

# WESTERN MIFFLIN COUNTY COMPREHENSIVE PLAN

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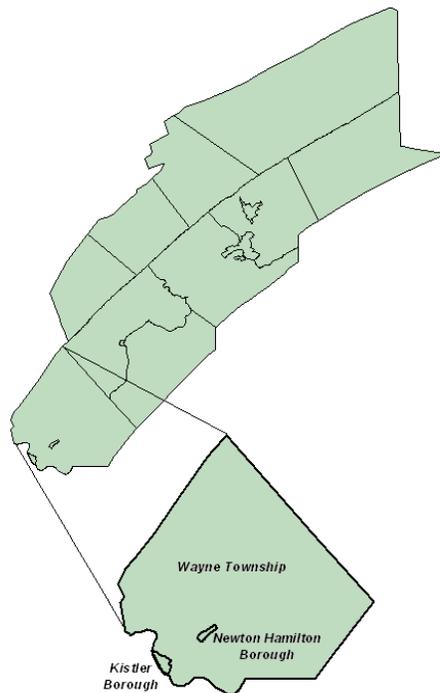
## MIFFLIN COUNTY, PENNSYLVANIA



Newton Hamilton Building



New Fairview Building



Kistler Building



Center Building

**Adopted: August 8, 2001; August 20, 2001; September 4, 2001**

# WESTERN MIFFLIN COUNTY COMPREHENSIVE PLAN

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## Mifflin County, Pennsylvania

*PREPARED FOR:*

Wayne Township  
Kistler Borough  
Newton Hamilton Borough

Adopted: August 8, 2001; August 20, 2001; September 4, 2001

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*PREPARED BY:*

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Barbara Hobbs  
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Funding for this project was provided through a PA Small Communities Planning Assistance Program Grant (SCAP) and local assistance from the Mifflin County Board of Commissioners.

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**Borough of Kistler**  
**Resolution No. 2001-1**

**ADOPTION OF COMPREHENSIVE PLAN**

WHEREAS, the Borough of Kistler is committed to fostering proper growth and development through effective planning to maintain the quality of life enjoyed by the residents of the Borough; and

WHEREAS, the Borough of Kistler in conjunction with the Borough of Newton Hamilton and Wayne Township authorized the preparation of the Western Mifflin County Comprehensive Plan; and

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended) provides for municipalities to prepare and adopt a comprehensive plan, which is generally consistent with the adopted county comprehensive plan; and

WHEREAS, the Mifflin County Commissioners authorized the Mifflin County Planning Commission, and the staff of the Mifflin County Planning and Development Department, to assist the municipalities of Kistler, Newton Hamilton, and Wayne in the development of joint Comprehensive Plan in response to ongoing changes occurring in Western Mifflin County; and

WHEREAS, the County Commissioners , in collaboration with Wayne Township and the Boroughs of Kistler and Newton Hamilton, appointed the Western Mifflin County Comprehensive Plan Steering Committee, composed of representatives from all three municipalities, to encourage maximum community input; and

WHEREAS, the Western Mifflin County Comprehensive Plan, in conjunction with Mifflin County's Comprehensive Plan, undertook a public involvement process, which included: participation in a Quality of Life Survey; key person interviews; and community forums, in conjunction with the County's Brownfields project, to identify issues and concerns relevant to the residents of Western Mifflin County; and

WHEREAS, this draft Plan addresses many critical issues facing the residents of Western Mifflin County, including economic development, land use, housing, community services and facilities, transportation, historical and cultural features, and natural resources; and

WHEREAS, the Western Mifflin County Comprehensive Plan is a tool to promote economic and community development as well as protect farms, natural resources, and other features important to sustain the vitality of the region; and

WHEREAS, the Plan entitled "Western Mifflin County Comprehensive Plan" in its entirety has been recommended by the Western Mifflin County Comprehensive Plan Steering Committee for adoption by the Kistler Borough Council; and

WHEREAS, the required public meeting and public hearing have been held by the Steering Committee jointly with the municipalities of Wayne, Kistler, and Newton Hamilton.

NOW, THEREFORE, BE IT RESOLVED, the Council of the Borough of Kistler hereby adopts the Western Mifflin County Comprehensive Plan, dated August 2001, as the official Comprehensive Plan for the Borough of Kistler; and

BE IT FURTHER RESOLVED, that:

1. The Western Mifflin County Comprehensive Plan, as adopted by the Borough of Kistler, supersedes any earlier Plans adopted; and
2. The Kistler Borough Council will follow the guidelines and policies presented in the Plan when dealing with planning issues requiring action by the Board

Adopted this 8 day of August, 2001.

**KISTLER BOROUGH COUNCIL**

<u><i>Debra Sluzarski, Pres</i></u>	<u><i>Evelyn Henry</i></u>
<u><i>Janet K. Sluzarski</i></u>	<u><i>Mira Aideroff</i></u>
<u><i>Charlene Myers</i></u>	<u><i>Barbara Hobbs</i></u>

**Borough of Newton Hamilton**  
**Resolution No. 2001-01**

**ADOPTION OF COMPREHENSIVE PLAN**

WHEREAS, the Borough of Newton Hamilton is committed to fostering proper growth and development through effective planning to maintain the quality of life enjoyed by the residents of the Borough; and

WHEREAS, the Borough of Newton Hamilton in conjunction with the Borough of Kistler and Wayne Township authorized the preparation of the Western Mifflin County Comprehensive Plan; and

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended) provides for municipalities to prepare and adopt a comprehensive plan, which is generally consistent with the adopted county comprehensive plan; and

WHEREAS, the Mifflin County Commissioners authorized the Mifflin County Planning Commission, and the staff of the Mifflin County Planning and Development Department, to assist the municipalities of Kistler, Newton Hamilton, and Wayne in the development of joint Comprehensive Plan in response to ongoing changes occurring in Western Mifflin County; and

WHEREAS, the County Commissioners , in collaboration with Wayne Township and the Boroughs of Kistler and Newton Hamilton, appointed the Western Mifflin County Comprehensive Plan Steering Committee, composed of representatives from all three municipalities, to encourage maximum community input; and

WHEREAS, the Western Mifflin County Comprehensive Plan, in conjunction with Mifflin County's Comprehensive Plan, undertook a public involvement process, which included: participation in a Quality of Life Survey; key person interviews; and community forums, in conjunction with the County's Brownfields project, to identify issues and concerns relevant to the residents of Western Mifflin County; and

WHEREAS, this draft Plan addresses many critical issues facing the residents of Western Mifflin County, including economic development, land use, housing, community services and facilities, transportation, historical and cultural features, and natural resources; and

WHEREAS, the Western Mifflin County Comprehensive Plan is a tool to promote economic and community development as well as protect farms, natural resources, and other features important to sustain the vitality of the region; and

WHEREAS, the Plan entitled "Western Mifflin County Comprehensive Plan" in its entirety has been recommended by the Western Mifflin County Comprehensive Plan Steering Committee for adoption by the Newton Hamilton Borough Council; and

WHEREAS, the required public meeting and public hearing have been held by the Steering Committee jointly with the municipalities of Wayne, Kistler, and Newton Hamilton.

NOW, THEREFORE, BE IT RESOLVED, the Council of the Borough of Newton Hamilton hereby adopts the Western Mifflin County Comprehensive Plan, dated August 2001, as the official Comprehensive Plan for the Borough of Newton Hamilton; and

BE IT FURTHER RESOLVED, that:

1. The Western Mifflin County Comprehensive Plan, as adopted by the Borough of Newton Hamilton, supersedes any earlier Plans adopted; and
2. The Newton Hamilton Borough Council will follow the guidelines and policies presented in the Plan when dealing with planning issues requiring action by the Board

Adopted this 20<sup>th</sup> day of August, 2001.

**NEWTON HAMILTON BOROUGH COUNCIL**

Carl D. Sundelind      John R. Woods  
Charles Serrano      \_\_\_\_\_  
Tom White      \_\_\_\_\_

**Township of Wayne**  
**Resolution No. 2001-6**

**ADOPTION OF COMPREHENSIVE PLAN**

WHEREAS, the Township of Wayne, Mifflin County, is committed to fostering proper growth and development through effective planning to maintain the quality of life enjoyed by the residents of the Township; and

WHEREAS, the Township of Wayne in conjunction with the Boroughs of Newton Hamilton and Kistler authorized the preparation of the Western Mifflin County Comprehensive Plan; and

WHEREAS, the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247, as reenacted and amended) provides for municipalities to prepare and adopt a comprehensive plan, which is generally consistent with the adopted county comprehensive plan; and

WHEREAS, the Mifflin County Commissioners authorized the Mifflin County Planning Commission, and the staff of the Mifflin County Planning and Development Department, to assist the municipalities of Kistler, Newton Hamilton, and Wayne in the development of joint Comprehensive Plan in response to ongoing changes occurring in Western Mifflin County; and

WHEREAS, the County Commissioners, in collaboration with Wayne Township and the Boroughs of Kistler and Newton Hamilton, appointed the Western Mifflin County Comprehensive Plan Steering Committee, composed of representatives from all three municipalities, to encourage maximum community input; and

WHEREAS, the Western Mifflin County Comprehensive Plan, in conjunction with Mifflin County's Comprehensive Plan, undertook a public involvement process, which included: participation in a Quality of Life Survey; key person interviews; and community forums, in conjunction with the County's Brownfields project, to identify issues and concerns relevant to the residents of Western Mifflin County; and

WHEREAS, this draft Plan addresses many critical issues facing the residents of Western Mifflin County, including economic development, land use, housing, community services and facilities, transportation, historical and cultural features, and natural resources; and

WHEREAS, the Western Mifflin County Comprehensive Plan is a tool to promote economic and community development as well as protect farms, natural resources, and other features important to sustain the vitality of the region; and

WHEREAS, the Plan entitled "Western Mifflin County Comprehensive Plan" in its entirety has been recommended by the Western Mifflin County Comprehensive Plan Steering Committee for adoption by the Wayne Township Board; and

WHEREAS, the required public meeting and public hearing have been held by the Steering Committee jointly with the municipalities of Wayne, Kistler, and Newton Hamilton.

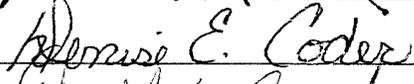
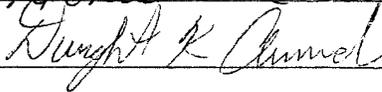
NOW, THEREFORE, BE IT RESOLVED, the Board of Wayne Township hereby adopts the Western Mifflin County Comprehensive Plan, dated August 2001, as the official Comprehensive Plan for the Township of Wayne; and

BE IT FURTHER RESOLVED, that:

1. The Western Mifflin County Comprehensive Plan, as adopted by the Township of Wayne, supersedes any earlier Plans adopted; and
2. The Wayne Township Board will follow the guidelines and policies presented in the Plan when dealing with planning issues requiring action by the Board

Adopted this 4<sup>th</sup> day of September, 2001.

**TOWNSHIP OF WAYNE**

  
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***Part One - Background Trends and Issues***

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## Chapter 1 - Introduction

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## **INTRODUCTION**

### *Regional Setting*

The Western Mifflin County study area comprises three municipalities that include Wayne Township, Kistler Borough, and Newton Hamilton Borough (Figure 1-1). These municipalities are primarily situated in the Ridge and Valley Province, which is characterized by mountainous terrain and flat bottom valleys that have been severely eroded by stream overflow. Land elevations in the study area vary from approximately 500 and 2,321 feet above mean sea level while slopes range from zero to 60 percent. The western portion of the study area is bordered by the Juniata River, which also serves as the dividing line between Mifflin and Huntingdon Counties. In total, the study area encompasses a land area equaling 48.4 square miles. Of the three municipalities, Wayne Township encompasses the largest land area with 47.9 square miles. Newton Hamilton and Kistler Boroughs cover 0.2 and 0.3 square miles, respectively.

The study area is best characterized as a rural farming community with densely populated community type settings located in Kistler and Newton Hamilton Boroughs. In addition, Mount Union Borough in Huntingdon County also adjoins the study area to the west and serves as an important employment and commercial service area for the citizens of the study area.

### *Project Background*

This comprehensive plan was prepared in conjunction with the Mifflin County Comprehensive Plan and Brownfields Pilot Project. The intent of this document is to assess the current trends and issues facing the Western Mifflin County region in terms of socioeconomics, housing, land use patterns

and development trends, community facilities and services, and the transportation system. After assessing the future impacts of these trends and issues, a set of goals and objectives, as well as a capital improvements program, was developed to meet the communities' preferred vision for the future.

Funded by a grant from the United States Environmental Protection Agency, the Brownfields Pilot Project is designed to identify, prioritize, and assess potentially contaminated sites throughout the county and to plan cleanup and redevelopment of selected sites. The overall Brownfields pilot goal is to make the county cleaner and economically and environmentally greener.

Both this plan and the Mifflin County Comprehensive Plan provides the policy documents necessary to implement the Brownfields Pilot Project. Likewise, the pilot project provides valuable public involvement—key person interviews and regional community forums—and Brownfield priorities as input for policy action plans.

To encourage a wider understanding and support for this comprehensive planning effort, a nine-member Western Mifflin County Comprehensive Plan Steering Committee was appointed. The committee's membership included community leaders from each of the three municipalities. This group met on a routine basis to review progress and provide direction on the regional comprehensive plan.

The plan is divided into two phases. Phase I addresses the elements of population, economic conditions, land use, community facilities and services, and transportation. Phase II provides the planning recommendations and implementation strategies for improvement.

