, and religious institutions exhibit a similar pattern, with a concentration of these uses in the city of Pottsville, the boroughs, and the villages. Individual school and church sites, as well as fire stations, are scattered throughout the county along local and state roads.

Open space uses in the county include cemeteries, golf courses, and woodlands. Cemeteries are located throughout the county within or near urbanized areas. Golf courses are located in the county primarily in suburban areas. Major bands of woodlands, located in the central portion of the county, stretch from the western to eastern borders of the county. Other significant wooded areas are located north of Shenandoah Borough in Union, North Union, and East Union Townships.

There are two predominant areas in the county with land use classified as mining. The first is located in the north central part of the county and runs east to west from Ashland Borough to Kline Township. The other area is located in the central portion of the county and runs from the western county border with Dauphin County to Coaldale and Tamaqua at the border with Carbon County. Related to mining uses is the presence of a cogeneration plant in Frailey Township, east of Interstate 81.

Other uses include landfills, transportation, and utilities. Landfills are located in the county in Pine Grove Township and at the convergence of the Foster, Reilly, and Frailey Township borders. The Schuylkill County Airport, a significant transportation use, is located in Foster and Barry Townships. Other transportation and utility uses are located throughout the county in urbanized areas.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Existing Land Use

Figure 2.2.1



Chapter Two: Existing Conditions

SECTION 3: RESOURCES

NATURAL RESOURCES

As part of the examination of existing conditions in Schuylkill County, an inventory of various environmental factors was made. These factors are critical components in any consideration of future alternatives for growth and development.

Some of these factors may impose constraints on development, while others may suggest opportunities for development. It is possible for an environmental factor to represent both an opportunity and a constraint for development. Certainly, environmental factors may serve as indicators of areas where conservation should be considered as a land use strategy in order to protect scarce natural resources or important ecological systems.

Inventory maps have been prepared that delineate these resources, including the following:

- Hydrological Features
- Steep Slopes
- Woodlands
- Agricultural Soils

These interrelated, interpretive maps permit the identification of areas within the county requiring preservation, areas requiring conservation, and areas available for development.

Areas requiring preservation include streams, floodplains, public parklands and protected areas, and other lands generally undevelopable due to physical characteristics or statutory regulations. Areas in need of conservation would include fragile environmental areas such as wetlands and areas that contain steep slopes or are subject to erosion, and areas of woodlands, farmlands, and those that contain historic sites and scenic features. These represent areas to be protected or conserved due to their environmentally sensitive nature and to the importance of these valuable resources to the county.

For areas not requiring special efforts toward preservation or conservation, there remain factors that make lands more or less suitable for development,

Chapter Two: Existing Conditions

based on the availability of water and sewer service, soil capacity, existing roads, and other relevant factors.

Terrain

The slopes, valleys, and changing elevations that characterize the Schuylkill County landscape contribute significantly to its beauty and diversity. The topography (and the natural resources it hosts) have also exerted considerable influence over where settlements, agriculture, mining, and roads have located throughout the county.

Schuylkill County is located in the Ridge and Valley Region of the Appalachian Mountains, from which the county derives its diverse topography. Two mountainous ridges traverse the county in a northeasterly to southwesterly direction. Blue Mountain, running along the southern border of the county, separates it from its southern neighbors, Berks and Lehigh Counties. Blue Mountain forms a section of the continuous Kittatinny Ridge, which runs through southern New York, northwestern New Jersey, and through Pennsylvania almost to the Maryland border. The Kittatinny Ridge is well known as an important travel corridor for many species of birds and functions as an important greenway link and connector for this region's otherwise frequently disconnected ecosystems. Second and Broad Mountains parallel Blue Mountain, running along the same northeastern to southwestern axis through the center of the county. Broad Mountain is a significant plateau-like crest that covers approximately 80 miles in the center of the county running from the community of Tremont to Tamaqua and beyond into neighboring Carbon County. In addition to being a notable landmark, Broad Mountain divides the county into its two principal river drainage basins, the Delaware and the Susquehanna. A number of other important named mountains in the county include Mahantongo Mountain in the northwest, stretching eastward almost to the town of Ashland, and Spring Mountain in the northeast of the county including Mahanoy, East Union, and Delano Townships. Of note is the presence of Hawk Mountain, home to the Hawk Mountain Sanctuary, located on the southern border of the county near Port Clinton. This mountain is an important part of the Blue Mountain/Kittatinny Ridge system.

Slope

Approximately one third of the county's land area exists with grades less than 8 percent (Figure 2.3.1). Another third or so of the county's land area has grades of between 8 percent and 15 percent, and the final third of the land area

Chapter Two: Existing Conditions

can be characterized as either steep with grades between 15 percent and 25 percent, or very steep, with grades of greater than 25 percent. The areas of steep and very steep slopes are generally found on the flanks of the mountains described above and form impediments to road travel, agriculture, and urban development that run in the same northeastern to southwestern orientation as the mountain ridges. Large areas of moderate or flat land area also exist in what can be characterized as agricultural valleys in the western and southeastern portions of the county.

Hydrology

Schuylkill County is located in two major drainage basins, the Delaware and the Susquehanna, which are principally separated by Broad Mountain (Figure 2.3.2). Broad Mountain, as described above, is a long plateau-like crest running in a northeast to southwest direction that covers approximately 80 square miles in the center of Schuylkill County. It separates the two major drainages, supplying water to both. Generally, hydrologic features and water runoff in the eastern side of the county flow into the Delaware River drainage basin while flows from the western part of the county reach the Susquehanna drainage basin.

The principal drainage route on the eastern side of the county consists of the West Branch of the Schuylkill River, the Schuylkill River, and the Little Schuylkill River as they flow generally in a southerly direction. The West Branch of the Schuylkill River and the Schuylkill River merge near Cressona and Schuylkill Haven. These branches merge with the Little Schuylkill River near Port Clinton, before leaving the county at its southern border. The West Branch of the Schuylkill River forms in Cass Township to the northwest of the City of Pottsville and originates in a number of streams including Crystal Run, West Creek, Schafer Creek, and Indian Run. The Schuylkill River originates west of Tamaqua and flows toward the center of the county along Route 209, merging with the West Branch of the Schuylkill River and Panther Creek north of Schuylkill Haven. Traveling southeast, the Schuylkill River intersects with Red Creek, Plum Creek, and Bear Creek, before merging with the Little Schuylkill River just to the northwest of Port Clinton. The Little Schuylkill River originates north of Tamaqua and is fed by Lofty and Neifert Creeks north of Tamaqua as well as Rabbit Run, Owl Creek, Stump Run, and Brushy Run along the shared borders of Walker, West Penn, and East Brunswick Townships.

The principal water features on the western side of the county include Mahantongo Creek and Little Mahantongo Creek just south of the county's northern border with Northumberland County, and Deep Creek and Pine

Chapter Two: Existing Conditions

Creek which merge just east of the county's western border after flowing west on either side of Route 25. All of these water features flow toward the west and leave Schuylkill County along its western border with Dauphin and Northumberland Counties. Farther to the south is West Branch Fishing Creek, which is located in an exceptional value watershed¹, as well as the Lower Little Swatara Creek, Black Creek, Panther Creek, and the Upper Little Swatara Creek, which merge to form the Swatara Creek near the community of Pine Grove before flowing west into Lebanon County. Other less significant water features do exist throughout Schuylkill County, including the Catawissa Creek in East and North Union Townships, as well as Panther Creek near Tamaqua and Mahanoy Creek, which runs between Shenandoah and Ashland.

These drainage patterns are significant in the analysis of stormwater runoff as well as in planning for sanitary and stormwater sewer extensions. Other hydrologic characteristics contribute strongly to delineating areas that are available for development and those that constrain development. Of major concern are flood prone zones adjacent to bodies of water and wetlands.

Development in floodplains is hazardous to life and property, not only on proposed development sites, but also in existing developed areas downstream. These areas may be subjected to unexpected changes in stream channel location or in flood heights and velocities. The 100-Year and 500-Year Floodplain areas in Schuylkill County have been identified by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program. The most extensive floodplains occur in lowland areas where stream gradients are less, where there is generally flat land adjacent to or near streams, creeks and drainages, and where the valleys are wider than in the mountains. Notable 100-Year floodplain areas include land in the southwestern part of Schuylkill County adjacent to the Upper Swatara Creek and the Lower Little Swatara Creek and their convergence near the community of Pine Grove into Swatara Creek. Small pockets of land around and within Pine Grove are located in a 500-Year floodplain. In the northwestern part of Schuylkill County, 100-Year floodplains follow the Mahantongo and Little Mahantongo Creeks, Mahanoy Creek near the community of Gordon, and Pine and Deep Creeks in the vicinity of Route 25. In the northern part of Schuylkill County, 100-Year floodplains surround the Little Catawissa Creek and the Catawissa Creek as they meander through North and East Union Townships. In the southeast, 100-Year floodplains follow Panther Creek as it runs through the town of Tamaqua and the Little

¹ An Exceptional Value Watershed is a watershed that contains a stream or streams that have been rated Exceptional Value. Streams may receive this rating if DEP testing demonstrates that they possess "high biotic integrity and health with test data from over a year." Exceptional Value streams include those in state natural areas or federally protected wilderness areas, "other waters that receive a score of 92% biotic integrity ranking and wilderness trout streams."

Chapter Two: Existing Conditions

Schuylkill River and some of the smaller streams (known as runs) that feed into it as it travels southwest from Tamaqua. Finally, from the center of the county running southeast, is the Schuylkill River. It is surrounded by a 100-Year floodplain for the majority of its passage through the communities of Middleport, New Philadelphia, Port Carbon, Mechanicsville, Schuylkill Haven, Auburn, and, finally, Port Clinton on Schuylkill County's southern border. There are pockets of land that are located in the 500-Year floodplain along the upper reaches of the Schuylkill River in Port Carbon, along the enlarged Schuylkill River in Schuylkill Haven and nearby Cressona, and throughout the final curves of the Schuylkill River as it reaches Port Clinton and flows south into Berks County.

Surface water area in Schuylkill County is not extensive. There are only a few lakes and reservoirs, including Lake Hauto in Rush Township and Sweet Arrow Lake in the southwest, near Pine Grove. However, the total area and widespread pattern of stream courses and their related floodplains are noteworthy. Another man-made water body in the area is Indian Run Reservoir in Branch Township, just southeast of the City of Pottsville. Also, Tumbling Run Dams are located in North Manheim Township.

Wetlands are among our most valuable resource areas because they control flooding, improve water quality, and support a wide variety of animal and plant species. Wetlands are characterized generally by a high water table, poor drainage, and some degree of surface ponding during the year. The U.S. Fish and Wildlife Service has delineated wetlands in Schuylkill County under the National Wetlands Inventory Project. These wetlands include surface water bodies, most floodplains, and other small areas. Schuylkill County is dotted with hundreds of farm ponds which, according to the National Wetland Inventory, qualify as wetlands.

Most hydric soils also qualify as wetlands. A hydric soil is one that in its undrained condition is flooded, ponded, or saturated long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. Hydric soils exist in Schuylkill County along the paths of many of the streams described above. There are large swaths of hydric component soils, which are less concentrated although similar in character, located in the lowland valleys between the two major topographic ridges that run southwest to northeast through the county.

Soils

Soils information is a vital component of any natural resource evaluation because soil characteristics indicate the inherent suitability of an area for

Chapter Two: Existing Conditions

development, agriculture, or other land uses. Additionally, in areas under development pressure, the presence of agricultural soils is an important anchor for conservation, farm preservation, and other growth management efforts. The Agricultural Soils map for Schuylkill County, prepared by the United States Department of Agriculture Natural Resources Conservation Service and the Soil Survey Geographical Data (SSURGO), shows areas of the county that have prime agricultural farmland soils and soils of statewide importance (Figure 2.3.3). Prime farmland, of which there are 66,285 acres in the county, is defined as land best suited for producing food, feed, forage, fiber, and oilseed crops, and also is available for these uses. The land could be cropland, pastureland, rangeland, forest land, or other land but not built-up land or water. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

Prime agricultural soil is generally made up of silty, and in fewer cases gravelly, channery or sandy loams, on land that is sloped less than 8 percent. Broad swaths of prime agricultural farmland soil exist in Schuylkill County, throughout low-lying areas, often following significant watersheds and generally located near other farmable soils. The largest band of agricultural soil is in the southern part of the county and stretches from its east to west border, encompassing large areas between Schuylkill Haven to the north, Pine Grove to the west, Auburn to the south, and from Carbon County to the east. Another large band of prime agricultural farmland soil stretches from the westernmost point of Schuylkill County in Upper Mahantongo Township east into Butler Township near Frackville. There is a third large concentration of prime agricultural farmland soils in Union and North Union Townships in the north of Schuylkill County. The final large concentration is northwest of Tamaqua in Ryan and Rush Townships.

Additional land of statewide importance, of which there is 86,384 acres, is land, in addition to prime farmland, that is of statewide importance for agricultural production. These soils are generally various types of silty loams, and in fewer cases gravelly, shaly or channery sandy loams, on land that is sloped between 3 percent and 15 percent. Not surprisingly, the location of these soils of statewide importance throughout the county mirrors the concentrations and patterns of the prime agricultural soils described above.

Woodlands

Schuylkill County forests, as classified by the United States Department of Agriculture Forest Service, are located in an area of the state known as the

Chapter Two: Existing Conditions

Central Appalachian Broadleaf Forest–Coniferous Forest–Meadow Province. Compared to other land uses in the county, woodlands comprise the largest, with approximately 224,000 acres or 44 percent of county land. Major bands of woodlands, located in the central portion of the county, stretch from the western to eastern borders of the county. Other significant wooded areas are located north of Shenandoah borough in Union, North Union, and East Union Townships surrounding Ringtown Borough.

The county has over 9,000 acres of woodlands preserved in Weiser State Forest in association with the Second and Blue Mountain ranges. This acreage is located in the following townships: Barry, Branch, Eldred, North Manheim, Reilly, Ryan, South Manheim, Washington, Wayne, West Brunswick, and West Penn.

Composite Constraints

The preceding natural resource information was combined and synthesized to illustrate the relative level of development constraints affecting various areas of Schuylkill County (Figure 2.3.4). These features, including:

- Floodplains;
- Wetlands;
- Slopes;
- Woodlands; and
- Hydric Soils

represent environmentally sensitive natural and scenic resources as well as potential constraints for future development.

Floodplains and wetlands, and the waterways around which they often cluster, are generally precluded from development due to the flood risk and the substantial and still evolving regulatory framework that controls the degree and type of disturbance permitted in these areas. Floodplains and wetlands qualify as being very severe constraints for development.

Steeply sloped areas pose severe constraints for most development, while woodlands and hydric soils represent moderate constraints for development. The balance of the county has only slight development limitations.

The composite pattern illustrates the prominent but controlled form of floodplains through most of the county, the striated form of the two mountain ridges that run northeast to southwest through the county, and the dense combinations of the series of features constituting moderate constraints for

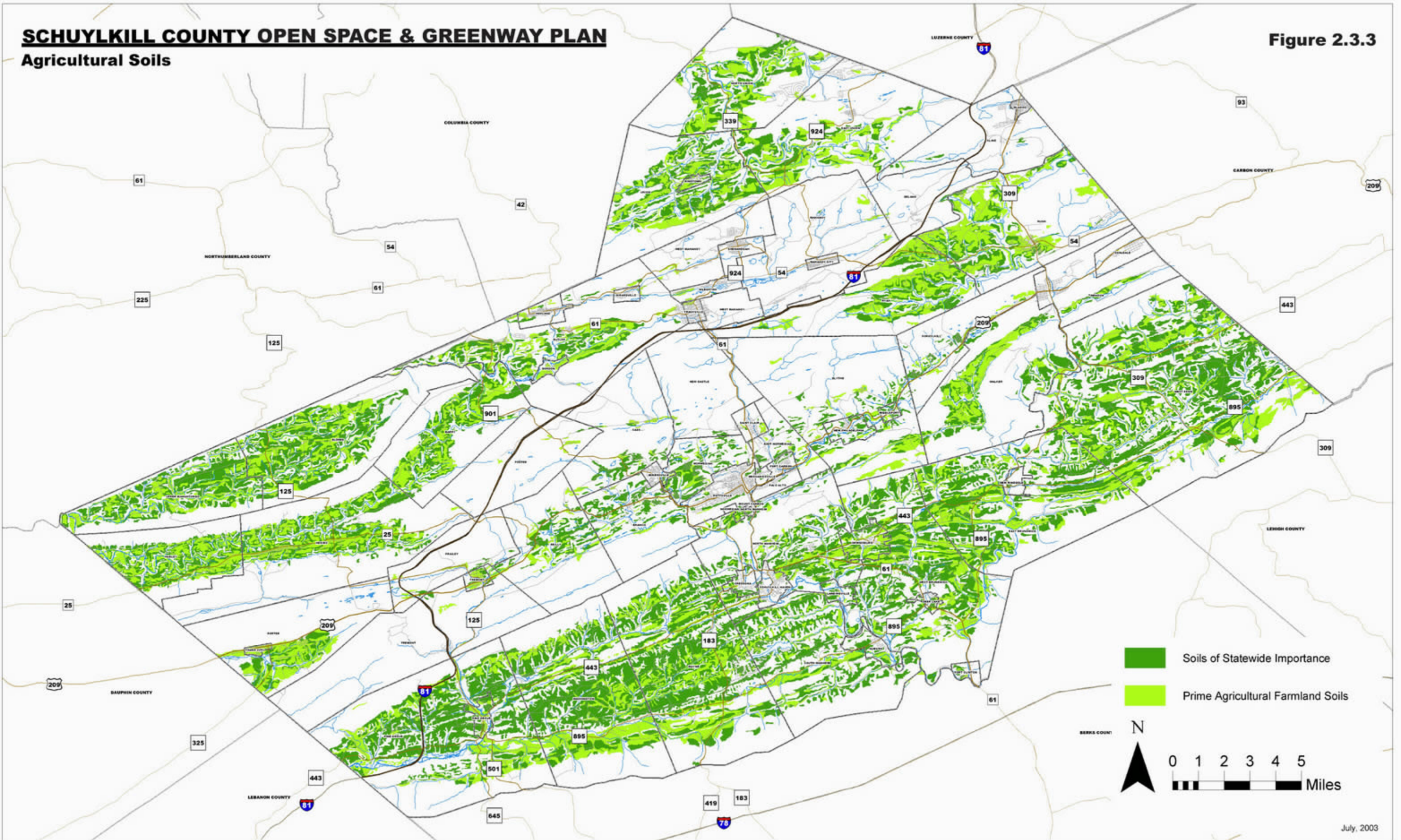
Chapter Two: Existing Conditions

development in the foothills abutting the mountains. The rest of the county exhibits a very rough mosaic of moderately constrained areas and areas with only slight constraints, dominated by large valleys through which the county's many waterways run.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Agricultural Soils

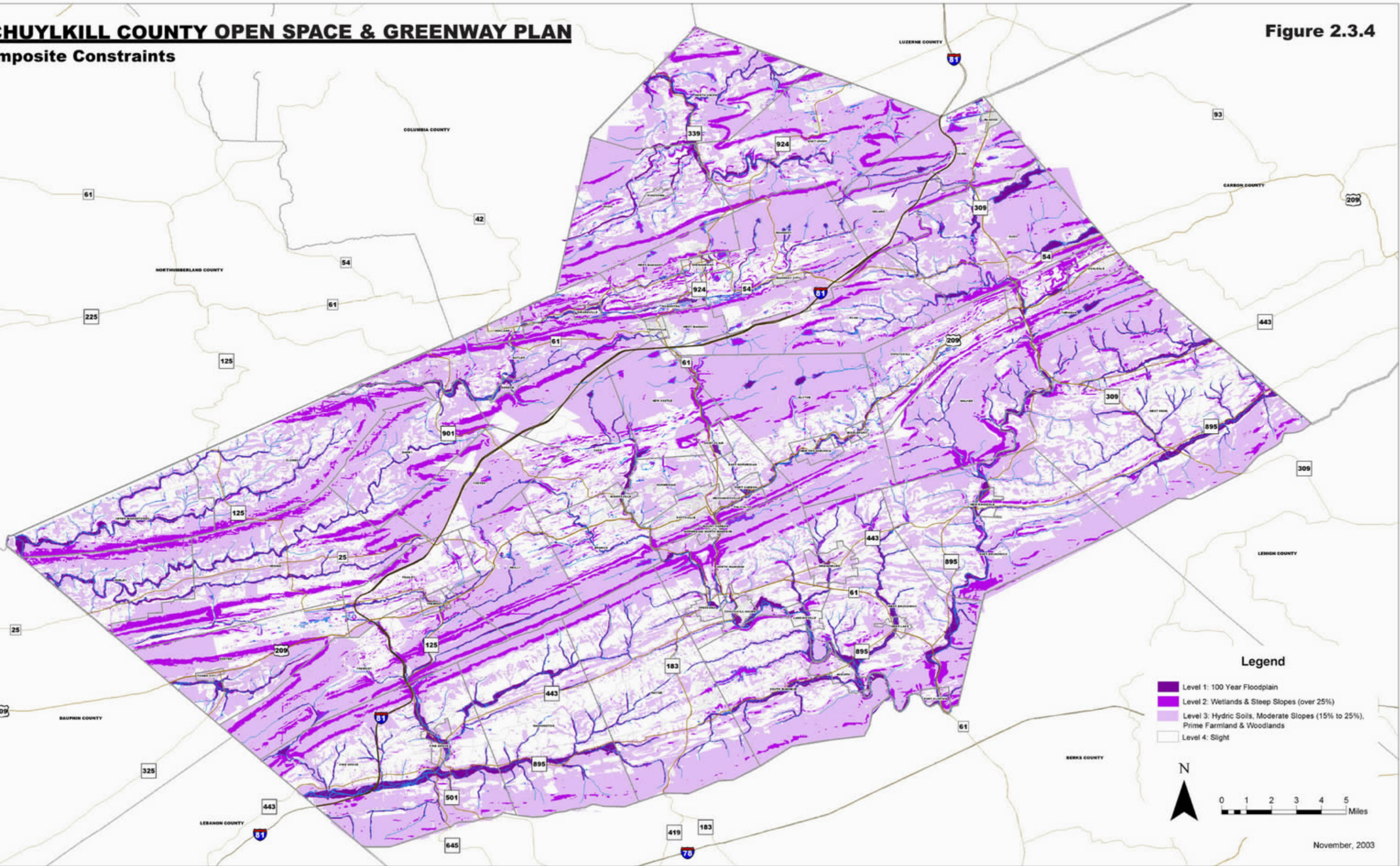
Figure 2.3.3



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Composite Constraints

Figure 2.3.4



Legend

- Level 1: 100 Year Floodplain
- Level 2: Wetlands & Steep Slopes (over 25%)
- Level 3: Hydric Soils, Moderate Slopes (15% to 25%), Prime Farmland & Woodlands
- Level 4: Slight



Chapter Two: Existing Conditions

NATURAL AREAS INVENTORY

The natural areas of Schuylkill County provide a habitat for a great diversity of plants and animals, including rare, threatened, and endangered species. The Natural Areas Inventory map documents examples of intact natural communities and sites for species rarely found in the state or the world.

All information on the Natural Areas Inventory map (Figure 2.3.5) and the accompanying table (Table 2.3.?) has been taken from the Schuylkill Conservation District's *Natural Areas Inventory of Schuylkill County, Pennsylvania, 2003*. The map depicts species and selected geologic features of statewide significance. In addition, the map identifies areas that are significant on a county-wide scale, but were not recognized as exemplary natural communities since no species of concern are known to be present from recent survey efforts. However, the county-wide significant sites represent good examples of habitats that are relatively rare in the county, support an uncommon diversity of plant species, and/or provide valuable wildlife habitat on a local level. In many, but not all cases, areas of state-wide and county-wide significance correspond to areas that are preserved through state ownership of parks, forests, and gamelands.

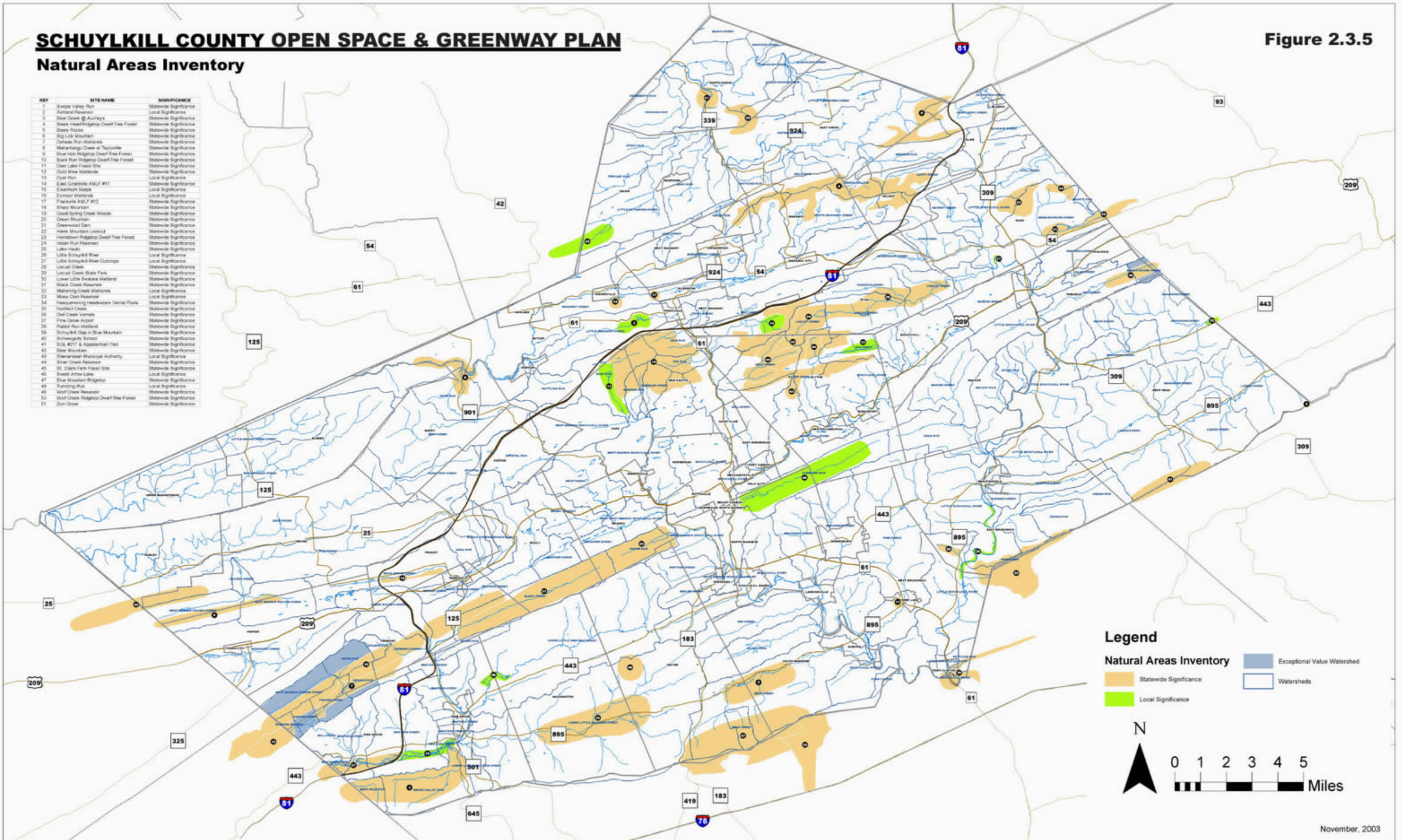
Natural areas are also available and are used for human activities. Both residents and visitors to the county can enjoy scenic and recreational opportunities in these areas.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Natural Areas Inventory

Figure 2.3.5

KEY	SITENAME	SIGNIFICANCE
1	Sweep Valley Run	Statewide Significance
2	Ashland Reservoir	Local Significance
3	Beer Creek @ Auchys	Statewide Significance
4	Beer Head Ridge/Dwarf Tree Forest	Statewide Significance
5	Beer Run	Statewide Significance
6	Big Lick Mountain	Statewide Significance
7	Denasa Run Wetlands	Statewide Significance
8	Mahantago Creek at Taylors	Statewide Significance
9	Blue Hill Ridge/Dwarf Tree Forest	Statewide Significance
10	Black Run Ridge/Dwarf Tree Forest	Statewide Significance
11	Over Lake Forest Site	Statewide Significance
12	Gold Mine Wetlands	Statewide Significance
13	Dyer Run	Local Significance
14	East Gravelly AMU #11	Statewide Significance
15	Evershill Seeps	Local Significance
16	Exmore Wetlands	Local Significance
17	Frackville AMU #12	Statewide Significance
18	Knep Mountain	Statewide Significance
19	Good Spring Creek Woods	Statewide Significance
20	Green Mountain	Statewide Significance
21	Greenwood Dam	Statewide Significance
22	Hawk Mountain Lookout	Statewide Significance
23	Hemlock Ridge/Dwarf Tree Forest	Statewide Significance
24	Indian Run Reservoir	Statewide Significance
25	Lake Halls	Statewide Significance
26	Little Schuylkill River	Local Significance
27	Little Schuylkill River Outcrops	Local Significance
28	Locust Creek	Statewide Significance
29	Locust Creek State Park	Statewide Significance
30	Lower Little Schuylkill Wetland	Statewide Significance
31	Black Creek Reservoir	Statewide Significance
32	Manning Creek Wetlands	Local Significance
33	Moss Glen Reservoir	Local Significance
34	Nequebecong Headwaters Vernal Pools	Statewide Significance
35	Norfolk Creek	Statewide Significance
36	Old Creek Vernal	Statewide Significance
37	Pine Grove Airport	Statewide Significance
38	Rabbit Run Wetland	Statewide Significance
39	Schuylkill Gap in Blue Mountain	Statewide Significance
40	Schweigert Spring	Statewide Significance
41	SGL #217 & Appalachian Trail	Statewide Significance
42	Seep Mountain	Statewide Significance
43	Shenandoah Municipal Authority	Local Significance
44	Silver Creek Reservoir	Statewide Significance
45	St. Clare Fern Forest Site	Statewide Significance
46	Sweet Arrow Lake	Local Significance
47	Blue Mountain Ridge/Dwarf Tree Forest	Statewide Significance
48	Running Run	Local Significance
49	Wolf Creek Reservoir	Statewide Significance
50	Wolf Creek Ridge/Dwarf Tree Forest	Statewide Significance
51	Zion Grove	Statewide Significance



Chapter Two: Existing Conditions

Table 2.3.1 Natural Areas Inventory

	Site Name	Significance
1	Swope Valley Run	Statewide Significance
2	Ashland Reservoir	Local Significance
3	Bear Creek @ Auchey's	Statewide Significance
4	Bears Head Ridgetop Dwarf-Tree Forest	Statewide Significance
5	Bears Rocks	Statewide Significance
6	Big Lick Mountain	Statewide Significance
7	Dehaas Run Wetlands	Statewide Significance
8	Mahantango Creek at Taylorville	Statewide Significance
9	Blue Nob Ridgetop Dwarf-Tree Forest	Statewide Significance
10	Buck Run Ridgetop Dwarf-Tree Forest	Statewide Significance
11	Deer Lake Fossil Site	Statewide Significance
12	Gold Mine Wetlands	Statewide Significance
13	Dyer Run	Local Significance
14	East Girardville AMLF #11	Statewide Significance
15	Eisenhuth Seeps	Local Significance
16	Exmoor Wetlands	Local Significance
17	Frackville AMLF #12	Statewide Significance
18	Sharp Mountain	Statewide Significance
19	Good Spring Creek Woods	Statewide Significance
20	Green Mountain	Statewide Significance
21	Greenwood Dam	Statewide Significance
22	Hawk Mountain Lookout	Statewide Significance
23	Hometown Ridgetop Dwarf-Tree Forest	Statewide Significance
24	Indian Run Reservoir	Statewide Significance
25	Lake Hauto	Statewide Significance
26	Little Schuylkill River	Local Significance
27	Little Schuylkill River Outcrops	Local Significance
28	Locust Creek	Statewide Significance
29	Locust Creek State Park	Statewide Significance
30	Lower Little Swatara Wetland	Statewide Significance
31	Black Creek Reservoir	Statewide Significance
32	Mahoning Creek Wetlands	Local Significance
33	Moss Glen Reservoir	Local Significance
34	Nesquehoning Headwaters Vernal Pools	Statewide Significance
35	Northkill Creek	Statewide Significance
36	Owl Creek Vernals	Statewide Significance
37	Pine Grove Airport	Statewide Significance
38	Rabbit Run Wetland	Statewide Significance
39	Schuylkill Gap in Blue Mountain	Statewide Significance
40	Schweigerts School	Statewide Significance
41	SGL #217 & Appalachian Trail	Statewide Significance

Chapter Two: Existing Conditions

Table 2.3.1 Natural Areas Inventory - Continued

	Site Name	Significance
42	Bear Mountain	Statewide Significance
43	Shenandoah Municipal Authority	Local Significance
44	Silver Creek Reservoir	Statewide Significance
45	St. Claire Fern Fossil Site	Statewide Significance
46	Sweet Arrow Lake	Local Significance
47	Blue Mountain Ridgetop	Statewide Significance
48	Tumbling Run	Local Significance
49	Wolf Creek Reservoir	Statewide Significance
50	Wolf Creek Ridgetop Dwarf-Tree Forest	Statewide Significance
51	Zion Grove	Statewide Significance

Chapter Two: Existing Conditions

HISTORIC AND LANDSCAPE RESOURCES

Landscape Character and Scenic Resources

Schuylkill County has a rich landscape, a significant portion of which remains untouched by urban, suburban, or industrial development. These include areas of farmland and woodlands. A most basic difference among the different geographic areas in the county is their underlying geology. The various geologic formations and their weathering over time have created the landforms and drainage patterns with which we are familiar today. The landforms, the drainage patterns, the soils developed from the geologic formations, and the other natural resources characteristic of each geographic area have played a large part in shaping the settlement and use of the land by people. Land use, in turn, has given shape to the Schuylkill County landscape by establishing its spatial patterns, divisions, and degrees of accessibility, as well as by influencing the vegetative growth, which is constantly changing. In seeking to preserve the landscape of Schuylkill County, it will be important to identify fully those elements that contribute to the landscape's character, and to create policies and processes that preserve and reinforce those elements as the county continues to grow and develop.