*What Is a Comprehensive Plan?*

This comprehensive plan is the official statement of public policy of each municipality's governing body. It is meant for use by the local officials and staff, authorities, private citizens, and the business community. The plan is intended as a guide for the legislative decisions and as a reference for needed policy changes. It should serve as the basis for planning improvements and rendering of municipal services.

The Pennsylvania Municipalities Planning (MPC) requires that a comprehensive plan consider many factors which influence a community such as location, character, and timing of future development. Essentially, a comprehensive plan provides a blueprint for a community's future growth and development. The Western Mifflin County Comprehensive Plan was prepared in accordance with the MPC, which includes the recent amendments pursuant to Acts 67 and 68.

*How Is a Comprehensive Plan Prepared?*

A comprehensive plan document consists of three integral components: 1) background studies; 2) the community's goals and objectives; and 3) policy action plans for land use, housing, transportation and community facilities. According to section 301.2 of the MPC:

“In preparing the comprehensive plan, the planning agency shall make careful surveys, studies and analyses of housing, demographic and economic characteristics and trends; amount, type, and general location and interrelationships of different categories of land use; general location and extent of transportation and community facilities; natural features affecting development; natural,

historic, and cultural resources; and the prospects for future growth in the municipality.”

Community involvement is vital in facilitating the planning process and realizing the plan's implementation. Community involvement in this planning effort included:

- ▶ Community Questionnaire Survey having a 39 percent (76/195) response rate.
- ▶ Key person interviews;
- ▶ Community forums;
- ▶ Public meetings; and
- ▶ Steering Committee meetings.

**HISTORICAL BACKGROUND**

This section provides a brief historical overview of the Western Mifflin County study area. These historical accounts were derived from Bicentennial Edition (July 3, 1976) of *The Sentinel*.

*Wayne Township*

Wayne Township, which was established in 1782, seven years prior to the establishment of Mifflin County, ranks as one of the county's most senior municipalities. Mifflin County was officially carved from Cumberland and Northumberland Counties in 1789 and named for Thomas Mifflin, the first governor of the commonwealth under the Constitution of 1790.

Prior to 1782, Wayne Township was originally included in the land area that comprised Derry Township in Cumberland County. Thereafter, in 1791, there developed a great dispute over the Wayne Township boundary line—first between Cumberland and Huntingdon Counties and later between Huntingdon and Mifflin Counties.

As a result of this boundary dispute, the assessment of 1792 was conducted in two parts. However, an act of Assembly passed on March 29, 1792, altered the boundary line and ultimately settled the dispute.

*Kistler Borough*

Similar to Juniata Terrace Borough in Mifflin County, Kistler Borough also began as a company-owned development. The Mount Union Refractories Company began the present day Kistler Borough by building homes for the benefit of its workers. In 1917, when the project was well under way, the corporation village had a population of 250 persons. Each housing unit constructed contained five rooms and a shower bath. Each tenant was also given a “liberal truck patch” and the company purchased one-half of the seed. The newly formed community contained all modern equipment and ample playground area for children that included an attendant who was thoroughly trained in administering first-aid. Furthermore, the company also constructed a school and employed teachers and a visiting nurse.

However, in May of 1925, the community’s residents petitioned the Mifflin County Court to become an incorporated borough. The court subsequently concurred and set June 2, 1925, as the date for the borough to hold its first election.

*Newton Hamilton Borough*

Newton Hamilton Borough was formed by an act of legislature on April 12, 1843, and its first election was held in March 1844. The present site of the borough was formerly included in the tract of land warranted to Hugh Brown in 1762. At the time of his death, the ownership of the land was inherited by Margaret Hamilton prior to 1783. Around

1802, the town was laid out “in the general plan of Newton Hamilton.”



## Chapter 2 - Population Analysis

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## **INTRODUCTION**

In any Comprehensive Plan it is necessary to understand the characteristics of the residents in order to plan for their needs and expected changes in their needs. This Section deals with such characteristics as total population, change in that population over time, age structure, household and family structure, race and ethnicity, and persons living in group quarters. Total population is projected through 2020 based on the projections made by the State Data Center for Mifflin County, and through the Mifflin County Planning and Development Department. Here, the Region's expected change in population is conditioned by the age structure of the three municipalities. Most of the data in this Section is derived from the Census of Population and Housing for 1980 and 1990. However, when available, Census 2000 data was included.

## **POPULATION AND POPULATION CHANGE**

The Western Mifflin County Region includes Wayne Township and the Boroughs of Kistler and Newton-Hamilton. The two Boroughs are tiny in area and quite small in population (Table 2-1). The 1990 Census of Population and Housing (hereafter the Census) shows Kistler as having an area of 0.1 of a square mile and a population of 314. Likewise, Newton-Hamilton is listed as 0.2 square miles and 287 residents. Wayne Township, in contrast, had an area of 51.7 square miles and 2,521 residents in 1990. In total, the Region had 3,122 residents and an area of 52 square miles. This yields an average density of 60 persons per square mile. Based on the preliminary 2000 U.S. Census Bureau data, however, the population for the Region has declined to 3,030, or 58 persons per square mile.

Between 1970 and 1990 both Newton-Hamilton and Wayne Township had population growth, while Kistler Borough decreased slightly (Table 2-1). Total population change in the Township was 697 persons or 38.2 percent; Newton Hamilton grew by seven persons or 2.5 percent. Kistler Borough declined from 369 residents to 314 or -14.9 percent. Most of the positive population change in the Township occurred between 1970 and 1980; its population in 1970 was 1,824 in 1970 but increased to 2,491 in 1980. During the 1980's growth was much slower; the Township added only 30 residents to a total of 2,521. During the 80's Newton Hamilton lost 30 residents from 317 to 287. Kistler lost population over both Census periods; it fell from 369 residents in 1970 to 364 in 1980 and to 314 by 1990. Overall, the Region grew by 649 residents from 1970 to 1990 (26.2 percent).

Based on the preliminary Census data for 2000, this growth scenario has changed with Newton Hamilton declining by 5.5 percent and Wayne Township falling by 4.4 percent. In contrast, Kistler Borough grew by 8.7 percent. The Region, overall, grew by 557 persons from 1970 to 2000 (18.4 percent). Most of this population growth occurred during the 1970s, with the majority occurring in Wayne Township.

## **AGE STRUCTURE**

Compared to Pennsylvania, the Western Mifflin Region has a young population when looking at Kistler and Newton Hamilton Boroughs (Table 2-2). The median age for the state in 2000 is 38.0 while the County's is 38.8. In comparison, the 2000 Census reported that the Western Mifflin Region's median age is 40.0. Within this Region, Kistler and Newton Hamilton Boroughs' median ages are 40.3 and 31.8, respectively, while Wayne Township's median age is 33.5. Menno Township was the only municipality in

**Table 2-1  
Demographic Change, 1970 to 2000**

Category	Pennsylvania	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
<b>Total Land Area (Sq. Mi)</b>	45,019.6	431.1	0.1	0.2	51.7	52.0
<b>Total Population by Census Year</b>						
1970	11,766,310	45,268	369	280	1,824	2,473
1980	11,864,720	46,908	364	317	2,491	3,172
1990	11,881,643	46,197	314	287	2,521	3,122
2000	12,281,054	46,486	344	272	2,414	3,030
<b>Density 2000 (Pers/Sq. Mile)</b>	272.8	107.8	3,440.0	1,360.0	46.7	58.3
<b>Numeric Population Change</b>						
1990 to 2000	399,411	289	30	(15)	(107)	(92)
1980 to 1990	16,923	(711)	(50)	(30)	30	(50)
1970 to 1990	115,333	929	(55)	7	697	649
<b>Percent Population Change</b>						
1990 to 2000	3.4	0.6	9.6	(5.2)	(4.2)	(2.9)
1980 to 1990	4.4	2.7	(6.7)	(2.9)	32.3	22.5
1970 to 2000	4.4	2.7	(6.7)	(2.9)	32.3	22.5

Sources: Census of Population and Housing, 1970 – 1990. Federal Census 2000

**Table 2-2  
Generalized Age Structure, 1980, 1990 and 2000**

Category	Pennsylvania	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
<b>Percent of Population Under 18 Years of Age</b>						
2000	23.4	24.6	29.9	30.5	23.1	24.5
1990	23.5	24.9	25.5	30.7	27	27.2
1980	26.3	28.9	29.1	33.4	35.5	34.6
<b>Percent of Population Over 65 Years of Age</b>						
2000	15.6	17.0	11.0	11.8	16.7	16.6
1990	15.4	16	18.2	13.6	12	12.8
1980	12.9	13.4	14.8	11.6	8.2	9.3
<b>Median Age 2000</b>	38.0	38.8	33.5	31.8	40.3	40.0

Sources: Census of Population and Housing, 1980 – 1990. Federal Census 2000

the County to have a median age below Newton Hamilton, which may be attributed to the large percentage of Amish families residing in this part of the County.

The median age for the Region rose dramatically between 1990 and 2000, and reflects the aging population base. This

becomes more evident when looking at 1990 in detail. In 1990, 849 persons or 27.2 percent of all residents of Western Mifflin were under 18 years of age (Table 2-2). By comparison, only 23.5 percent of persons in Pennsylvania and 24.9 percent of the population of Mifflin County were under 18. In contrast to the population profile of most smaller Boroughs,

both Kistler and Newton Hamilton have a significantly greater percentage of the population in the younger age groups. Kistler had 25.5 percent under 18 in 1990 while Newton Hamilton had 30.7 percent in that age group. With the exception of Kistler, these 1990 figures have remained relatively stable when compared to the preliminary 2000 data. The 2000 Census shows the under 18 population for Kistler at 29.9 percent, Newton Hamilton at 30.5 percent and the Region at 24.5 percent. Mifflin County's under 18 age group stands at around 24.6 percent of its 2000 population. In 2000, Wayne Township recorded 23.1 percent of its population under 18 years of age. In 1990, 735 residents were of school age (between 5 and 19 years of age), but by 2000, this had dropped to 625.

The Region had 399 persons over 65 years of age in 1990. This was 12.8 percent of total population. In Pennsylvania 15.4 percent were over 65 and in Mifflin County 16 percent were in that age group. Kistler Borough had the highest percentage of elderly with 18.2 percent over 65, followed by Newton Hamilton with 13.6 percent. Only 12.0 percent of persons living in Wayne Township in 1990 were over the age of 65. By 2000, those persons 65 years of age and older had declined as a percentage of the total population in Newton Hamilton and Kistler Boroughs. In Wayne Township, however, this population group grew by 28 percent.

As was common in both the state and the County, the percentage of the population under 18 decreased between 1980 and 1990 in the Region. Likewise the percentage of persons over 65 increased. Persons under 18 were 34.6 percent of the population in 1980 but this percentage fell to 27.2 percent in 1990. In 1980, only 299 persons or 9.4 percent of the population was over 65 in the Western Mifflin Region; this had increased to 12.8 percent by 1990. These changes were

similar in magnitude to the changes experienced in the state and County.

### **GENDER, RACE, AND ETHNICITY**

Females represent 51.5 percent of the total population in the Region in 2000 (Table 2-3). This was slightly lower than the state and County percentages because the population of the Region is younger and in areas with older populations there tend to be a greater number of females than males because the former live longer on average.

Less than one percent of the population of the Region is African-American or Hispanic. This is typical of Mifflin County and many other places in rural Pennsylvania. By comparison over 10 percent of the population of the Commonwealth is Black and 3.2 percent is Hispanic. In Kistler Borough, 0.6 percent of the population was Black in 2000 (four persons); this was down from almost five percent (18 persons) in 1980. The Hispanic population of Wayne Township tripled between 1980 and 1990 but this was a very small number of residents; from 6 to 18, but by 2000, had dropped to 13. No other racial groups were reported in the Region in 1990. Preliminary 2000 Census data indicates that the minority population for the Region is slightly over one percent.

### **HOUSEHOLD AND FAMILY STRUCTURE AND PERSONS IN GROUP QUARTERS**

Households are defined by the Census as any group of persons living in an occupied housing unit. Families are defined as *related* persons living in a housing unit. Single person households (individuals living alone) and households containing only unrelated individuals (such as unrelated roommates) are not considered families. Families are a subset of households. Institutionalized persons are persons incarcerated or placed into nursing

**Table 2-3  
Gender, Race and Ethnicity, 1980, 1990 and 2000**

Category	Pennsylvania	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
<b>Percent of Population</b>						
Female, 2000	51.7	51.8	54.1	52.9	51.0	51.5
Female, 1990	52.1	52.1	52.2	55.1	51.1	51.7
Black, 2000	10.0	0.5	0.6	0	0.3	0.3
Black, 1990	9.2	0.2	1.4	0.0	0.3	0.3
Black, 1980	8.8	0.2	4.9	0.0	0.1	0.1
Hispanic, 2000	3.2	0.6	0.6	0.4	0.5	0.5
Hispanic, 1990	1.0	0.3	0.0	0.0	0.6	0.6
Hispanic, 1980	1.3	0.3	0.0	0.0	0.2	0.2

Sources: Census of Population and Housing, 1980 – 1990. Federal Census 2000

**Table 2-4  
Household and Family Structure and Persons in Group Quarters**

Category	Pennsylvania	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
<b>Households</b>						
2000	4,777,003	18,413	138	99	644	1,181
1990	4,495,966	17,697	132	103	891	1,126
1980	4,219,606	16,813	133	104	785	1,022
Percent Change 1980-1990	6.55	5.26	(0.75)	(0.96)	13.50	10.20
<b>Persons Per Household</b>						
2000	2.48	2.49	2.39	2.75	2.51	2.55
1990	2.57	2.58	2.38	2.79	2.79	2.74
1980	2.81	2.79	2.74	3.05	3.17	3.10
<b>Families</b>						
2000	3,208,388	12,905	91	79	708	878
1990	3,155,989	12,842	85	78	704	867
1980	3,134,322	12,861	97	85	657	839
<b>Institutionalized persons (2000)</b>	213,790	625	0	0	49	49
<b>Other persons in group quarters (2000)</b>	219,511	65	0	0	14	14
<b>One Person Male (1990)*</b>	429,925	1,401	15	4	66	85
<b>One Person Female (1990)*</b>	720,769	2,934	26	20	98	144
<b>Male Headed HH w/Children (1990)*</b>	67,505	276	4	3	24	31
<b>Female Head Household w/Child (1990)*</b>	290,395	926	9	7	49	65

\* 2000 Census data was not available at the time this report was prepared.

Sources: Census of Population and Housing, 1980 – 1990. Federal Census 2000

homes. Other persons in group quarters include persons in dorm rooms, barracks, hotels and the like. Institutionalized persons and other persons living in group quarters are not counted in households. Table 2-4 shows the distribution of household and family structure for the Region in 1990. While population slightly declined from 1990 to 2000, in the Region, the number of households did increase. In 1990, there were 1,126 households in the Region; by 2000, this number increased to 1,181; a gain by 4.9 percent. The increase in households was only slightly higher than the County rate, but below the state rate of 6.25 percent. All of the gain in the number of households came in Wayne Township. In fact, Kistler Borough experienced a decrease in its total number of households and an increase in its total population. Newton Hamilton experienced the exact opposite trend as Kistler Borough.

The only way that households can increase while population remains constant is for the average size of households to fall. Between 1990 and 2000, the average size of households in the Region decreased from 2.74 to 2.55 persons, or by 6.9 percent. This decreasing household size trend was also experienced at the County and state levels, whereby, Mifflin County's household size fell from 2.58 to 2.49 persons per household and Pennsylvania's household size fell from 2.57 to 2.48 persons per household. These decreases in household size may be attributed to the aging population. Households over the period were splitting into two or more (smaller) units as children came of age and formed their own households.

Families were also increasing in number in the Region during the 1980's but at a slower rate than households. In 1980 there were 839 families in Western Mifflin; by 1990 this had increased to 867 (an increase of 3.3 percent). In the County the number of families fell during the decade by a fraction of a percentage

point; in the state the number of families increased by a similarly small percentage. Overall, in 1990 families were 77 percent of all households while in the state and County the percentages were 70.2 and 72.6 respectively.

Single person households were only 8.4 percent of the households in the Western Mifflin Region in 1990. They were 24.5 percent of all households in the County and 25.6 percent in Pennsylvania. The much higher proportion of elderly persons (largely widows and widowers) in these larger aggregates accounts for most of this difference.

There were a significant number of households with children headed by a male, with no wife present, – or by a female, with no husband present, in the Region in 1990. A total of 96 such households were found (8.5 percent). By comparison, less than seven percent of all households in the County, and less than eight percent of households in the state, were of this type. This is simply because families with children—of whatever structure—are a greater percentage of total households in the Region. There were 63 persons in group quarters in the Region in 2000; of these the majority are located in a nursing home in Wayne Township.

Estimates produced by the Mifflin County Planning and Development Department at the end of 2000, indicated that there were 1,208 occupied housing units in the Western Mifflin County Region. This figure is based on building permits issued between 1990 and 1999, and a vacancy rate of almost 15 percent. Based on preliminary Census enumerations, however, there were 1,181 occupied housing units in 2000.

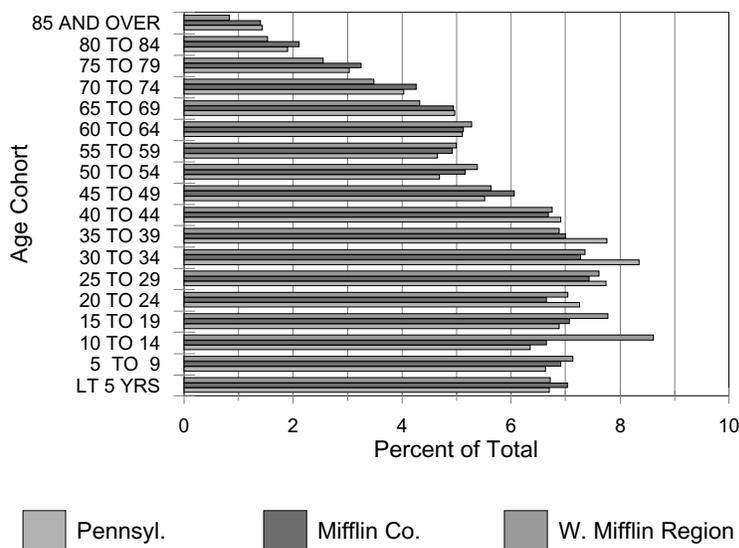
**POPULATION PROJECTIONS**

According to the Pennsylvania State Data Center, Mifflin County is expected to remain essentially constant in population over the period 1990 to 2020. If, as is more likely, household size has continued to decline as it has for the last several decades, this would suggest that population growth will be on the order of 1.2 percent per decade. That would imply about 4.0 percent growth between 1990 and 2020.

is significant. Therefore, Table 2-5 shows the Regional population at both the 4 percent rate for the period 1990-2020, as well as the higher growth rate shown in the County Comprehensive Plan. The County Plan is based on historical building permit data and vacancy rates, and a slightly declining person per household rate of 2.5 to 2.6 persons per household. In 1990, the occupancy ratio for the Region was 2.7 persons per household.

Population projections from the recently adopted Mifflin County Comprehensive Plan indicates that the Region was anticipated to grow by approximately 2.9 percent. Instead, based on recently released Census data, the opposite occurred and the Region lost around 3 percent of its population. Projecting population for small areas such as the two boroughs separately is not likely to be accurate since the movement of one or two households

**Figure 2-1**  
**Age Structure for Pennsylvania, Mifflin County and Region, 1990**  
 Source: Census of Population and Housing, 1990



**Table 2-5**  
**Population Projections for the Western Mifflin Region to 2020**

<b>Projection</b>	<b>1990</b>	<b>2000 (Projected)</b>	<b>2000 Preliminary Census</b>	<b>2010</b>	<b>2020</b>	<b>Percent Change 1990-2020</b>
Low	3,122	3,161	3,030	3,201	3,241	3.8
Medium	3,122	3,212	3,030	3,321	3,502	12.2

Sources: Mifflin County Comprehensive Plan (2000) - Derived from Housing Permit Data and Estimates of Household Size. Pennsylvania State Data Center.

## Chapter 3 - Housing Analysis

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**INTRODUCTION**

Housing is an important concern for all Comprehensive Plans. It is important both for the shelter function it provides as well as the for the fact that it represents the largest store of private wealth in most communities and the basis for most local taxation. In this section the local stock of housing is examined in terms of occupancy, type, value, condition, age, and infrastructure. Much of the data in this section is from the 1980 and 1990. However, when available, Census 2000 data was included.

**TOTAL HOUSING UNITS, CHANGE AND OCCUPANCY, 1980-1990**

In 2000, there were 1,485 housing units in the Western Mifflin Region (Table 3-1); this was an increase of 167 units, or 12.8 percent from the 1990 Census of Population and Housing. In comparison, Mifflin County gained only 5.6 percent in total units between 1980 and 1990. Most of the increase occurred in Wayne Township; Kistler Borough gained only six units and Newton Hamilton Borough gained one. The number of total units in Wayne Township increased from 1,055 to 1,230 or by 16.6 percent.

The number of occupied housing units in the Region on Census Day 2000 was 1,181. This was an increase of 55 units. However, when reviewing the total housing stock, it increased by 164 units. Most of the remainder of the new units constructed in the Region were seasonal units which were not inhabited on April 1, 2000 when the Census was taken. Many of these seasonal units are cabins and mobile homes which serve as hunting and fishing camps. Seasonal units in the Region in 2000 were almost 16 percent of the total housing stock; in the County they were only 5.2 percent.

Overall, there were 304 vacancies in 2000 with an overall vacancy rate of 20.5 percent. However, when the 233 seasonal homes are subtracted from total vacancies, the effective vacancy rate in the Region was 4.8 percent. In 1990, there were 192 total vacancies for an overall vacancy rate of 14.6 percent. One hundred and thirty-seven (137) of these 192 vacancies in 1990 were for seasonal or occasional use. When they are subtracted from the 192, the effective vacancy rate for 1990 was 4.2 percent. Discounting seasonal units, the actual vacancy rate in the County was 6.0 percent in 2000.

**RECENT GROWTH IN HOUSING UNITS**

Between 1990 and 2000, building permits for single family homes in the Region was quite high (Mifflin County Comprehensive Plan Update, 2000, and the Mifflin County Planning Commission's Annual Report, 2001). There were 106 single family home permits issued in Wayne Township as well as 24 permits for mobile homes. Kistler had one single family permit; Newton-Hamilton had two; and Newton Hamilton had five mobile home permits issued during the time frame. During the same period there were 29 demolition permits issued in Wayne Township and one in each of the Boroughs. (It is not clear from the data whether the demolition permits were for residences or some other structures but a conservative view would be that they were housing structures). On net then, the Region had at least 109 new homes built in the nine year period. This would indicate that the rate of growth in new construction has declined somewhat from the 1980 to 1990 period; but, if all permits issued led to the building of a new residence, total units would be expected to increase by about 8.3 percent from 1990 through 2000. The County as a whole had a net of 1,504 new residences, an increase of 7.7 percent.

**Table 3-1  
Total Housing Units, Occupancy and Tenure, 1980, 1990, and 2000**

Category	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
<b>Total Housing Units</b>					
2000	20,745	141	114	1,230	1,485
1990	19,641	149	114	1,055	1,318
1980	18,557	143	113	838	1,094
<b>Occupied Housing Units</b>					
2000	18,413	138	99	944	1,181
1990	17,697	132	103	891	1,126
1980	16,813	133	104	785	1,022
<b>Vacant Units</b>					
2000	2,332	3	15	286	304
1990	1,944	17	11	164	192
1980	872	10	9	53	72
<b>Seasonal Units</b>					
2000	1,082	1	4	228	233
1990	1,166	1	2	134	137
1980	124	0	0	16	16

Sources: Census of Population and Housing, 1970 – 1990. Federal Census 2000

Based on the building permit activity (1990-2000), there are some 1,427 total housing units in the Region. Using historical vacancy rates for the Region, there are an estimated 1,219 occupied housing units.

**HOME OWNERSHIP AND RENTALS**

In 2000, there were 1,014 owner-occupied housing units in the Region compared with only 167 rentals. Hence, owner-occupied units were 68.3 percent of all units. This is comparable to the County’s percentage of 65.7 percent. Home ownership remained fairly constant in the Region whereby the percentage of owner-occupied housing units increased from 85 percent in 1990, to 85.9 percent in 2000.

Although the greatest number of rental units are found in Wayne Township (123 of the total regional 167 units in 2000), the

percentage of rental-occupied units is higher in Kistler (19.5 percent) and Newton Hamilton (17.1 percent) Boroughs.

The age structure of the population in 1990 is reflected in the percentage of homeowners over the age of 65. Whereas in the County almost 30 percent of all homeowners are over 65, in Wayne Township that group represents only 26 percent of total owner occupants. The two Boroughs have substantially older populations than the Township which is reflected in the fact that 42 percent of homeowners in Kistler Borough and 35 percent of homeowners in Newton Hamilton are over 65. This suggests that substantial turnover of the housing stock in the Boroughs may be expected in the next few years as older homeowners die or move into smaller units or nursing homes. It should be noted that similar 2000 Census data was not available at the time

**Table 3-2  
Home Ownership and Rental Units, 1980, 1990, and 2000**

Category	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
<b>Owner-Occupied</b>					
2000	13,631	111	82	821	1,014
1990	12,887	97	77	783	957
1980	12,304	104	76	684	864
<b>Renter-Occupied</b>					
2000	4,782	27	17	123	167
1990	4,810	35	26	108	169
1980	4,509	29	28	101	158

Sources: Census of Population and Housing, 1970 – 1990. Federal Census 2000

that this plan was prepared; therefore, a comparison with the 1990 data was not made.

**TYPE OF HOUSING**

Table 3-3 provides information regarding the types of housing units found throughout the Western Mifflin County Region. Of the 1,318 total units in the Region, 931 or 70.6 percent were single family detached homes in 1990. In addition, 293 or 22.2 percent were mobile homes. Therefore, the remaining housing stock, 7.2 percent, includes single family row houses, two-family homes, and some 15 multi-family houses. This suggests that housing choice is somewhat restricted in the area. The primary concern here is that in a rural region, such as Western Mifflin, is that as people age and their housing needs change, they have little alternative to staying in their single family home if they want to stay in the area.

Recent estimates of housing based on permits and the 1997-1998 reassessment indicates that 74.2 percent, or 1,050 units, of the total housing stock is single family construction while 20.9 percent, or 296 units, can be classified as mobile homes.

**AGE OF HOUSING STOCK**

The two Boroughs were largely developed before 1940; most of their housing stock is quite old. According to the 1990 Census, over 53 percent of the housing stock of Kistler and 54 percent of the housing stock of Newton-Hamilton was built before 1940. By contrast, only 17 percent of the houses in Wayne Township predate the Second World War. Over 37 percent of all housing units in Mifflin County, when the Census was taken in 1990, were built before 1940 making them at least 50 years old at that time. Just 25 percent of the housing stock in the Boroughs was built after 1970, while 53 percent of Wayne Township’s unit were built after 1970.