Historic Resources

Historic resources in Schuylkill County represent the region's different periods of settlement. The oldest development grew around the county's waterways and crossroads. Later resources represent the growth around railroad lines and the subsequent mining communities that developed. Since its initial European settlement in the 1700s, the county has experienced change through development and evolution of existing industries and institutions, economic conditions, and way of life. As a consequence, the historic character of the county's landscape has remained strong. From the standpoint of historical significance, Schuylkill County is predominantly home to a 19th-century agricultural and 19th- to 20th- century industrial landscape. Historic resource types include farmsteads, residences, mills, schoolhouses, and churches and tend to be related to the peak development of boroughs and villages located in or near mining areas or concentrations of farms.

As part of this planning process, a review of previous surveys of local historic resources was undertaken. Following is a list of the existing resources as well as new resources reviewed for this plan. These resources are also mapped out in Figure 2.3.6.

Chapter Two: Existing Conditions

Table 2.3.2 Historic Resources

ID Number	Resource Name	Location
1	The Old Forge / Swatara Furnace	Pine Grove
2	Union Canal Ruins	Pine Grove
3	Revolutionary War Cemetery	Pine Grove
4	Covered Bridge	Washington
5	Covered Bridge	Washington
6	Vietnam Veterans Memorial	Schuylkill Haven
7	Pioneer Tunnel Coal Mine	Ashland
8	Museum Of Anthracite Mining	Ashland
9	Mothers Memorial	Ashland
10	Pennsylvania Anthracite Miners Memorial	Shenandoah
11	St. Michael's Ukrainian Catholic Church	Shenandoah
12	Charles Kaier Mansion	Mahanoy City
13	Mahanoy Plane Engine House Ruins	Frackville
14	Hibernian House (Molly Maguires)	Girardville
15	Girard Estate Office	Girardville
16	St Nicholas Coal Breaker	Mahanoy Township
17	Peddler's Grave	Mahanoy Township
18	Civil War Soldiers Monument	Mahanoy Township
19	Sheppton Mine Disaster Site	East Union Township
20	Old White Church / Cemetery	Union Township
21	New St. Nick Breaker	Norwegian Township
22	St. Kieran's Church / Cemetery	Cass Township
23	Pottsville Maroon's Football Field (Kings Village)	Branch Township
24	Coal Miner Statue	Branch Township
25	Minersville Train Station	Minersville
26	St. Nick's Ukrainian Church	Minersville
27	Henry Clay Monument	Pottsville
26	Yuengling Brewery	Pottsville
28	Schuylkill County Jail	Pottsville
29	Schuylkill County Courthouse	Pottsville
30	John O'Hara House	Pottsville
31	St. John's Roman Catholic Church	Pottsville
32	Presbyterian Church	Pottsville
33	United Methodist Church	Pottsville
34	Nicholas Biddle Grave	Pottsville
35	Garfield Square Monument	Pottsville
36	Yuengling Mansion	Pottsville
37	Charles Baber Cemetery	Pottsville
38	Schuylkill Canal Ruins	Port Carbon
39	Port Carbon Soldiers Monument	Port Carbon

Chapter Two: Existing Conditions

Table 2.3.2 Historic Resources - Continued

<u>ID Number</u>	<u>Resource Name</u>	<u>Location</u>
40	Mother Allison Memorial	Port Carbon
41	Schuylkill Canal Mural	Port Carbon
42	John Siney Monument	St. Clair Area
43	Walker's Hall (Site of First Miners Union Meeting)	St. Clair Area
44	St. Clair Civil War Monument	St. Clair Area
45	Fort Lebanon Historical Marker	West Brunswick
46	Landingville Community Park Schuylkill Canal Ruins	Landingville
47	Schuylkill Canal Ruins	West Brunswick
48	Schuylkill Canal Ruins and Historic Towpath Trail	West Brunswick
49	Zions (Old Red) Church and Cemetery	West Brunswick
50	Revolutionary War Historical Marker	West Brunswick
51	Kelayres Massacre Site	Kline Township
52	Newkirk Tunnel Historical Site	Tamaqua
53	Tamaqua Train Station	Tamaqua
54	Burkhart Moser House	Tamaqua
55	Odd Fellow's Cemetery	Tamaqua
56	St. Jerome's Cemetery (Molly M's)	Tamaqua
57	Hegarty Blackmith Studio	Tamaqua
58	Fort Franklin Historic Site	West Penn Township
59	First Schuylkill County Courthouse	East Brunswick Township
60	Minersville Churches	Minersville
61	[unassigned]	
62	Pine Grove Historic District	Pine Grove
63	Tamaqua Historic District	Tamaqua
64	Port Clinton Historic District [proposed]	Port Clinton
65	Pottsville Downtown Historic District	Pottsville

Chapter Two: Existing Conditions

County Trail System

The county has an important trail system that passes through many natural and man-made resource areas (Figure 2.3.7). Expansion of this trail network and linkages to areas outside the county are ongoing.

Schuylkill County is bound on its southern border by the famous Appalachian Trail, which stretches from Georgia to Maine. However, the county also contains a number of other scenic paths and trails, many of which are located along the banks of the Schuylkill River and its tributaries as they flow to the south. In conjunction with the many water features, parkland, and other open space in Schuylkill County, the trail system is an important resource recreationally as well as economically because of the visitors it attracts and quality of life it provides.

Appalachian Trail: The Appalachian Trail, or the “A.T.” as it is known to hikers, runs along a large extent of Schuylkill County's southern border. On its route through the Schuylkill County area, the A.T. passes through woodland, mountain ridges, important bird migration zones and viewing areas, and amongst many of Schuylkill County's streams and rivers. It leaves the county just southeast of Port Clinton near the Hawk Mountain Sanctuary.

Bartram Trail: This trail follows elements of the Schuylkill River on its eastern shore as it meanders south from the Pottsville area through Schuylkill Haven, Landingville, and Auburn, ending in Port Clinton on the county's southern border. The Bartram Trail is part of a system that extends beyond the boundary of the county.

Lehigh and New England Rail Trail: Opened in June 2002, this former rail line turned into a recreation trail under the Rails-to-Trails program and runs along PA Route 309 between the borough of Tamaqua and West Penn Township in the eastern part of Schuylkill County.

Little Schuylkill Branch Trail: This trail is located on the banks of the Little Schuylkill River as it flows from above the Borough of Tamaqua toward Port Clinton and Schuylkill County's southern border. South of Tamaqua the trail runs on the western side of PA Route 309 before heading southwest through Walker Township, New Ringgold, East and West Brunswick Townships, and Port Clinton.

Schuylkill River West and Main Branch Water Trail: This path, as its name suggests, follows the western and then main branches of the Schuylkill River from their origin in Cass Township to the southern border of the county near Port Clinton. The trail travels south through Minersville and along the western edge of the City of Pottsville before trending southeast through Cressona, Schuylkill Haven, Landingville, and Auburn, and converging with the Little

Chapter Two: Existing Conditions

Schuylkill River in Port Clinton. This path is part of a system that extends beyond the boundary of the county.

Schuylkill Valley Heritage Trail: Running between Middleport and Tamaqua, as well as extending south along PA Route 309, this trail will eventually connect the Lehigh and New England Rail Trail in the eastern part of Schuylkill County with the Bartram Trail running south from the Pottsville area. The Schuylkill Valley Heritage Trail runs along the southern side of US Route 209.

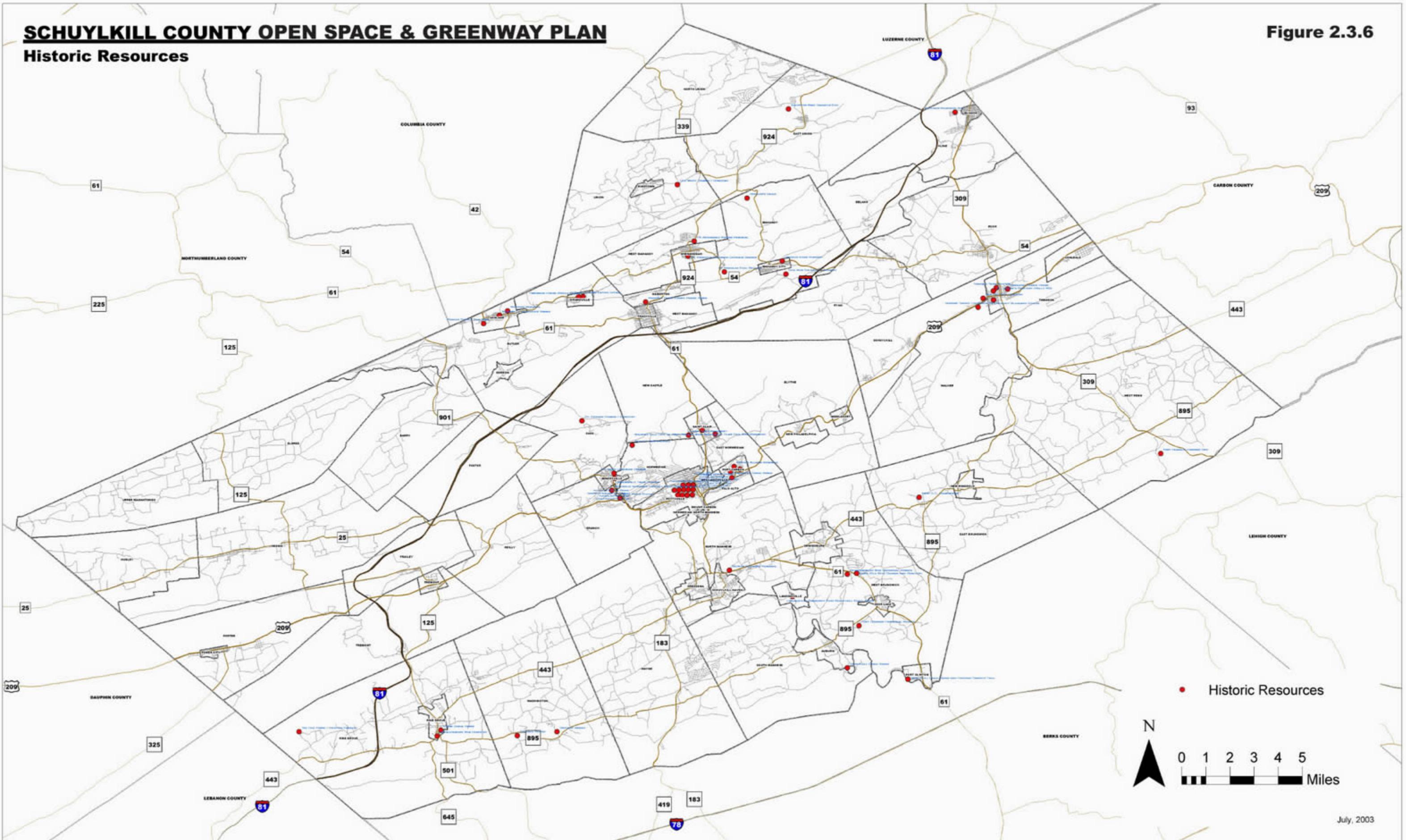
Stony Valley Railroad Grade Trail: Located amidst state gamelands, the West Branch Creek, and other water features on the western edge of Schuylkill County, this trail is relatively remote. It originates at the western border of Schuylkill County with Dauphin County and runs approximately 22 miles east into Tremont Township.

Swatara State Park Trail: Located in Swatara State Park and following eight miles of the Swatara Creek, this trail is another successful conversion from a former rail line. The trail originates in Lebanon County and runs east through Pine Grove Township.

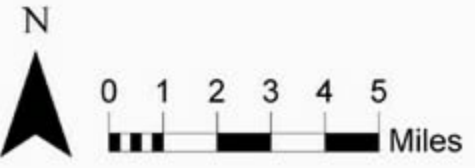
SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Historic Resources

Figure 2.3.6



• Historic Resources



Chapter Two: Existing Conditions

LAND CONSERVATION AND PRESERVATION

Several techniques are now being used to conserve farmland in the county (Figure 2.3.8). The most important is the purchase of agricultural conservation easements, since these essentially preserve farmland in perpetuity. Other techniques, such as Agricultural Security Areas, can be helpful in conserving land for agriculture. Additional land is being considered for preservation in the county through the acquisition of property for state gamelands, state parks, and state forests.

Agricultural Conservation Easements

Schuylkill County is participating fully in the Pennsylvania Purchase of Agricultural Conservation Easements (PACE) program. Easements provide protection of farmland that is essentially permanent. They can be reviewed after 25 years, however, and, if both the state Agricultural Preservation Board and the Local Agricultural Advisory Committee (in Schuylkill County, the Agricultural Land Preservation Board) find that the land under easement is no longer viable agricultural land, the development rights can be sold to the current owner. In order to be eligible for the PACE program, farmland must be located in an Agricultural Security Area. As of 2003, Schuylkill County has acquired easements on 70 farms, totaling approximately 8,500 acres.

The largest concentration of preserved farms is in northwestern Schuylkill County. Preserved farms in this area are located in Upper Mahatongo, Hubley, Eldred, Hegins, and Barry Townships. Other areas of preserved farms include portions of Union and West Penn Townships in the northeast and farms in Wayne and Washington Townships in the south.

Agricultural Security Areas

Many farmland owners have enrolled their land in Agricultural Security Areas. The Agricultural Security Areas law prevents municipalities from enacting ordinances that restrict normal farming practices or structures in these areas. It also requires state agencies with programs that might negatively affect farmers to conduct their programs in a manner that will encourage the continuance of viable agriculture in the areas. It requires the approval of the Agricultural Lands Condemnation Approval Board of the Commonwealth before the Commonwealth or local governments use the power of eminent domain to acquire land in an area. Finally, the law requires that state or locally funded development projects in a Security Area be reviewed by the state Agricultural Preservation Board and the Schuylkill County Agricultural Land Preservation Board. Inclusion of an area is voluntary and does not prevent the landowner

Chapter Two: Existing Conditions

from developing his land. As of 2003, there were 14 townships in Schuylkill County that had established Agricultural Security Areas consisting of over 56,900 acres. Agricultural Security Areas in the county cover farmland in the northwest, northeast, south, and southeast. The areas in the northwest and northeast, in particular, make up a large portion of areas of suitable agricultural soils.

State Forests

State forests in Pennsylvania are administered by the Department of Conservation and Natural Resources (DCNR) Bureau of Forestry. State forests in the county are overseen through Forestry District #18, the Weiser District, which manages lands in Lebanon, Berks, Dauphin, Schuylkill, Northumberland, and Carbon Counties. As mentioned in the section on Natural Resources in this chapter, there are approximately 9,000 acres of Schuylkill County lands managed in Weiser State Forest.

State Gamelands

State gamelands are managed through the Pennsylvania Game Commission and are scattered throughout the county. The largest concentration in the county is located along the county's southern border with Berks County. Other areas exist along the border of Delano and East Union Township and along the border of Schuylkill Haven and North Manheim Townships. Other municipalities that contain state gamelands include Tremont, Porter, Hubley, Reilly, Eldred, Hegins, Rush, and Walker Townships, and Tamaqua Borough.

State Parks

Locust Lake State Park

Known for its popular camping area, Locust Lake State Park nestles on the side of Locust Mountain in Ryan Township. Hiking, fishing, biking, and camping are popular activities in the 1,089-acre park.

Swatara State Park

The 3,515-acre Swatara State Park, is located in Lebanon and Schuylkill Counties and situated along Interstate 81 between Second and Blue Mountains. One of the main focal points is the eight miles of Swatara Creek that winds through the park. A recreation area is planned for the future and will offer canoeing, fishing, hiking, picnicking, bicycling, swimming, camping, and environmental education.

Chapter Two: Existing Conditions

Tuscarora State Park

The 1,618 acre park is located in Ryan, Rush, and Schuylkill Townships and surrounding Tuscarora Lake. Activities available in the park include picnicking, fishing, hiking, camping, and environmental education. The park is home to the Park Office and Visitor Center for Tuscarora and Locust Lake state parks.

County-Owned Lands

Sweet Arrow Lake

Schuylkill County has acquired land surrounding Sweet Arrow Lake in Pine Grove and Washington Townships in order to develop the first county park. Plans for recreational activities include facilities for swimming, fishing and boating. There are also plans to renovate the historic clubhouse at the lake as well as ongoing environmental work on the dam.

Chapter Two: Existing Conditions

CIRCULATION

Since the period in the mid-1970s when Schuylkill County's last Comprehensive Plan was completed, traffic in the county has increased. A number of different factors, including increased rates of car ownership and long-distance commuting, new patterns of residential development, and new concentrations of employment activities, means that a rethinking of current and future transportation needs is due.

The Existing Roadway Network

The transportation network of Schuylkill County consists of two main north-south highways and an Interstate Highway that runs northeast to southwest through the county (Figure 2.3.9). Additional state and local roads run through the various parts of the county. Larger communities are generally well served by the road network. One of the more significant aspects of the recent history of Schuylkill County is the manner in which transportation corridors have influenced land use. Formerly commercial and industrial activities tended to be concentrated in and near boroughs and other important settlements. Recently, these uses have occurred along PA Route 61 and at the interchanges along Interstate 81. Similarly, residential uses are no longer so much focused on Pottsville, boroughs, and villages with new development now occurring frequently in more remote locations.

Key corridors in Schuylkill County are described below:

- Interstate 81: This northeast to southwest highway crosses the northern tier of the county, passing through lowlands in between the county's two major mountain ridges en route from Harrisburg and points south to the Wilkes-Barre/Scranton area and New York State. The highway enters Schuylkill County from Lebanon County to the southwest and leaves it in Luzerne County to the northeast. The construction of this roadway has changed the conditions of access in a profound way for the northern half of the county over the last 40 years, and has spawned development of industrial parks, shopping centers, three prisons, and two large landfills. Economic incentives, as well as superior access and generally developable land, have helped spur development.
- PA Route 61: This important, mostly four-lane highway, runs from Reading to the Susquehanna River at Sunbury, passing through the center of Schuylkill County and its largest community, the City of Pottsville. PA Route 61 is the historic main spine of the county, providing access to numerous commercial and industrial businesses

Chapter Two: Existing Conditions

along its path and tying together a number of Schuylkill County's large communities including Schuylkill Haven, the City of Pottsville, Mechanicsville, Saint Clair, Frackville, Shenandoah, and Ashland. PA 61 enters Schuylkill County from Berks County to the south in the community of Port Clinton and leaves via Ashland heading northwest into Northumberland County. PA 61 has seen an increase in traffic and congestion in recent years, particularly in areas south of Pottsville. This is a corridor-wide problem, but is felt most acutely in Schuylkill Haven and other places where the roadway runs right through the middle of historic communities.

- PA Route 309: The third significant transportation corridor is this well-traveled and historic highway on the eastern side of Schuylkill County. Considered a spine for the eastern portion of the county, PA Route 309 links Allentown to Hazleton, passing through Tamaqua Borough in Schuylkill County. This road has seen significant increases in traffic. PA 309 enters Schuylkill County from Lehigh County to the south, intersecting with PA Route 895 before heading north through Tamaqua and Rush Township and exiting the county into Luzerne County parallel with Interstate 81.

Current Traffic Volumes

As indicated by traffic counts performed, estimated, and tabulated by PennDOT in 2000 and 2001, there is a wide diversity of traffic volumes throughout different parts of Schuylkill County (Figure 2.3.10). Major roads such as Interstate 81 and PA Route 61 carry heavy volumes of vehicles, often with an annual average daily traffic (AADT) rate of between 20,000 and 26,000 vehicles. Many of the county's other state routes, especially those which allow east to west movement, are less well traveled but still have significant AADTs, ranging from 2,000 to 8,000 vehicles. Finally, there are a number of smaller local roads and sparsely traveled state routes that have AADT levels well below 2,000 and sometimes as low as 150. These routes are generally located in the corners and along the edges of the county and are not near or between the county's major population centers.

Functional Classification of Major Highways

Roadways perform two very distinct and sometimes contradictory functions - moving traffic and providing access to adjacent land uses (Figure 2.3.11). Limited access highways (expressways) provide no access to adjacent land uses and are best at moving traffic. Since providing access to adjacent land uses detracts from the ability of a highway to provide for smooth traffic flow, it is important for planning purposes to classify roadways by function. The following functional categories are typically used:

Chapter Two: Existing Conditions

- Principal Arterial: A street or road that is used primarily for fast or heavy volumes of through traffic including freeways, expressways, and high-volume through-roadways carrying regional traffic.
- Minor Arterial: A street or road that is used primarily for through traffic. Minor arterials carry generally lower volumes of traffic than major arterials.
- Major Collector: A street or road that carries traffic from minor borough streets and township roads to the arterial system.
- Local: All other borough streets or township roads, providing access to abutting properties in residential, commercial, industrial, and rural areas.

The classification of key roadways for Schuylkill County routes is summarized as follows:

Principal Arterials

US Interstate 81
PA Route 61
PA Route 309

Minor Arterials

US Route 209
PA Route 443
PA Route 183
PA Route 895 (b/w PA Route 61 and New Ringgold Borough)
PA Route 54 (west of PA Route 309)
PA Route 924
PA Route 901

Major Collectors

PA Route 443 (west of Interstate 81)
PA Route 501
PA Route 645
PA Route 125
PA Route 25
PA Route 339
PA Route 54 (east of PA Route 309)
PA 895 (west of PA Route 61 and east of New Ringgold Borough)

Chapter Two: Existing Conditions

Public Transportation System

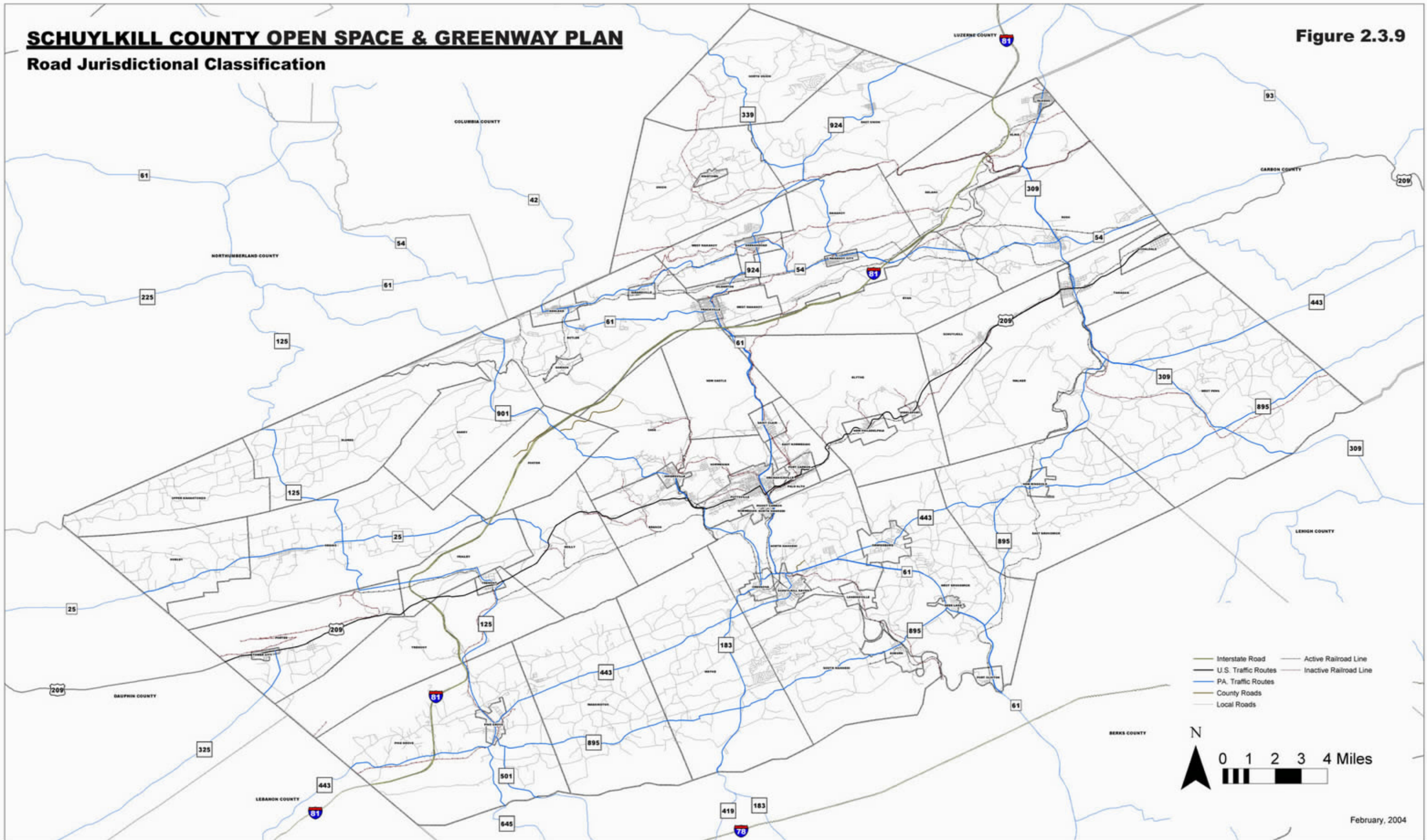
Public transportation in Schuylkill County is maintained and operated by the Schuylkill Transportation System (STS) (Figure 2.3.12). Founded in 1982, STS faced the task of providing public transportation options to residents within a diverse and largely rural county. Since its founding, STS has tripled the number of bus routes, updated its equipment, and built a modern maintenance and storage facility.

The bus lines are generally organized along the lines of a hub and spoke type of pattern, focused on important community centers with routes expanding outward to more rural parts of the county along major roads.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Road Jurisdictional Classification

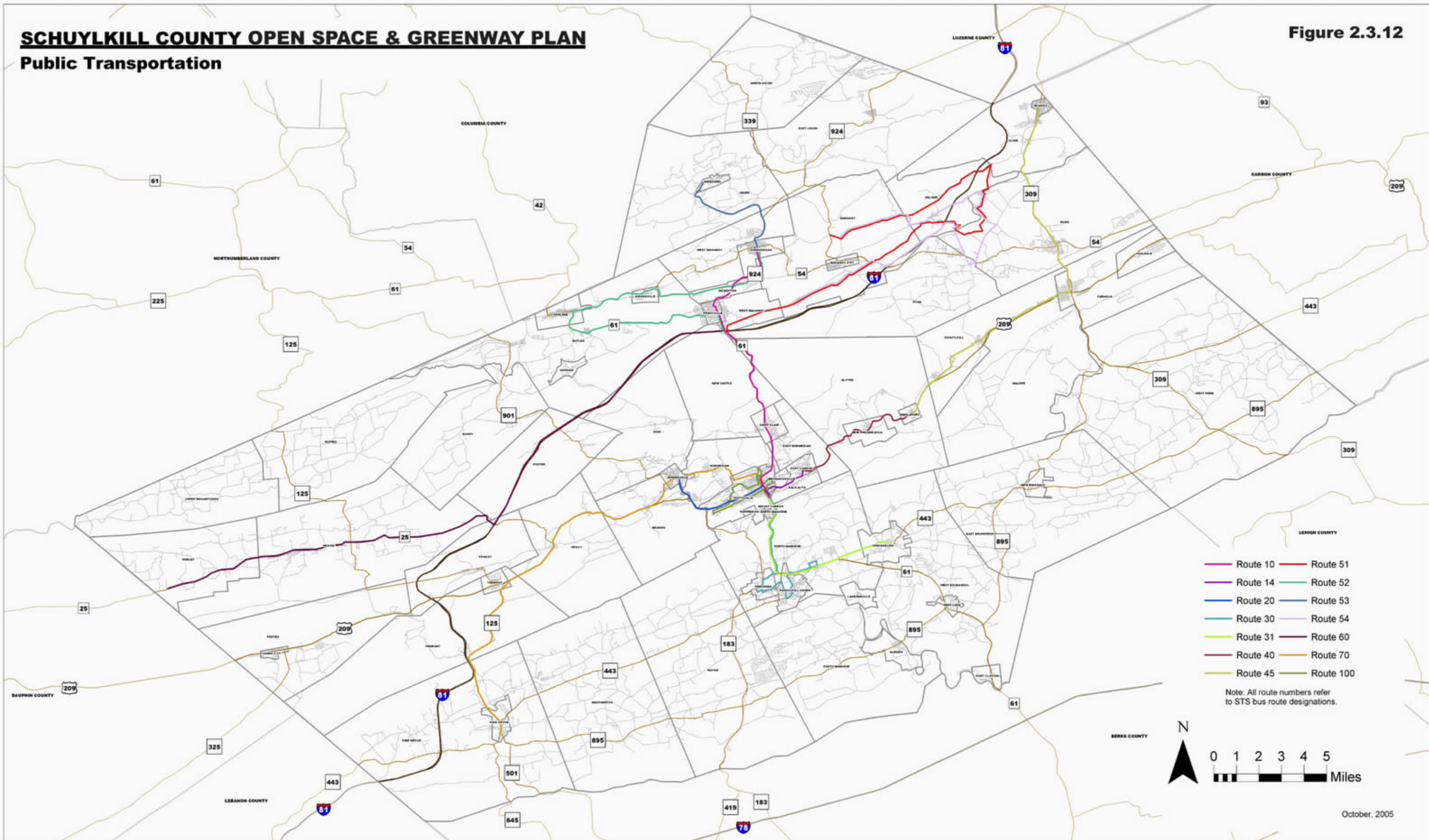
Figure 2.3.9



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Public Transportation

Figure 2.3.12



Chapter Two: Existing Conditions

RAILROAD AND AIRPORT FACILITIES

Railroad Facilities

County industries are served by the privately-owned Reading Blue Mountain and Northern Railroad (RBMNR). Freight rail activity in Schuylkill County was traditionally linked to the coal industry, and rail use declined as the coal industry declined. More recently, RBMNR has tried to attract general merchandise customers but this has proven difficult because the rail system was set up for the coal industries and to a large extent does not reach appropriate locations to serve other customers. The railroad also runs occasional passenger excursion trips.

There are also a number of inactive rail lines located in Schuylkill County, including whole inactive lines as well as branches of the aforementioned railroad lines (Figure 2.3.13). The location and extent of these inactive lines is important in planning for future rails-to-trails opportunities.

Airport Facilities

The Schuylkill County (Joe Zerbey) Airport is located in Foster Township and is administered by the Schuylkill County Airport Authority (Figure 2.3.13). The airport currently serves corporate (air taxi) aviation and is open 24 hours a day. In the future, the airport may be expanded so as to be able to accommodate air freight service.