**HOUSING VALUES**

Housing serves as a store of wealth for both owners and landlords. For this reason, as homeowners we like to see the value of our homes increase; on the other hand, rising house values make it more difficult for new families starting out to purchase their own homes and are likely to lead to increases in the property tax. The price of housing in an area at a particular time, relative to state and national averages, is usually a good reflection

**Table 3-3  
Type of Housing Units, 1990**

Category	Pennsylvania		Mifflin County		Kistler Borough		Newton Hamilton Borough		Wayne Township		Region	
	#	%	#	%	#	%	#	%	#	%	#	%
Total Units 90	4,938,140	100.0	19,641	100.0	149	100.0	114	100.0	1,055	100.0	1,318	100.0
Single Family Detached	2,636,631	53.4	12,352	62.9	94	63.1	73	64.0	764	72.4	931	70.6
Single Family Attached	909,676	18.4	2,040	10.4	7	4.7	7	6.1	9	0.9	23	1.7
Duplexes or 2 Family	279,700	5.7	931	4.7	19	12.8	7	6.1	6	0.6	32	2.4
3 or 4 Units, Multifamily	227,788	4.6	662	3.4	3	2.0	6	5.3	5	0.5	14	1.1
5 to 9 Units, Multifamily	171,041	3.5	477	2.4	0	0.0	0	0.0	1	0.1	1	0.1
10 to 19 Units, Multifamily	149,419	3.0	152	0.8	0	0.0	0	0.0	0	0.0	0	0.0
20 to 49 Units, Multifamily	99,244	2.0	78	0.4	0	0.0	0	0.0	0	0.0	0	0.0
50 or more, Multifamily	144,428	2.9	128	0.7	0	0.0	0	0.0	0	0.0	0	0.0
Mobile home	254,920	5.2	2,037	10.4	22	14.8	18	15.8	253	24.0	293	22.2
Other (e.g. Garage Apt)	65,293	1.3	784	4.0	4	2.7	3	2.6	17	1.6	24	1.8

Source: Census of Population and Housing, 1990.

of the recent economic health of the area and of local incomes. As shown in Table 3-4, the Western Mifflin Region has housing values substantially below those in both the state and the nation. The median value of owner occupied units in 1990 was only \$42,900 in Wayne Township, \$30,900 in Newton Hamilton Borough, and \$23,700 in Kistler Borough. These medians do not compare well to the \$44,800 median for the County or the \$69,700 median for Pennsylvania. Part of the wide variation in median values stems from the fact that housing stocks in rural Boroughs tend to be older than those in rural Townships because in many cases the Townships are still growing while the Boroughs are fully built out.

Over 38 percent of all single family owner-occupied houses (not including farm properties) were valued at less than \$30,000 in Western Mifflin compared to 24.4 percent countywide and 13.3 percent statewide. A windshield survey of the Region indicates that many of the lowest value houses are probably older mobile homes.

At the other end of the housing price distribution, only 13 owner-occupied homes in the Region were valued at more than \$100,000 in 1990. This was about 2.2 percent of the housing stock (again, not including farms or farm residences). In Pennsylvania over 28 percent of residences were valued at more than \$100,000 in 1990. Even Mifflin County had almost 5.0 percent of its owner occupied housing stock valued at over \$100,000 according to the 1990 Census.

During the 1990's, prices rose more slowly than they did in the 1980's because inflation was relatively lower. The Consumer Price Index for housing has increased by 24.5 percent since 1990 nationwide; if the median home in Mifflin County had kept pace with that increase it is now worth about \$55,800. If, as seems more likely, housing value increases remained proportionally the same as they were in the 1980's, the median value has increased to about \$52,860. The preceding is borne out by findings from the Mifflin County Assessment Office. For the period from 1995 to 1997, the average value of a housing unit

**Table 3-4  
Housing Values and Rents, 1990**

Category	Pennsylvania		Mifflin County		Kistler Borough		Newton Hamilton Borough		Wayne Township		Region	
	#	%	#	%	#	%	#	%	#	%	#	%
Less than \$15000	88,203	3.4	454	4.6	6	7.3	10	16.4	40	9.1	56	9.6
\$15000 to \$19999	66,186	2.6	433	4.4	18	22.0	6	9.8	30	6.8	54	9.2
\$20000 to \$24999	88,693	3.4	688	7.0	23	28.0	6	9.8	29	6.6	58	9.9
\$25000 to \$29999	100,557	3.9	820	8.4	11	13.4	7	11.5	37	8.4	55	9.4
\$30000 to \$34999	118,673	4.6	884	9.0	4	4.9	8	13.1	32	7.3	44	7.5
\$35000 to \$39999	117,728	4.6	769	7.9	7	8.5	10	16.4	26	5.9	43	7.4
\$40000 to \$44999	131,882	5.1	864	8.8	4	4.9	3	4.9	46	10.4	53	9.1
\$45000 to \$49999	117,304	4.5	795	8.1	5	6.1	5	8.2	34	7.7	44	7.5
\$50000 to \$59999	237,993	9.2	1351	13.8	0	0.0	4	6.6	58	13.2	62	10.6
\$60000 to \$74999	345,873	13.4	1363	14.0	3	3.7	2	3.3	61	13.8	66	11.3
\$75000 to \$99999	433,929	16.8	874	8.9	0	0.0	0	0.0	36	8.2	36	6.2
\$100000 to \$124999	233,290	9.0	254	2.6	1	1.2	0	0.0	5	1.1	6	1.0
\$125000 to \$149999	162,591	6.3	102	1.0	0	0.0	0	0.0	4	0.9	4	0.7
\$150000 to \$174999	111,450	4.3	55	0.6	0	0.0	0	0.0	0	0.0	0	0.0
\$175000 to \$199999	69,168	2.7	24	0.2	0	0.0	0	0.0	2	0.5	2	0.3
\$200000 to \$249999	72,910	2.8	21	0.2	0	0.0	0	0.0	0	0.0	0	0.0
\$250000 to \$299999	36,170	1.4	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0
\$300000 to \$399999	27,055	1.0	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0
\$400000 to \$499999	10,146	0.4	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0
\$500000 or more	11,460	0.4	6	0.1	0	0.0	0	0.0	1	0.2	1	0.2
Total Units	2,581,261	--	9,768	--	82	--	61	--	441	--	584	--
Lower Value Quartile	\$42,500		\$30,300		\$19,000		\$19,400		\$26,500			
Median Value	\$69,700		\$44,800		\$23,700		\$30,900		\$42,900			
Upper Value Quartile	\$109,500		\$62,900		\$34,400		\$39,400		\$59,800			
Lower Contract Rent Quartile	\$217		\$158		\$163		\$150		\$110			
Median Contract Rent	\$322		\$204		\$183		\$171		\$162			
Upper Contract Rent Quartile	\$447		\$249		\$213		\$193		\$220			

Source: Census of Population and Housing, 1990.

sold (at market) in the County was between \$48,000 and \$52,000. By the year 2000, the average value of a single family home sold in the County was over \$66,000, while houses in Western Mifflin County sold on average at over \$57,000. In contrast, estimates provided

on building permits issued in Wayne Township over the past two years indicate that new home construction ranges between \$71,000-\$72,000, compared to the County price range of \$85,000-\$97,000.

### **RENTAL COSTS**

Rents in the area are also quite low. In 1990, the median rent for the Region was about \$171 and 75 percent of all rents were below \$220. In Mifflin County the median rent was \$204 and the upper quartile value was \$249. Both the Region and the County were exceptionally low compared to the state. Due to the urban rental market in the larger cities, the median Pennsylvania rent in 1990 was \$322 with 25 percent of all monthly rents above \$447.

In 1991, the average “reasonable” rent in the County was \$284 for a one-bedroom apartment; by 2000, this had increased to \$391, an increase of 38 percent (Mifflin County Housing Authority). Two-bedroom rents increased from \$344 to \$460 (34 percent). And three-bedroom units increased from \$434 to \$562 (29 percent). It should also be mentioned that all of these rents in the County have increased faster than the Consumer Price Index or the price of new homes.

### **HOUSING CONDITION**

As part of the Countywide reassessment in 1997 the exterior conditions of all structures were evaluated and scored according to their apparent deterioration. Countywide approximately 8.2 percent of the total housing stock was determined to need substantial rehabilitation (Mifflin County Comprehensive Plan Update, 2000). The same survey showed that Wayne Township had significantly more deteriorated units than the County, while both Kistler and Newton Hamilton Boroughs had significantly fewer. According to the reassessment survey, Kistler Borough had only four units with an alpha score of “D” or below (2.68 percent of all units) while Newton Hamilton had 10 deteriorated units (8.3 percent). The 267 deteriorated units (23.3 percent) in Wayne are probably misleading

because it reflects the condition of seasonal places and hunting camps as well as year-round residences. Western Mifflin, as a whole, contained 281 housing units that were considered deteriorated or 19.9 percent of the Region’s housing stock.

A windshield survey conducted by the Consultant and County staff in October 1999, indicated that the reassessment survey was probably fairly accurate with respect to total deterioration when the caveat about seasonal units is taken into account.

### **HOUSING NEEDS**

The Mifflin County Planning and Development Department developed housing unit projections—assuming the rate of growth would remain constant—using the residential building permit activity over the period from 1990 to 1999 (Table 3-5). There was an overall average of 7.09% growth in residential construction for the County as a whole, but when looking at each municipality the rate of growth varied.

**Table 3-5  
Future Housing Needs in Western Mifflin County**

<b>Location</b>	<b>Est. Housing Units by Municipality, 2000</b>	<b>Percent of Growth</b>	<b>Projected Units by Municipality, 2010</b>	<b>Projected Units by Municipality, 2020</b>
Kistler	149	0.000	153	153
Newton Hamilton	120	0.050	126	132
Wayne	1,146	0.086	1,241	1,348
Mifflin Co.	21,033	0.071	22,524	24,120

Source: Mifflin County Planning and Development based on residential building permit activity over the period from 1990-1999, and assuming the rate of growth would remain constant. There was an overall average of 7.09% growth in residential construction for the County as a whole, but when looking at each municipality the rate of growth varied, and is reflected in the table above. One additional consideration was taken into account with Kistler, which has approved a 15-acre subdivision in 2000. When considering this, four units of growth were added both to 2010 and 2020, and correspondingly that number of units deducted from the Wayne Township projections to keep the overall regional and County projections the same.

## Chapter 4 - Economic and Socioeconomic Analysis

## **INTRODUCTION**

In a small, rural, region such as Western Mifflin County most employment occurs outside of the municipality of residence. This is largely because there are very few employment opportunities except farming in the local area. Other than a small grocery in Newton-Hamilton, most non-farm employment in the Region occurs along a strip of Route 22/522 bordering Mount Union. With the exception of Meadowview Manor, the Route 22/522 corridor is primarily a highway commercial oriented area that includes a bar and two restaurants, which serve both local and non-local clientele. The Tuscarora Intermediate Unit (a publicly funded regional education service) is also located in Wayne Township. The old Empire Kosher Packing plant now contains a concrete block supply company. Most other employment in the Region is an ancillary activity which takes place in the residence. Activities include beauty salons, fire wood, yard care, day care, and other local services. In the Western Mifflin Region almost 98 percent of all employed persons work outside their home municipality (Table 4-1). This is exceptionally high even for small, rural areas. In Mifflin County, as a whole, 74.3 percent work outside their place of residence and statewide the percentage is 69.9 percent. Since most employment, other than farming, occurs outside the Township and the two Boroughs, this economic analysis concentrates on the income, employment, and occupation of the residents of the Region.

## **INCOME AND POVERTY**

In 1989, the median household income in Kistler Borough was \$20,972; in N-H Borough it was only \$19,444 and in Wayne Township the median was \$23,472 (Table 4-1). For the Region as a whole it was approximately \$22,500. By Mifflin County standards these are pretty average incomes:

the County median in 1989 was \$22,778. However, household income in the Region was less than 80 percent of the state median. Since households are larger in the Western Mifflin Region than they are most places in the state, household income must be spread over a greater number of individuals. For this reason per capita income (total regional income divided by population) is far below the state average. In 1989, the per capita income of residents of the Region was \$8,786 compared to \$10,609 for County residents and \$14,068 for all Pennsylvanians. Per capita income for the Region was only 62.4 percent of the state average.

The income data imply significantly lower local purchasing power and suggest that poverty will be high. It is. In 1989, about 15.1 percent of all residents of the Region had incomes below the poverty level. Poverty was greatest in Kistler Borough where 16.5 percent had incomes below poverty. In Pennsylvania 11.1 percent of all persons were in poverty in 1989; in Mifflin County the percentage was 13.2.

## **EDUCATIONAL ATTAINMENT**

The lower incomes of residents of the area is directly related to a fairly low level of education. The Region trails both the state and the County in the percentage of adults who have completed a high school education. In 1990, 74.7 percent of all persons over 25 in Pennsylvania had a high school diploma. In Mifflin County the percentage was 68.2 percent but in the Region it was only about 63.7 percent. College education lags even further. Only 6.4 percent of adult residents of the Region had a college degree compared to 17.9 percent statewide and 8.7 percent in Mifflin County.