Chapter Two: Existing Conditions

PENDING AND PROPOSED TRANSPORTATION IMPROVEMENTS

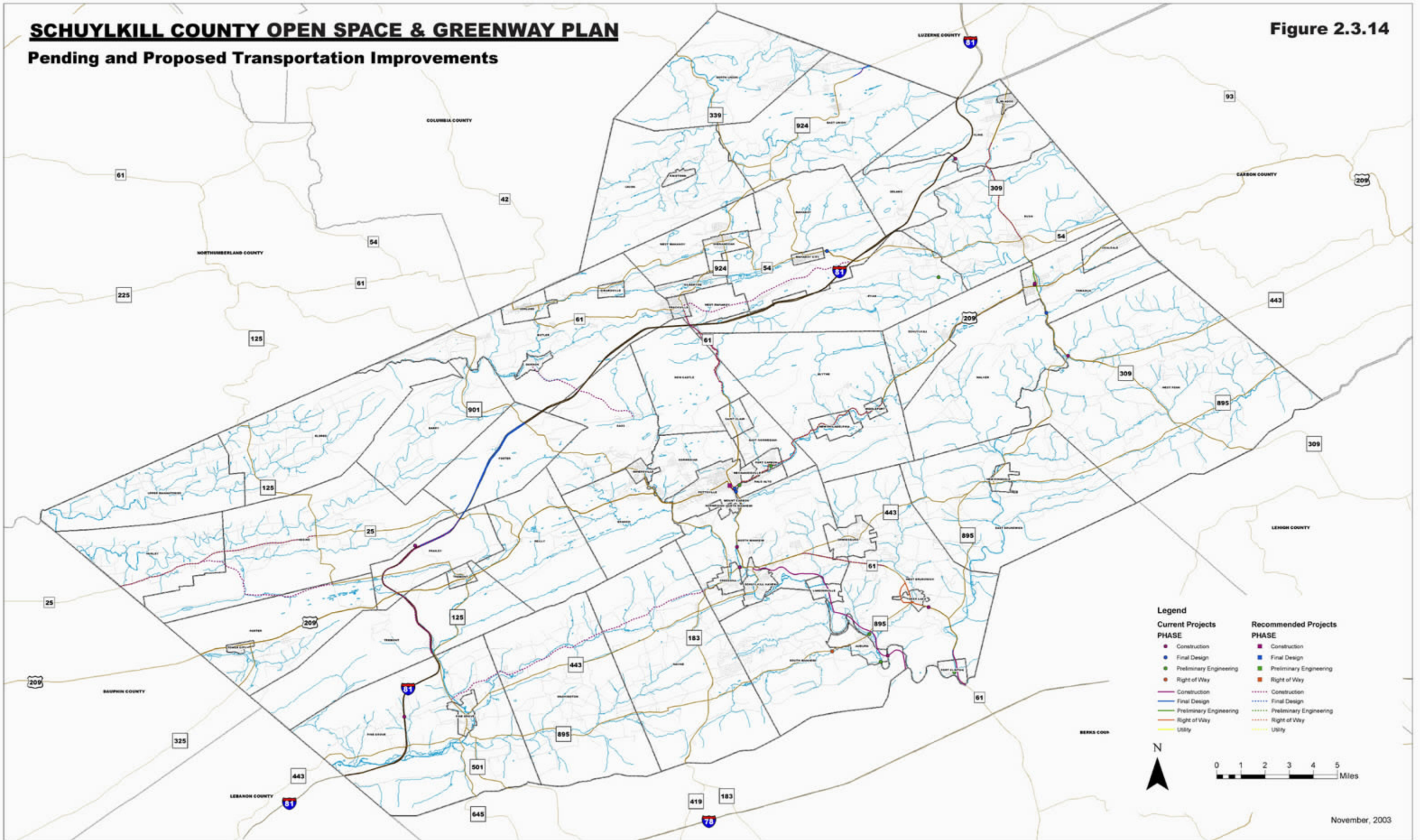
Pending and proposed transportation improvements in Schuylkill County consist of two types of projects (Figure 2.3.14). First, there are projects that have been approved as of May 2003 by the Pennsylvania Department of Transportation (PennDOT) to be part of their Transportation Improvement Program (TIP). Second, there are projects that are part of the Schuylkill County Planning Commission's Recommended Priority List for inclusion on PennDOT's TIP. These are projects recommended for the TIP in addition to the ones already on it.

For both categories, proposed projects consist of those for Construction, Final Design, Preliminary Engineering, and Right of Way improvements. While both the approved TIP projects and those recommended for the TIP occur on roadways throughout the county, there are a significant number of projects in the south, the most populous area of the county. These projects are proposed to take place on heavily traveled roads such as PA Route 61, PA Route 895, and US Route 209. Other areas where current projects are planned are along the Interstate 81 corridor, in Tamaqua, and in various townships in the northeastern part of the county.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Pending and Proposed Transportation Improvements

Figure 2.3.14



Chapter Two: Existing Conditions

COMMUNITY FACILITIES

Community facilities in Schuylkill County encompass a wide range of features (Figure 2.3.15). The following section discusses the existing educational institutions, fire, police, and EMS services, and environmental and recreational facilities available in the county.

K-12 Education

The county has 13 public school districts as well as a number of independent schools (Figure 2.3.16). Most public school districts are situated completely within the county but some districts, due to their locations along the county's edge, bridge two counties and share facilities and students from the adjacent counties.

Higher Education

There are many institutions of higher education located in the county. They range from branch campuses of community and state colleges to independent trade schools.

Police, Fire and EMS

Police and Fire stations are generally located in and near existing boroughs, villages, and the City of Pottsville. Many of the less populated boroughs and townships rely on state police coverage as they have very limited local police service. Ambulance corps are associated with some of the fire companies. EMS service is available also in boroughs, townships, and Pottsville.

Environmental and Recreational Facilities

In addition to the facilities mentioned above, Schuylkill County has a number of important recreational and environmental areas.

Hawk Mountain Sanctuary

Hawk Mountain Sanctuary, a non-profit organization, is located in East Brunswick Township at the border with Berks County. Its mission is to foster the conservation of birds of prey worldwide and further the conservation of the natural environment, particularly the Central Appalachian region. Staff carry out integrated conservation programs in education, research, and

Chapter Two: Existing Conditions

monitoring, including operating a Visitors' Center and other facilities year-round.

The Sanctuary manages its 2,600 acres for multiple uses, balancing mission-based programs like education and awareness, with the need to maintain a healthy and functioning ecological system. The organization works to protect the scenic and ecological integrity of its property and nearby National Park Service Land (Appalachian Trail Corridor) through fees and easement acquisitions.

County and State-owned Lands

Schuylkill County owns Sweet Arrow Lake, located north of State Route 443 in Pine Grove and Washington Townships. The site of the County Fairgrounds, located south of State Route 895 in Wayne Township, is owned by the Foundation for Agriculture and Resource Management (FARM). There are three state parks in the county, Swatara State Park, located in Lebanon and Schuylkill Counties, Locust Lake State Park in Ryan Township, and Tuscarora State Park in Ryan, Rush, and Schuylkill Townships. Also of importance are state forests and gamelands.

Community Parks and Open Space

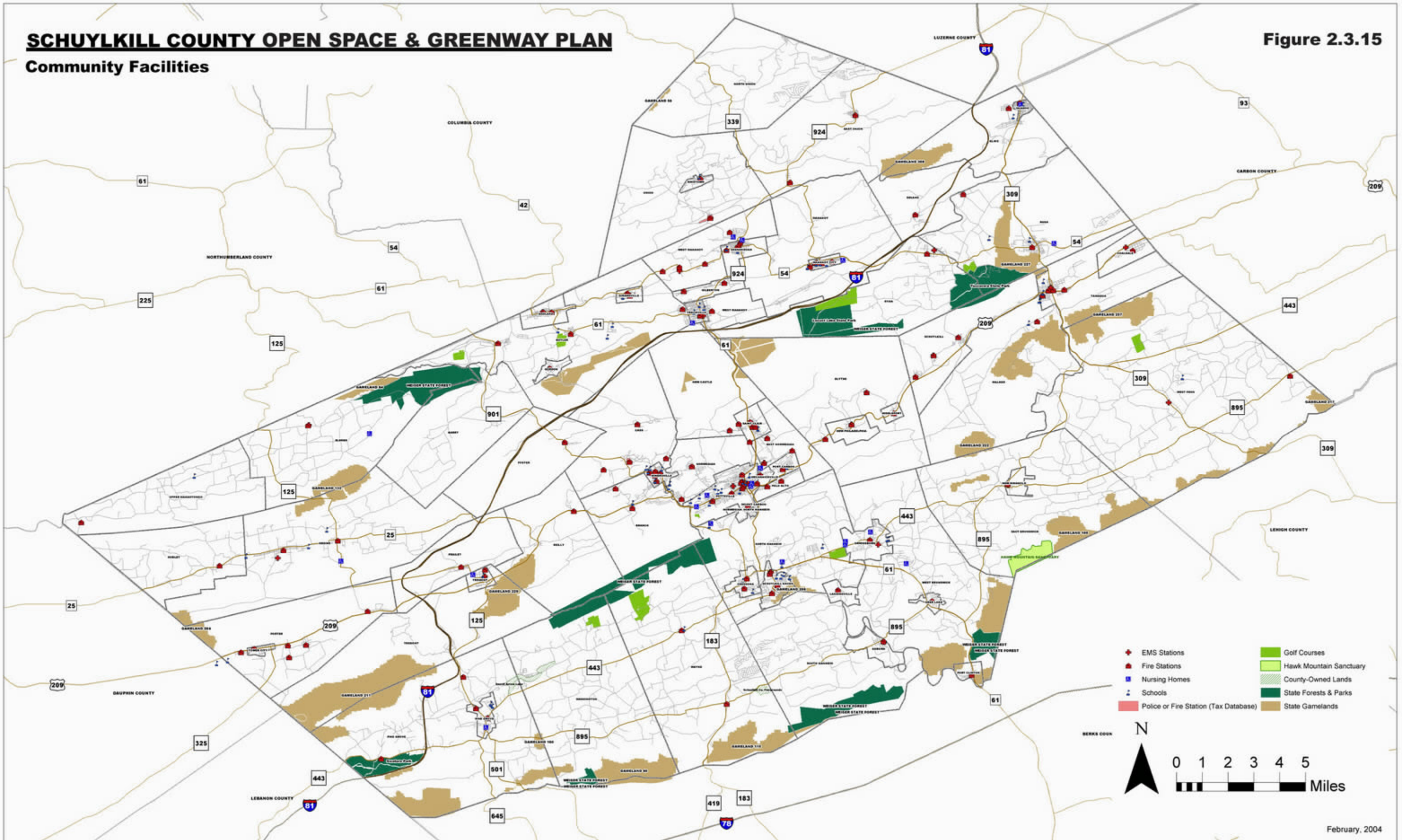
Additional recreational areas in the county include municipally owned community and regional parks (Table 2.3.3). Active recreation areas in the county include ballfields, playgrounds, skating rinks, hiking trails, golf courses, and driving ranges. In addition, there are also areas for passive recreation including fishing and picnicking areas. Other areas in the county include privately owned fish and game clubs.

In addition to existing areas for recreation, there are a few sites in the county that could be redeveloped or reused for recreational purposes. These sites include Sandy Beach in West Mahanoy Township and the Landingville Dam.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Community Facilities

Figure 2.3.15



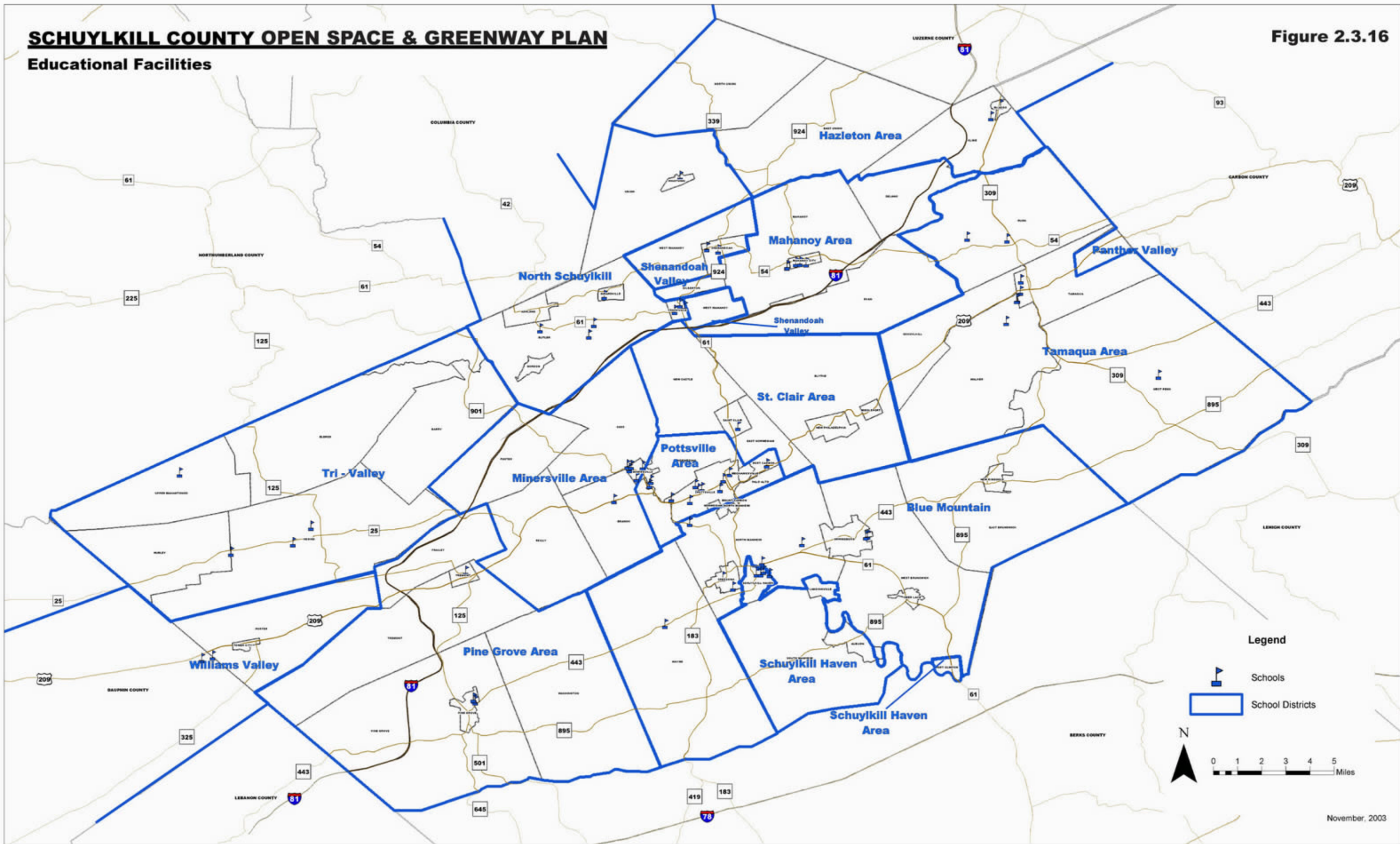
- EMS Stations
- Fire Stations
- Nursing Homes
- Schools
- Police or Fire Station (Tax Database)
- Golf Courses
- Hawk Mountain Sanctuary
- County-Owned Lands
- State Forests & Parks
- State Game Lands



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Educational Facilities

Figure 2.3.16



Legend

-  Schools
-  School Districts



Chapter Two: Existing Conditions

Table 2.3.3 Park and Open Space Inventory

	<u>Facility Name</u>	<u>Location</u>	<u>Size</u>	<u>Comments</u>
Townships				
Barry	Barry Township Baseball Field	SR 4020	3.2	Baseball Field & Playground
	North Schuylkill Rec. Assoc.	Airport Road	5.8	Soccer Fields and Basketball Court
Blythe	Blythe Township Playground	James Road	3.7	Playground, Basketball Court, Baseball Field, Tennis Court
	Blythe Township Ball Field	SR 209	6.2	Baseball Field, Playground, Basketball Courts
Branch	Branch Tot Lot	4th & Springwood	0.13	Tot Lot
	Branch School	Llewellyn Road	8	Baseball Field, Playground, Volleyball Court, Tennis Court
	Phoenix Park	Main St.	0.3	Playground
Butler	Ashland Gun & Country Club	Fountain Street	18.4	
	Ashland Fish & Game Protective	Germanville	78.7	
	Lavelle Park	Main Street	0.6	Tot Lot, Basketball Courts
	Fountain Springs Playground	Catherine Street	0.6	Basketball Court, Tot Lot
Cass	Minersville Fish & Game	Live Oaks Road	21.5	
	Primrose Athletic Fields	SR 901	7	Baseball Fields
	Heckcherville Playground	SR 4008	1.65	Basketball Courts, Playgrounds
	Forestville Citizens Fire Co. Park	SR 4008	12	Basketball Courts, Playgrounds
Delano	Delano Park	RT 483	2.8	Playground
	Delano Playground	Willow Street	3.1	Playground, Basketball Court, Tennis Court
East Brunswick	Tennis Courts	Rt 745	1	Tennis Courts
	Friedens Evan. Church	Church Road	3.7	Baseball Field
	East Brunswick Playground	Catawissa Street	1.6	Playground, Pavilion
East Norwegian	East Norwegian Ballfield	Division Street	1.66	Baseball Field
	Park Ave Ballfield	Park Avenue	0.67	Ballfield
East Union	Shenandoah Archery Club	Phineyville Road	22.4	
	Sheppton Playground	Center Street	0.82	Playground
	Columbia Hose Fire Company	Spruce Street	5.3	Picnic Grove
	Pumping Station	Pole Road	63.5	Fishing Lake
Eldred	Mahantongo Fire Co. Ballfield	Main Road	2.1	Little League Baseball Field
Foster	Foster Township	PA 901		
	Foster Township Community Park		4	Little League Baseball Field, Walking Trail, Basketball Court, Playground
Frailey				
Hegins	Hegins Park	Park Street	3	Soccer Field, Baseball Fields
	Hegins Park	Park Street	28.6	Picnic, Passive
	Valley View Park	T-474	40.6	Baseball Field, Playground
	Valley View Park	SR 4013	20	Passive
	Valley View Park	SR 4011	54.7	Picnic, Open Field

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

Hubley				
Kline	Veterans Memorial Park	Hancock Street	13.7	Little League, Basketball Court, Tot Lot
	Kline Township	Lofty Road	0.4	Skating Rink, Volleyball Area
	Kelayres Playground	James Street		Tot Lot
Mahanoy	East End Park	East End Road	4.8	Softball Field, Playground and Pavilion
	Mahanoy City High School		7	Football Stadium, Baseball Field, Tennis Courts
	Morea Park	Rt. 53035	2	Baseball Field, Basketball Court, Pavilion
New Castle				
North Manheim	Blue Mountain HS Complex	PA 443	25	Soccer, Baseball, & Softball Fields, Tennis Courts, Football Stadium
	Second Mt Rod and Gun Club	Second Mt. Rd	5	
	Pottsville Youth Soccer Fields	Gordon Nagle Trail	8.7	Soccer Fields
	Seider's Hill Baseball Field	Gordon Nagle Trail	2	Softball Field
North Union	Shenandoah Arrowhead Club	502 Red Ridge	22	
	Community Park	Mahanoy Street	5.2	Playground, Volleyball Court, Basketball Court, Pavilion
Norwegian	Seltzer Playground	Delaware Street	0.96	Playground
	Seltzer Hose & Gun Club	Seltzer Road	39	Ballfield
	Marlin Citizen Hose	Maple Street	0.17	Playground, Ballfield
Pine Grove	Pine Grove Fish & Game	Geary Wolf Road	6.1	
	Pine Grove Township Playground	Long Stretch Road	5.0	Playground, Basketball Hoops, Ball Field
Porter	Tower City American Legion Baseball	T-325	12.3	Baseball Fields
	Tower City Little League	Wisconisco Street	5.4	Baseball Field
Reilly	Reilly	SR 4008	0.9	Open Space

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

Rush	Marian High School	Marian Ave.	10	Football Field and Track, Baseball and Softball Fields
	Quakake Playground	Tamanend Road	0.52	Basketball Court, Playground
	Ryan Park	Kellers Road	13	Basketball Court, Playground
	Rush Elementary School	Meadow Ave.	5	Basketball Court, Playground, Baseball Field, All Purpose Field
	White Birch Golf Course	Tuscarora Park Road	90.6	Golf Course
	Lincoln Park	Lincoln Street	0.21	Playground, Basketball Court
	Hometown Fire Company	Mahanoy Avenue	0.2	Basketball Court
	Air Products Wildlife Sanctuary	SR 1019	2	
	Ryan Township Fire Company	SR1017	8.4	Baseball Field, Pavilion
	Richard E. Miller Park	Miller Avenue	2.9	Being Developed
Ryan				
Schuylkill	Howard D. Buehler Memorial Pool	S.R. 209	2	Swimming Pool
	Bungalow Park	S.R. 209	4	Little League, Basketball Court, Playground, Volleyball, Pavilion
	Mary-D Ball Field	S.R. 209	4.8	Baseball Field
	Tuscarora Ball Field	S.R. 209	2	Baseball Field
South Manheim				
Tremont				
Union	Shenandoah Fish and Game	Zions Grove	440	Fishing Lake, Picnic Area
	Ringtown Little League	Route 4033	6.4	Little League field, Tee Ball Field, tot Lot
	Union Township	Zions Grove Road	14	Undeveloped
Upper Mahantongo	Klingerstown Fairgrounds	Carnival Road	17.6	Fairgrounds
Walker	Wildcat Park	Township Road	5.2	Playground, Basketball Court, Tennis Courts
	Hilltop Sportsmen Assoc.	Catawissa Road	27.4	
	Deep Run All Sports Club	Route 529	315	
	Rosemont Camp Grounds	Valley Road	11	
	Heisler's Miniature Golf	Catawissa Road	16.5	Miniature Golf and Driving Range
Washington	Washington Municipal Building	Frantz Road	4.2	Basketball Court, Tennis Courts
Wayne	Wayne Township Playground	Rolling View Drive	1.31	Playground & Pavilion
	Summit Station Playground	SR 895	1.7	Playground
	Blue Mt. Elementary West	Sr 443	2	Open Field, Pavilion, Tot Lot

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

West Brunswick	Pindale Driving Range & Miniture Golf	Centre Turnpike PA 61	12	Driving Range & Miniture Golf
	West Brunswick Recreation Park	Pheasant Run Rd.	6	Softball Field, Soccer Field, Little League Field
West Mahanoy	Sandy Beach	PA 924	13.8	Inactive site-picnicking and swimming
	Shenandoah Soccer Field	Route 54	2	2 Soccer Fields
	Shenandoah Softball Field	Lost Creek #2	1	Softball Field
	Altamont Playground	Green Street	0.61	Pavilion, Grounds, Tot Lot
	Heights Fire Company Playground	Swatara Road	1.8	Tot Lot, Basketball Courts, Pavilion
	Whipporwill Dam	Morea Road	24.1	Fishing, shooting range, pavilion, old playground
West Penn	Villas Crossing Golf Course	Golf Road	58.2	
	Laurel Lake Campgrounds	Summer Valley Rd.	53.4	
	JEM Park	Rt. 443	1	Under Construction
	West Penn Park	Zions Stone Church Rd.	21.3	Playground, Pavilions, Baseball Fields, Basketball Courts, Nature Trails

Boroughs				
Ashland	Ashland Park	Spruce Street	0.1	Playground
	Oakland Street Playground	Oakland Street	0.37	Playground, Basketball Court
	Ashland Little League	Center Street	4.3	Baseball Field
Auburn	Auburn Memorial Park	Market St.	20	Baseball & Soccer Fields, Pavilions, Playground, Basketball Courts
	Auburn School District	Pearson St.	0.92	Basketball Courts
Coaldale	Seek Playground	Foster Ave.	1	Basketball Court, Baseball Field, Playground
	East Ward/Ridge Terrace	East Phillips	0.69	All Purpose Field
	Coaldale Complex	Phillips & 6th	1.61	Playground, Basketball Court, Sand Volleyball Court, All Purpose Field
Cressona	Cressona Playground	Sillyman St.	2.3	Tot Lot, Tennis, Basketball
	Cressona Pool	Graeff St.	2.2	Pool
	Cressona Ballfield Complex	Schuylkill St.	10.9	Baseball Fields, Park
	Blue Mountain Elementary School	Wilder St.	3.15	????
Deer Lake	Deer Lake Park	Lakefront Drive	4	Tennis, Basketball, Little League, Swings, Picnic area, Pavilion
	Deer Lake	Lakefront Drive	21	Fishing, Boating
Frackville	Arch St. Park	Arch Street	1	Basketball Courts, Tot Lot, Pavilion

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

	Memorial Park	Pine Street	6	Swimming Pool, Football & Baseball Fields, Tennis Court, Tot Lot, proposed Ice Rink
	High St. Park	High St.	6	Baseball Fields
	Broad Mountain Park	Broad Mountain Ave.	0.5	Tot Lot
Gilberton	Mahanoy Plane Park	Main Street	1.5	Tot Lot, Pavilion,
	Gilberton	Main Street	0.74	Tennis Courts, Basketball Courts
Girardville	East End Recreation Complex	B Street	2	Little League Field, Basketball Courts, Playground
	C Street Park	C Street	0.2	Tot Lot
	West End Park	Preston & Richard	0.2	Tot Lot
Gordon	Oak Street Park	Oak Street	14.1	Playground, Pavilion, Open Space, Basketball Courts
Landingville	Landingville Community Playground	Dock Street	3	Playground, Tot Lot, Pavilion, Passive
Mahanoy City	Eighth Street Park	Eighth Street	2	Basketball Courts
	Mahanoy City Little League	Spruce Street	2.5	Baseball Park
	Fifth Street Park	Fifth Street	0.35	Tot Lot, Gazebo
	St. Canicus Playground	S. Catawissa Street	0.18	Paved Basketball Courts
	Police Tot Lot	East Pine	0.1	Police Station Property
McAdoo	St. Michael's	Grant Street	0.2	Basketball Court, Playground
	Adams Street	Hancock Street	0.52	Basketball Court, Tot Lot
Mechanicsville				
Middleport	Middleport Ball Field	SR 209	0.5	Ball Field
	Middleport Courts	SR 209	2.1	Basketball Courts, Tennis Courts
	Middleport Park	SR 209	0.4	Passive
Minersville	Minersville Recreation Complex	South Fourth Street	8.76	Community Pool, 3 Ballfields, Playground, Soccer Field, Basketball Court, Walking Trail
	North Second Street Playground	North Second Street	0.52	Basketball Court
	Penn Street Playground	Penn Street	0.4	Basketball Court, Playground
	New Minersville Playground	Line Street	3	Softball Field, Basketball Court
	Teaberry Hill Playground	Josephine Street	0.39	Basketball Court
Mount Carbon	Mount Carbon Fire Co.	Main Street	0.17	Tot Lot
New Philadelphia	New Philadelphia Little League	Valley Street	12.1	Baseball Fields
	Clay Street Playground	Clay Street	0.24	Playground, Basketball Court
	Simon Kramer Institute	Alliance Street	4	Soccer Field, Track

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

New Ringgold	New Ringgold Little League	Railroad Street	10.7	Baseball Field
Orwigsburg	Orwigsburg Community Park	Grove Street	12.1	Tot Lot, Picnic Area, Pavilion, Wooded Area
	Blue Mountain Middle School	Reddale Road	1	Playground
	Fishers Pond	Washington Street	2	Pond, Fishing
	Memorial Park	Grove Street	7	Tot Lot, Little League Field, Basketball Courts, Indoor Recreation Center
	Walborn Community Park	Tammany Street	0.5	Tot Lot, Basketball Court
Palo Alto	Palo Alto Playground	E. Bacon Street	0.91	Playground
	Palo Alto Park	W. Bacon Street	0.65	Basketball Court
Pine Grove	The Canal	Mill Street	14.8	Swimming Pool, Passive
	The Canal	Canal Street	5.2	Playground
	Pine Grove High School	High Street	4.66	Football Field, Baseball Field
Port Carbon	Mirawall Park	Pottsville & Commerce	3	Softball Field, Soccer Field, Tot Lot
	Miller Playground	Mill Street	3.7	Tennis Courts, Little League Field, Basketball Courts, Tot Lot, Pavilion
Port Clinton	Port Clinton Park	Schuylkill Street	2.5	Baseball Field, Playground
Ringtown	North Schuylkill School District	Hancock Street	1.5	Baseball Field, Basketball Courts
St. Clair	St. Clair Area Football Stadium	North Nichols Street	8	Gated Facility
	North Ward Playground	North Morris St.	0.83	General Playground
	St. Clair Fish and Game	Lawton Street	6	Outdoor Recreation, Baseball field, Tot Lot, and Pavilion
	John Siney Park			Picnicking and Pavilion
	3rd Street Playground	16 S. Third St.	0.74	General Playground
	St. Clair Swimming Pool	Lawton Street	1	Community Pool
	Little League Park	East Johnson St.	1.6	
	Arnot's Addition Basketball Court			
	St. Clair Area Elementary School	Mill St.	0.5	General Playground
Schuylkill Haven	Garfield Ave	Garfield Ave.	0.28	Tot Lot
	Fritz Reed	Fritz Reed Ave.	0.2	Tot Lot
	Saylor Street	North Berne St.	1.21	Playground with basketball court
	Willow St.	Willow St.	1.6	Playground with basketball court
	Green Goose	Jackson Street	0.6	Playground with basketball court
	The Island	Fritz Reed Ave.	10	Softball Fields, Soccer Field, Boat Launch, Playground, Passive
	Schuylkill Haven High School	N. Main Street	14.4	Football Stadium, Baseball Fields, Tennis Courts

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

	Bubeck Park	Washington St.	3.1	Stoyer's Dam, Playground, Passive, Pavilion
Shenandoah	Bicentennial Park	Herald Road	5.8	Softball Field, Tot Lot, Fields, Tennis Courts
	Girard Park	Route 924	1.5	Passive, Pavilion
	Shenandoah Little League	West Coal St.	5	Practice Fields and Ballpark
	Veterans Stadium	W. Centre St.	6	Practice Fields, Football Stadium, Baseball Field, Track
	Vine Street Playground	Vine Street	0.5	Basketball Courts, Playground
Tamaqua	East End Park	Mountain Ave.	0.5	Basketball Court, Playground
	South Ward Playground	Penn Street	0.41	Basketball Court, Playground
	Tamaqua Area Baseball Assoc.	S. Biddle Street	2.07	Baseball Fields
	North & Middle Ward Playground	Washington & RR	0.76	Basketball Court, Playground
	Willing Park	E. Cedar Street	2.2	Basketball Court, Playground, Skate Park
	Dutch Hill	Willing St.	0.88	Baseball Fields
	Tamaqua Elementary	Nescopec Street	2.3	Playground, Tennis Courts, Basketball Courts
	Tamaqua High School	Stadium Hill	5	Football Stadium , Baseball & Softball Fields, All Purpose Field, Tennis Courts
Tower City				
Tremont	Tremont Little League	Maple Creek Drive	3.2	Little League Field
	Tremont Elementary School	Clay Street	5.5	Tennis Courts, Basketball Courts, Baseball Field
	Veterans Memorial Park	E. Main Street	0.19	Under Construction
	Poplar Street Park	W. Main & Laurel		Basketball Court, Playground
Cities				
Pottsville	Race Street Playground	Race Street	0.14	Playground
	Peacock Street	Peacock Street	1.3	Tot Lot, Playground, Basketball Courts
	Forest Hills	Deerfield Drive	7.4	Tot Lot, Baseball Field, Picnic Area, Tennis Courts
	Greenwood Hill	Wolfe Street	0.58	Tot Lot, Basketball Court
	General G. Jowlwan	E. Norwegian	12.1	Tot Lot, Basketball Court, Skating Park Proposed
	Peacock St. Housing Authority	Peacock Street	0.06	Tot Lot
	Fairmont Avenue Housing Authority	Fairmont Ave.	0.06	Tot Lot, Basketball Court
	John O'Hara Housing Authority	W. Laurel Street	0.06	Tot Lot
	Main Street	Main Street	0.11	Tot Lot, Basketball Court
	JFK Memorial	First Street	4.8	Basketball Courts, Tennis Courts, Picnic Area, Swimming Pool
	Mt. Hope	Mount Hope Ave.	0.06	Tot Lot
	Rotary Park	Mahantongo Street	5.1	Little League Baseball Field, Tot Lot, Basketball Courts, Tennis Courts

Chapter Two: Existing Conditions

Table 2.3.3 (cont'd)

	Railway Park	Nineteenth Street	2.5	Little League Baseball Field
	Bunker Hill	Schuylkill Avenue	2	Tot Lot , Basketball Court, Tennis Court
	Market Square	12 th Street	4.8	Tot Lot, Playground, Basketball Courts
	Ivyside Club	Mahantongo Street	2.55	Swimming Pool, Basketball Court, Tennis Court
	Pottsville High School	16th Street	7	Soccer and Mini Football Fields
	Pottsville High School	16th Street	5	Football Stadium and Track
	Pottsville High School	16th Street	2.4	Baseball Field
	Pottsville High School	16th Street	5.4	Softball Filed
	John C. Clarke Elementary School	16th Street	1	Tot Lot
	Nativity High School	Pottsville Blvd.	5	Football Field and Track

Chapter Two: Existing Conditions

INFRASTRUCTURE AND UTILITIES

Water Supply Service Areas

Most of the areas of public water service in the county center upon older settlements and their nearby suburbs. The locations of existing service areas can be seen in Figure 2.3.17. Schuylkill County completed a comprehensive Water Supply Study in 2002. The information presented in this section is excerpted from that report.