**Table 4-1  
Socioeconomic Characteristics, 1990**

Category	Pennsylvania	Mifflin County	Kistler Borough	Newton Hamilton Borough	Wayne Township	Region
Percent Population in Poverty	11.13	13.16	16.46	13.51	14.95	15.1
Income Per Capita, 89	\$14,068	\$10,609	\$9,725	\$7,936	\$8,766	\$8,786
Median HH Inc., 89	\$29,069	\$22,778	\$20,972	\$19,444	\$23,472	\$22,500
Percent Over25, HS Grads	74.7	68.2	66.5	63.4	63.3	63.7
Percent Over25, Coll Grads	17.9	8.7	8.9	3.4	6.4	6.4
LFPR-Males	71.4	71.5	68.8	79.2	74.1	74.1
LFPR – Females	54.4	49.7	45.0	45.2	48.2	47.3
LFPR – Total	61.5	59.0	57.3	62.6	60.0	60.0
Total Employment	5,434,532	19,831	140	119	1,060	1,319
Percent Emp Out of County	20.8	17.2	88.1	68.4	62.0	65.4
Percent Emp Out of State	4.3	0.7	0.0	1.7	1.9	1.7
Percent Emp Out of MCD	69.9	74.3	98.5	96.6	98.0	97.9
<b>Percent Employment by Industry</b>						
Agriculture	1.8	5.2	2.1	3.4	5.4	4.9
Mining	0.6	0.3	2.1	5.0	0.6	1.1
Construction	6.1	4.9	5.0	9.2	6.2	6.4
Manufacturing	20.0	33.8	31.4	37.0	32.5	32.8
Transportation	4.4	3.8	5.7	6.7	2.8	3.5
Communications/Public Utilities	2.5	1.6	2.1	1.7	2.5	2.4
Wholesale Trade	4.3	4.0	12.9	6.7	6.9	7.5
Retail Trade	17.1	15.4	8.6	14.3	8.3	8.9
Finance, Insurance and Real Estate (FIRE)	6.5	3.4	1.4	1.7	3.6	3.2
Services	32.6	25.3	20.0	10.9	24.5	22.8
Public Administration	4.0	2.4	8.6	3.4	6.7	6.6

Source: Census of Population and Housing, 1990.

### LABOR FORCE AND UNEMPLOYMENT

The labor force is defined as all persons over the age of 16 employed or unemployed but seeking employment. The Labor Force Participation Rate (LFPR) then, is calculated by dividing all those in the labor force by total persons over 16. Higher LFPR is usually a sign of a healthy local economy. In 1990 the total LFPR for Pennsylvania was 61.5 percent;

for Mifflin County it was 59 percent (Table 4-1). The Western Mifflin Region was between the two at 60.0 percent. One major reason that the LFPR was lower in the County and the Region was a low participation rate by females (49.7 and 47.3 percent respectively compared to a state average of 54.4 percent). A higher percentage of men were in the labor force in the Region than in the state (74.1 percent compared to 71.4 percent).

The only available statistics on unemployment for small areas such as the municipalities in the Region are from the Census of Population and Housing. This data is almost ten years old but it suggests that one reason that the LFPR was low for women in the Region was that female unemployment was high. In 1990, the overall unemployment rate in the state was 6.0 percent and it was a bit lower for women than men. By contrast, the unemployment rate for the Region was about 11.7 percent and for females it was a full point higher than it was for males. The County unemployment rate in 1990 was 6.7 percent. It has stayed above the state rate for most of the 1990's and in 1999 was also 6.7 percent. There is little reason to believe that the Regional rate has fallen below the County rate.

#### **PLACE OF EMPLOYMENT**

The section introduction mentions the fact that most employed residents of the Region must work out of their local municipalities. Table 4-1 shows that 98.5 percent of the employed residents of Kistler Borough work out of their municipality; 96.6 percent of N-H residents work elsewhere; and 98.0 percent of Wayne residents work in other localities. Much of this employment occurs not only outside of the local place of residence but outside the County as well. Over 65 percent of the employed residents of the Region are employed in other Counties according to the Census. In contrast only 20.8 percent of the employed residents of the state and 17.2 percent of the residents of Mifflin County are employed outside of their County of residence. The high percentage of residents of the Region employed outside of Mifflin County is less surprising than it might seem at first glance. The nearest population center of any size is Mount Union Borough immediately across the Juniata River (the County boundary) in Huntingdon County. Much of the industrial employment of Huntingdon County is located near Mount

Union and many of the residents of the Region are employed in this area. Relatively few of the residents of the Region are employed out of the state. Only 1.7 percent of local employees worked out of the state in 1990 compared to 4.3 percent of all employed state residents. The Community Survey (October 1998) indicated that 68.4 percent of all respondents worked outside the County; this is roughly the same percentage as shown in the Census.

#### **EMPLOYMENT BY INDUSTRY**

The largest sector of employment for residents of the Region is manufacturing (Table 4-1). In 1990, 32.8 percent of all workers living in the Region were employed in this sector. Since there is no manufacturing employment available in Wayne Township or in either of the Boroughs, it is likely that most of these workers are employed in nearby Huntingdon County. (See above). Some manufacturing workers are also employed in the Lewistown area of Mifflin County. In Pennsylvania only 20.0 percent of the labor force was employed in manufacturing in 1990. In the County just over a third of all workers are employed in manufacturing.

The Region mirrors the County in agricultural employment. In 1990, about 4.9 percent of all employed residents of the Region were employed in agriculture which is below the 5.2 percent of workers Countywide. Both the County and the Region are significantly more concentrated in agricultural employment than the state; in 1990 only 1.7 percent of employed workers in Pennsylvania were in this sector. Between 1987 and 1997, the number of farms in the County decreased by 8.5 percent and the acreage farmed decreased by 9.3 percent; persons claiming farming as their principal occupation declined by 9.8 percent. It is likely that some of this decline occurred in Western Mifflin but no up-to-date statistics are available.

Only 1.1 percent of all workers in the Region were employed in mining; however, this amounts to a fairly significant concentration compared to the 0.6 percent statewide or the 0.3 percent in Mifflin County. Most of these workers are likely employed in the nearby quarries located in Huntingdon County.

Construction workers were 6.4 percent of total employed residents in 1990. This is similar to the state average and slightly above the County rate of 4.9 percent. Transportation sector employment is also close to the state and County averages. In 1990, 3.5 percent of all workers who lived in the Region were employed in transportation compared to 4.4 percent in Pennsylvania and 3.8 percent in Mifflin County. Employment in communications and public utilities was also similar to the statewide and County averages at 2.4 percent for the Region, 2.5 percent for the state and 1.6 percent for the County.

There are substantially fewer retail trade employees in the Region than one might expect. Only 8.9 percent of total employment was in this sector compared to the state average of 17.1 percent and the County average of 15.4 percent. The highly rural nature of the area reduces local retail trade employment opportunities. Most retail workers must travel to Lewistown or Mount Union for employment in this sector. Similarly, employment in the finance, insurance, and real estate sector is fairly low. Like retail trade, this sector has a highly urban orientation; therefore, the fact that only 3.2 percent of local residents are employed in this sector—compared to 6.5 percent statewide—is not remarkable.

Even service sector employment is much lower in the Region than in the State, and somewhat lower than in the County; in 1990, 22.8 percent of employed residents of the Region worked in the services sector

compared to 32.6 percent in the state and 25.3 percent in the County.

The two sectors, other than manufacturing and agriculture, to have significantly more employment than expected are wholesale trade (7.5 percent locally compared to 4.3 percent in Pennsylvania) and Public Administration (6.6 percent local and 4.0 percent statewide).

In all, the employment structure of Western Mifflin County is fairly typical of a rural area. The low level of local retail trade and service sector employment suggests that most residents must travel to Lewistown or Mount Union for even basic necessities. This, in turn, suggests that the potential for local provision of lower order (convenience type) goods and services exist.

### **RESULTS OF COMMUNITY SURVEY WITH REGARD TO ECONOMIC DEVELOPMENT**

Almost 40 percent of the Western Mifflin respondents to the Community Survey (Summer, 1998) indicated that employment opportunities in their community and the surrounding area were only fair or poor and that they would be willing to pay for efforts to improve them. This was significantly higher than the County average of 30 percent. Respondents also felt that unemployment was a greater problem than most residents of the County (79 percent compared to 74.5 percent considered unemployment a severe or moderate problem). Over 97 percent indicated that increasing employment should be a high or moderate priority and 88 percent were supporters of workforce training and retraining. On the other hand relatively few (39 percent) were in favor of giving tourism development a high priority and 72 percent were strongly in favor of supporting the family farm.

**SECTORS OF ECONOMIC ACTIVITY**

Economic data for the Region is normally only available following the decennial Census. The 2000 Census economic data was not available at the time this study was completed,. Updated economic analysis for the County during the 1990's, however, was accessible, and does provide an updated perspective on the overall economy since the 1990 Census.

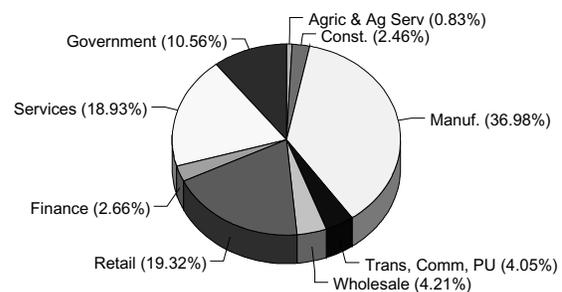
The following is based on ES-202 data from the Pennsylvania Department of Labor and Industry (1997). The employment figures include all persons covered by Unemployment Compensation. Since most persons working in agriculture are self-employed and, therefore, not covered by Unemployment Compensation, the statistics do not do a good job of measuring changes in this sector.

The largest sector of economic activity in the County remains manufacturing (Figure 4-1). In the first quarter of 1997, 37.0 percent of all employment was in this sector. In comparison, only 18.0 percent of state employment is in this sector. Unfortunately, manufacturing employment continues to decline in both the County and the state. Between 1990 and 1997, the County lost 10.4 percent of its manufacturing employment. This loss was slightly greater than the state loss of 9.3 percent. Recent data indicates that through 1999 manufacturing lost 674 jobs or 10.3 percent of its 1990 employment. However, it continues to be more than 37 percent of private sector employment.

In percentage terms the fastest growing employment sectors in the Mifflin Economy between 1990 and 1997 were Agriculture and Agricultural Services (33.3 percent), Transportation, Communications, and Public Utilities (33.0 percent), and Wholesale Trade (23.4 percent). All of these sectors are quite small with 132, 644 and 669 employees

respectively. (See the caveat about agricultural employment above). The Services sector grew by the largest absolute number of workers, from 2,697 to 3,006, an increase of 309 or 11.5 percent. All government employment, taken together, declined slightly. There was a small overall increase in Retail Trade, Construction, and Finance, Insurance, and Real Estate employment over the period. The Services and Finance, Insurance, and Real Estate sectors are still significantly under-represented in the County compared to the Commonwealth. Through 1999, Service sector employment grew by 1,743 jobs or 65 percent.

**Figure 4-1**  
**Distribution of Employment, 1997**  
Source: PA Department of Labor and Industry, 1990-1997



Chapter 5 - Land Use Analysis

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**INTRODUCTION**

A comprehensive study and mapping of existing land uses serves as a guide for future development. A land use study depicts the development patterns within the study area of Wayne Township, Kistler Borough, and Newton Hamilton Borough (Western Mifflin County), and together with other factors, outlines restrictions and opportunities for future growth and development.

**EXISTING LAND USE**

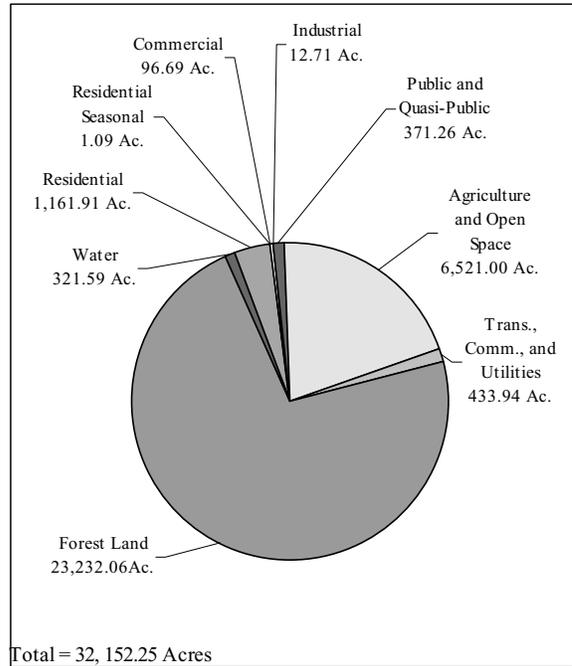
The existing land use patterns of Western Mifflin County were to a great extent influenced and shaped by the region’s ridge and valley physiographic features and waterways. The close relationship of these natural features with the existing development pattern is evident in the area’s transportation network. Historically, transportation routes were developed along corridors where travel and construction were the easiest, thus directly influencing the type, location, and intensity of subsequent land uses.

As shown in Figure 5-1, the existing land use distribution of the study area is best characterized as being predominantly rural whereby forest land, and agricultural and open space land uses comprise approximately 29,753 acres or 93 percent of the total land area. With the exception of water, the remaining land use patterns are largely comprised of low to medium density residential, commercial, industrial, and public/quasi-public land uses, which are predominantly located throughout the valleys, particularly following the linear patterns of the various transportation corridors.

Of the study area’s total land area, approximately 2,078 acres or 6.5 percent of the total study area may be characterized as developed. Developed areas include residential, residential seasonal, commercial,

**Figure 5-1  
Western Mifflin County  
Land Use Distribution, 1999**

Sources: Mifflin County Planning and Development Department, and Mifflin County Mapping Department



industrial, public and quasi-public, transportation, communication, and utility land use classifications.