Types of Water Suppliers

Schuylkill County residents receive their water from three main sources: wells, reservoirs, and springs. This water is provided to the residents by community, private, and self-suppliers. The Pennsylvania Department of Environmental Protection defines a community water supplier as those providers serving at least 15 connections used by year-round residents, or regularly serves at least 25 year-round residents. The larger suppliers of water are mostly municipal systems, which provide water for a large number of people within a small area or cluster. These suppliers are usually located throughout the County. The smaller suppliers are generally located in the rural sections of the county.²

Sewer Service Areas

Most of the existing central sewer service areas in Schuylkill County are located in Pottsville, the boroughs, and their environs (Figure 2.3.18). Landingville and Port Clinton are two boroughs that lack central sewer service. Some areas in townships with central sewer service not associated with boroughs include areas in Butler, North Union, East Union, Rush, Cass, Foster, South Manheim, and Wayne Townships.

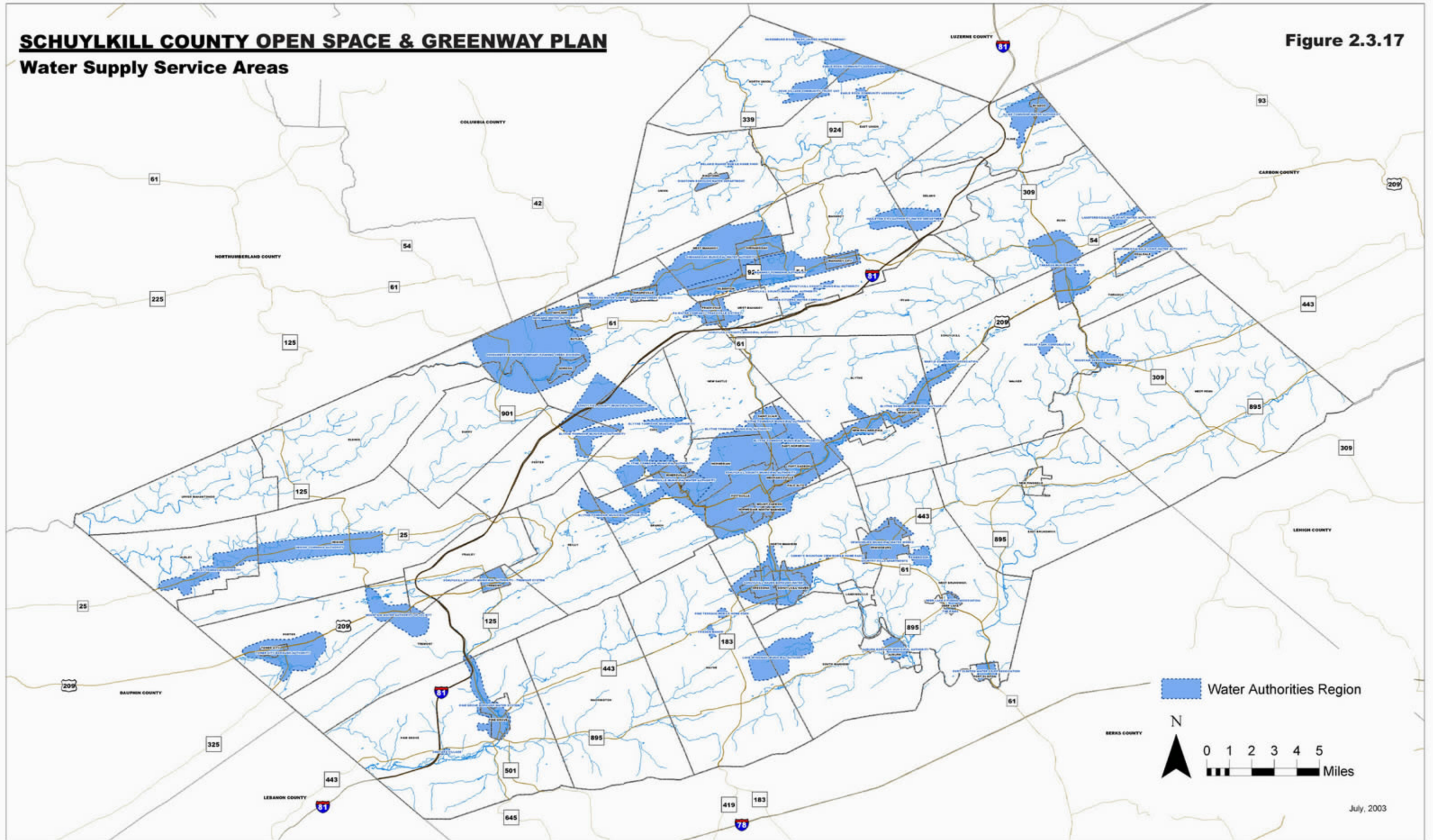
Proposed service areas include Pine Grove Township west of Pine Grove Borough, Frailey Township north of Tremont Borough, Gilberton Borough, New Ringgold Borough, New Philadelphia Borough, Middleport Borough, and along the US Route 209 corridor in Blythe and Schuylkill Townships.

² "Schuylkill County Water Supply Study," Prepared for Schuylkill County and the Pennsylvania Department of Environmental Protection by Vitillo Corporation, revised February 25, 2002, 10.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Water Supply Service Areas

Figure 2.3.17



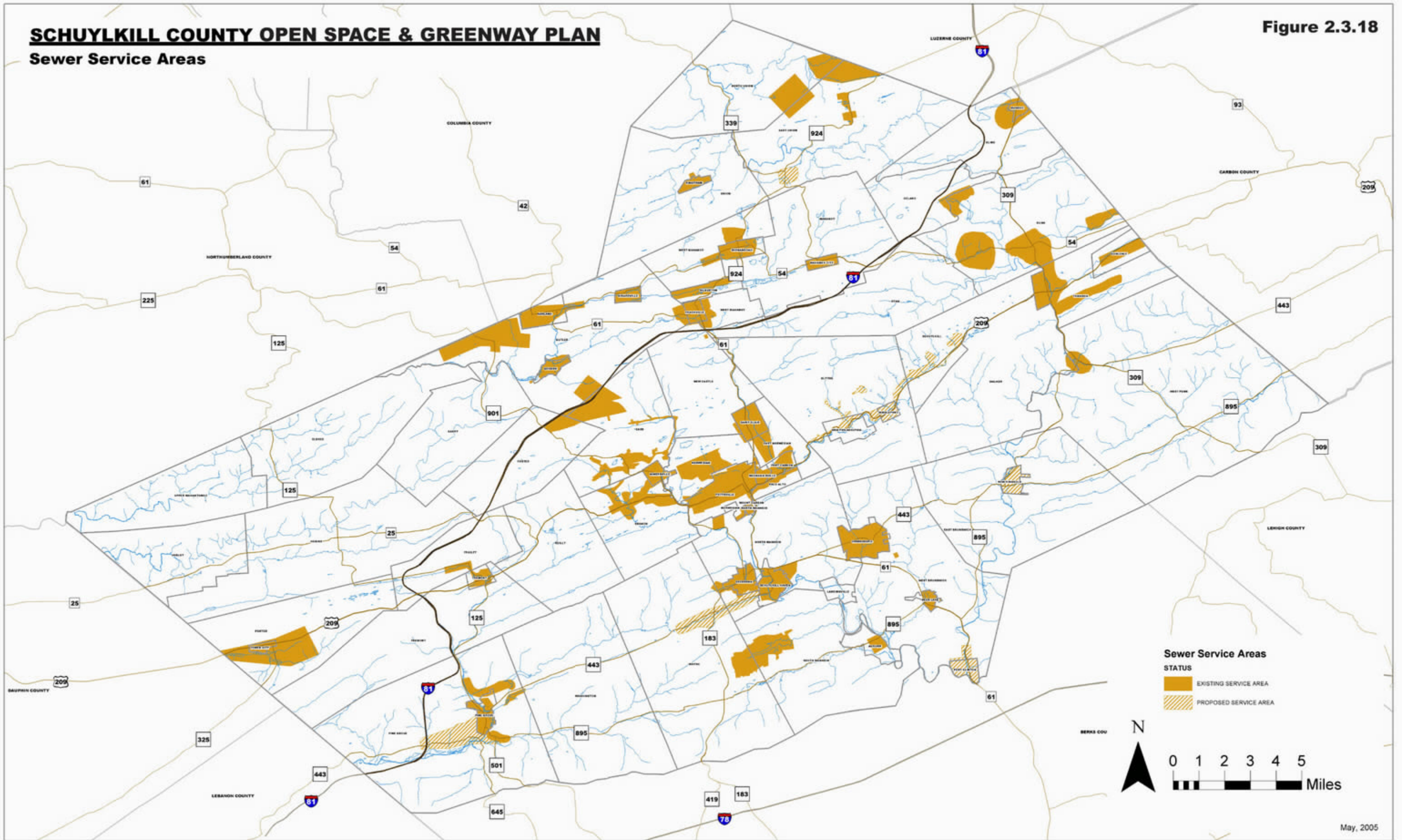
Water Authorities Region



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Sewer Service Areas

Figure 2.3.18



Chapter Two: Existing Conditions

MINING

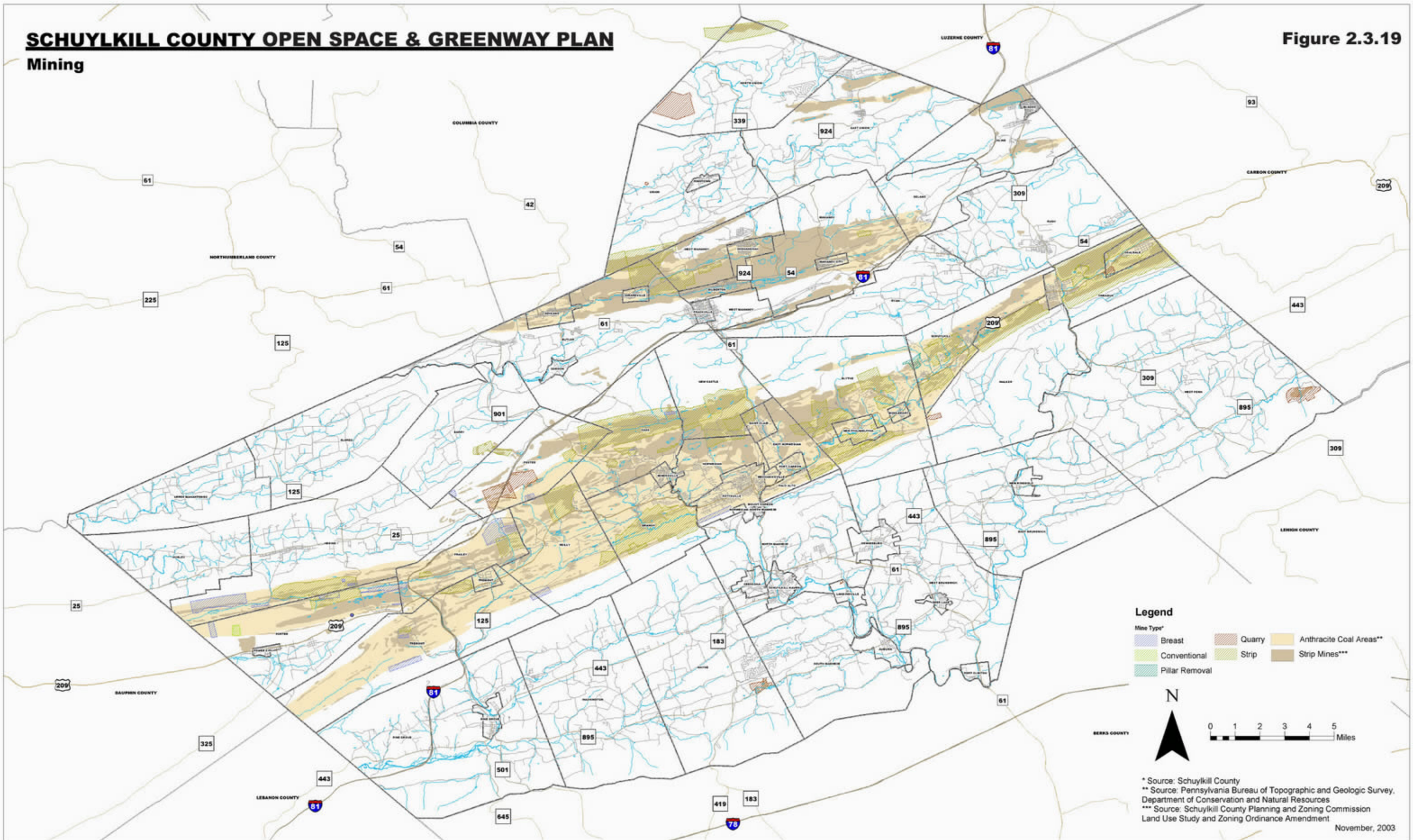
Schuylkill County is a significant part of the coal region that is located in southeastern Pennsylvania. The hard coal, or anthracite, beds are located in several narrow bands that run northeasterly between the Blue Mountain and the Susquehanna River. The region is divided into three fields – southern, middle, and northern. The southern field was the first to be developed and its central part is known as the Pottsville District. In the fields, the coal lies in dozens of seams, or “veins,” some only a few inches thick and unworkable and some as much as 40-feet thick. In the county, anthracite occurs in a large number of veins, one above the other, separated by thicker or thinner beds of slate and shale.

In Schuylkill County, there are two predominant bands of anthracite coal (Figure 2.3.19). The first is located in the north central part of the county and runs west to east from Butler Township to Kline Township. The other area is located in the central portion of the county and runs from the western county border with Dauphin County to Coaldale and Tamaqua at the border with Carbon County. A smaller area occurs in the northern part of the county in East Union and North Union Townships. These areas have largely been disturbed from mining activities.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Mining

Figure 2.3.19



Chapter Two: Existing Conditions

ECONOMIC DEVELOPMENT ZONES

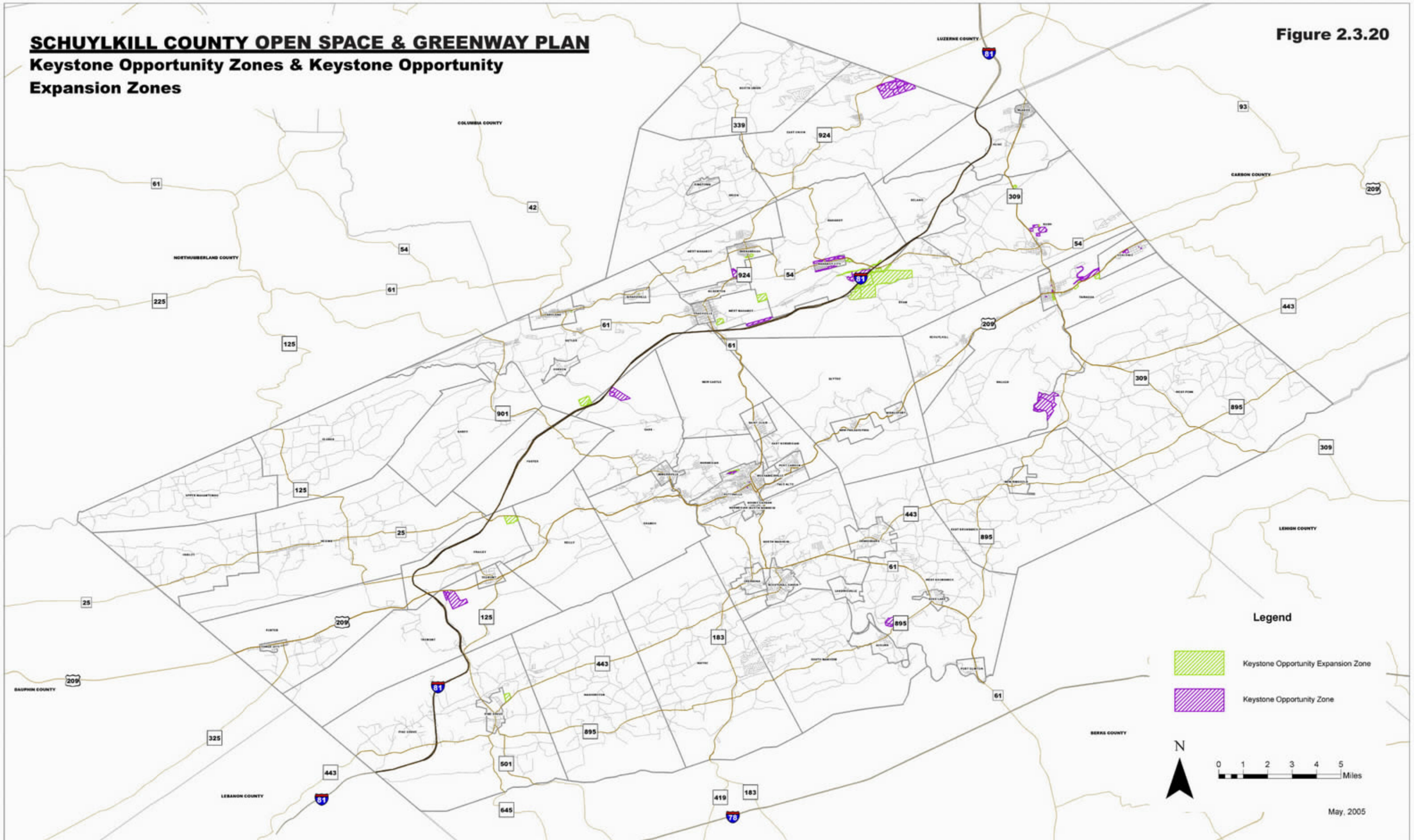
Important to the recent economic development in the county are economic development zones created under the terms of Pennsylvania's Keystone Opportunity Zones (KOZ) and Keystone Opportunity Enterprise Zones (KOEZ) legislation (Figure 2.3.20). These zones are defined, parcel-specific areas with tax-free or tax-abated provisions for property owners, residents, and businesses. KOZs have been designated by local communities and approved by the state; they are, in fact, a partnership between each community and region among state and local taxing bodies, school districts, economic development agencies, and community-based organizations.

KOZs in Schuylkill County are located at the site of the High Ridge Industrial Park east of Interstate 81 and south of that road in Cass Township. Various KOZ sites also exist in West Mahanoy Township, Mahanoy City, Tamaqua, Coaldale, Walker Township, Rush Township, and at the site of the Humboldt Industrial Park in East Union Township. KOEZs are located in Butler Township north of Interstate 81; Ryan Township, south of Interstate 81; Shenandoah; Mahanoy City; West Mahanoy Township; and Tamaqua.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Keystone Opportunity Zones & Keystone Opportunity Expansion Zones

Figure 2.3.20



Legend

-  Keystone Opportunity Expansion Zone
-  Keystone Opportunity Zone



May, 2005

Chapter Two: Existing Conditions

SECTION 4: TRENDS

POPULATION, HOUSING, AND EMPLOYMENT

Population projections are an essential part of planning for future growth and conservation in that they can be translated into approximations of the future need for housing, community facilities, and other forms of development. Many factors are taken into account in making population projections but these factors are constantly subject to change. The longer the time period of the projections and the smaller the present population, the less reliable the projections are likely to be. For instance, projections for individual municipalities are less valid than those for a county, for a large region or for the entire nation, and 15- or 20-year projections usually are less valid than five-year projections.

Population, housing, and employment trends and projections are discussed in this section. Data for Schuylkill County and its constituent municipalities are contrasted with regional and statewide data where appropriate. The demographic analysis provides a basis for predicting future growth and estimating residential and nonresidential land area requirements.

Population Trends

The population of Schuylkill County, which was 173,027 in 1960, declined to 150,336 by 2000, representing a reduction of the 1960 population by 13 percent (Tables 2.4.1 and 2.4.2). Most of the decline occurred in the first three decades of the forty-year period and, from 1990 to 2000, Schuylkill County declined only slightly (-1.5 percent). While many other counties in the region have experienced slight growth in the population during this time period, counties such as Luzerne and Northumberland have also experienced this type of moderate population loss.

The largest municipality in Schuylkill County is the county seat, the City of Pottsville, with a 2000 population of 15,549. The second largest municipality in the county is the Borough of Tamaqua, with a population of 7,174. Other boroughs with significant populations include Shenandoah with a population of 5,624 and Schuylkill Haven with a population of 5,548. The smallest boroughs in the county are Landingville, with a population of 175 and Mount Carbon, with a population of 81. Almost all of the boroughs as well as the City of Pottsville have experienced slight to moderate population loss during the period from 1960 to 2000.

The most populous townships in the county are Butler Township, with a 2000 population of 4,987 and Wayne Township with a population of 4,721. There are other townships close to this size, including the townships of Hegins, Mahanoy,

Chapter Two: Existing Conditions

North Manheim, Pine Grove, Rush, West Brunswick, West Mahanoy, and West Penn. The townships with the least population include Frailey Township with a 2000 population of 416, New Castle Township with a population of 395, and Tremont Township with a population of 250.

The townships have fared somewhat better than the boroughs with regards to population change. Fourteen townships have experienced population increases from 1990 to 2000. One reason for this may be that people are leaving the boroughs to live in more suburban or rural environments in nearby townships. In addition, institutional populations in federal and state prisons in Ryan, Butler, and Mahanoy Townships have contributed the bulk of the population increase in these communities.

Age Characteristics

According to the 2000 Census, 23 percent of Schuylkill County's population is under 18 years-of-age, 57 percent is between 18 and 65 years-of-age, and 20 percent is over 65 years-of-age (Figures 2.4.3 and 2.4.4). These percentages are generally in keeping with those exhibited by Pennsylvania's population as a whole. However, Schuylkill County's percent of population over 65 years-of-age is higher than the state's figure of 15.6 percent; in fact, Schuylkill County has one of the highest percentages in the state of residents over 65. Related to this is the trend of a rising median age. The median age in the county has increased from 37.4 years-of-age in 1970 to 40.9 in 2000. This is somewhat higher than the State's median age for 2000 which was 38.0 years-of-age.

Housing Characteristics

Over 80 percent of the housing units in Schuylkill County are either single-family attached or single-family detached dwellings (Figure 2.4.5). There are also a significant amount of other housing types available in the county with 13.7 percent of all housing units being part of multi-unit structures and 4.3 percent being mobile homes.

Schuylkill County's vacancy rate has increased over the years, from a rate of 7.6 percent in 1970 to a rate of 10.7 percent in 2000. However, throughout the same period, the number of housing units has grown in the county from 64,825 in 1970 to 67,806 in 2000. The reasons for this ongoing construction of new residential units may include a demand for different housing types from those available in the county and a decrease in household size, as Schuylkill County has experienced a slight decrease in persons per household from a high of 2.66 in 1980 to a low of 2.36 in 2000 (Figure 2.4.6).

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Population and Housing Forecasts

Alternative population forecasts for Schuylkill County have been made for the period 2000 to 2025 (Figure 2.4.7). In most cases, forecasts use the U.S. Bureau of the Census's 2000 county population total of 150,336 persons.

Alternative 1 shows population forecasts for 2025 that were shown in the *2002 Data Pamphlet* for Schuylkill County by Woods & Poole Economics. This estimate used 1990 Census information as a base and developed future forecasts based upon an estimated 2000 population of 150,240. For Schuylkill County, a 2010 population of 148,180 and a 2025 population of 147,430 residents were forecast in 2002.

Alternative 2 takes the actual annual growth rate for the county from 1990 to 2000, around -0.15 percent per year, and projects this rate out over 25 years, from 2000 to 2025, on Schuylkill County's starting population of 150,336 (the 2000 Census figure). The results show that around 144,698 people would live in Schuylkill County by the year 2025.

Alternative 3 takes the actual annual growth rate for the nine-county area, which includes Schuylkill County and all counties adjacent to it, from 1990 to 2000, 0.37 percent per year, and projects this rate out over 25 years, from 2000 to 2025, on Schuylkill County's starting population of 150,336 (the 2000 Census figure). This projection reveals that around 164,236 people would live in Schuylkill County by the year 2025.

Alternative 4, takes the housing construction rate for Schuylkill County, 0.2 percent per year. This rate is projected out over 25 years, from 2000 to 2025, on Schuylkill County's starting population of 150,336. The resultant 2025 population for the county is about 157,836 people.

Housing Units to be Constructed

Based on the forecasts and projections discussed above, including a prospective county 2025 population of between 147,400 and 164,200 residents, an estimate of the number of housing units to be constructed over the planning period has been formulated (Figure 2.4.8). Three rates of population growth are used: a "low" estimate of 150,000 residents, a "medium" estimate of 155,000 residents, and a "high" estimate of 160,000 residents.

This forecast assumes that 95.2 percent of the population will live in households, that the average number of persons per household will be 2.2, that vacancies will comprise 8 percent of the total housing stock, and that there

Chapter Two: Existing Conditions

will be a modest need to replace some of the existing housing stock over the planning period. (Figures used are consistent with the Federal Census for Schuylkill County for 1980, 1990, and 2000 and area population and housing trends.)

Applying this method, the total number of new housing units to be constructed in the county from 2000 to 2025, a 25-year period, could range from 3,652 to 8,325, with about 5,989 new units corresponding to a “medium” rate of population growth. This latter figure translates into about 240 units per year. Based upon the “medium” population forecast, the county may expect construction of new housing units over the planning period at a slightly higher pace than recent history.

Employment Trends and Forecasts

Employment trends and forecasts are important in planning for future growth. While population forecasts and housing data can be translated into approximations of the future need for housing units and land for new housing construction, employment forecasts for a given locale may be converted into estimates of potential demand for land for new commercial and industrial establishments. Both kinds of forecasts may give clues as to the future need for varying kinds of community facilities and services.

According to the 2000 Census, 63,902 people are employed in Schuylkill County (Figure 2.4.9). The largest percentage of workers, 26 percent, are employed in the manufacturing sector. The sectors of education, health and social services, and that of retail trade also are strong in the county, employing 19.5 percent and 12.3 percent, respectively, of the total number of people employed in the county. These employment figures are in keeping with the averages of nearby counties, except for the fact that the manufacturing sector in Schuylkill County employs more workers than that sector does in the surrounding counties (Figure 2.4.10).

Employment forecasts are taken from the *2002 Data Pamphlet* by Woods & Poole Economics. Forecasting future employment is more difficult than population because of many factors influencing employment at the national, regional, and local levels. Unlike population changes, which generally tend to be more gradual and relatively predictable, employment forecasts may vary widely because of broad forces such as foreign trade, world economics, politics, military conflicts, national monetary policies, demographic trends, and social forces. Local factors such as labor force availability, land prices, transportation networks, and local political climate also play important roles in determining employment levels.

The Woods & Poole Economics estimate of a 2000 employment figure of

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63,902, was forecast in 2002 to increase to 68,690 by 2010, 72,260 in 2000, and 74,460 by 2025 (Figure 2.4.10). Obviously, there are a great many potential influences on the total number of jobs likely to be found in Schuylkill County by 2025. A concerted effort to attract new businesses could produce results that would seriously affect these Woods & Poole 2002 forecasts. On the other hand, a serious decline in the county resident population could reduce the expected level of demand for retail trade and services.

Chapter Two: Existing Conditions

Table 2.4.1 Population Totals in Schuylkill County Municipalities and Selected Jurisdictions, 1960-2000

	1960	1970	1980	1990	2000
Schuylkill County	173,027	160,089	160,630	152,585	150,336
Boroughs and Cities					
Ashland	5,007	4,737	4,226	3,856	3,283
Auburn	936	895	999	913	839
Coaldale	3,949	3,023	2,762	2,531	2,295
Cressona	1,854	1,814	1,810	1,694	1,635
Deer Lake	334	347	515	550	528
Frackville	5,654	5,445	5,308	4,700	4,361
Gilberton	1,712	1,293	1,096	953	867
Girardville	2,958	2,450	2,268	1,889	1,742
Gordon	888	856	892	768	781
Landingville	224	175	170	192	175
McAdoo	3,560	3,326	2,940	2,459	2,274
Mahanoy City	8,536	7,257	6,167	5,209	4,647
Mechanicsville	588	663	519	540	515
Middleport	775	609	577	520	458
Minersville	6,606	6,012	5,635	4,877	4,552
Mount Carbon	308	184	157	132	87
New Philadelphia	1,702	1,528	1,341	1,283	1,149
New Ringgold	314	314	301	315	291
Orwigsburg	2,131	2,661	2,700	2,780	3,106
Palo Alto	1,445	1,428	1,321	1,192	1,052
Pine Grove	2,267	2,197	2,244	2,118	2,154
Port Carbon	2,775	2,717	2,576	2,134	2,019
Port Clinton	739	363	337	328	288
Pottsville	21,659	19,715	18,195	16,603	15,549
Ringtown	849	880	837	853	826
St. Clair	5,159	4,576	4,037	3,524	3,254
Schuylkill Haven	6,470	6,125	5,977	5,610	5,548
Shenandoah	11,073	8,287	7,589	6,221	5,624
Tamaqua	10,173	9,246	8,843	7,943	7,174
Tower City	1,968	1,774	1,667	1,518	1,396
Tremont	1,893	1,833	1,796	1,814	1,784

Chapter Two: Existing Conditions

Table 2.4.1 (cont'd)

	1960	1970	1980	1990	2000
Townships					
Barry	1,176	715	869	845	967
Blythe	1,302	1,199	1,228	1,023	905
Branch	1,749	1,798	1,906	2,051	1,871
Butler	3,340	3,738	4,240	4,099	4,987
Cass	2,950	2,508	2,414	2,088	1,840
Delano	735	643	686	573	487
East Brunswick	1,060	1,165	1,554	1,506	1,601
East Norwegian	1,198	1,076	999	991	864
East Union	1,387	1,452	1,470	1,374	1,419
Eldred	974	677	726	736	719
Foster	600	378	289	298	268
Frailey	637	570	465	518	416
Hegins	3,320	3,253	3,562	3,561	3,519
Hubley	919	808	895	928	889
Kline	2,019	1,624	1,768	1,722	1,591
Mahanoy	8,536	7,257	1,525	1,273	3,093
New Castle	996	727	718	567	395
North Manheim	2,829	3,312	3,574	3,404	3,287
North Union	879	843	1,139	1,143	1,225
Norwegian	1,389	1,592	1,822	1,938	2,172
Pine Grove	2,267	2,197	3,521	3,699	3,930
Porter	2,738	2,525	2,593	2,560	2,032
Reilly	1,088	941	884	835	802
Rush	2,316	2,730	3,440	3,472	3,957
Ryan	1,022	1,073	1,275	2,296	2,461
Schuylkill	1,732	1,516	1,518	1,230	1,123
South Manheim	650	771	1,015	1,558	2,191
Tremont	442	252	289	297	250
Union	1,169	969	1,162	1,458	1,308
Upper Mahantongo	750	727	787	696	652
Walker	697	730	884	949	936
Washington	1,292	1,497	2,205	2,423	2,750
Wayne	1,729	2,065	3,565	3,929	4,721
West Brunswick	906	1,795	2,519	3,227	3,428
West Mahanoy	4,514	3,968	3,934	3,606	3,175
West Penn	2,464	2,636	3,388	3,693	3,852
Counties					
Berks	275,414	296,382	312,509	336,523	373,638
Carbon	52,889	50,573	53,285	56,846	58,802
Columbia	53,489	55,114	61,967	63,202	64,151
Dauphin	220,255	223,713	232,317	237,813	251,798
Lebanon	90,853	99,665	108,582	113,744	120,327
Lehigh	227,536	255,304	272,349	291,130	312,090
Luzerne	346,972	341,956	343,079	328,149	319,250
Northumberland	104,138	99,190	100,381	96,771	94,556
Pennsylvania	11,319,366	11,800,766	11,864,720	11,881,643	12,281,054

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Table 2.4.2 Population Change in Schuylkill County Municipalities and Selected Jurisdictions, 1960-2000

	1960-1970		1970-1980		1980-1990		1990-2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Schuylkill County	(12,938)	-7.5%	541	0.3%	(8,045)	-5.0%	(2,249)	-1.5%
Boroughs and Cities								
Ashland	(270)	-5.4%	(511)	-10.8%	(370)	-8.8%	(573)	-14.9%
Auburn	(41)	-4.4%	104	11.6%	(86)	-8.6%	(74)	-8.1%
Coaldale	(926)	-23.4%	(261)	-8.6%	(231)	-8.4%	(236)	-9.3%
Cressona	(40)	-2.2%	(4)	-0.2%	(116)	-6.4%	(59)	-3.5%
Deer Lake	13	3.9%	168	48.4%	35	6.8%	(22)	-4.0%
Frackville	(209)	-3.7%	(137)	-2.5%	(608)	-11.5%	(339)	-7.2%
Gilberton	(419)	-24.5%	(197)	-15.2%	(143)	-13.0%	(86)	-9.0%
Girardville	(508)	-17.2%	(182)	-7.4%	(379)	-16.7%	(147)	-7.8%
Gordon	(32)	-3.6%	36	4.2%	(124)	-13.9%	13	1.7%
Landingville	(49)	-21.9%	(5)	-2.9%	22	12.9%	(17)	-8.9%
McAdoo	(234)	-6.6%	(386)	-11.6%	(481)	-16.4%	(185)	-7.5%
Mahanoy City	(1,279)	-15.0%	(1,090)	-15.0%	(958)	-15.5%	(562)	-10.8%
Mechanicsville	75	12.8%	(144)	-21.7%	21	4.0%	(25)	-4.6%
Middleport	(166)	-21.4%	(32)	-5.3%	(57)	-9.9%	(62)	-11.9%
Minersville	(594)	-9.0%	(377)	-6.3%	(758)	-13.5%	(325)	-6.7%
Mount Carbon	(124)	-40.3%	(27)	-14.7%	(25)	-15.9%	(45)	-34.1%
New Philadelphia	(174)	-10.2%	(187)	-12.2%	(58)	-4.3%	(134)	-10.4%
New Ringgold	-	0.0%	(13)	-4.1%	14	4.7%	(24)	-7.6%
Orwigsburg	530	24.9%	39	1.5%	80	3.0%	326	11.7%
Palo Alto	(17)	-1.2%	(107)	-7.5%	(129)	-9.8%	(140)	-11.7%
Pine Grove	(70)	-3.1%	47	2.1%	(126)	-5.6%	36	1.7%
Port Carbon	(58)	-2.1%	(141)	-5.2%	(442)	-17.2%	(115)	-5.4%
Port Clinton	(376)	-50.9%	(26)	-7.2%	(9)	-2.7%	(40)	-12.2%
Pottsville	(1,944)	-9.0%	(1,520)	-7.7%	(1,592)	-8.7%	(1,054)	-6.3%
Ringtown	31	3.7%	(43)	-4.9%	16	1.9%	(27)	-3.2%
St. Clair	(583)	-11.3%	(539)	-11.8%	(513)	-12.7%	(270)	-7.7%
Schuylkill Haven	(345)	-5.3%	(148)	-2.4%	(367)	-6.1%	(62)	-1.1%
Shenandoah	(2,786)	-25.2%	(698)	-8.4%	(1,368)	-18.0%	(597)	-9.6%
Tamaqua	(927)	-9.1%	(403)	-4.4%	(900)	-10.2%	(769)	-9.7%
Tower City	(194)	-9.9%	(107)	-6.0%	(149)	-8.9%	(122)	-8.0%
Tremont	(60)	-3.2%	(37)	-2.0%	18	1.0%	(30)	-1.7%

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Table 2.4.2 (cont'd)

	1960-1970		1970-1980		1980-1990		1990-2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Townships								
Barry	(461)	-39.2%	154	21.5%	(24)	-2.8%	122	14.4%
Blythe	(103)	-7.9%	29	2.4%	(205)	-16.7%	(118)	-11.5%
Branch	49	2.8%	108	6.0%	145	7.6%	(180)	-8.8%
Butler	398	11.9%	502	13.4%	(141)	-3.3%	888	21.7%
Cass	(442)	-15.0%	(94)	-3.7%	(326)	-13.5%	(248)	-11.9%
Delano	(92)	-12.5%	43	6.7%	(113)	-16.5%	(86)	-15.0%
East Brunswick	105	9.9%	389	33.4%	(48)	-3.1%	95	6.3%
East Norwegian	(122)	-10.2%	(77)	-7.2%	(8)	-0.8%	(127)	-12.8%
East Union	65	4.7%	18	1.2%	(96)	-6.5%	45	3.3%
Eldred	(297)	-30.5%	49	7.2%	10	1.4%	(17)	-2.3%
Foster	(222)	-37.0%	(89)	-23.5%	9	3.1%	(30)	-10.1%
Frailey	(67)	-10.5%	(105)	-18.4%	53	11.4%	(102)	-19.7%
Hegins	(67)	-2.0%	309	9.5%	(1)	0.0%	(42)	-1.2%
Hubley	(111)	-12.1%	87	10.8%	33	3.7%	(39)	-4.2%
Kline	(395)	-19.6%	144	8.9%	(46)	-2.6%	(131)	-7.6%
Mahanoy	(1,279)	-15.0%	(5,732)	-79.0%	(252)	-16.5%	1,820	143.0%
New Castle	(269)	-27.0%	(9)	-1.2%	(151)	-21.0%	(172)	-30.3%
North Manheim	483	17.1%	262	7.9%	(170)	-4.8%	(117)	-3.4%
North Union	(36)	-4.1%	296	35.1%	4	0.4%	82	7.2%
Norwegian	203	14.6%	230	14.4%	116	6.4%	234	12.1%
Pine Grove	(70)	-3.1%	1,324	60.3%	178	5.1%	231	6.2%
Porter	(213)	-7.8%	68	2.7%	(33)	-1.3%	(528)	-20.6%
Reilly	(147)	-13.5%	(57)	-6.1%	(49)	-5.5%	(33)	-4.0%
Rush	414	17.9%	710	26.0%	32	0.9%	485	14.0%
Ryan	51	5.0%	202	18.8%	1,021	80.1%	165	7.2%
Schuylkill	(216)	-12.5%	2	0.1%	(288)	-19.0%	(107)	-8.7%
South Manheim	121	18.6%	244	31.6%	543	53.5%	633	40.6%
Tremont	(190)	-43.0%	37	14.7%	8	2.8%	(47)	-15.8%
Union	(200)	-17.1%	193	19.9%	296	25.5%	(150)	-10.3%
Upper Mahantongo	(23)	-3.1%	60	8.3%	(91)	-11.6%	(44)	-6.3%
Walker	33	4.7%	154	21.1%	65	7.4%	(13)	-1.4%
Washington	205	15.9%	708	47.3%	218	9.9%	327	13.5%
Wayne	336	19.4%	1,500	72.6%	364	10.2%	792	20.2%
West Brunswick	889	98.1%	724	40.3%	708	28.1%	201	6.2%
West Mahanoy	(546)	-12.1%	(34)	-0.9%	(328)	-8.3%	(431)	-12.0%
West Penn	172	7.0%	752	28.5%	305	9.0%	159	4.3%
Counties								
Berks	20,968	7.6%	16,127	5.4%	24,014	7.7%	37,115	11.0%
Carbon	(2,316)	-4.4%	2,712	5.4%	3,561	6.7%	1,956	3.4%
Columbia	1,625	3.0%	6,853	12.4%	1,235	2.0%	949	1.5%
Dauphin	3,458	1.6%	8,604	3.8%	5,496	2.4%	13,985	5.9%
Lebanon	8,812	9.7%	8,917	8.9%	5,162	4.8%	6,583	5.8%
Lehigh	27,768	12.2%	17,045	6.7%	18,781	6.9%	20,960	7.2%
Luzerne	(5,016)	-1.4%	1,123	0.3%	(14,930)	-4.4%	(8,899)	-2.7%
Northumberland	(4,948)	-4.8%	1,191	1.2%	(3,610)	-3.6%	(2,215)	-2.3%
Pennsylvania	481,400	4.3%	63,954	0.5%	16,923	0.1%	399,411	3.4%

Chapter 2: Existing Conditions

Table 2.4.3 Population by Age Groups and Median Age in Schuylkill County, 1970-2000

Age Groups	1970		1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0-4	11,230	6.6%	9,234	5.7%	8,773	5.6%	7,357	4.9%
5-17	37,847	22.3%	30,780	19.2%	24,885	15.8%	27,210*	18.1%
18-24	11,003	6.5%	15,951	9.9%	13,234	8.4%	7,623**	5.1%
25-44	45,114	26.6%	37,096	23.1%	42,795	27.2%	63,750	28.3%
45-54	25,348	15.0%	18,488	11.5%	15,133	9.6%	21,224	14.1%
55-64	19,492	11.5%	22,126	13.8%	22,126	14.0%	14,530	9.6%
65-74	13,787	8.1%	17,728	11.0%	17,776	11.3%	14,552	9.7%
75+	5,536	3.3%	9,227	5.7%	12,773	8.1%	15,314	10.2%
TOTALS	169,357	100%	160,630	100%	157,495	100%	150,336	100%
Median Age	37.4 years		n/a		38.6 years		40.9 years	
*5-19 years of age								
**20-24 years of age								

Table 2.4.4 Percent Distribution of Population by Age Groups in Schuylkill County and Pennsylvania, 1980-2000

Age Groups	1980	1990	2000
Schuylkill County			
0-4	5.7%	5.6%	4.9%
5-17	19.2%	15.8%	18.1%*
18-24	9.9%	8.4%	5.1%**
25-44	23.1%	27.2%	28.3%
45-54	11.5%	9.6%	14.1%
55-64	13.8%	14.0%	9.6%
65-74	11.0%	11.3%	9.7%
75+	5.7%	8.1%	10.2%
Pennsylvania			
0-4	-	6.7%	5.9%
5-17	-	16.8%	20.6%*
18-24	-	10.3%	6.1%**
25-44	-	30.8%	28.6%
45-54	-	10.2%	13.9%
55-64	-	9.8%	9.2%
65-74	-	9.0%	7.9%
75+	-	6.4%	7.7%
*5-19 years of age			
**20-24 years of age			

Chapter 2: Existing Conditions

Table 2.4.5 Schuylkill County Housing Unit Inventory, 1980-2000

Structural Type	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
Single-Family Detached (Units)	n/a	n/a	31,718	47.7%	34,922	51.5%
Single-Family Attached (Units)	n/a	n/a	21,918	33.0%	20,599	30.4%
Two to Four Family Buildings (Units)	n/a	n/a	5,550	8.4%	5,502	8.1%
Five or more Family Buildings (Units)	n/a	n/a	3,348	5.0%	3,804	5.6%
Mobile Homes (Units)	n/a	n/a	3,923	5.9%	2,943	4.3%
Boat, RV, van, etc.	n/a	n/a	-	0.0%	36	0.1%
TOTALS	64,825	100%	66,457	100%	67,806	100%
Total Occupied Housing Units	59,899	92.4%	60,773	91.4%	60,530	89%
Total Vacant Housing Units	4,926	7.6%	5,684	8.6%	7,276	10.7%

Table 2.4.6 Population Totals, Population in Households and Persons per Household in Schuylkill County, 1970-2000

	1970	1980	1990	2000
Total Population	160,089	160,630	152,585	150,336
Population in Households	n/a	159,294	150,202	143,110
Persons per Household	2.5	2.66	2.47	2.36

Chapter 2: Existing Conditions

Table 2.4.7 Schuylkill County Alternative Population Forecasts

Alternative	1990	2000	2010	2020	2025	2000-2025	
						Number	Percent
1. Projections for Schuylkill County (2002)*	152,585	150,336	148,180	147,420	147,430	(2,906)	-1.9%
2. County Growth Rate, 1990-2000 (-0.15%/yr.)	152,585	150,336	148,081	145,826	144,698	(5,638)	-3.8%
3. Growth Rate for Adjoining Counties, 1990-2000 (0.37%/yr)	152,585	150,336	155,896	161,456	164,236	13,900	9.2%
4. Housing Construction Rate for Schuylkill County (.2%/yr)	152,585	150,336	153,336	156,336	157,836	7,500	5.0%

* from 2002 Data Pamphlet, Woods & Poole Economics, based upon a 2000 estimate of 150,240

Table 2.4.8 Schuylkill County Housing Units to be Constructed, 2000-2025

	"Low"	"Medium"	"High"
Population Projection, Year 2025	150,000	155,000	160,000
Population in Households (95.2%)	142,800	147,560	152,320
Persons per Household	2.20	2.20	2.20
Occupied Housing Units	64,909	67,073	69,236
Vacant Units (8%)	5,193	5,366	5,539
Total Housing Units Required	70,102	72,439	74,775
Existing Stock, Year Round Housing Units, 2000	67,806	67,806	67,806
Net Additions to Housing Stock	2,296	4,633	6,969
Replacement of Existing Stock (3%)	2,034	2,034	2,034
Conversions (1%)	-678	-678	-678
Total Housing Units to be Constructed, 2000-2025 (25 years)	3,652	5,989	8,325
Average Number of Housing Units to be Constructed per Year (2000-2025)	146	240	333

Chapter 2: Existing Conditions

Table 2.4.9 Schuylkill County Employment by Major Industry, 1990-2000

Industry	Number of Employees		Percent Distribution	
	1990	2000	1990	2000
Agriculture, forestry, fishing, hunting, mining	2,362	1,360	3.7%	2.1
Construction	4,543	4,195	7.0%	6.6
Manufacturing	21,514	16,596	33.3%	26.0
Wholesale Trade	2,068	2,324	3.2%	3.6
Retail Trade	10,244	7,840	15.9%	12.3
Transportation, warehousing, utilities	3,798	3,101	5.9%	4.9
Information	-	937	-	1.5
Finance, insurance, real estate, rental and leasing	2,443	2,419	3.8%	3.8
Professional, scientific, management	3,447	3,304	5.3%	5.2
Educational, health, social services	9,197	12,491	14.2%	19.5
Arts, entertainment, recreation, accommodation, food services	426	3,329	0.7%	5.2
Other services (except public administration)	2,186	2,977	3.4%	4.7
Public administration	2,334	3,029	3.6%	4.7
Total Employment	64,562	63,902	100%	100%

Table 2.4.10 Schuylkill County Alternative Employment Projections, 1990-2025

	1990	2000	2010	2020	2025	2000-2025	
						Number	Percent
1. Projections for Schuylkill County (2002)*	64,562	63,902	68,690	72,260	74,460	10,558	16.5%

* from 2002 Data Pamphlet, Woods & Poole Economics, based upon a 2000 estimate of 65,760

Chapter Two: Existing Conditions

PATTERN OF CHANGE

Recent Development

Recently, Schuylkill County has seen a moderately-paced expansion of development occurring on land that was previously either wooded, in use as agriculture, vacant, or host to a different but developed land use (Figure 2.4.1). The development that has occurred in Schuylkill County over the past decade, since about 1992, has taken the form of four general land use categories: Residential, Commercial, Industrial, and Institutional. Approximately 5,900 acres have been developed during this time period. Although these general categories describe the development that has occurred, it should be noted that within each of the four categories, a variety of types, sizes, and intensities of developments have occurred. For example, residential development that has occurred since 1992 is of a significant variety in the sizes of tracts that have been developed and in the size of the lots that have been created on those tracts.

Residential Development: Residential construction has been the most significant component of all recent development, totaling approximately 3,600 acres, or about 61 percent of the total land developed since 1992. Much of the residential development has taken place across the southern third of the county with larger clusters located near the borough of Pine Grove, in the vicinity of Schuylkill Haven, and in the far east of the county in the townships of West Penn and New Ringgold. Other areas that have shown a significant occurrence of residential development include the city of Pottsville, East and North Union Townships in the northern part of the county on the border with Luzerne County, and in the northwestern corner of Schuylkill County in Upper Mahantongo Township.

While the pattern of recent residential development in Schuylkill County is widespread, it has principally taken the form of single-family homes developed on lots approximately one acre in size and served by existing utilities and roadways. Some of this development has occurred in a typical subdivision form, with homes arranged along internal roadways. Other residential development is more scattered through certain areas. Very little of the recent residential development has occurred within existing boroughs and villages, meaning that previously undeveloped land was consumed by this new residential development.

Industrial Development: Industry has been the second most significant land use developed in Schuylkill County since 1992, taking place on approximately 1,190 acres, or 20 percent of the total acreage developed during that time period. Large tracts of land, most located along Interstate 81, are being developed as industrial parks. Additional land in Rush Township north of

Chapter Two: Existing Conditions

Tamaqua as well as in East Union Township on the border with Luzerne County have also been developed as part of industrial parks.

Commercial Development: Commercial land uses have been developed on approximately 730 acres of land in Schuylkill County since 1992, 12 percent of the total acreage developed during that time. Much of this commercial development has occurred on land parcels located along the county's major roadways. These areas include tracts along Interstate 81 in several different places; along PA Route 61 near Pottsville, Saint Clair, and Schuylkill Haven; along PA Route 309 in the southeast in West Penn Township (at the intersection of PA Routes 309 and 895); and north of Tamaqua. Additionally, a rural area in southern Walker Township is being developed for a miniature golf course.

Institutional Development: The development of institutional facilities has been the least consumptive during the last decade. Only 6 percent, or approximately 330 acres of the land area developed over the past decade, has been allocated for new institutional uses. Significant institutions that have been developed over the past decade in Schuylkill County include a resource center at Hawk Mountain Sanctuary on the West Brunswick/East Brunswick Township border, a Girl Scout center in Pine Grove Township, and a state prison in Mahanoy Township.

Pending and Proposed Development

Pending and proposed development includes approved but unbuilt developments and prospective developments (Figure 2.4.2). The total land area in pending and proposed developments is 4,656 acres, with 1,610 acres planned for residential development, 1,099 acres for commercial use, 1,937 acres planned for industrial use, and 10 acres for institutional use.

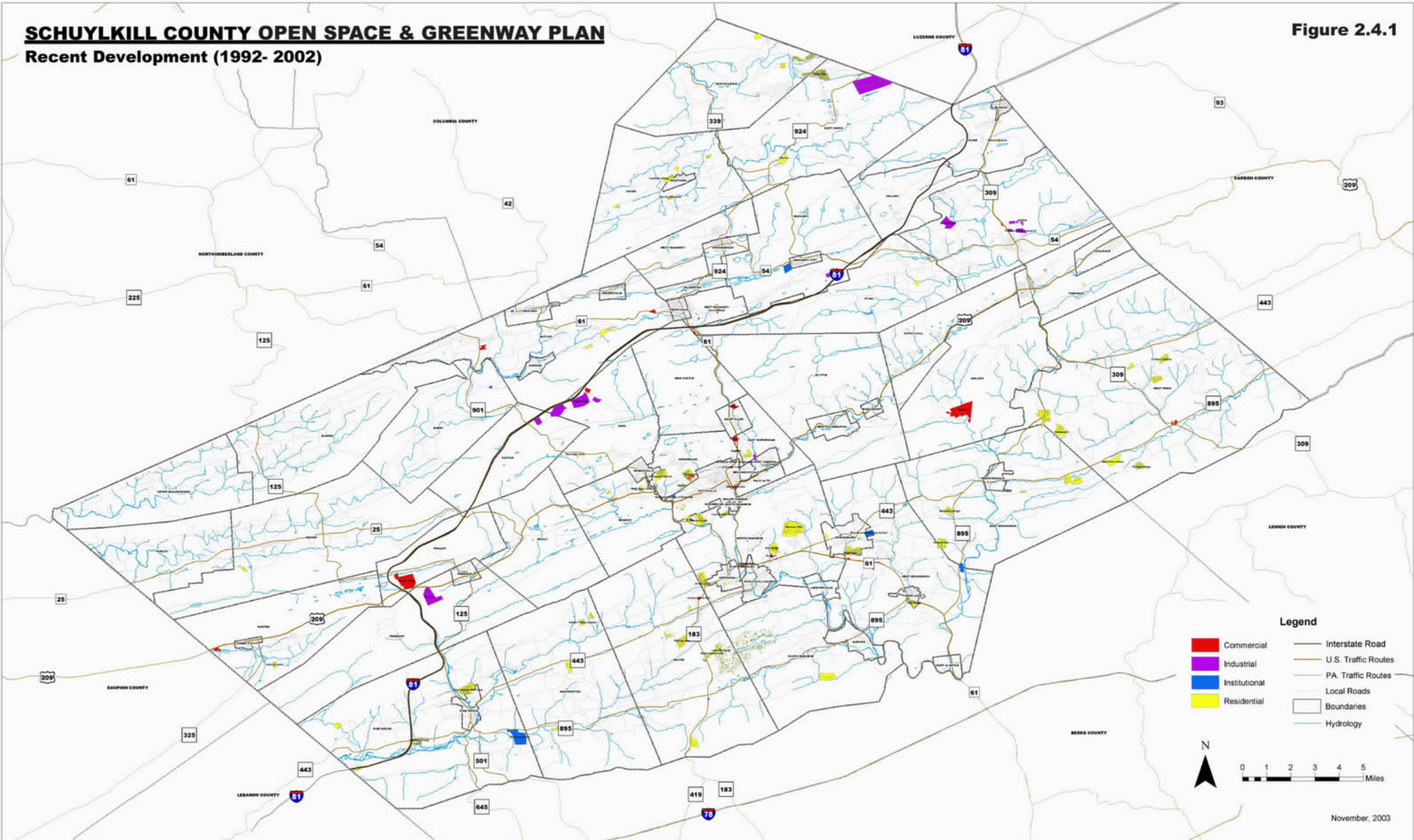
The pattern for development in the near future, as reflected in the Pending and Proposed Development map, consists of scattered small-scale residential developments throughout the county, mostly south of Interstate 81. In addition, there is one large-scale development planned in the county, the Mountain Valley Golf Course expansion, which is located in Ryan Township just south of Interstate 81. Although there are exceptions, most residential development in the near future will apparently occur in townships, rather than in urbanized areas such as boroughs and the City of Pottsville.

If development occurs along the lines of the Pending and Proposed Development map, then there will be commercial and industrial development in Cass, Foster, and Butler Townships as part of development in and near the Highridge Industrial Park. Additional industrial development will occur in the southwestern part of the county in the vicinity of Interstate 81. Other smaller-scale commercial development will take place in a scattered fashion throughout the county.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Recent Development (1992- 2002)

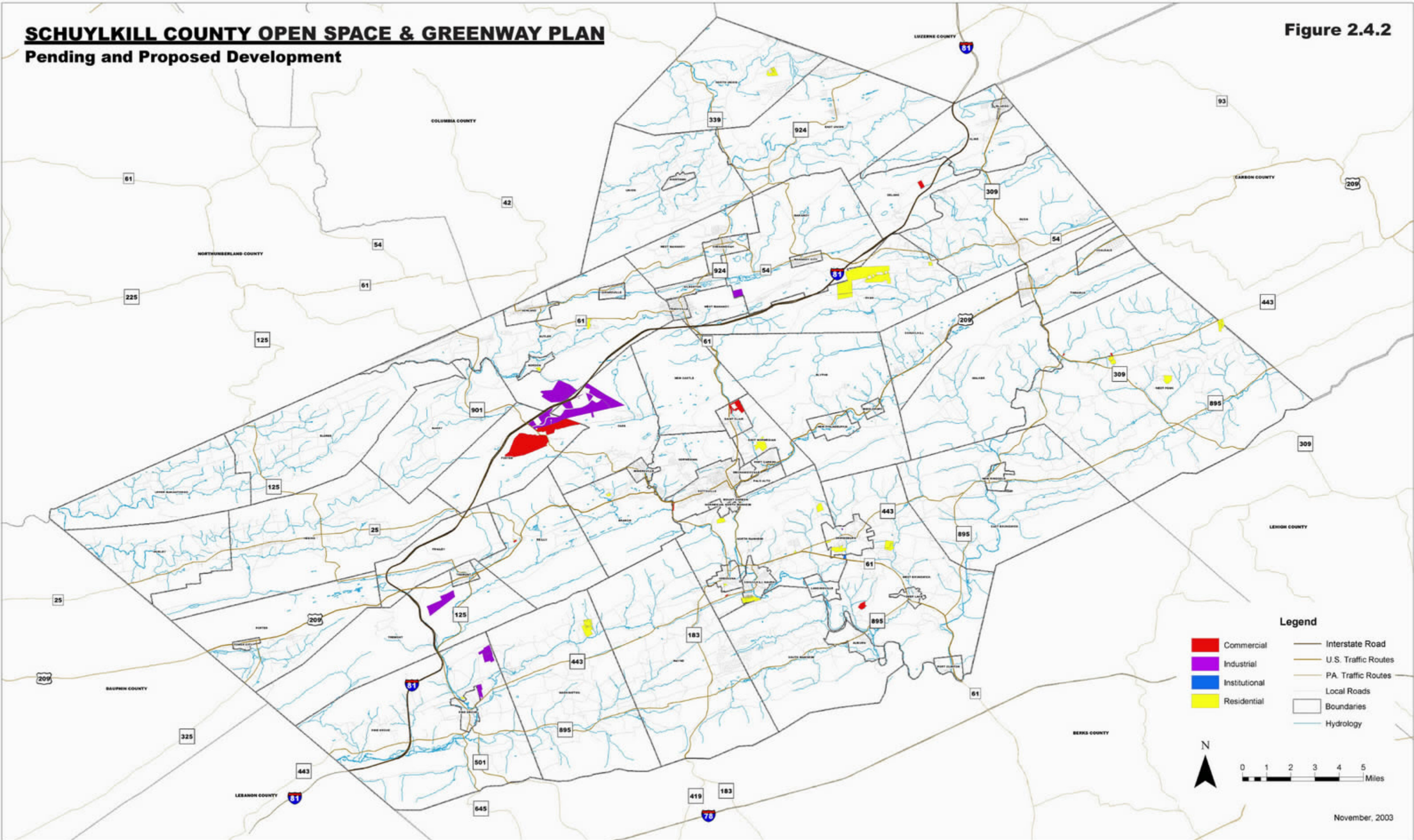
Figure 2.4.1



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Pending and Proposed Development

Figure 2.4.2



Chapter Two: Existing Conditions

TREND SCENARIO

In order to develop a sense of the magnitude and characteristics of future development in the county, assuming no significant change in terms of county or local regulations controlling land development, a Trend Scenario was developed. The Trend Scenario made use of three sets of data: 1) Population forecasts; 2) Census data on municipal population and housing characteristics; and 3) Data derived from recent land development activity in the county.

Applying this method, the total number of new housing units to be constructed in the county from 2000 to 2025, a 25-year period, could range from 3,652 to 8,325, with about 5,989 new units corresponding to a “medium” rate of population growth. This latter figure translates into about 240 units per year.

Recent development activity in the county was examined as part of the study. All significant development projects for the 1992 to 2002 time period were documented. Through this process, information concerning the average density for residential development, 1.22 dwelling units per acre, was derived.

Estimates of the total number of housing units to be constructed from 2000 to 2025 were combined with the data on average densities for residential subdivisions in recent years. The intent of this synthesis of data was to yield a hypothetical scenario of the county’s likely consumption of land for new development by the year 2025 if population forecasts, development trends, and land development regulations and policies continue unchanged.

In the Trend Scenario map (Figure 2.4.3), a graphic representation of the total amount of land required to accommodate future population and employment is depicted. Locations for this potential future development reflect the development pattern of the 1992-2002 period. The 40-acre blocks of land shown represent the amount of land required for the projected development.

It must be remembered that the Trend Scenario is by no means a recommended plan or set of policies for the county. The Trend Scenario merely makes an informed conjecture as to what the county could be like in 20 to 25 years assuming a continuation of recent land development trends, no changes in local regulations and local growth management strategies, and no significant transportation or other public improvements.

Chapter Two: Existing Conditions

SECTION 5: SUITABILITY

ACCESSIBILITY ANALYSIS

An analysis of the county was undertaken to identify those areas with better accessibility by virtue of being near highways, interchanges, or urban places (Figure 2.5.1). This analysis was done, in part, to help identify areas more suitable for development or less suitable for development over the next twenty years .

Areas close to interchanges and urban places were defined as follows:

- Areas within a 1½-mile radius from each interchange on Interstate 81;
- Areas within a 2-mile radius from the center of Pottsville;
- Areas within a 1½-mile radius from the center of Tamaqua;
- Areas within a 1-mile radius from the center of other boroughs with populations of at least 5,000 residents; and
- Areas within a ¾-mile radius from the center of boroughs with populations of between 2,000 and 5,000 residents.

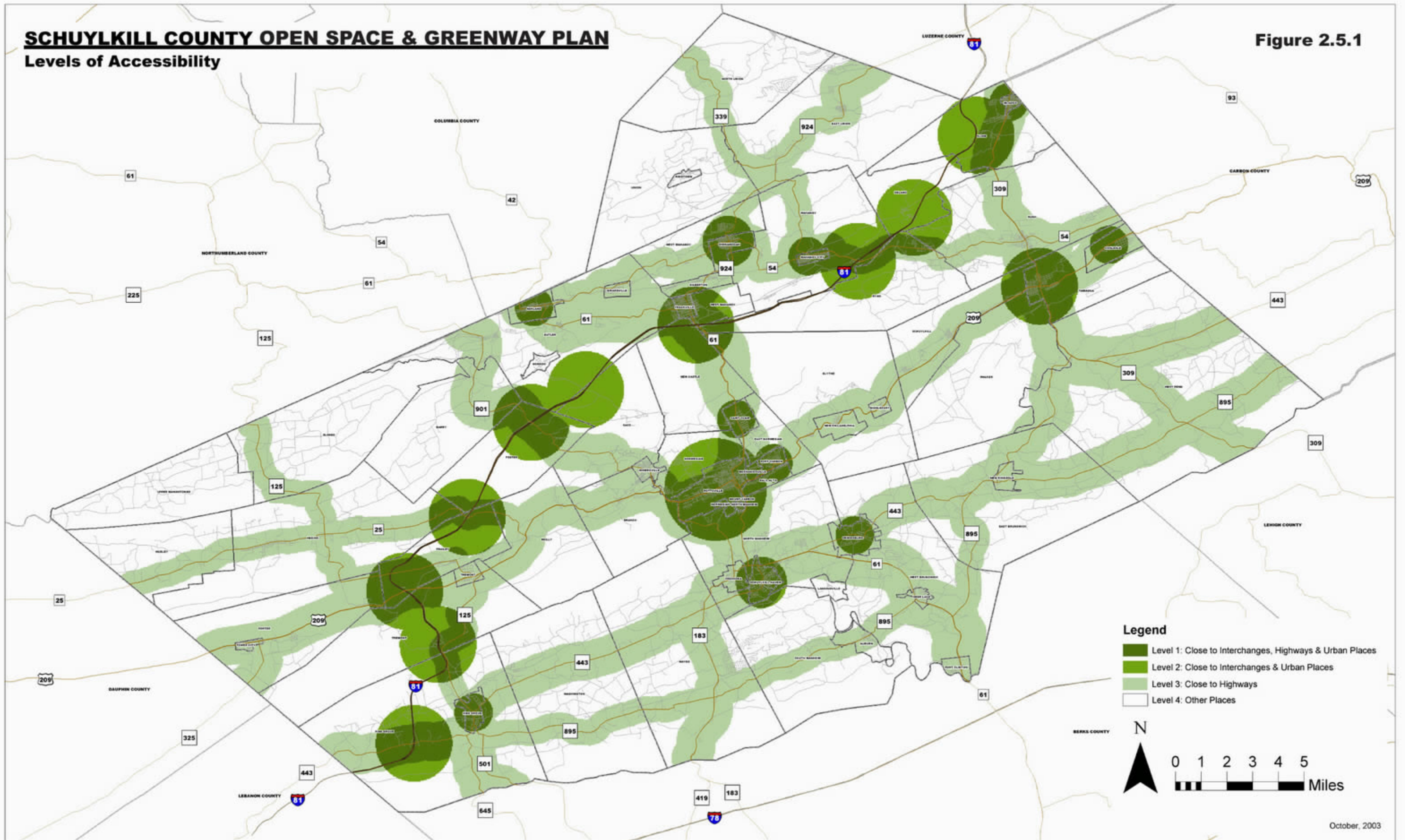
Areas close to major roads were defined as follows:

- 1 mile along either side of principal arterials;
- ¾ mile along either side of minor arterials; and
- ½ mile along either side of major collectors.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Levels of Accessibility

Figure 2.5.1



Chapter Two: Existing Conditions

SUITABILITY ANALYSIS

Positive factors influencing the relative suitability of land for development have been combined with composite natural constraints information compiled as part of this study. Areas of the county may be considered more suitable for development in consideration of their relative advantages in accessibility and serviceability. These additional factors have been synthesized with the composite constraints designations to yield a Suitability for Development map for Schuylkill County.