Figures 5-2, 5-2A and 5-2B illustrate the individual land use patterns for each of the three municipalities included in the study area, while Table 5-1 provides a detailed numerical summarization of the major and subcategories of land use. As shown, the land use distribution for Wayne Township is similar to the overall study area’s land use pattern with forest land, and agriculture and open space land uses comprising approximately 29,625 acres or 92 percent of the total land area. In comparison with Wayne Township, the land use patterns for both Kistler and Newton-Hamilton Boroughs are more closely related to a village development pattern with higher housing and population densities (Table 5-2). The developed portions of both Kistler and

**Table 5-1  
Summarization of Existing Land Use by Major and  
Subcategory Classifications for Western Mifflin County, Pennsylvania, 1999**

Land Use Categories (Includes Major and Sub- categories)	Wayne Township		Kistler Borough		Newton-Hamilton Borough		Study Area	
	Total (Acres)	% of Wayne Total	Total (Acres)	% of Kistler Total	Total (Acres)	% of N-H Total	Total (Acres)	% of Region Total
<b>Residential</b>	<b>1,064.50</b>	<b>3.31</b>	<b>40.18</b>	<b>24.35</b>	<b>57.23</b>	<b>46.06</b>	<b>1,161.91</b>	<b>3.61</b>
Single Family Residential	788.56	2.45	36.05	21.85	40.61	32.68	856.22	2.69
Residential Farm	141.81	0.44	--	--	--	--	141.81	0.44
Mobile Home	88.70	0.28	4.13	2.50	3.47	2.79	96.30	0.30
Vacant Residential	43.23	0.13	--	--	12.22	9.83	55.45	0.17
Apartment	2.20	0.01	--	--	0.93	0.75	3.13	0.01
<b>Residential Seasonal (1)</b>	<b>1.09</b>	<b>0.003</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.09</b>	<b>0.003</b>
Hunting Camp**	273.93	0.85	--	--	--	--	273.93	0.84
<b>Commercial</b>	<b>93.27</b>	<b>0.29</b>	<b>--</b>	<b>--</b>	<b>3.42</b>	<b>2.75</b>	<b>96.69</b>	<b>0.30</b>
Service	1.96	0.01	--	--	--	--	1.96	0.01
Retail	6.14	0.02	--	--	1.15	0.93	7.29	0.02
Vacant Commercial	29.10	0.09	--	--	1.49	1.20	30.59	0.10
Heavy Commercial	53.77	0.17	--	--	0.47	0.38	54.24	0.17
Service Institution	1.57	0.005	--	--	--	--	1.57	0.005
Non-Profit Service	0.73	0.002	--	--	0.31	0.25	1.04	0.003
<b>Industrial</b>	<b>12.71</b>	<b>0.04</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>12.71</b>	<b>0.04</b>
Quarry	12.71	0.04	--	--	--	--	12.71	0.04
<b>Public and Quasi-Public</b>	<b>353.34</b>	<b>1.10</b>	<b>6.34</b>	<b>3.84</b>	<b>11.58</b>	<b>9.32</b>	<b>371.26</b>	<b>1.15</b>
Recreation	342.04	1.06	5.34	3.24	3.20	2.58	350.58	1.09
Church or Cemetery	7.09	0.02	--	--	7.08	5.70	14.17	0.04
Education	3.98	0.01	0.80	0.48	--	--	4.78	0.01
Government	0.23	0.001	0.20	0.12	1.30	1.05	1.73	0.01
<b>Agriculture and Open Space</b>	<b>6,470.68</b>	<b>20.308</b>	<b>46.78</b>	<b>28.35</b>	<b>3.54</b>	<b>2.85</b>	<b>6,521.00</b>	<b>20.28</b>
Agriculture	6,296.70	19.59	45.20	27.39	3.54	2.85	6,345.44	19.74
Undeveloped	173.98	0.54	1.58	0.96	--	--	175.56	0.54
<b>Transportation, Communication, and Utilities</b>	<b>409.94</b>	<b>1.28</b>	<b>12.67</b>	<b>7.68</b>	<b>11.33</b>	<b>9.12</b>	<b>433.94</b>	<b>1.35</b>
Utility	48.34	0.15	--	--	--	--	48.34	0.15
Railway or Terminal	61.48	0.19	--	--	--	--	61.48	0.19
Highway	300.12	0.93	12.67	7.68	11.33	9.12	324.12	1.01
<b>Forest Land</b>	<b>23,154.36</b>	<b>72.05</b>	<b>59.06</b>	<b>35.79</b>	<b>18.64</b>	<b>15.00</b>	<b>23,232.06</b>	<b>72.26</b>
Public (State Forest) (2)	3,543.64	11.03	--	--	--	--	3,543.64	11.02
Non-Public	19,610.72	61.02	59.06	35.79	18.64	15.00	19,688.42	61.23
<b>Water</b>	<b>303.07</b>	<b>0.94</b>	<b>--</b>	<b>--</b>	<b>18.52</b>	<b>14.90</b>	<b>321.59</b>	<b>1.00</b>
<b>Total</b>	<b>31,862.96</b>	<b>100.0</b>	<b>165.03</b>	<b>100.0</b>	<b>124.26</b>	<b>100.0</b>	<b>32,152.25</b>	<b>100.0</b>

Notes: 1. Area calculation based on Mifflin County Assessment Office records for Wayne Township.

2. Area calculation based on data downloaded from PA Spatial Data Access Online <http://www.pasda.psu.edu/>, 1999.

\*\* Total acres (273.93) not included in "Total" land area due to being derived from the Mifflin County Assessment Office and not from "Sources."

Sources: Mifflin County Mapping Department, 1999, and Mifflin County Planning and Development Department, 1999

**Table 5-2  
Comparative Housing and Population Densities for Wayne Township, Kistler Borough  
and Newton Hamilton Borough**

Municipality	Total Housing Units (2000 Estimates)*	Total Population 2000 Preliminary Census Data	Area (Sq. Miles)	Density (per sq. mile)	
				Housing	Population
Wayne Township	1,146	2,414	47.9	23.9	50.4
Kistler Borough	149	344	0.3	496.7	1,146.7
Newton-Hamilton Borough	120	272	0.2	600.0	1,360.0

Sources: \* Paths and Bridges to the 21<sup>st</sup> Century; Mifflin County Comprehensive Plan 2000 (Table 2-20)  
U.S. Census Bureau

Newton Hamilton Boroughs, respectively, comprise 35.9 percent and 67.3 percent of their total land areas.

An interpretation of the major land use categories presented in Table 5-1 is provided in the following sections. This information provides a better understanding of these major land use categories and their distribution throughout the study area.

#### *Residential*

Residential land uses within the study area are primarily represented by low density (typically, housing units on lots of more than one acre), single family detached housing units. However, housing densities are much higher in portions of Wayne Township, and Kistler and Newton-Hamilton Boroughs. For example, housing units in the Wayne Township communities of Ryde, Lucy Furnace, and the Methodist Camp are mostly situated on lot sizes less than one-half acre.

The majority of Wayne Township's residential land uses are located on individual lots and farm operations scattered throughout the valley areas; mainly between the U.S. Route

22 corridor and the Juniata River. In total, there are 1,065 acres of residential land in Wayne Township, which comprises 3.3 percent of the township's total land area.

Residential parcels in Kistler Borough are equally divided among single family detached housing and mobile home units. Approximately 40 acres, or 24 percent, of the borough's land area is classified as residential.

Residential settings in Newton-Hamilton Borough primarily consist of single family detached units intermixed with mobile homes. Roughly 57 acres, or 46 percent, of the borough's land area is classified as residential.

In total, residential land uses constitute 1,162 acres or 3.6 percent of the entire study area.

#### *Residential Seasonal*

The residential seasonal category represents uses that have been developed for recreational and/or leisure-time activities. Such uses are for temporary occupancy and are not intended for year-round dwelling purposes. Typical residential seasonal uses include travel trailers, motor homes and hunting cabins.

Although Table 5-1 indicates that on 1.1 acres of residential seasonal land exists within the study area, the Mifflin County Assessment Office has indicated that hunting camps comprise 274 acres, or less than one percent, of the region's total land area. According to the Mifflin County Assessment Office, these 274 acres are included in 50 parcels located in Wayne Township.

### *Commercial and Industrial*

Commercial uses include land sustaining retail, wholesale, office, and service businesses. As shown in Table 5-1, commercial uses are located on 97 acres, or only 0.3 percent of the total study area. Of the three municipalities included in the study area, Wayne Township contains the majority (93.27 acres) of the commercial land uses. As illustrated in Figure 5-2, commercial uses are located throughout the township; however, the heaviest concentrations are located towards the western most portion of the township in close proximity to the Juniata River, and Kistler and Newton-Hamilton Boroughs.

Of Newton-Hamilton Borough's total land area, approximately 3.4 acres or 2.8 percent is classified as commercial. Kistler Borough has no commercial land uses.

The industrial land use category pertains only to a 12.71 acre quarry operation located in the eastern-most portion of Wayne Township.

### *Public and Quasi-Public*

Land uses within this category typically sustain establishments or properties that provide educational, cultural, or social services for the community, and include uses such as municipal buildings, churches, schools, fire companies, cemeteries, recreational facilities, and other similar civic uses. These uses are located throughout the study area and comprise 371.26 acres or 1.1

percent of the total land area. Of the three municipalities, Wayne Township contains the majority of these land uses with approximately 353 acres, or 95 percent of the study area's total public and quasi-public land uses.

### *Agriculture and Open Space*

This category includes all land areas currently being used for agricultural purposes (i.e., cropland, pasture, farm, and non-farm agricultural uses), as well as undeveloped areas<sup>1</sup>. These uses comprise 6,521 acres, or 20.3 percent, of the total land area, which make them the second largest land use category.

The limestone-based soils underlying various portions of the study area's valley floors continue to support a productive agricultural community. The majority—approximately 6,471 acres, or 99.2 percent—of the study area's agricultural activities are located in Wayne Township.

### *Transportation, Communication, and Utilities*

Land uses included in this category include various transportation networks and support systems, as well as communication and utility rights-of-way. Many of these land uses are characterized by areas of activity interconnected by linear patterns. The county's transportation network greatly influences other land uses. For example, many land use boundaries are essentially defined by transportation systems. Furthermore, the extent of a transportation system in an area defines the level of access; this, along with other infrastructure (e.g., water and sewer) impacts the present and future use of the land. These land uses

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<sup>1</sup> According to the Mifflin County Mapping Department, undeveloped land uses consist of, but not limited to brownfield areas, refuse areas, and other pasture land areas.

comprise 434 acres, or 1.4 percent of the total study area.

*Forest*

Forested areas include land which is covered by deciduous and/or evergreen vegetation, and timberland. Historically, the land use of the study area has been dominated by forest land; with the heaviest concentration of this use located along the steep slopes and ridges of Jack's Mountain and Blue Mountain.

Today, forested land areas remain as the predominant land use, comprising 23,232 acres, or 72 percent of the total study area. Of the three municipalities, Wayne Township contains the largest portion (72 percent) of forest land. The remaining portions are located in Kistler (59 acres) and Newton Hamilton (approximately 19 acres) Boroughs.

Approximately 3,544 acres, or 11 percent, of the study area's total forest lands, are classified as public land. These public land areas are included in Rothrock and Tuscarora State Forests. According to the land use inventory, these public lands are located only in Wayne Township.

*Water*

Due to the scale of the data presented in Figure 5-2, this category only defines the Juniata River Water body, which covers almost 322 acres, or one percent, of the total study area.

**LAND USE TRENDS**

A comparison of existing land use with previous comprehensive planning studies<sup>2</sup>, proved difficult due to differences in land use

classifications and quantifying techniques. However, a general comparison of forest and industrial land uses was made due to discernable differences in acreage levels. For example, the approximate amount of existing forest land increased from 1974 levels; specifically, in those areas where former farming operations have been replaced with either tree cover. In terms of industrial land use, the existing inventory of these uses shows a decrease from the 1974 data. This is due to the deceased operations of the former Empire Kosher Chicken Processing Plant and the Powder Plant near Kistler Borough.

A further assessment of development trends within the study area was made possible through information collected from the county and local municipalities.

A farmland loss analysis, sponsored by the Mifflin County Agricultural Land Preservation Board, was performed by the Mifflin County Mapping Department with funding from the PA Department of Agriculture, Bureau of Farmland Protection. Using aerial photographs from 1975 and digital orthophotos from 1995, the Mapping Department employed a manual aerial photo interpretation process to determine that the County lost 3,248 farmland acres during this period. Of this total, Wayne Township lost 78 acres. Of this 78 acres, over 36 acres was attributed to residential development. Kistler and Newton Hamilton Boroughs did not experience losses in farmland.