In this exercise, areas already developed, under public ownership, deed restricted, or otherwise unavailable for development have been excluded from consideration.

With respect to accessibility factors, a designation of Accessibility 1 was applied to areas situated close to major roadways, in the vicinity of interchanges, or close to urban centers. Areas not qualifying as having Accessibility 1 have been designated Accessibility 2.

Servicing factors were also established. The Service 1 category included lands already part of central water and sewer service areas or only part of central sewer service. The Service 2 designation indicates areas not meeting Service 1 classification criteria. Accessibility and servicing factors have been combined with the composite constraints designations to yield a Suitability for Development index, as shown in Table 2.5.1, which was then mapped.

Table 2.5.1 Suitability Analysis

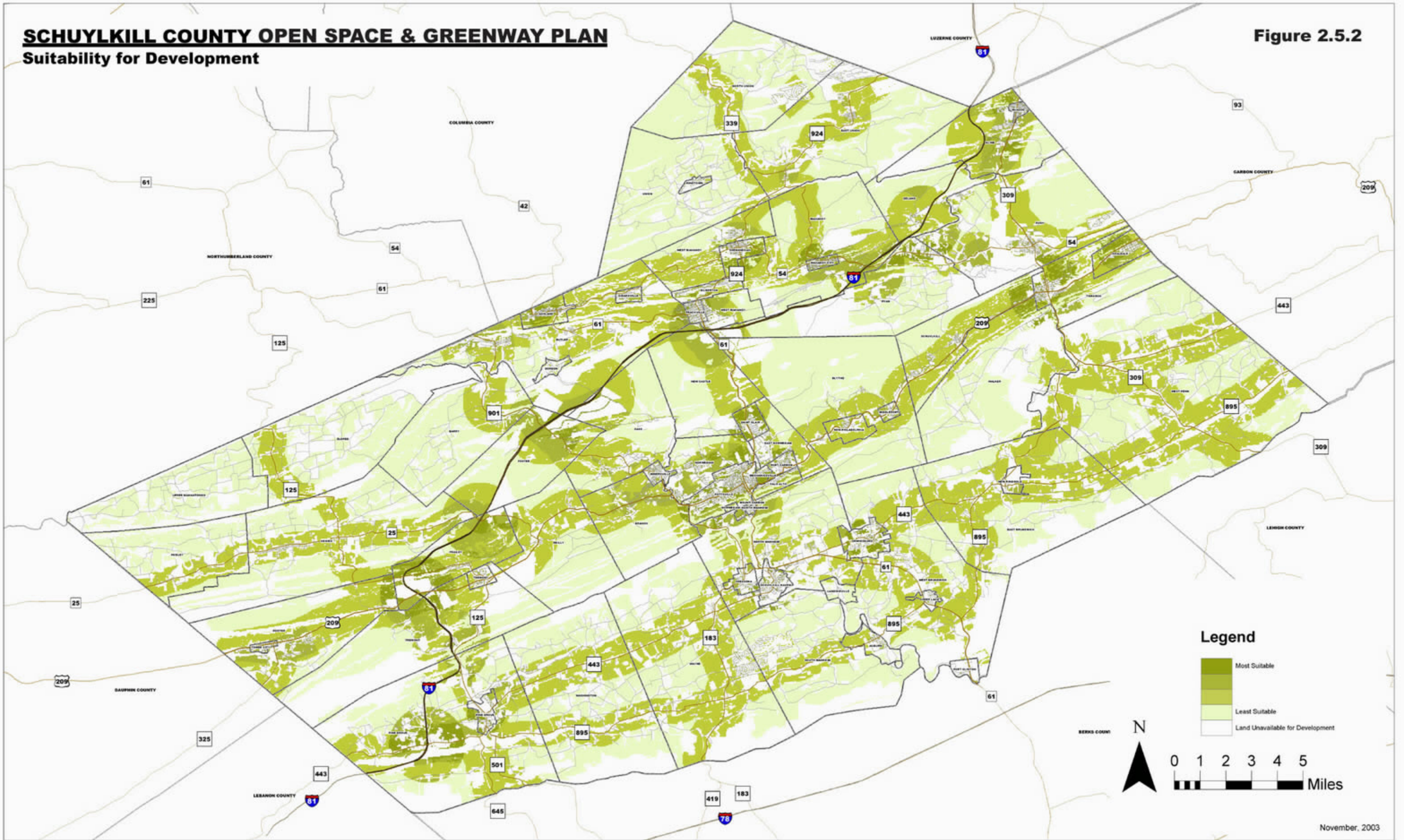
Composite Constraints	Accessibility and Servicing Factors			
	Accessibility 1		Accessibility 2	
Slight	Good	Moderate	Moderate	Limited
Moderate	Moderate	Limited	Limited	Very Limited
Strong	Limited	Very Limited	Very Limited	Very Limited
Severe	Very Limited	Very Limited	Very Limited	Very Limited

The Suitability for Development map (Figure 2.5.2) illustrates areas with good suitability in and around many existing communities as well as areas near Interstate 81 interchanges. Areas with moderate or limited suitability exist along major roadways other than Interstate 81 and areas near existing centers. Areas least suitable for development include those constrained for development by prominent natural features and areas that are relatively remote and/or poorly serviced in the county.

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Suitability for Development

Figure 2.5.2



Legend

- Most Suitable
- Least Suitable
- Land Unavailable for Development



Chapter Three: Open Space & Greenway Plan

Chapter Three: Open Space & Greenway Plan

SECTION 1: GENERAL INTRODUCTION

The Open Space and Greenway Plan is intended as a guide for the establishment, maintenance, and selected development of the open space and greenway system in Schuylkill County. Several months of background research and analysis, coupled with regular meetings with the Open Space and Greenway Steering Committee, form the basis for the plan. It reflects not only a comprehensive set of goals and policies, but also attempts to embody shared community wants and aspirations.

The Open Space and Greenway Plan is composed of several elements. These include a description of the open space and greenway network, the relationship between open space/greenway planning, and the protection of historic and natural resources and agricultural lands preservation, parks and recreation, and the role of open space and greenways in the context of an evolving county and region. Prior to discussion of the elements, Section 2 presents a summary of goals and objectives on which the plan has been structured.

The plan represents a guide to be followed by the county and by local municipalities, conservation organizations, tourism professionals, school districts, other public and quasi-public organizations, local businesses and industry, and private developers in order to address important issues and problems related to the county's development. A better quality of life for county residents, improved recreation and tourism opportunities, and protection for the county's core assets are all integral to the Open Space and Greenway Plan.

Chapter Three: Open Space & Greenway Plan

SECTION 2: GOALS & OBJECTIVES

GOAL:

Protect existing open space in Schuylkill County and add to it to establish an open space and greenway system.

GOAL:

Expand the existing county trail network.

Objective:

Formulate a trails expansion and extension program with trail organizations, local governments, and conservation and recreation organizations.

Objective:

Develop a planning, management, and acquisition strategy for the establishment and maintenance of a county-wide open space and greenway network.

Objective:

Work with a variety of stakeholders including local governments, the state, regional agencies, conservation and recreation organizations, developers and citizens to incrementally build up the open space and greenway system as outlined in this plan.

Objective:

Incorporate open space and greenway areas as part of new residential, commercial, and industrial developments.

Objective:

Ensure that the trails system provides access to important open space destinations from population centers and strategic locations.

GOAL:

Increase recreational opportunities for county residents and visitors.

Objective:

Provide an adequate supply and mix of parks, playgrounds, and other recreation facilities, both active and passive, to serve the existing and projected populations of Schuylkill County.

Objective:

Promote the development of new recreation facilities at strategic locations throughout the open space and greenway system.

Chapter Three: Open Space & Greenway Plan

Objective:

Provide public facilities in the most efficient, cost-effective manner, taking into account community needs and environmental factors.

GOAL:

Enhance the tourism industry.

Objective:

Identify, protect, and promote Schuylkill County's natural, cultural, and historic resources.

Objective:

Continue to maintain an attractive visual and aesthetic environment throughout the county.

Objective:

Encourage more locally-based tourism opportunities compatible with the other goals of this plan.

GOAL:

Protect environmentally sensitive areas of the county.

Objective:

Protect groundwater, floodplains, wetlands, mature woodlands, steep slopes, prime farmland, orchards, habitats of rare and endangered species, and other environmental features.

GOAL:

Protect culturally significant areas of the county.

Objective:

Preserve the abundant and widespread historic resources of the county.

Objective:

Reinforce the character and ambience of historic settlements.

Objective:

Maintain locally and nationally significant historic resources in appropriate settings.

Chapter Three: Open Space & Greenway Plan

GOAL:

Preserve scenic and historic transportation corridors.

Objective:

Identify scenic routes and other roadways with particularly strong visual characteristics as well as outstanding scenic vistas that are worthy of special preservation efforts.

Objective:

Identify opportunities to enhance or expand current excursion rail routes.

Objective:

Promote the reuse of inactive rail lines as part of the county trail network.

Chapter Three: Open Space & Greenway Plan

SECTION 3: OPEN SPACE & GREENWAY PLAN

This section details the Schuylkill County Open Space and Greenway Plan. It identifies areas of the county that are most important to protect as open space, mechanisms by which these areas may be preserved, priorities for open space preservation, and ways of coordinating with adjacent counties to develop a regional open space network. The plan also reviews implications of the open space and greenway plan for park and recreational facilities creation; historic, cultural, and landscape resources protection; agricultural resources conservation; natural resources protection; as well as implications for the county's transportation network. Implementation strategies are discussed in Chapter 4.

Benefits of Open Space and Greenways

Creating a network of open space and green corridors throughout the county is a comprehensive way of protecting the local character and landscape. Open space and greenways provide an array of direct and indirect benefits that add to the quality of life of a region. Protection of these areas provides numerous economic, social, transportation, recreation, and ecological benefits. Understanding the benefits of open space and greenway identification and protection will promote and sustain the Schuylkill County initiative to develop a comprehensive open space network throughout the county. The benefits of green corridors and open spaces include:

Economic Benefits

- Increase nearby property values;
- Provide an attractive amenity that can be a strong selling point in gaining business investment;
- Precipitate new and expanded businesses related to greenway and trail use. New businesses will provide employment opportunities and revenues;
- Create tourist destinations which will generate expenditures on food, services, and lodging; and
- Reduce damage and financial loss from flooding by providing buffer areas along stream and river corridors.

Social Benefits

- Provide access to historically and culturally significant features;

Chapter Three: Open Space & Greenway Plan

- Provide opportunities to reconnect with the natural environment and urban fabric of communities;
- Help to preserve the character and aesthetic appeal of places and landscapes;
- Provide significant new public places which can help to connect people and communities;
- Increase quality of life;
- Improve health and wellness of greenway and trail recreation users; and
- Heighten sensitivity to the natural environment by providing for interaction between people and nature.

Transportation Benefits

- Promote non-motorized transportation;
- Provide safe alternative transportation routes for pedestrians and bicyclists;
- Provide emergency access via trails to undeveloped areas; and
- Create linkages between rural and urban areas.

Ecological Benefits

- Promote plant and animal species diversity;
- Serve as a filtering zone: wetlands absorb pollutants and nutrients and slow surface run-off;
- Provide corridors for wildlife migration and movement;
- Preserve and protect vital wildlife, plant, and aquatic habitats;
- Improve air quality and reduce noise;
- Reduce stormwater damage and promote flood mitigation within protected floodplains;
- Clean up abandoned corridors;

Chapter Three: Open Space & Greenway Plan

- Maintain stable groundwater levels;
- Reconnect fragmented natural areas; and
- Protect and buffer critical environmental resources.

Recreation Benefits

- Provide areas for active recreation pursuits including jogging, walking, bicycling, and water-related activities;
- Serve as sites for passive pursuits such as picnicking, fishing, and enjoying nature;
- Connect existing and proposed trails;
- Encourage ecotourism;
- Provide landscapes for environmental education; and
- Provide connections between protected lands.

The Open Space and Greenway Plan

The Open Space and Greenway Plan for Schuylkill County is presented in Figure 3.3.1 and Table 3.3.1. The figure shows the system of open space and greenways throughout the county that collectively comprise the Open Space and Greenway Plan. This system is an interconnected network of areas and corridors, to a large extent based upon existing preserved open space areas, including state, county, and municipal parks, State Gamelands, State Forests, land preserved through agricultural easements, and trails. To these existing preserved areas are added extensive areas of environmentally sensitive lands and resources, new trail corridors, greenways along roadways, and open space buffers. These new areas comprise fifty discrete elements, detailed in the table, organized into five general conservation categories — Natural Areas, Greenways, County Lands, Watersheds, and Trails. The new areas are to be brought into the conservation fold over time, many as Short Term priorities, and others as Mid Term and Long Term priorities. In total, some 70,000 acres of Natural Areas, Greenways, County Lands, and Watersheds and more than 200 miles of trails are to be given status as permanent open space.

The Plan for a countywide system of open space and greenways is consistent with and supportive of plans for a statewide system of greenways. The Schuylkill County system is an important component of the Schuylkill River Greenway and Kittatinny Ridge corridors identified in the statewide plan.

Table 3.3.1 - Priority Areas for Open Space and Greenways

Map No.	Proposed Conservation Area	Location	Acres/ Miles	Comment	Priority
<u>Natural Areas</u>					
1	Bears Head Ridgetop Dwarf-Tree Forest	Delano Township East Union Township Mahanoy Township West Mahanoy Township	3,469	NAI Site	Short Term
2	Blue Nob Ridgetop Dwarf-Tree Forest	East Union Township Kline Township	1,338	NAI Site	Mid Term
3	Buck Run Ridgetop Dwarf-Tree Forest	Cass Township Foster Township New Castle Township	4,231	NAI Site	Mid Term
4	Dehaas Run Wetlands	Pine Grove Township Tremont Township	1,073	NAI Site	Mid Term
5	Greenwood Lake Wetland	Rush Township	322	NAI Site	Mid Term
6	Lower Little Swatara Wetland	Washington Township Wayne Township	3,216	NAI Site	Mid Term
7	Sharp Mountain	Reilly Township Tremont Township Lebanon County	4,071	Connector to State Gamelands and other Greenways	Mid Term
8	Wolf Creek Ridgetop Dwarf-Tree Forest	Blythe Township Ryan Township	3,694	NAI Site	Mid Term
9	Green Mountain	North Union Township	654	NAI Site	Long Term
10	Mahanoy Creek at Taylorville	Barry Township Butler Township Eldred Township	973	NAI Site	Long Term
11	St. Clair Fern Fossil Site	Blythe Township	177	World Renowned Fern Fossil Site Privately held property	Long Term
12	Owl Creek Wetlands	Tamaqua Borough	868	High Quality Stream and Class A Trout Water, Top ranked county NAI site	Short Term
13	Tower City Wetlands	Porter Township	100	Locally significant NAI site	Mid Term
14	Swope Valley Run	Pine Grove Township		NAI Site	Short Term
<u>Greenways</u>					
15	Blue Mountain Ridge	West Penn Township East Brunswick Township South Manheim Township Wayne Township Washington Township Pine Grove Township	-	Connector to Complete Kittany Ridge Top NAI Site Audubon Society important bird area	Mid Term
16	Panther Valley Tract	North Manheim Township	750	Proposed land acquisition by Schuylkill County Conservancy	Short Term
<u>County Lands</u>					
17	County held lands adjacent to Jeff's Swamp	Tremont Township	1,000	Property adjacent to State Game Lands # 229	Short Term
18	County held lands south of Big Lots Distribution Center	Tremont Township	1,200	Potential site for ATV Park Excellent Hunting Area	Short Term
19	Koenigs Creek Flood Control Dam	East Brunswick Township	46	Existing Flood Control Dam Potential for Public Park	Short Term
20	Sweet Arrow Lake	Washington Township Pine Grove Township	184	Various Recreation Improvements to be completed. See Sweet Arrow Lake Master Plan	Short Term
<u>Watersheds</u>					
21	Ringtown Reservoirs No. 5 & 6	Union Township	2,348	Drinking Water Supply	Short Term
22	Raven Run Reservoirs No. 2 & 3	West Mahanoy Township Union Township	691	Drinking Water Supply	Short Term
23	Wolf Creek Reservoir	Blythe Township	2,006	Drinking Water Supply Critical NAI Site	Short Term
24	Indian Run Reservoir	Branch Township North Manheim Township Wayne Township	2,174	Drinking Water Supply Critical NAI Site	Short Term
25	Mt. Laurel Reservoir	New Castle Township Buyler Township	621	Drinking Water Supply Formerly Mud Run Reservoir	Short Term
26	Kaufman Reservoir	New Castle Township	684	Drinking Water Supply	Short Term
27	Pine Run Reservoir	New Castle Township	866	Drinking Water Supply Formerly Tar Run Reservoir	Short Term
28	Eisenhuth Reservoir	Blythe Township Mahanoy Township Ryan Township	1,789	Drinking Water Supply	Short Term

Table 3.3.1 - Priority Areas for Open Space and Greenways

Map No.	Proposed Conservation Area	Location	Acres/ Miles	Comment	Priority
29	Tumbling Run Reservoir	Blythe Township North Manheim Township	3,835	Drinking Water Supply	Short Term
30	Still Creek Reservoir	Rush Township Kline Township	2,631	Drinking Water Supply	Short Term
31	Moss Glen Reservoir	Schuylkill Township Blythe Township	968	Drinking Water Supply	Short Term
32	Silver Creek Reservoir	Blythe Township	803	Drinking Water Supply	Short Term
33	Crystal Reservoir	Cass Township Foster Township	3,225	Drinking Water Supply NAI Site	Short Term
34	Ashland Reservoir	Butler Township New Castle Township	600	Drinking Water Supply	Short Term
35	All Surface Water Supply Reservoirs owned by Mahanoy Township Authority	Mahanoy Township	2,796	Drinking Water Supply Includes all reservoirs under permit by PADEP	Short Term
36	Minersville Reservoir	Cass Township	3,111	Drinking Water Supply	Short Term
37	Rattling Run Reservoir	Port Clinton Borough West Brunswick Township	200	Drinking Water Supply	Short Term
38	Lebanon Reservoir	Pine Grove Township Tremont Township	535	Drinking Water Supply	Short Term
39	Black Creek Reservoir	Branch Township Reilly Township	1,942	Study completed	Short Term
40	Mary-D Reservoir	Schuylkill Township	372	Drinking Water Supply	Short Term
	<u>Trails</u>				
41	Bartram Trail	Port Clinton Borough West Brunswick Township Landingville Borough North Manheim Township Schuylkill Haven Borough Cressona Borough City of Pottsville Norwegian Township East Norwegian Township Saint Clair Borough New Castle Township Frackville Borough	52 mi.	Easements partially secured. Regional connector management entity in place	Short Term
42	North Schuylkill Rail Trail	Delano Township East Union Township Mahanoy Township West Mahanoy Township Union Township Shenandoah Borough Gilberton Borough Mahanoy City Borough	51 mi.	Study completed.	Short Term
43	Appalachian Trail	West Penn Township East Brunswick Township South Manheim Township	41 mi.	Additional acreage adjoining trail may be acquired by federal government	Short Term
44	Tamaqua-Summit Hill Trail (Panther Valley Trail)	Tamaqua Borough Coaldale Borough	5 mi.	Connection Schuylkill River and Delaware and Lehigh Trail	Short Term
45	Sweet Arrow Lake Trail	Washington Township Pine Grove Township	4 mi.	Proposed trail construction dependent on Army Corps placement of dredge material from lake bed.	Mid Term
46	Swatara State Park to Sweet Arrow Lake Trail	Pine Grove Township	7 mi.	Connecting from Swatara State Park to Sweet Arrow Lake Park	Mid Term
47	West Branch Schuylkill-Blackwood-Indian Run Trail	Tremont Township Reilly Township Branch Township North Manheim Township	13 mi.	Extension of western branch of Bartram Trail	Mid Term
48	Little Schuylkill River Trail	Port Clinton Borough West Brunswick Township East Brunswick Township New Ringgold Borough Walker Township Tamaqua Borough West Penn Township Rush Township	17 mi.	Connects Berks County to Schuylkill County & will connect The Schuylkill Valley Heritage Trail to the Bartram Trail	Long Term
49	Lehigh Valley and New England to Carbon County Trail	Tamaqua Borough West Penn Township	9 mi.	Connect to Lehigh New England Trail	Long Term
50	Pottsville to Middleport Trail	City of Pottsville Palo Alto Borough Port Carbon Borough East Norwegian Township Blythe Township New Philadelphia Borough Middleport Borough	7mi.	Potential extension of Bartram Trail to connect with Heritage Trail	Long Term

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The system described above is the centerpiece of the County's approach to creating designated open space and greenways. In concert with the establishment of this system is a parallel approach toward protecting more of the nearly 500,000 acres of land that make up the county as open space. The system of existing and future permanent open space represented in the Open Space and Greenway Plan reflects a widespread pattern of existing protected lands (State Parks, Gamelands, and Forests, County lands, and privately-conserved properties) and delineated natural resource corridors (Figure 3.3.2). These resource corridors are based largely on existing natural features such as the extensive county-wide web of floodplains associated with creeks and stream courses, and can be said to be to some extent already established. In many instances, even where municipal zoning does not exist, floodplain and wetlands regulations, administered by municipalities and/or state and federal agencies, already prohibit or restrain most development. In this broader initiative, the overall objective is to link resource corridors together, give them permanent protection, and, where appropriate, facilitate improved public access.

Establishing greenway corridors is one of the most effective methods of protecting open spaces and enhancing the environment. Because greenway corridors are often lands that are not considered developable due to floodplains, wetlands, steep slopes, or past use such as rail lines, they are often open. Providing permanent protective measures for these green corridors preserves sensitive natural areas, reconnects fragmented landscapes, and enhances habitats for wildlife.

In the context of a county that contains significant open space assets but is facing some increased development pressures in certain areas, the long-term protection of these sensitive resources will depend on concerted efforts by public and private agencies. Natural feature corridors are proposed to be combined with existing protected areas, such as parks, state forests, and gamelands, and with projected linear buffers to form a permanent interconnected open space system. This broad permanent open space system is an adjunct component of the Open Space and Greenway Plan, and is seen as the primary mechanism to simultaneously protect county resources and to offer long-term opportunities to meet open space and recreational needs.

The continuous, interconnected, permanent open space network is intended to serve several purposes: 1) to conserve areas of environmentally sensitive and culturally valuable resources; 2) to provide appropriate buffers, where possible, between areas of differing land use, such as between urban uses and agricultural ones; 3) to build upon the existing county trail system, for walking, hiking, and cycling; 4) to permit pedestrian and bicycle access to a variety of destinations, including adjacent and nearby communities, other residential developments, schools, special natural features, shopping, and specific sites for recreational facilities; 5) to create sites where public recreational facilities may be developed; 6) to provide for some of the private open space and recreational space needs of

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the residents of each new housing development; 7) to provide appropriate buffers between high volume traffic arteries and residential areas; and 8) to maintain and enhance wildlife habitat.

Implications of the County Comprehensive Plan for Open Space Resources

A key goal of the Land Use Plan of the Schuylkill County Comprehensive Plan is to maximize the preservation of the rural landscape of Schuylkill County by encouraging growth and new development in the vicinity of existing boroughs, villages, and the City of Pottsville. In order to preserve the rural landscape to the maximum extent, this growth and new development is proposed to occur in more compact form than that normally associated with conventional rural and suburban development. In addition to the proposed growth in the vicinity of existing communities, the plan calls for new development to be encouraged in other selected locations. This additional development would be concentrated in new mixed-use hubs, allowing rural lands to be conserved. A limited amount of scattered development in more traditional forms would also take place, but not to an extent or degree so as to compromise the rural character of much of the county.

The implication of the proposed Comprehensive Plan on Schuylkill County's landscape is, by and large, the conservation of its existing character and resources. However, this conservation will occur only if the plan can be implemented. A clear and effective open space conservation plan will be an important part of the implementation process. The Open Space and Greenway Plan must work in conjunction with the aims of the County Comprehensive Plan in order to protect rural areas from scattered and breakaway development and to ensure that such development occurs in a manner sympathetic to the landscape being conserved.

The success of the county's Open Space and Greenway Plan will depend upon the effectiveness of future planning, the processes of local government, and the attitude of the local population. Implementation of the plan described herein will require a high degree of intergovernmental cooperation and cooperation with other partner organizations, and will also require types of implementation strategies not previously made use of within the county. In order to be successful, therefore, strong leadership and an ambitious program will be required to foster the cooperation and to implement the strategies described in the plan.

Creating the Open Space and Greenway System

The Open Space and Greenway Plan, the identification and formal recognition of a county-wide permanent open space system, should lead directly toward programs for its protection and, in places, for its further development. The county needs to act as advocate and promoter for the network and, through plan implementation, as a facilitator for appropriate protective and developmental

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efforts by public and private agencies. These actions include encouraging state and federal governments to make additional acquisitions of land that border existing state forests, gamelands, and parks; facilitating further open space and greenway planning efforts; promoting conservation easements; and providing technical assistance to municipalities and other entities for local parks and open space development.

The county needs to urge its municipalities to recognize the open space and greenway network and to undertake local efforts in support of it, particularly through the adoption of appropriate planning documents and the enactment and enforcement of new development regulations. Local comprehensive plans should formally recognize the parts of the system relevant to each township, borough, or city, and municipalities may wish to promote residential clustering, which concentrates a tract's potential development on a small portion of the overall tract, leaving the remaining area as permanent open space, by adopting suitable zoning regulations. The county should work with existing conservation associations where feasible and through the County Conservation District, encourage the establishment of new watershed associations and other voluntary groups that would take an active role where appropriate in promoting stream course and other corridor preservation efforts.

Provisions within the framework of regulations governing land development are extremely important in helping to create the open space and greenway network. A primary method by which the system would be achieved is the utilization of residential cluster development zoning provisions by landowners, in combination with existing and potential new regulations limiting development of environmentally sensitive lands. With local comprehensive plans in place, cognizant of the county-wide network, the county and municipality can evaluate a prospective development's potential open space lands in terms of the permanent open space system and its various parts. Under certain conditions (such as under optional cluster development provisions), local regulations may mandate the offering of any subdivision's required open space to the township, city, or borough, and the municipality may, depending on a tract's specific location, accept a developer's offer of dedication. Otherwise, a public access easement may be required, or lands may simply be left to the exclusive use and responsibility of the respective homeowners' association. Depending on the value of a particular piece of ground to the county's open space and greenway network, the land may become part of the overall system in various ways or may not be included.

Through various means, including outright purchase by different levels of government or by private non-profit conservation organizations, through the granting of conservation easements on relevant properties, and through the residential land development process, residents of the county may become the beneficiaries of lands to be permanently preserved as open space, potentially developed as new parkland, or to be held as part of a long-term land bank for future park development and open space needs. In the latter cases, the dedicated

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or otherwise conserved land can still function as part of a continuous trail system in the interim since, for most of the proposed permanent open space network, the emphasis should be on low maintenance, natural growth, passive recreation paths, with minimal upkeep needs. When the time comes for more capital-intensive park development of portions of open space lands, state programs for parkland acquisition and development may assist in facility construction of recreational sites.

The permanent open space system offers an opportunity to expand open space and recreational opportunities in Schuylkill County, and is intended to be complementary to existing state and county parks, state forests and gamelands, and community recreational facilities. As part of the interconnecting network themselves, these other facilities have major roles to play in the system's development, and as the sponsor of the overall system, the county should ensure that the agencies that operate them are full participants in the process. Cooperation among the various levels of government can produce tangible open space benefits for county residents as well as visitors to the area.

Open Space Protection Strategies

This section outlines various methods for permanently protecting open space and greenway areas. Advantages and disadvantages for each strategy are discussed. Recommendations for the use of certain strategies for Schuylkill County are identified later in this chapter and in the Implementation Strategy in Chapter 4.

Acquisition or Donation

Acquisition: Acquisition of land for the sole purpose of open space and greenway use is one of the most effective methods of permanently protecting open space. It is also the most costly and contingent upon an agency or organization to manage and maintain the land.

Donations/Gifts: Donation of land to an agency or non-profit organization provides permanent protection without public expenditure. This method may provide tax benefits to the donor if the donation is for the purpose of preservation or conservation.

Bargain Sale: This occurs when land is purchased at less than its appraised market value. The difference in purchase and fair market value is considered a charitable gift for tax purposes.

Option to Buy: This occurs when a purchaser enters into an agreement with a property owner to purchase or have the right of first refusal to purchase land. It secures the rights for future purchase but does not set price or determine

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when or if the property would be sold.

Purchase of Development Rights: This method provides a landowner with the monetary difference between the value of land when fully developed with uses allowed by right versus the value of the same parcel remaining undeveloped as open space. For the landowner, this method lowers taxes on land; however, the cost to purchase development rights may be high.

Purchase of Resource Protection Rights: This method allows the purchase of rights from a landowner to protect and manage specific resources; however, the cost to purchase resource protection rights may be high.

Purchase and Resale: This method allows the purchase of land by a party desiring to restrict its future use and resold only under conditions or restrictive deed conditions. The party that originally purchases the land for the sole purpose of restricting its use is relieved of continuing ownership and maintenance responsibilities. The land remains on tax rolls.

Condemnation: This tool for acquisition encompasses the act of eminent domain or taking of private property for public purposes. It may be costly and reflect negatively on the open space initiative. This method should be used as a last resort for protection.

Easements

Conservation Easements: Conservation easements are legally enforceable agreements between a landowner and an agency or non-profit organization which places restrictions on the use of, or activities on, a specific property which aligns with conservation objectives. This method is less expensive than acquisition of land. The landowner retains rights not surrendered in the easement agreement, and the easement provisions are valid and enforceable in perpetuity. Provisions for easements may require public access to be restricted. A method for enforcement of easement provisions is needed.

Public Access Easement: This type of easement provides the general public the right to access to, or through, a privately owned land for a defined purpose such as hiking, walking, and biking. Specific activities such as hunting and motorized vehicle use may be prohibited. This method is less expensive than acquisition of land. The landowner retains rights not surrendered in the easement agreement, and the easement provisions are valid and enforceable in perpetuity.

Historic Preservation Easements: A preservation easement is a legal right granted by the owner of a property to an organization or a governmental entity qualified under state law to accept such an easement. It protects against undesirable development or indirect deterioration. Preservation easements may provide the most effective legal tool for the protection of privately-

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owned historic properties. The terms are generally incorporated into a recordable preservation easement deed and can prohibit, for example, alteration of the structure's significant features, changes in the usage of the building and land, or subdivision and topographic changes to the property. The property continues on the tax rolls at its current use designation rather than its "highest and best use" (its value if developed) thereby giving the owner a genuine tax advantage.

Land Use Regulations

Overlay Zone: An overlay zone adds an additional level of regulation governing the use of a property. This technique is typically used to protect floodplains, woodlands, steep slopes, and historic resources. Riparian buffers, wetlands, unique natural areas, and scattered historic resources are resources that could be protected with an overlay zone. These regulations are enforced by local government.

Cluster Zoning: This technique promotes the clustering of development and maximizing open space on a tract of land. Ordinance provisions should promote the preservation of sensitive natural resource such as stream corridors, wetlands, and hedgerows, contiguous open space, and buffering. These types of provisions can reduce construction and infrastructure costs. Municipalities must work with developers to ensure that open space is useful as a greenway and linked to other protected open space.

Transfer of Development Rights: This provision allows property owners to sell development rights for use in targeted areas. Open space is preserved by deed restrictions on properties that no longer carry development rights. This method allows development to be directed to specific areas.

Mandatory Dedication: This method requires dedication of land from developers for open space purposes. It dedicates open space where development is occurring. Municipalities must adopt a recreation or open space use plan that supports the dedication standards contained in the subdivision and land development ordinance. Fee-in-lieu provisions allow a fee for land based on fair market value to be used for the purchase of land in targeted areas.