Table 5-3 provides a comparative overview of subdivision and land development activity for Mifflin County's municipalities for the period 1993 to 2000. As shown, Wayne Township experienced the fifth highest percentage of total acres developed during this period. Development activity in both Kistler and Newton-Hamilton Boroughs was virtually

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<sup>2</sup> Wayne Township Comprehensive Development Plan (1974) and Mount Union Region: Regional Sketch Plan (1974)

**Table 5-3**  
**Mifflin County Subdivision and Land Development Reviews**  
**Total Acres Developed, 1993-2000**

Municipality	1993	1994	1995	1996	1997	1998	1999	2000	Municipal Totals
Armagh Township	48.76	362.99	363.37	102.48	183.11	100.75	373.24	112.37	1,647.06
Bratton Township	1.35	2.19	95.66	46.72	17.84	23.73	16.04	111.90	315.44
Brown Township	5.85	0.00	165.34	316.47	24.49	58.92	84.35	225.91	881.34
Burnham Borough	1.50	0.25	2.79	4.32	0.98	0.34	0.00	10.25	20.43
Decatur Township	21.32	145.02	762.49	180.69	70.37	132.21	170.23	901.59	2,383.92
Derry Township	3.64	110.54	139.97	312.45	31.66	693.00	247.89	1,085.91	2,625.07
Granville Township	16.92	58.92	266.64	173.58	53.00	52.07	151.23	185.03	957.39
Juniata Terrace Borough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kistler Borough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.62	14.62
Lewistown Borough	0.57	0.00	1.47	0.00	0.97	0.00	14.83	0.75	18.59
McVeytown Borough	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03
Menno Township	8.92	13.94	96.80	8.47	12.18	25.93	15.92	285.33	467.49
Oliver Township	29.08	131.00	342.95	96.29	206.09	84.70	76.62	1,028.98	1,995.71
Union Township	35.04	2.60	241.26	89.24	17.77	27.78	44.19	596.34	1,054.23
Wayne Township	118.92	3.47	395.95	111.23	33.76	56.41	105.63	328.61	1,153.97
<b>County Totals</b>	<b>291.87</b>	<b>830.92</b>	<b>2,874.69</b>	<b>1,441.99</b>	<b>652.22</b>	<b>1,255.85</b>	<b>1,300.16</b>	<b>4,887.59</b>	<b>13,535.29</b>

Note: No development occurred during survey period in Newton Hamilton Borough.

Sources: Mifflin County Planning and Development Department, 2001, City and County Data Books (1993 and 1997).

non-existent due to their limited areas available for growth.

Separately, according to the U.S. Census Bureau, Wayne Township experienced the third highest percentage gain in total housing units for all Mifflin County municipalities during the period 1980 to 1990. During this period, the township's total housing unit stock increased from 891 in 1980 to 1,055 in 1990, or by 18.4 percent. In contrast, growth in total housing units during the 1980 to 1990 period for both Kistler and Newton Hamilton Boroughs decreased by four percent and eight percent, respectively. During this period, the number of total housing units in Kistler Borough decreased from 153 units in 1980 to 149 units in 1990. The number of total housing units in Newton Hamilton Borough decreased from 122 in 1980, to 114 in 1990.

Building permit information shown in Table 5-4 provides insight on the specific areas of development within the study area and the county as a whole. As shown, the majority of development within the Western Mifflin County study area for the period 1990 to 2000 was single family residential. The second greatest development activity was commercial/public based. Of the three municipalities included in the study area, Wayne Township experienced the greatest development activity. In contrast Kistler and Newton Hamilton Boroughs experienced very little development activity, due to their limited areas available for growth.

### REGULATORY MEASURES

The Pennsylvania Municipalities Planning Code (MPC) provides the legal framework for local governments to enact, administer and enforce both zoning, and subdivision and land

Table 5-4  
Building Permit Trend Comparisons, 1990 through 2000

Muni.	Single Family Residential										Mobile Home										Commercial/Public										Demolition													
	90	91	92	93	94	95	96	97	98	99	00	90	91	92	93	94	95	96	97	98	99	00	90	91	92	93	94	95	96	97	98	99	00	90	91	92	93	94	95	96	97	98	99	00
Armagh	35	23	22	10	8	15	8	14	10	7	4	12	3	4	7	9	4	7	9	15	3	5	0	1	1	1	1	4	1	0	2	1	4	0	1	0	0	2	0	1	0	2	1	4
Bratton	0	0	0	4	3	4	3	4	1	5	2	0	2	1	1	2	1	2	0	1	2	0	2	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brown	17	19	20	16	10	13	12	25	27	21	19	0	0	0	1	1	0	1	1	0	2	0	0	0	6	3	10	8	14	27	14	0	1	0	1	0	0	0	0	0	0	0	0	1
Burnham	0	0	0	1	5	2	1	2	2	1	0	3	0	0	2	1	1	3	3	0	0	0	1	1	2	1	0	0	3	3	0	0	6	4	2	1	0	2	3	0	0	2	1	6
Decatur	0	0	0	0	0	11	0	16	15	16	11	0	0	0	0	0	0	3	5	4	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Dery	27	29	21	27	33	25	19	12	19	15	14	8	4	6	11	6	5	3	3	5	5	4	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	0	0	0	1	0	4	4
Granville	11	18	20	16	17	17	17	15	16	11	21	7	9	10	11	12	13	8	15	13	15	12	0	0	5	0	0	0	0	0	0	0	5	4	16	0	0	2	1	4	3	7	3	3
Juniata Terrace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kistler	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Lew'twn	0	0	0	0	0	1	0	0	1	1	2	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1
McV'twn	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Menno	1	0	1	2	1	0	2	1	2	3	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	2	0	0	1	0	1	0	2	1	5	0
Newton-Hamilton Borough	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oliver	15	13	15	4	15	7	8	7	14	12	14	0	0	0	0	0	0	0	0	4	1	1	0	0	1	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	2	9
Union	3	11	5	4	2	8	16	15	8	3	7	0	1	0	2	1	2	1	5	2	6	1	0	0	1	0	0	1	0	1	0	1	4	0	1	2	0	0	1	0	0	3	0	2
Wayne	3	3	5	11	9	13	8	8	11	20	15	0	0	0	0	0	0	0	0	9	8	6	1	3	3	13	8	8	1	3	3	0	1	1	2	5	0	0	0	3	6	2	4	1
Total	112	116	109	95	103	117	96	119	128	117	118	30	19	21	35	30	28	24	49	58	46	33	4	11	26	20	19	20	35	22	23	43	42	6	10	4	0	8	15	21	47	26	32	32

Sources: Mifflin County Planning and Development Department based on data derived from municipality year end reports and building permit records, 1993 and 1997 Pennsylvania County Data Books, direct contacts with municipalities, and Mifflin County Planning Commission's Annual Report (2000).

development regulations. Zoning is a method a community may use to regulate the use of land and structures and is designed to protect public health, safety, and welfare, and to guide growth. In contrast, subdivision and land development regulations do not control which uses are established within the municipality nor where a use or activity can or cannot locate; rather, it controls how a use or activity relates to the land upon which it is located.

As shown in Table 5-5, Kistler Borough is the only municipality within the study area that has adopted a zoning ordinance. Furthermore, each municipality within the study area is subject to Mifflin County's subdivision and land development ordinance provisions.

According to Kistler Borough officials, the borough experiences frequent problems in enforcing the zoning ordinance even with a codes enforcement officer. Too often, local citizens take action without first conferring with the codes enforcement officer. However, both the zoning, and subdivision and land development ordinances are effective.

### **MIFFLIN COUNTY BROWNFIELDS PILOT PROGRAM**

According to the U.S. Environmental Protection Agency (EPA), "Brownfields are abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination."

In June 1999, the U.S. EPA awarded Mifflin County a \$200,000 Brownfields Pilot Program Grant. Through this program, the County's objective is to develop a comprehensive strategy to promote environmental and economic sustainability that integrates the Pilot project with this Comprehensive Plan. This strategy has and continues to rely on an extensive community involvement program.

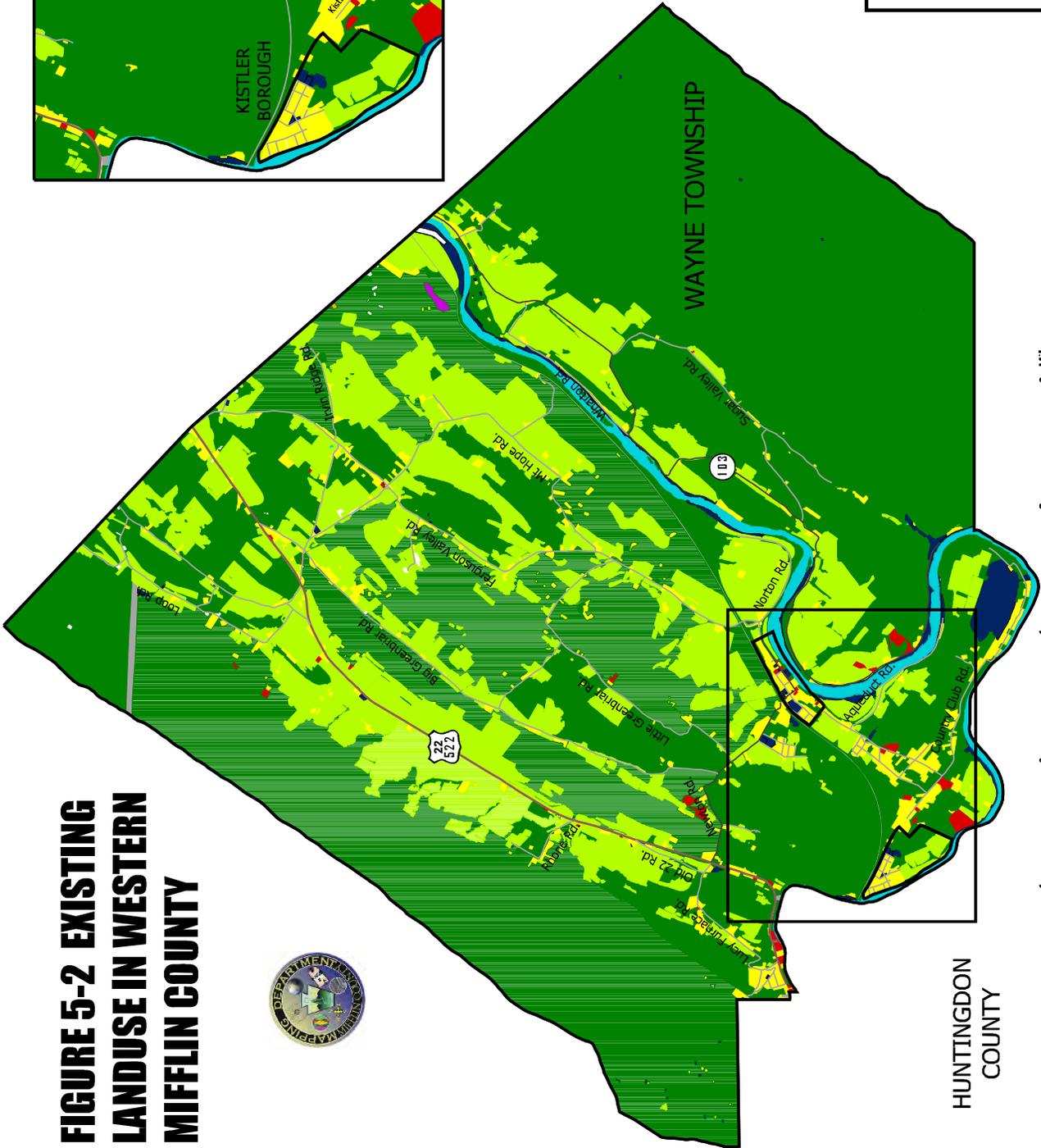
The Pilot is taking a two-track approach to foster brownfields cleanup and redevelopment. First, the Pilot is currently targeting the Corkins' property, a former automotive shop located at an entrance to the downtown area, for assessment and cleanup planning. Simultaneously, the Pilot program has also identified and prioritized seven other brownfields sites, which includes the Empire Chicken Processing Plant in Wayne Township.

**Table 5-5  
Enacted Land Use Regulatory Measures in Mifflin County**

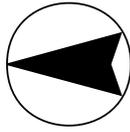
Municipality	Zoning Ordinance (Date Enacted)	Subdivision and Land Development Ordinance (Date Enacted)
Mifflin County	--	March 1995
Armagh Township	--	February 1990
Bratton Township	--	Mifflin County
Brown Township	1973	Mifflin County
Burnham Borough	1973	June 1975
Decatur Township	--	October 1994
Derry Township	1977	June 2000
Granville Township	1998	December 1989
Juniata Terrace Borough	--	Mifflin County
Kistler Borough	1997	Mifflin County
Lewistown Borough	1954	March 1954
McVeytown Borough	--	Mifflin County
Menno Township	--	December 1991
Newton Hamilton Borough	--	Mifflin County
Oliver Township	--	March 1993
Union Township	1968	October 1978
Wayne Township	--	Mifflin County

Source: Mifflin County Planning and Development Department, 1999.

# FIGURE 5-2 EXISTING LANDUSE IN WESTERN MIFFLIN COUNTY



HUNTINGDON  
COUNTY



Prepared by the Mifflin County Mapping Department on February 20, 2001.  
Data sources from aerial photography of Mifflin County, PA taken April 5th, 1995 and field investigations.