Other Methods

Official Map: A map of a municipality may identify existing and proposed features such as parks, greenways, trails, and easements, and, through this designation, reserve public land. If a plan for subdivision or development of mapped land is presented, the municipality may withhold approval for a period of one year, giving the municipality the option to purchase or condemn the property. The official map does not protect land specifically for open space purposes but merely reserves land for purchase by the municipality.

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Deed Restriction: This provision contains restrictions as part of the deed that limit in some way the use of a piece of land. Examples include removing vegetation, requiring a portion of a tract to remain undeveloped, or serving as a buffer. These features are protected in perpetuity.

Open Space and Greenway Planning

There are major challenges between identifying potential open space and greenway areas and actually establishing them in the county. The objective of these recommendations is to provide explicit steps that Schuylkill County should take to establish a county-wide system of open space and greenways. It will require foresight and planning on the part of county and municipal staff, elected officials, and other key stakeholders to move ahead in establishing the open space and greenway program.

The establishment of open space and greenway areas will require the following actions:

- Establish an effective planning and management system;
- Create partnerships for open space and greenway development;
- Establish a funding program to support greenways; and
- Develop a public education program.

Consideration of open space and greenways needs to be institutionalized at all levels as part of routine governmental planning in Schuylkill County. Both county and local governments should address these issues in comprehensive and open space plans. As part of the overall planning agenda, governmental units can identify ways to establish green corridors and open spaces through ordinances and regulations as well as through acquisition, easements, and rights-of-way.

Establish an Effective Planning and Management System

Schuylkill County Role

Schuylkill County is already playing the pivotal role in open space and greenway development by undertaking this plan. Through the collaborative planning process instituted in this plan, the county is defining the common vision toward which all of the different municipalities, conservation organizations, the private sector, and landowners can work. The county is in a unique position to guide county policy on developing the open space and greenway network due to its zoning and/or subdivision and land development administration for approximately half of the county's municipalities. Through

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its roles and responsibilities, the county can:

- Provide the common framework for county-wide open space and greenway planning;
- Provide technical assistance and support for municipalities and organizations participating in establishing the open space and greenway network;
- Potentially provide financial assistance in local planning;
- Spearhead efforts for regional collaboration in open space and greenway planning;
- Assess the potential for providing funding for open space and greenway planning, development, and management;
- Potentially provide oversight for monitoring open space and greenway areas; and
- Collaborate with local organizations in greenway development, management, and monitoring.

In addition to the aforementioned roles, it is also important for the county to determine how to assume the role for managing open space areas and greenways that run through several jurisdictions. The county should consider undertaking the following actions:

- Vesting the responsibility for managing an Environmental and Open Space Subcommittee.
- Establishing a County Parks Department that would be equipped to manage open spaces and greenways. As the county begins to plan for and take on the administration of its first county park, this is an opportune time to establish the responsibility for county management of other potential recreational areas.
- Working with county conservancies, municipalities, and private citizens' groups to assume management and ownership of the open space and green corridor areas. (Even with ownership and operation of private groups or landowners, the umbrella organization for open space and greenways in the county would still be needed.)
- Managing open space or greenways that are only part of one jurisdiction or on private lands at the local level or through private organizations.

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Environmental and Open Space Subcommittee

The county should create an Environmental and Open Space Subcommittee of the County Parks and Recreation Committee as an advisory organization to the County Commissioners. The Environmental and Open Space Subcommittee would coordinate county policy established by the County Commissioners and have responsibilities for county programs related to the protection of natural resources, open space, and rural landscape preservation. The Environmental and Open Space Subcommittee would work closely with the county planning staff, and should have representation on both the County Planning Commission and the Historical Advisory Board/Commission.

A primary responsibility of the Environmental and Open Space Subcommittee would be to assist in the implementation of the County Open Space and Greenway Plan. It is recommended that the county plan be followed by subsequent, more detailed municipal plans that would fill in the overall framework established by the county. In conjunction with the proposed County Historical Advisory Board/Commission, the Open Space and Greenway Plan can lead toward policies and provisions for the additional protection of historic resources, specifically scattered rural resources as well as vernacular and planned landscape resources.

Open Space and Greenway Master Plans

In addition to general planning, master plans need to be developed for individual regions of the county's open space network. The general configuration for Schuylkill County's network was established in this plan based on the county's array of resources. Regional area studies will need to occur based upon county and municipal priorities. Components of master plans will need to include identification of property boundaries, potential for acquisition, detailed alignment of greenways, property ownership, costs, facilities, management, and funding.

Local Greenway Planning

Municipalities need to be involved in open space and greenway planning, especially for land within their jurisdictions. Open space and greenway plans can be done as single purpose municipal efforts, as part of a larger municipal comprehensive plan, or as a parks, recreation, and open space plan.

The county should work with municipalities to develop local plans for open spaces and greenways. The local plans would incorporate the recommendations of the county's plan as a planning framework. For open spaces and linear corridors that occupy land over several jurisdictions, the affected municipalities could collaborate as a regional entity for planning purposes, using the opportunity to define how to work together on open space

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and greenway development and management.

Municipal open space and greenway responsibilities can include:

- Adoption of resolutions supporting the County Open Space and Greenway Plan;
- Coordination with Schuylkill County on common open space and greenway issues;
- Development of local open space and greenway plans;
- Development of action plans and funding sources for open space and greenway development;
- Inclusion of open space and greenway planning in broader land use planning and decision making at the local level;
- Participation with other municipalities on regional open space and greenway planning initiatives; and
- Public education and outreach efforts with residents; as well as with local landowners.

Regional and municipal open space and greenway planning will require funding assistance, technical assistance, and financial support. Financial assistance can be a combination of state, county, and local efforts. Funding recommendations are presented in this section under “Establishing a Funding Program to Support Open Space and Greenway Planning.”

Create Partnerships for Open Space and Greenway Development

Schuylkill County cannot plan and develop a county-wide open space and greenway system alone. The involvement of state agencies, local municipalities, and non-profit historic, conservation, and tourism organizations is essential.

With the open space and greenway priorities identified in this plan, the municipalities, conservation organizations, and private landowners need to be involved with the implementation process of greenway development. Options for protection of designated areas would be identified through consultation and actions would be determined for land protection.

Pennsylvania Department of Conservation and Natural Resources (DCNR)

DCNR should be a primary resource for technical assistance and for open space and greenway planning and development. DCNR’s action plan for greenways

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development sets state policies and practices. As it is establishing the open space and greenway network, the county should both utilize and contribute to the data collection efforts for DCNR's "Hubs and Spokes" initiative to develop a Geographic Information System (GIS) database of its statewide greenway network. This information is being collected in order to identify greenways of statewide significance and local and regional greenway networks. Through the GIS information that has been updated as part of the county open space and greenway planning effort, the Schuylkill County Planning and Zoning Department will be able to provide to DCNR extensive information regarding existing and future conditions in the county.

DCNR, along with other state agencies, will continue to serve as sources of funding for planning and implementation of open space and greenway programs. This will be discussed further in "Establish a Funding Program."

Regional Organizations

Northeastern Pennsylvania Alliance (NEPA): NEPA is the Rural Planning Organization (RPO) for the region of Pennsylvania that includes Schuylkill County. NEPA serves as the coordinating agency for transportation planning in the region that includes Schuylkill County as well as the counties of Carbon, Monroe, Pike, and Wayne. Schuylkill County should coordinate all county planning efforts with NEPA, especially as the region prepares to undertake a regional transportation plan in the next few years.

Appalachian Trail Conference: For open space and greenway issues along the southern border of the county, the Appalachian Trail Conference (ATC) can be a resource. The ATC is a volunteer-based, private, nonprofit organization dedicated to the preservation, management, and promotion of the Appalachian Trail as a setting for outdoor recreation and for learning. The ATC is both a confederation of the local clubs with delegated responsibility for managing sections of the trail and an individual membership organization. The ATC promotes the Appalachian Trail through a variety of programs, events, and publications.

Schuylkill River Greenway Association: This non-profit organization preserves and promotes the Schuylkill River National and State Heritage Area along its 128 miles. This organization will be an asset for open space and greenway planning along the Schuylkill River West Branch, Main Branch, and Little Schuylkill Water Trails.

Other Regional Partners: Schuylkill County should also work with adjacent counties, their regional planning commissions, and non-profit preservation and conservation organizations in order to plan and promote efforts to develop a regional open space network.

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Local Non-Profit Organizations

The county should continue to cultivate local partners involved in land preservation and acquisition, historic and landscape preservation, as well as organizations involved in the promotion of recreation and tourism.

Schuylkill County Conservancy: The county should work with the Schuylkill County Conservancy as this organization begins to increase capacity. The Conservancy was established to protect the quality of life in Schuylkill County by conserving farmland, open space, rural heritage, and natural resources. The organization promotes sound municipal planning to preserve county resources and focuses on educating landowners on land conservation options, conservation easements, and tax benefits. The Conservancy should be a valuable resource for management, education, and land preservation issues with regards to open space and greenways in the county. It may be possible in the future for the organization to become more involved in historic and landscape preservation activities.

Schuylkill County Chamber of Commerce: The purpose of the Schuylkill County Chamber of Commerce has been to promote the commercial, industrial, and civic welfare of Schuylkill County and vicinity to help ensure a better quality of life for all. The Chamber is involved in a variety of economic development and job creation programs. In the early 1980s the Chamber formally established the Schuylkill County Tourist Promotion Agency. The Chamber seeks to promote economic development through tourism activities. This organization should be a resource for open space and greenways program development and promotion as well as outdoor recreation and cultural tourism promotion.

Establish a Funding Program

Bond Issue for Open Space and Greenway Planning and Development

The county may wish to consider a bond issue for open space and greenway planning and development. Other counties that have floated bonds for open space and greenway planning and program development have been able to demonstrate how bonds can be used in a variety of ways for land acquisition, conservation easements purchase, and parks and recreation facilities development. The county should consult with other counties in the state including Bucks, Chester, Montgomery, and Monroe about their open space programs and bond issues.

Grant Programs

There are a number of federal and state grant programs that provide funding for open space and greenway planning and development.

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Community Conservation Partnerships Program (C2P2): This program is administered by the Pennsylvania Department of Conservation and Natural Resources (DCNR). C2P2 is a combination of several funding sources and grant programs: the Commonwealth's Keystone Recreation, Park and Conservation Fund (Key 93), the Environmental Stewardship and Watershed Protection Act (Growing Greener), and Act 68 Snowmobile and ATV Trails Fund. The Program also includes federal funding from the Land and Water Conservation Fund (LWCF) and the Recreational Trails component of the Transportation Equity Act for the Twenty-first Century (TEA-21).

C2P2 contains the following grant components: Community Recreation, Land Trusts, Rails-to-Trails, Rivers Conservation, Snowmobile/ATV, Heritage Parks, Land and Water Conservation Fund and Recreational Trails. Generally, all components require a match, usually 50 percent of cash or in-kind contributions.

Other State Funding Sources: Additional funding for planning and program administration that is related to the areas of economic development, community revitalization, historic preservation, and natural resources conservation can be found through other state agencies including the Pennsylvania Historic and Museum Commission, the state Department of Community and Economic Development, and the state Department of Environmental Protection.

Transportation Enhancement Funding: This federal program, for which funding has recently been reauthorized, is administered through the Pennsylvania Department of Transportation. Project funding is available for projects related to open space and greenways including pedestrian and bicycle facilities, education programs for pedestrians and cyclists, landscaping and beautification, historic preservation, rehabilitation of historic structures for transportation, preservation of abandoned rail corridors, control/removal of outdoor advertising, archeological planning, mitigation of water pollution due to highway runoff, and establishment of transportation museums.

Develop a Public Education Program

The purpose of the program is to inform and promote the benefits of greenways, open space, historic, and farmland preservation, and natural resource protection. Public education about the costs and benefits of land preservation may be needed. The county would need to involve local municipalities as well as conservation organizations in the process regarding county open space planning and decisions regarding land and funding. Because of its experience educating the public about resource conservation issues, the Schuylkill County Conservancy would be an ideal partner for this undertaking.

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Open Space and Greenway Plan Implications for Recreation

The Community Facilities and Land Preservation sections in Chapter 2 of this document discussed the types of state, county, and local recreation facilities available to county residents and visitors. The county and its municipalities should continue to maintain existing open space and recreation facilities and manage recreation programs in their respective jurisdictions. The county may wish to use the development of Sweet Arrow Lake as a pilot program for county management of other recreational areas in the future. The Parks and Recreation Commission should assess the need for the acquisition and development of other sites on the model of Sweet Arrow Lake and, depending upon future plans, the establishment of a recreation department to manage their administration. It is also suggested that the county use the planning for this project as an opportunity to plan for open space and greenway connections to Sweet Arrow Lake.

Municipalities should develop plans for integrating open space, greenways, and recreation objectives in their communities. They should work with the county and other partners to acquire open space when feasible to be used as future open space, parkland, or other recreation areas according to the priorities outlined in this plan. An effective tool for municipalities to secure open space and recreation areas is to use mandatory dedication provisions in zoning or subdivision ordinances for open space. Depending on municipal priorities, fee-in-lieu provisions can be used to acquire land in targeted areas. Municipalities should also investigate other tools outlined in this plan for acquisition and preservation of open space to further community goals and contribute to the development of the open space network.

Implication of the Open Space and Greenway Plan for the Transportation Network

The primary elements of the Circulation Plan outlined in the Schuylkill County Comprehensive Plan are consistent with the goals of the Open Space and Greenway Plan, including providing a network of open space for non-motorized vehicle and pedestrian access and concentrating growth in the county where there is sufficient infrastructure in place to accommodate it.

Development of the county-wide open space network will build upon the existing county trail system for walking, hiking, and cycling; will permit pedestrian and bicycle access to a variety of destinations, including adjacent and nearby communities, other residential developments, schools, special natural features, shopping, and specific sites for recreational facilities; and will provide appropriate buffers between high volume traffic arteries and residential areas. Development of trails in conjunction with roadway improvement projects should be encouraged, such as in the case of the

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segment of the Bartram Trail located along Route 61 south of Pottsville. Other amenities that encourage non-motorized transportation alternatives, such as bicycle lanes and pedestrian paths, should also be considered when planning for roadway improvements. Finally, the county should also encourage the identification and preservation of scenic roadway corridors as a way to preserve the rural character of the landscape and reinforce the county open space network. This is further discussed in the “Implication of the Open Space and Greenway Plan for Historic and Landscape Resources” section of this chapter.

Implication of the Open Space and Greenway Plan for Historic and Landscape Resources

The objectives of the Open Space and Greenway Plan are closely aligned with those of the Historic, Cultural, and Landscape Resources Conservation Plan component of the Schuylkill County Comprehensive Plan. One of the primary goals of the comprehensive plan is to maximize the preservation of the rural landscape of Schuylkill County by encouraging growth and new development in the vicinity of existing communities. In order to preserve the rural landscape to the maximum extent, this growth and new development is proposed to occur in more compact form than that normally associated with conventional rural and suburban development. In addition to the proposed growth and new development in the vicinity of boroughs, villages, and the City of Pottsville, the plan calls for new development to be encouraged in other selected locations.

Because the goals of the two plans are similar, individuals interested in historic preservation must work closely with individuals interested in other diverse but related areas, such as tourism, agricultural and natural resource preservation, and open space development. Strategies for effective implementation of both plans will require a high degree of intergovernmental cooperation as well as types of sophisticated land development controls not previously made use of within the county. Concentrated development without intergovernmental cooperation and land development controls could result in increased threats to historic resources, natural resources, the character of the landscape, and the quality of life in Schuylkill County.

Conservation in Schuylkill County is not a matter of protecting isolated historic buildings or specific natural features. It is a matter of protecting the overall fabric of the rural and urbanized landscape of which the buildings and features are a part. The county's landscape is already rich, diverse, and appealing. It does not need to be created, but managed and preserved. A reasonable amount of growth and development can occur in this landscape without destroying its character provided that the development is sympathetically integrated into the landscape. Such integration is accomplished by identifying the elements that give the landscape its character and quality, and by preserving and reinforcing those elements. A wide range of planning and preservation tools are available to accomplish this goal.

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Historic Preservation

The county's primary role in the preservation of historic resources is to promote and assist preservation and awareness of the need for preservation at the local level. Key to this effort will be encouragement by the county of municipal historical commissions, the detailed inventory and assessment of historic resources at the local level, and the adoption of municipal ordinances and review procedures requiring preservation and mitigation. Many tools available to address the preservation, promotion, and funding of historic resources can also work as a component of open space and greenway planning. These include:

County Historical Advisory Board/Commission

The county should create, initially, an Historical Advisory Board (perhaps later becoming a County Historical Commission) as an advisory organization to the County Commissioners. The Historical Advisory Board/Commission would coordinate county policy established by the County Commissioners and have responsibility for overseeing county programs related to historic preservation. The Historical Advisory Board/Commission should have representation on the County Planning Commission and the proposed Environmental and Open Space Commission.

Historic Resource Inventories and Assessments

The County Historical Advisory Board/Commission should undertake a county-wide inventory of historic resources. Through the County Historical Advisory Board/Commission and the County Office of Planning and Development, the county should coordinate and assist local municipalities and historical commissions with the inventory and assessment of historic resources within their jurisdictions.

Historic Overlay Zoning

The county should prepare a model historic overlay zoning ordinance and promote its incorporation into municipal zoning codes. Historic overlay zoning involves the identification and mapping of scattered historic resources throughout a municipality. It protects the character of historic resources by regulating the subdivision and land development review process. It clearly communicates to developers the desire of the municipality to preserve historic resources and contexts, and it identifies those resources and contexts. Historic overlay zoning requires a developer to assess the impact of a proposed subdivision or land development plan upon the historic resources on the tract being developed as well as upon adjacent affected tracts. Mitigation of the impact is required and/or negotiated through the exploration of design alternatives, buffering, landscaping, design standards, and other appropriate measures. Lot sizes and configurations as well as the design and location of improvements are controlled to preserve the integrity of the historic resource

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and its related landscape.

National Register Nominations

The County Historical Advisory Board/Commission and the County Office of Planning and Development, in conjunction with the National Park Service and the Schuylkill County Historical Society, should coordinate the preparation of new nominations for listing on the National Register of Historic Places. The work should concentrate on thematic nominations of groups of significant historic resources and cultural themes singular to Schuylkill County. Possible themes could include industrial complexes and industrial archeological sites, rail stations and settlements, prehistoric archeological sites, architectural building types, mills, schools, churches, original settlements, landscapes, and structures related to state and county parks.

Certified Local Governments

The Certified Local Government (CLG) program is administered by PHMC under federal guidelines and in association with Pennsylvania Act 167 authorizing the creation of historic districts in municipalities. CLG status enables a municipality to participate in special PHMC grant programs. Currently, there are not any CLGs in Schuylkill County. The county, through the Historical Advisory Board/Commission and County Office of Planning and Zoning, should investigate the feasibility of establishing CLGs for Pottsville and Tamaqua, the two municipalities in the county with Act 167 Historic Districts. The county should also investigate other local controls including historic district commission legislation under the Pennsylvania Municipalities Planning Code, village commercial zoning, and historic district cluster zoning.

Main Street/Elm Street Programs

There are a number of municipalities in Schuylkill County that are currently, or in the process of becoming, Main Street communities, which receive state technical assistance and grants for commercial revitalization through historic preservation. The state has recently passed the Elm Street Bill, which will provide similar assistance to residential districts adjacent to Main Street communities. The county should encourage suitable local municipalities to participate in these programs.

Additional Funding Sources

In addition to state grants geared directly to historic preservation goals, other sources of funding can be used to further the aims of preservation. For instance, Transportation Enhancement Projects provide funding for certain types of historic transportation projects including rails-to-trails funding for abandoned railway corridors and acquisition of scenic easements. The county should investigate available funding sources to further the aims of revitalizing historic

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communities and promote these programs to local municipalities.

Conservancy Activities

The county should support programs, through the Schuylkill County Conservancy or through the creation of an independent, non-profit, county-wide conservancy, to privately promote historic preservation and to undertake private land stewardship programs not possible for, or appropriate to, governmental agencies. Such programs should include various types of land donations ranging from outright gifts or bargain sales of land, to gifts of land with retained life estates, to conservation and historic preservation easement donations. The conservancy would not only organize and promote the programs, but would become the legal entity acting as steward for property donations. Additionally, the conservancy could coordinate limited development planning options for landowners that wish to develop their land, but wish to do so in a manner that preserves landscape character and open space.

The Schuylkill County Conservancy should be prepared to take a leading role in implementing high-priority conservation activities as outlined in Table 3.1.1.

Landscape Preservation

The county's rich historic fabric is often taken for granted. In rural areas, this fabric is comprised of many elements in addition to its historic buildings, including roads and site features such as boundary lines, archeological resources, and park structures. Many of these elements are integral to the landscape. The protection of historic buildings and structures should include protection of the historic contexts in which the buildings are situated. This is accomplished through the identification and protection of the historically significant landscape areas and features directly associated with the buildings under consideration.

In addition to measures outlined above, other measures should be undertaken within the county to protect the character of the rural landscapes. These could include:

Comprehensive Plans for Growth Areas

In addition to the creation of Certified Local Governments, a critical tool in the control of new development in projected growth areas in and adjacent to historic communities is the adoption of detailed comprehensive plans for these areas. The county should promote and assist municipalities in the production of these plans, as well as in the adoption of ordinances and land development controls necessary for implementation. The plans should incorporate many of the open space, natural resource, and historic preservation recommendations noted elsewhere in this plan and in the Schuylkill County Comprehensive Plan. These detailed Growth Area Comprehensive Plans will be essential to the preservation and restoration of the historic character of existing communities,

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and should lead to the adoption of detailed review procedures and design guidelines to help ensure that new development is compatible with existing historic and landscape character.

Scenic Byways and Historic Roadway Corridors

The County Historical Advisory Board/Commission, in conjunction with the Environmental and Open Space Commission, should identify ways of designating historic road corridors. One way to identify these areas is to propose inclusion in the Pennsylvania Scenic Byways Program, which is administered through the Pennsylvania Department of Transportation. Transportation Enhancements funding is also available to enhance and preserve these corridors. The county can also give local designation to historic transportation corridors.

Implications of the Open Space and Greenway Plan on Agricultural Resources Conservation

The county's general goal for agricultural resources has two interrelated parts: to maintain a strong agricultural industry and to protect farmland for agricultural use. The two parts of the general goal are equally important and are interrelated. If the farming industry is to continue, it is necessary that its land resource base be maintained. But the protection of the land base will not assure that the agricultural industry will remain profitable. And if farming is not profitable, there will not be an economic reason to protect the land resource. Many of the policies advocated to advance one objective will also advance the other.

If the general goal for agriculture can be achieved, county residents and visitors will enjoy numerous additional benefits in addition to the maintenance of the agricultural economy and the agricultural land resource. They will avoid the social, economic, and environmental disadvantages of sprawl and the possibility will be enhanced of achieving a development pattern that is more convenient and less expensive. They will also benefit from the continuation of the county's traditional culture and landscape.

Agricultural areas are important to county open space and greenway planning goals. Preservation of these areas contributes to the open space network, preserves scenic views, and preserves cultural landscapes. Some of the tools used to preserve and plan for agriculture are detailed below.

Agricultural Conservation Easements

Permanently preserved agricultural land greatly contributes to the county open space network. The most effective measure for preventing the development of farmland is the acquisition of agricultural conservation easements. These are legally binding instruments, which go with the deed, that prevent development

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forever. The Pennsylvania Agricultural Conservation Easement (PACE) program is the best-known program for easements. As of 2003, Schuylkill County has acquired 70 farms for a total of 8,500 acres.

A second method for acquiring easements is through donation to non-profit conservancies. Landowners who donate easements can count the value of the easement as a charitable donation that can be deducted from income for federal income tax purposes, thus lowering their tax liability. A number of conservancies active in the state, including the American Farmland Trust, are available for donation of easements, but working within the existing Schuylkill County Conservancy would greatly increase the area that could be maintained for farming in the county.

Agricultural Zoning

Strong agricultural zoning strictly limits land uses to agriculture and related uses and limits residential development to no more than one dwelling per 20 or 25 acres on average. Such zoning is common in York and Lancaster Counties and has been adopted by Walker Township in Schuylkill County.

For municipalities in Schuylkill County that have local zoning, adoption of agricultural zoning is ultimately the responsibility of each municipality. However, the county, with zoning jurisdiction over approximately half of the county's municipalities, can lead the way by adopting these zoning provisions for county zoning. In addition, the county can also assist local municipalities by developing model ordinances and providing technical assistance to municipalities that are exploring zoning alternatives.

Agricultural zoning will greatly strengthen the Pennsylvania Agricultural Easement Program in which the county is participating. In contrast, it may prove difficult to continue to farm individual farms protected by conservation easements if they are surrounded by land zoned, and someday developed, at suburban densities.

Agricultural Security Areas

Often when non-farmers move into a farming area, they are annoyed by noisy, dusty, or smelly farm operations and bring pressure on the municipality to enact ordinances that will restrict farming operations, and thus cause farmers to use more costly operating techniques. The Pennsylvania Agricultural Security Areas Law prevents municipal governments from passing ordinances that restrict normal farming practices or structures in Agricultural Security Areas. The Schuylkill County Comprehensive Plan encourages owners of farmland within areas planned for agriculture to petition their local governing bodies to establish Agricultural Security Areas so that their land will be afforded these and other protections. Security Areas covering 56,900 acres had already been established in the county as of November 1996.

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Non-farm neighbors must be protected against pesticides, herbicides, and other chemicals that farmers find economically necessary to use. Therefore, a buffer of 100 feet should be required on parcels to be developed that are adjacent to any parcel in an area planned for continuation of agricultural use. Such setbacks are common in a number of jurisdictions around the country.

Cluster Development

Another way of providing open space and managing the demand for rural residential development is encouraging cluster development. Cluster development can provide open space buffers to manage the impact of adjacent uses and can focus development in a defined area, thus reducing the rate of development dispersion into rural areas.

Transfer of Development Rights

One possible scenario for non-farm development in agricultural areas provides a series of incentives in the form of density bonuses to encourage landowners to develop compact arrangements of dwelling units, rather than widely spread houses. The incentives in the form of density bonuses would promote developers to proceed under cluster and compact cluster provisions of a zoning ordinance, further reducing the potential land area disturbed in development. Such a system of incentives could conceivably culminate with a transfer of development rights (TDR) option.

Under a TDR option, the agricultural area could become a “sending” area for development rights that are exercised within designated growth areas of a township instead of in agricultural areas. Under TDRs, an owner of a tract of land can separate the rights to develop that land from the property in question and transfer those rights to a different tract of land. As a general growth management tool, TDRs can be very useful to a community, since it can designate areas that it would like to keep relatively undeveloped as “transferring-out” or “sending” areas for TDRs and areas appropriate for more intensive development as “transferring-in” or “receiving” areas for TDRs.

It should be noted that TDRs are conceived as a development alternative for a landowner, to be exercised by him at his option. Landowners in “sending” areas receive compensation for transferring development rights to growth areas, and the system is one whereby the financial benefits of generally rising land prices in a community may be equitably distributed to landowners in designated growth and low-growth areas alike. It should also be emphasized that, in addition to selling his development rights for compensation, the “sending” area landowner also retains the right to use his land for non-urban uses such as agriculture.

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Implications of the Open Space and Greenway Plan on Natural Resource Conservation

As discussed previously, the Open Space and Greenway Plan will contribute to natural resource protection efforts in the county by buffering many areas of the county where development is either prohibited due to environmental regulations or where development is to be strongly discouraged. The open space network will also connect many of these natural areas together. Many aspects of natural resource protection are based upon state and federal laws and programs, such as the National Flood Insurance Program and the Pennsylvania Department of Environmental Protection wetlands regulations. However, additional resource protection is necessary at a local level.

A framework for local protection of natural resources has been documented through a variety of studies and reports, for example, the Schuylkill County Conservation District's *Natural Areas Inventory of Schuylkill County Pennsylvania, 2003* (see Section 2.4). Building upon these inventories, it is recommended that among the basic governmental natural resource protection measures at the county and local levels should be the following:

Floodplains

The first and most specific level is represented by the 100-year floodplain designated by the federal government. There is clear authority for a complete prohibition of development within designated floodplains, and a set of standards for regulating design and construction within floodplains so as to prevent exacerbation of the flood hazard. Flood prone soils, identified by the U.S.D.A Soil Conservation Service Soil Survey, at times do not correspond precisely with the federal floodplain designations. The flood prone soils, so classified because of their alluvial nature, indicating that they were deposited by floodwaters, reflect not only 100-year floods but also floods of lesser frequency. Where flood prone soils lie outside the federally designated areas, the burden of proof should be on land developers to demonstrate by specific on-site tests, engineering analysis, and analysis of effects of impervious cover percentages of upstream development that could increase flow levels, that the generalized soil classification is in error for the specific site, or that any construction will be designed to avoid any possibility of creating a hazard to human life and property or exacerbating local flooding. Thus as a matter of policy the flood prone soils initially should be subject to all of the development restrictions of the land within the 100-year floodplain.

The preservation of environmentally sensitive resources will rely to a considerable degree on the protection of the widespread network of floodplains across the county. The county should be vigilant in preserving floodplains and in encouraging townships and boroughs to do the same.

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Wetlands

The open space network incorporates a variety of natural resource areas, including significant wetlands, where known. Under the jurisdiction of the US Army Corps of Engineers and the State Department of Environmental Protection, there is a well established regulatory framework concerning wetlands in Pennsylvania; mandating wetland surveys by developers of land and controlling the degree and type of wetland disturbance permitted. Counties and municipalities can provide long-term wetlands protection by directing development away from these areas, by encouraging clustered construction on higher ground surrounding wetlands, and by purchasing wetlands important to protecting local floodplains or ecological systems.

Stormwater Management

The county should prepare and promote the adoption of model ordinances and design guidelines for the retention of stormwater from new development and for temporary and permanent sedimentation and erosion control. Stormwater management areas should be located and designed to be extensions of permanent natural open space areas, rather than conventional retention basins, with appropriate native vegetation and wildlife habitat.

The county, with funding assistance from the Pennsylvania Department of Environmental Protection, should initiate watershed studies with the participation of relevant municipalities. These studies should focus on potential effects of land development upon discharge rates into creeks and streams, and should lead to model subdivision and land development regulations to assure that developments use the best available technology to minimize off-site stormwater runoff, increase on-site infiltration, minimize off-site discharge of pollutants, and encourage natural filtration functions.

Aquifer Recharge and Well Head Areas

Zoning and other land development regulations should be employed to protect well heads and aquifer recharge areas. Well head protection zones should extend at least 1/4 mile from each major water supply well, prohibiting within the zone commercial, industrial, or other facilities that might pollute the well. Protection of each well's aquifer should be ensured by limiting the type of development permitted throughout the recharge area.

Potential future locations for surface water reservoirs may also be preserved by enacting local zoning regulations that prohibit new development in designated areas. All of these protected areas can be included as part of the open space network.

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Wildlife and Plants

One of the priorities of the Open Space and Greenway Plan is to preserve habitat corridors and areas contiguous to these corridors. According to the United States Department of the Interior, Fish and Wildlife Service, except for occasional transient species, no federally-listed or -proposed threatened or endangered species are known to exist in the county. Several animal and plant species on state threatened or endangered lists have been observed in the county at dates varying from the 1920s through 1990. More recent sightings have been mapped in an extremely general way by the *Natural Areas Inventory of Schuylkill County, Pennsylvania, 2003* (Figure 2.3.5), and this information should be consulted by the county when reviewing proposed development. Where there is a suspicion that threatened or endangered habitats or species may be present, more detailed field studies should be undertaken by the developer.

Conservation Ordinances

The county should prepare a comprehensive model Natural Features and Resources Conservation Ordinance and should promote its adoption by the municipalities and the county. This ordinance should compile all zoning and subdivision and land development provisions related to the conservation of natural features and resources. It would include provisions regulating land disturbance and the removal and management of vegetation. This ordinance would provide a useful and comprehensive tool for local municipalities in planning for development and for the open space network.

Other Natural Features

A further level of environmental sensitivity includes the following resources: mature woodlands; areas of steep slope or erodible soils; and areas having a seasonal high water table within six inches of the soil surface. These features, especially where occurring in combination, suggest that little or no development should take place or that development should be severely curtailed and closely regulated. The policy of the county toward these environmentally sensitive areas should be one of discouraging development wherever possible to prevent destruction of important resources or to protect residents of the county from future problems.

The chief instrument that the county and its townships and boroughs will have at their disposal to protect these areas will be the encouragement or requirement of cluster development and the flexible gross density development approach in residential areas. By requiring developers to base the number of dwelling units allowed to be built on the gross developable acreage of their development parcels, areas designated by the county and its municipalities as being environmentally sensitive are more likely to end up being set aside.

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Open Space and Greenway Plan Policies

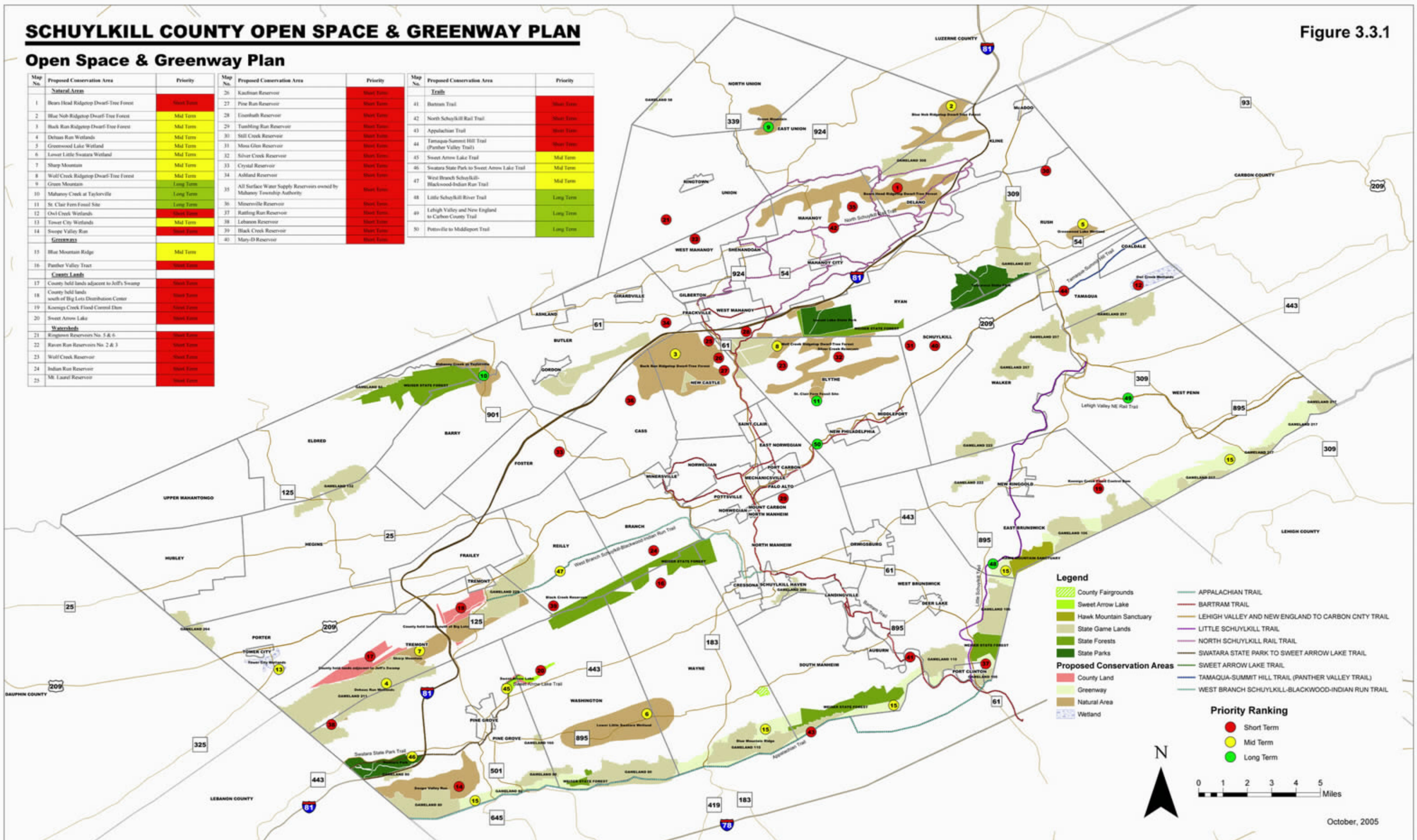
- 1. Establish a county-wide network of open space and greenways.*
- 2. Implement recommendations of the Schuylkill County Open Space and Greenways Plan including providing support to local municipalities in planning for open space in their communities.*
- 3. Coordinate efforts with partner organizations to preserve and promote the open space network at the regional and state levels.*

SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Figure 3.3.1

Open Space & Greenway Plan

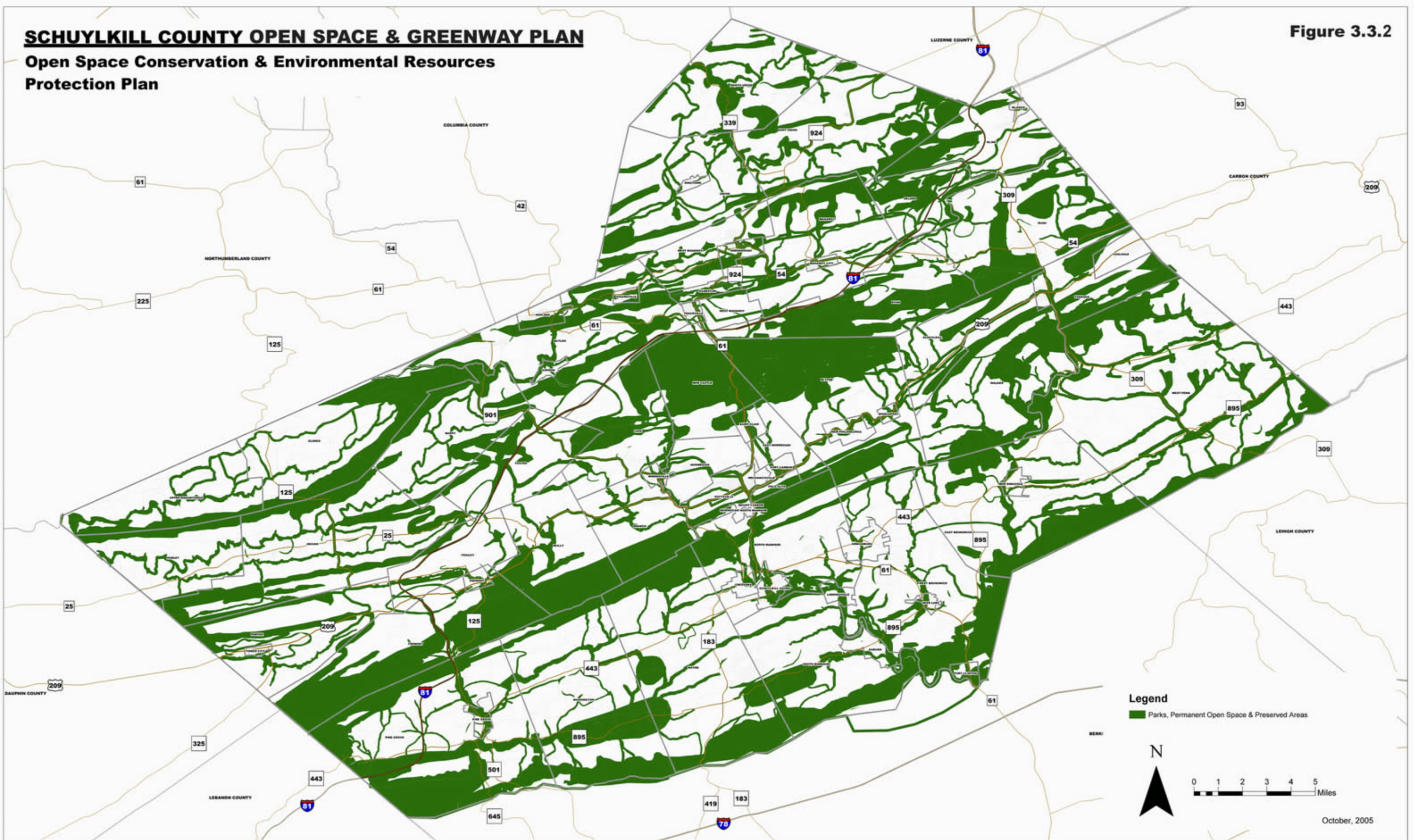
Map No.	Proposed Conservation Area	Priority	Map No.	Proposed Conservation Area	Priority	Map No.	Proposed Conservation Area	Priority
Natural Areas								
1	Beans Head Ridge-top Dwarf-Tree Forest	Short Term	26	Kachman Reservoir	Short Term	41	Barton Trail	Short Term
2	Blue Nub Ridge-top Dwarf-Tree Forest	Mid Term	28	Eisenbath Reservoir	Short Term	42	North Schuylkill Rail Trail	Short Term
3	Black Run Ridge-top Dwarf-Tree Forest	Mid Term	29	Tumbling Run Reservoir	Short Term	43	Appalachian Trail	Short Term
4	Deluan Run Wetlands	Mid Term	30	Still Creek Reservoir	Short Term	44	Tamaqua-Summit Hill Trail (Panther Valley Trail)	Short Term
5	Greenwood Lake Wetland	Mid Term	31	Moss Glen Reservoir	Short Term	45	Sweet Arrow Lake Trail	Mid Term
6	Lower Little Swatara Wetland	Mid Term	32	Silver Creek Reservoir	Short Term	46	Swatara State Park to Sweet Arrow Lake Trail	Mid Term
7	Sharp Mountain	Mid Term	33	Crystal Reservoir	Short Term	47	West Branch Schuylkill-Blackwood-Indian Run Trail	Mid Term
8	Wolf Creek Ridge-top Dwarf-Tree Forest	Mid Term	34	Auldland Reservoir	Short Term	48	Little Schuylkill River Trail	Long Term
9	Green Mountain	Long Term	35	All Surface Water Supply Reservoirs owned by Mahanoy Township Authority	Short Term	49	Lehigh Valley and New England to Carbon County Trail	Long Term
10	Mahanoy Creek at Taylorville	Long Term	36	Misereville Reservoir	Short Term	50	Pottsville to Middletown Trail	Long Term
11	St. Clair Fern Fossil Site	Long Term	37	Rattling Run Reservoir	Short Term			
12	Owl Creek Wetlands	Short Term	38	Lebanon Reservoir	Short Term			
13	Tower City Wetlands	Mid Term	39	Black Creek Reservoir	Short Term			
14	Swope Valley Run	Short Term	40	Mary-D Reservoir	Short Term			
15	Mt. Laurel Reservoir	Short Term						
Greenways								
16	Blue Mountain Ridge	Mid Term						
17	Panther Valley Tract	Short Term						
County Land								
18	County held lands adjacent to Jeff's Swamp	Short Term						
19	County held lands south of Big Lick Distribution Center	Short Term						
20	Koenigs Creek Flood Control Eban	Short Term						
21	Sweet Arrow Lake	Short Term						
Watersheds								
22	Raven Run Reservoirs No. 1 & 6	Short Term						
23	Raven Run Reservoirs No. 2 & 3	Short Term						
24	Wolf Creek Reservoir	Short Term						
25	Indian Run Reservoir	Short Term						



SCHUYLKILL COUNTY OPEN SPACE & GREENWAY PLAN

Open Space Conservation & Environmental Resources Protection Plan

Figure 3.3.2



Chapter Four: Implementation Strategy

Chapter Four: Implementation Strategy

The Need for Action

Open spaces and greenways are a significant county resource. Their conservation and selective development require ongoing monitoring and management, and, in some cases, funding for development. Having identified the county-wide, interconnected open space and greenway network in Table 3.1.1 and Figure 3.3.1 (see Chapter Three), Schuylkill County can now take the steps necessary to make this network a reality. While the prospects of establishing permanent open spaces and greenways are favorable, the feasibility of implementing the county-wide open space and greenway system requires an orchestrated course of action. This includes more detailed planning, participation by a host of players from the public and private sectors, management, funding, public education, and outreach.

The Implementation Strategy outlined in this chapter calls for county leadership in ensuring the evolution of the open space and greenway system over the coming years. Other stakeholders, including local municipalities, advocacy groups, and transportation, historic preservation, and tourism professionals also have critical roles in implementing the plan. These stakeholders will be looking to county leadership to guide the plan implementation process, provide technical assistance, and address problems and issues that will occur during the process.

Required Actions

In the diagrams that follow, the policy statements that conclude and summarize the Open Space and Greenway Plan (Chapter 3) are followed by sequences of actions required by various bodies and groups to implement each policy statement.

Overall, the goal is to implement the Open Space; Greenway Plan (Figure 3.3.1). As a means to achieve this goal, the highest priority items for implementation include:

- Establishment of a County Open Space and Environmental Subcommittee;
- County coordination with municipalities to develop local comprehensive plan and open space and greenway plans and plan updates;
- Enactment of an action strategy for priority open space and greenway areas;
- Development of master planning studies for the development of selected open space and greenway areas; and
- Coordination among stakeholders including government agencies, advocacy groups, and other interested parties.

Table 4.1.1 Detailed Action Items for Implementation of the Open Space and Greenway Plan

OPEN SPACE					
Policy Statement	Actors	1)	2)	3)	4)
<p>1) Establish a county-wide network of open space and greenways. 2) Implement recommendations of the Schuylkill County Open Space and Greenways Plan including providing support to local municipalities in planning for open space in their communities. 3) Coordinate efforts with partner organizations to preserve and promote the open space network at the regional and state levels.</p>	<p>Schuylkill County</p>	<p>1) Establish County Open Space and Environmental Subcommittee. 2) Assist municipalities to create/update local comprehensive plans consistent with the County Comprehensive Plan. 3) Coordinate open space protection efforts with other levels of government and land protection advocacy groups. 4) Review land development plans and make recommendations to ensure compatibility with the system outlined in the Open Space and Greenway Plan. 5) Work with Schuylkill County Conservancy to increase organization's capacity in the area of preserving environmentally valuable land in the county.</p>	<p>1) Assist municipalities in the preparation and adoption of local land use controls cognizant of the Open Space and Greenway Plan. 2) Support private efforts to establish and maintain the open space and greenway system. 3) Coordinate with state government so that their open space protection and development plans are integrated with county and local plans. 4) Provide information to Pennsylvania Department of Conservation and Natural Resources (DCNR) for state greenway GIS database. 5) Coordinate with Northeastern Pennsylvania Alliance (NEPA) on regional planning efforts.</p>	<p>1) Consider a direct county role in open space programming. 2) Consider approving a county bond issue for the acquisition of open space, recreation, and greenway land. 3) Develop public education program.</p>	<p>1) Assist municipalities in the planning and development of parts of the open space system. 2) Monitor the open space, greenway, and recreation development efforts of other levels of government and private groups; coordinate planning and programming.</p>

Table 4.1.1 Detailed Action Items for Implementation of the Open Space and Greenway Plan

OPEN SPACE					
Policy Statement	Actors	1)	2)	3)	4)
	State Government/DCNR	1) Prepare open space and greenway plan updates for state-owned lands that are compatible with the County Comprehensive Plan and Open Space and Greenway Plan. Coordinate efforts with county.	1) Coordinate with county to update statewide greenways database.	1) Provide technical and financial assistance towards local open space, greenway, and recreation facility implementation.	
1) Establish a county-wide network of open space and greenways. 2) Implement recommendations of the Schuylkill County Open Space and Greenways Plan including providing support to local municipalities in planning for open space in their communities. 3) Coordinate efforts with partner organizations to preserve and promote the open space network at the regional and state levels. (cont'd)	Municipalities	1) Create/update local comprehensive plans and open space and greenway plans consistent with the County Comprehensive Plan and Open Space and Greenway Plans. 2) Coordinate open space and greenway protection efforts with adjacent municipalities.	1) Integrate open space and greenway planning into broader land use planning goals. 2) Adopt new land use controls to protect open space, e.g. prohibition of development in floodplains.	1) Plan for local recreation facilities and open space acquisition and development needs. 2) Investigate sources for funding assistance. 3) Monitor county open space and greenway planning. 4) Participate in watershed studies.	1) Implement local open space and recreation facility improvements. 2) Participate in public education efforts.
	County Open Space and Environmental Subcommittee	1) Enact action strategy for priority open space and greenway acquisition areas.	1) Develop open space and greenway master plans.		
	NEPA	1) Coordinate planning activities with county open space and greenway planning efforts.			

Table 4.1.1 Detailed Action Items for Implementation of the Open Space and Greenway Plan

OPEN SPACE					
Policy Statement	Actors	1)	2)	3)	4)
	Schuylkill County Conservancy	1) Work with county to increase organization's capacity in the areas of preserving open space in the county.	1) Assist in promoting and advocating for the county open space and greenway network. 2) Assist in developing a public education program.		
	Local Tourism and Advocacy Groups	1) Assist in promoting county open space resources; look for new opportunities for promotion and partnerships.	2) Participate in county open space and greenway activities such as the County Open Space and Environmental Subcommittee and public education programs.		
	Regional Advocacy Groups	1) Coordinate planning activities for county connections to regional trail network.	1) Participate in education, promotion, and tourism objectives.		

Appendix A: Key Person Interviews

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Key Person Interviews

Key Person Interviews were held for the Schuylkill County Open Space & Greenway Plan on May 26 and June 10, 2003. These interviews were part of the data collection and analysis phase of work that sought to understand the needs of Schuylkill County to be addressed in the Open Space & Greenway Planning process. The interviews contained in-depth discussions on topics such as open space conservation, land preservation, trails, recreation facilities, outdoor education, and land development activity, and their perceived impacts and planning issues to be addressed relative to them. Also discussed at the meetings were general activities and trends, resource protection issues, and perceived potential open space and greenway development opportunities. Schuylkill County staff identified nine interview topics and invited participants to attend. Topics that were important to the Schuylkill County Comprehensive Plan were also explored at these interviews.

The following individuals, groups, and agencies participated in the interviews:

- Schuylkill River Greenway Association
- Schuylkill County Conservancy
- Schuylkill County Conservation District
- Eastern Schuylkill Recreation Committee
- Blue Mountain Recreation Committee
- Schuylkill County Tourism Office
- Penn State Schuylkill Campus
- Blue Mountain High School
- Pine Grove High School
- Catholic elementary schools
- farmers, agricultural preservation advocates, and the agricultural service agency
- SEDCO
- Manufacturing Association
- Chamber of Commerce
- Schuylkill County Economic Development Director
- Tamaqua Downtown Manager
- Schuylkill Transportation System
- PennDOT
- Schuylkill County Airport Authority
- railroad consultant
- Pottsville Sewer Authority
- Schuylkill Water Authority
- real estate agents
- developers
- mining company directors and employees

Appendix A: Key Person Interviews

The following is a summary of what was discussed at the interviews. The comments recorded here reflect the issues and concerns expressed by the participants at these interviews.

1. **Resource Protection, Greenways and Outdoor Recreation**

- A. **Recreation:** The county is located near highly populated areas but is not heavily populated itself, leaving plenty of space for recreation. The number one draw for the county is recreation. The county boasts Swatara State Park, the Appalachian Trail, Hawk Mountain, six campgrounds, rivers, hiking, hunting, golfing, snowmobiling.
- B. **Cabela's:** Cabela's could be the gateway to Schuylkill County's recreation destinations. Cabela's could provide plenty of tie-ins with the Schuylkill County economy. The Greenway is located 3,000 feet from the store. There could be organized hikes into county mountains, fishing trips to the Trout Unlimited regulation waters.
- C. **Mine Reclamation:** Reclaimed lands have great recreational potential. This reuse could serve to concentrate activities like ATV riding in one area and out of other environmentally sensitive areas. There is precedent for it through a western Pennsylvania program called "Ridge Rider." Could possibly use stripped land as lakes for fishing, boating, and swimming.
- D. **Recreation Priorities:** Neighborhood recreational facilities are lacking. Most populated areas do not have enough recreational space to serve its population. Most parks need more private sector funding.
- E. **County Parks:** The county has substantial land holdings. Maintenance and enforcement at parks is important so that they can continue to serve the population.
- F. **Destinations:** the group mentioned several recreational sites, including flood control sites (Tamaqua, New Ringgold) that are patrolled by the Fish Commission; Owl Creek reservoir, and the Pumping Station Dam in Shenandoah. There are several waterfalls including Wolf Creek Falls, Swatara Falls, and Crystal Falls.
- G. **Rails-to-Trails:** There is currently a study regarding possible rails-to-trails sites. There need to be other biking and mountain biking opportunities in the county; they must be listed on a route map.

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2. Revitalization, Historic Preservation, and Heritage Tourism

- A. **Attracting & Retaining Population:** Schuylkill County is difficult to pitch as a good place for younger people to live and work. However, it could be positioned as “A Nice Place to Raise a Family,” which could appeal to many, including those who left the county looking for other opportunities.
- B. **Revitalization:** Tamaqua has become a revitalized community through a joint municipal process that spanned ten years and involved civic organizations and government representatives from Tamaqua, the townships that surround it, and county organizations. Agreeing to work together allowed this group to tap funding that is reserved for joint municipal ventures. Their revitalization efforts included recreation planning, housing redevelopment, and included hiring a main street manager to promote economic development, preservation and tourism. The 2004 Partnership, the group driving this revitalization effort, represents many socioeconomic groups and does its own fundraising. There was agreement that revitalization efforts need to be highly visible so that communities will see that the projects are making progress.
- C. **Historic Preservation:** Historic districts bring pride to an area (ex. Pine Grove & Port Clinton). Historic preservation ordinances are often used to regulate demolition and the use of signs.
- D. **Heritage Tourism:** The number two draw for the county is heritage tourism; Port Clinton, Pottsville, Shenandoah, and Mahanoy City were mentioned as destinations. Areas for growth could be a railroad excursion line and bed and breakfasts. A difficulty mentioned is that housing in historic areas is in poor shape. Some of it was never of high quality, and because of lax code enforcement, it has become much worse.
- E. **Funding:** Finding money for any of the ventures mentioned above is not easy. It would be valuable for groups to have a clearinghouse of information to know what funds are available and how to get them, possibly including grant templates. The Northern Council of Governments was mentioned as well as the Schuylkill River Greenway Association as sources for help in getting grants.

3. Agriculture and Agricultural Land Conservation

- A. **Conservation:** The Schuylkill County Conservancy and the County Agricultural Preservation Board provide conservation easements.

Appendix A: Key Person Interviews

Some believe that the easement program, which gives \$1,000 per acre does not pay farmers enough for the development rights on their land to make it worth their while not to develop the land. Even so, there is only enough money available to preserve six or seven farms per year.

- B. **Urgency:** There is concern that the majority of existing farms are either operated by aging farmers or owned by farm widows, who may be leasing the land. When these farm widows die, their children will likely sell off the land for development. Farmers in the southern part of the county are looking to sell right now.
- C. **Residential Development:** Residential development poses a problem for continued farming because homeowners often make nuisance complaints against farmers for normal farming practices such as spreading manure. One possibility is to promote cluster development, with buffers in place to separate the farming and open space uses from the residential uses.

4. Mining/Mine Spoils Reclamation

- A. **Coal Measures:** The planning process should identify where the coal measures lie. New development should steer clear of the coal measures because much of the land is undermined and can be subject to subsidence, and new development could prevent future mining. The group cited the subsidence problems caused at a Wal-Mart site.
- B. **Selling Water Rights:** DEP is marketing the water from abandoned mines that can be pumped into streams to make up for losses downstream at power plants. There is concern that this could cause subsidence in some cases.
- C. **Safety Issues:** Safety concerns can drive reclamation efforts.
- D. **Discharge Locations:** Where the mapping shows a discharge site, it also indicates connections to underground mining.
- E. **Recreational Uses:** The group thought that reclaimed mined lands could be reused for recreational purposes. This would leave open the possibility for future mining. Uses suggested were hiking, mountain biking, horse and motorcycle trails, and camping areas. In addition, they considered golf courses, rifle ranges, and hunting lands good uses of the land.
- F. **Coal Gasification/Liquefaction:** Discussed the plans to build the first

Appendix A: Key Person Interviews

U.S. coal Gasification/Liquefaction plant in Schuylkill County. The cogeneration plant would produce aviation grade fuel and electricity from the steam by-product.

5. Water, Sewer, Emergency Services, Community Services

- A. **Landfills:** There are two major landfills in the county that have the capacity to expand.
- B. **Water:** There are more than adequate sources for water; delivery is the problem. New developments may or may not have public water. They often face the problem of not being located near existing water service, and no one wants to pay to extend water lines through unpopulated areas to reach a new development. The County Comprehensive Plan will be important because funding sources require municipalities to be consistent with the County Plan.
- C. **Sewer:** Most of the public sewer systems were installed in the early 1970s and are now overloaded. Upgrade projects are underway, including a Pottsville project to separate the sanitary sewer lines with the storm water discharge system. Pine Grove is adding a new treatment plant west of I-81 to add capacity; the system will serve existing residential development and likely allow for additional industrial and commercial development. Wildcatting still goes on, with raw sewage being discharged into the environment. There are some instances where developed areas are hooked up to public sewer lines but the lines then discharge untreated sewage.
- D. **Growth Controls:** Would like to see a county infrastructure plan that shows where services should be extended; if the infrastructure is not there, then the development cannot occur. Municipalities need this kind of assistance from the county to direct development.
- E. **Police:** Some boroughs and townships have their own police forces but others use State Police services. There have been discussions about combining police forces but it is difficult to find agreement about who will be in charge. Municipalities do have cooperative agreements for emergency response.
- F. **Fire & Ambulance:** It is becoming more and more difficult to recruit volunteers for fire and ambulance services, partly because a significant portion of the workforce leaves the county for employment. This problem is made worse by the need to serve new developments that are spread out through the townships, therefore making response time longer.

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6. Economic Development

- A. **Location:** Future economic development will likely happen near transportation corridors, including I-81 and PA 61. Retail clusters would be welcomed, but the cluster must include the right types of stores to serve as a destination. Most communities have their own industrial parks where metal fabrication and plastics work are common.
- B. **I-81:** Travel-oriented development will continue to occur, and some new large-scale development will locate near the highway; an impediment to that development is the lack of sewer and water in some areas.
- C. **PA 61:** There may be some light commercial development along PA 61, though there is not room for large-scale development. Some believe that Cabela's will spur commercial development in southern Schuylkill County along PA 61.
- D. **Schuylkill Mall:** The Schuylkill Mall has difficulty competing with Hazelton and other mall destinations west of the county. There is existing empty space that needs to be filled.
- E. **Deer Lake:** Existing Deer Lake is just about built out. It serves the existing population with commercial retail and includes some destination retail.
- F. **Future Labor Force:** The county should look toward technology jobs in the future, since that is what younger workers appear to demand. This will require an education system to deliver that labor force. There was a concern about the perceived high percentage of high school drop-outs and the low number of college graduates.

7. Housing

- A. **Demographics:** In 1930, Schuylkill County had a population of 235,000; today its population is 160,000.
- B. **“South of the Mountain”:** There is more demand for housing in the southern tier of the county, due to better weather, better schools and proximity to employment centers in Berks and Lehigh Counties. Not only are people moving in from Berks and Lehigh Counties for a lower cost of living, but they are also moving there from northern Schuylkill County.

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- C. **“North of the Mountain”**: The population is aging, declining, and oriented more towards Wilkes-Barre and Scranton.
- D. **Housing Stock**: While South of the Mountain has seen significant new development, North of the Mountain has an aging housing stock, fifty-three percent of which was built prior to 1940. The Borough of Frackville is considered to have good housing stock, but a significant amount of housing has not been kept up and would be too expensive to bring up to code, especially by the increasingly aging population who cannot afford renovations.
- E. **Code Enforcement**: Stricter code enforcement has been one of the keys to the better quality of southern municipalities’ housing stock. The group cited absentee landlords in the 1980’s and lax code enforcement as reasons why the northern housing stock has declined in quality.
- F. **Rehabilitation**: Groups apply for funds to rehabilitate existing housing in approximately ten entitlement areas. These funds are critical for the county.
- G. **Demolition**: Eleven percent (7,200 units) of the county’s housing stock is vacant. Many of these units could and should be demolished since their rehabilitation would cost more than the value of the houses. Funding for demolition is difficult to find and some historic resource codes do not allow buildings to be demolished.
- H. **Sewage**: Sewage treatment is a problem throughout the county. In many areas, overloaded systems lead to infiltration of sewage into surface and ground water sources.
- I. **Senior Housing**: The group identified elder care facilities in Pottsville, Tamaqua, and Orwigsburg (facilities are expanding). They stated that the western part of the county is underserved.
- J. **Public Housing**: There are two high rise complexes run by the city of Pottsville, county facilities in Shenandoah, Minersville, Ashland, Tamaqua, Schuylkill Haven and Mahanoy City; and Catholic Church facilities in Mary Queen of Peace and New Philadelphia. The group recommended investigating the vacancy rates at these facilities to understand their use.

8. Transportation

- A. **County Airport**: The airport is open twenty-four hours a day and sees

Appendix A: Key Person Interviews

the possibility of expanding to air freight but does not expect to attract an airline. The airport currently serves corporate (air taxi) aviation and would like to expand its runway length in order to accommodate larger jets.

- B. **Public Transportation:** STS manages the county bus service that provides fixed route service six days a week. Seventy-two percent of riders are seniors. STS also runs twenty-eight paratransit vehicles for senior services, employment-based transportation (welfare-to-work, CEDCO, County Economic Development). The paratransit service is growing while the fixed route service is declining which seems to correlate with older residents who are less mobile and use the service. STS is working with employers to establish a transit link before travel patterns are established. For the future, STS would like to use the paratransit and fixed-route buses together for better service and flexibility. STS needs a better bus terminal to link with other buses, including tour buses. One new possibility is the Union Station project, a ten million dollar intermodal project to link excursion rail with bus.
- C. **Rail:** The Reading and Northern railway runs occasional excursion trips. Freight rail in Schuylkill County was linked to the coal industry, and its use declined as the coal industry declined. More recently freight rail has tried to attract general merchandise customers, but it is difficult because it was set up for the coal industries and lacks the infrastructure (sidings) to serve other customers. The future of rail is inbound fly ash, outbound oil from the coal gasification/liquefaction plant, and some excursion trips. Longer-term goals could include some general merchandise freight.

9. Education

- A. **District Consolidation:** The opinion of the group was that school districts will not consolidate unless it is financially untenable to continue. Some believe that the Shenandoah District could consolidate with the Mahanoy District, the Minersville District could consolidate with the Pottsville District, and the Schuylkill Haven District could consolidate with the Blue Mountain District.
- B. **Community Identity:** Some believe that consolidation will be difficult because community identity is closely linked with school identity, especially with the school sports teams.
- C. **Parochial Schools:** Parochial schools are having the similar problems with low enrollment and small graduating classes.

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- D. **Census Data:** There were questions about the latest census data that show that the percentage of poor has been dropping compared with an increase in the number of free lunches that the schools are required to provide.
- E. **School District Expansion:** With the increase in residential development in the southern part of the county, schools have expanded. For example, facilities have been expanded in the Blue Mountain, Pine Grove, and Schuylkill Haven School Districts.
- F. **Higher Education:** The Schuylkill Community Education Council (SCEC) has rehabbed the ARDC building as space to hold classes for McCann's Business School, East Stroudsburg, and Alvernia College (Alvernia is looking for a nursing program). Penn State is looking for four-year education courses. It is offering a Master's in Education program. The Schuylkill County Airport offers a commercial driving school.

RESOLUTION

Whereas, the Board of County Commissioners adopts the following Resolution pertaining to Schuylkill County's Comprehensive Plan and the Open Space and Greenway Plan.

Now, therefore, be it resolved:

WHEREAS, the Comprehensive Plan and the Open Space and Greenway Plan provide guidance for growth, change and protection of green space in Schuylkill County; and

WHEREAS, as these plans are designed to be a "living" document, as they will be reviewed and, if necessary, updated every five (5) years to ensure they remain relevant to our changing communities; and

WHEREAS, as the public was provided an opportunity to participate in the development and review of the plans; and

WHEREAS, the Schuylkill County Planning Commission has recommended that the Schuylkill County Board of Commissioners adopt the proposed plans as an official planning tool; and

WHEREAS, the Schuylkill County Board of Commissioners has provided an opportunity for public comment by releasing the documents to the public on December 20, 2004 and at a public hearing on February 1, 2006.

Resolved and enacted this 22nd day of February, 2006

ATTEST:

BY /s/ Jean M. Heffner
Jean M. Heffner, Chief Clerk

COUNTY OF SCHUYLKILL

BY: /s/ Frank J. Staudenmeier
Frank J. Staudenmeier, Chairman

/s/ Robert S. Carl, Jr.
Robert S. Carl, Jr., Commissioner

/s/ Mantura M. Gallagher
Mantura M. Gallagher, Commissioner