**LEGEND**

	Agricultural and Open Space		Water
	Forest		Municipal Boundary
	Commercial		Roads
	Industry		Federal
	Public and Quasi-Public		State
	Residential		Municipal
	Residential Seasonal		
	Transportation, Communication and Utilities		

**FIGURE 5-2A BASE MAP:  
WESTERN MIFFLIN COUNTY  
PENNDOT CENTERLINES,  
HYDROLOGY AND LANDUSE IN  
NEWTON HAMILTON BOROUGH**



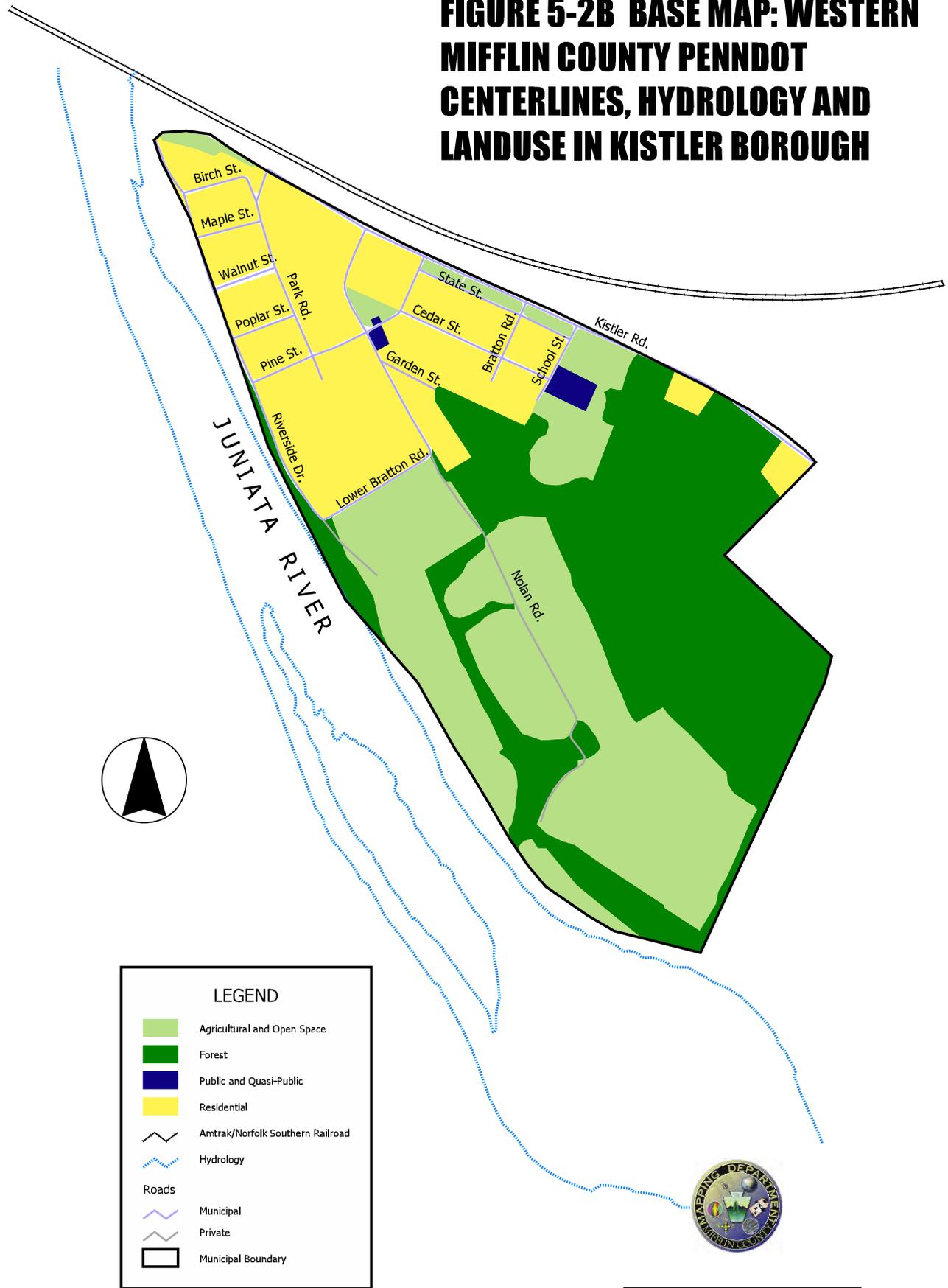
**LEGEND**

- Agricultural and Open Space
- Forest
- Commercial
- Public and Quasi-Public
- Residential
- Amtrak/Norfolk Southern Railroad
- Hydrology
- Roads
- State
- Municipal
- Municipal Boundary

Prepared by the Mifflin County Mapping  
Department on February 20, 2001.

800 Feet

# FIGURE 5-2B BASE MAP: WESTERN MIFFLIN COUNTY PENNDOT CENTERLINES, HYDROLOGY AND LANDUSE IN KISTLER BOROUGH



## LEGEND

-  Agricultural and Open Space
-  Forest
-  Public and Quasi-Public
-  Residential
-  Amtrak/Norfolk Southern Railroad
-  Hydrology
- Roads
  -  Municipal
  -  Private
-  Municipal Boundary



Prepared by the Mifflin County Mapping Department on February 20, 2001.

600 0 600 1200 Feet

## Chapter 6 - Community Facilities and Services Analysis

### INTRODUCTION

This chapter inventories existing community facilities and services within the Western Mifflin County study area and discusses the issues associated with their operation and provision. This is useful in identifying strengths as well as inadequacies and needs. The operation and provision of the various facilities and services are the duties of both private and public organizations, as noted throughout this chapter.

### PUBLIC SAFETY

#### *Police Protection*

Police protection is a service required for county residents and businesses. The traditional role of the police involves three functions: (1) law enforcement, (2) order maintenance, and (3) community service. Law enforcement involves the application of legal sanctions, usually arrest, to persons who injure or deprive innocent victims of life or property. Order maintenance involves the handling of disputes. The third aspect of the police function, and the one most likely to occupy the major portion of the officer's time, varies from community to community according to tradition and local ordinances. These are activities not necessarily related to criminal acts and include such tasks as traffic control, education, and other public services.

The provision of police protection is a primary function of each municipality. The citizens within the study are serviced entirely by the Pennsylvania State Police (PSP). According to the PSP office in Yeagertown, patrol areas within Mifflin County are divided into zones, which are determined by workload (i.e., the number of incidents occurring over a period of time). The study area municipalities are included in a single zone, which also encompasses both Menno and Oliver Townships. Zones are designed to have one

trooper available 24 hours a day to handle incidents. This is the average number of troopers assigned for this zone. Incident data for 1998 indicates that a total of 103 crimes were investigated by the PSP in the study area, which is a manageable number for the manpower assigned.

In addition to the PSP, the Mifflin County Sheriff's office also provides various policing and law enforcement duties. The sheriff's primary duties are to serve as an officer of the court and operate the County jail. The sheriff also performs a variety of administrative duties including serving court issued writs, orders, and notices, executing judgement orders, transporting prisoners, and selling of delinquent real estate and personal property. In addition, the sheriff is responsible for regulations enacted under the Brady Bill, including performing background checks on residents applying for gun permits, investigating gun dealers, and issuing a license to sell firearms.

The allocation of police resources is often a concern in rural areas where staff is limited. According to the U.S. Department of Justice, approximately half of the nation's local police departments employ fewer than 10 commissioned officers; typifying Mifflin County's police department sizes.

Rural departments are not only small but generally funded at about half the level of urban departments, per officer. The small sizes and small budgets of many rural departments do not mean they are ineffective. To the contrary, rural police typically have higher clearance rates than urban departments. In addition, rural citizens have a more positive image of their police than do urban citizens. As a result, the USDOJ's suggests that small town and rural police department inefficiencies may be best addressed through inter-agency cooperation, rather than formal consolidation (USDOJ, 1994).

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## *Chapter 6 - Community Facilities and Services Analysis*

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### *Fire Protection*

The Newton-Wayne Volunteer Fire Company (Co. #26) is the study area's primary fire incident response agency, which provides primary service to Wayne Township, and Kistler and Newton Hamilton Boroughs (Figure 6-1).

The Newton-Wayne Volunteer Fire Company is highly dependent upon manpower since it is staffed entirely by volunteer personnel. Similar to state and national trends, the practice of volunteering is declining in Mifflin County, which may be attributed to the following:

First, young people have more choices for how they can spend their leisure time than they did in the past. Therefore, lack of interest due to participation in other activities or the lack of free time are reasons for the decline in volunteering.

Second, volunteer interest appears to be diminishing because of the large number of hours that are necessary to conduct fund-raising activities. Constant fund-raising becomes tiresome to the typical volunteer firefighter who is interested in training and actual fire-fighting. The increased need and emphasis on fund-raising has diminished the ranks of these companies, and possibly dissuaded new membership development.

Third, the number of employment opportunities within the County and region may require many of the would-be volunteer fire-fighters to commute outside of their local municipality or the County on a daily basis. This situation results in lack of manpower during working hours and can lead to increased response times.

As manpower decreases, the response time to incidents lengthens. Since response time is used as a critical indicator to determine the

effectiveness of an emergency service provider, it is important for both County and local officials to continually monitor each department's response times.

According to the Mifflin County Emergency Services Department, the allocation of fire department resources is not evenly distributed throughout the county. The uneven distribution of resources, coupled with the shortage of volunteer personnel, has often posed the need for the consolidation of services, tied to response times and service areas. However, the 1998 Quality of Life Survey reported that most (41 percent) study area respondents rate their fire service as good to excellent, and indicated they would pay for needed improvements.

A municipality's fire-suppression capabilities are evaluated through a fire rating classification system implemented through the Insurance Service Office's (ISO) Public Protection Classification (PPC) system. Fire protection classification ratings are based on the quality of a local fire department and the distance a dwelling is located from a standard public fire hydrant. Local insurers depend on ISO's PPC database for accurate and timely information on a municipality's fire suppression capabilities to independently determine homeowner's and commercial property insurance rates. ISO's PPC database contains detailed information on the fire suppression capability of approximately 43,000 fire districts and municipalities nationwide. Key PPC information elements include emergency service area boundaries, fire-station locations, and mutual aid agreements. The rating system is based on a scale of 1 (best) to 10 (worst).

Primarily due to Western Mifflin County's rural nature, Wayne Township, and Kistler and Newton Hamilton Boroughs have ISO ratings equal to or greater than six (Table 6-1). However, these municipalities can

possibly improve their protection ratings by informing ISO of any changes in their fire protection resources. For example, Wayne Township has strategically placed approximately nine dry hydrants throughout the municipality to provide adequate opportunities for the Newton-Wayne Volunteer Fire Company and other responding agencies to access fire suppression water supplies. "Dry hydrants improve rural fire fighting abilities resulting in reduced insurance premiums as determined by the ISO. Dry hydrants installed in untreated water sources conserve treated water for domestic use. Shorter traveling distances for fill-ups save fuel and, coupled with a higher Fire-Fighting capability and lower insurance rates, attract homeowners."<sup>1</sup>

The levying of a local fire tax is often a revenue tool used by local municipalities to financially support their local fire departments. However, only four municipalities in Mifflin County currently levy a fire tax. These include:

- ▶ Lewistown Borough (1.5 mils with approximately \$139,000 estimated revenue)
- ▶ Burnham Borough (1.0 mils with approximately \$28,000 estimated revenue)
- ▶ Granville Township (1.08 mils with approximately \$97,998.61 estimated revenue)
- ▶ Derry Township (1.0 mils with approximately \$150,000 estimated revenue)

### *Emergency Medical Services*

Emergency medical services (EMS) can be divided into two general types. The first, emergency ambulance service involves the pickup of patients at the scene of a medical emergency. Then patients are expediently transported to a local medical care facility for treatment. The second, routine transports, is for the transport of patients from one medical care facility to another.

Western Mifflin County is serviced by a total of four EMS providers, who provide various levels of service including basic life support (BLS), advanced life support (ALS), and quick response service (QRS). Basic life support services are provided by the McVeytown Volunteer Fire Company and Mount Union Volunteer Fire Company. The Lewistown Hospital provides ALS services while QRS is provided through Newton-Hamilton Fire Company.

Much like volunteer fire companies, emergency medical services are in constant need of volunteers. Currently, the Newton-Wayne Volunteer Fire Company has six emergency medical technicians (EMTs) and one paramedic, while the McVeytown Volunteer Fire Company has 29 EMTs and six emergency responders. Each company is equipped with an automatic defibrillator service.

The Seven Mountains EMS Council is contracted through the Pennsylvania Department of Health to coordinate emergency medical service programs within a four county area of Central Pennsylvania, which includes Mifflin County. Seven Mountains acts as the liaison between the Department of Health and the Regional EMS providers on issues such as training, ambulance licensure, receiving facility accreditation, medical command

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<sup>1</sup> State of New Mexico. Forestry Division of the Energy, Minerals and Natural Resources Department. "Dry Fire Hydrants Reduce Rural Insurance Premiums." *Forest Health: A Burning Issue*. 1998.

**Table 6-1  
Mifflin County Insurance Service Office Public Protection Classification Ratings**

Municipality (Service Area)	ISO Public Protection Classification Rating	Municipality (Service Area)	ISO Public Protection Classification Rating
Armagh Township	7, 9	Kistler Borough	7
Bratton Township	9, 9	Lewistown Borough	5
Brown Township	6, 9	McVeytown Borough	6
Burnham Borough	7, 9	Menno Township	9, 9
Decatur Township	9	Newton-Hamilton Township	6
Derry Township	6, 9	Oliver Township	6, 9
Granville Township	6, 9	Union Township	6, 9
Juniata Terrace	6, 9	Wayne Township	6, 9
(E. Walnut Street Adjacent Lewistown)	6, 9	(South Hills)	6, 9

Note: More than one classification may be provided for a municipality or service area based on differing distances that dwelling units are from fire hydrants and responding fire stations.  
 Source: Insurance Service Office, 1999.

authorization, treatment and transfer protocols, protocols, mass casualty preparation and coordination, quality assurance, and complaint investigation. According to the council, the Newton-Wayne Fire Company is in constant need of more members and is deficient in emergency vehicle operation training. However, in response to this need, the council will provide an Emergency Vehicle Instructor's course in the near future.

According to the Pennsylvania Department of Health, revenues from the Emergency Medical Services Operating Fund (EMSOF) provided partial funding for 2,442 prehospital care equipment upgrades for ambulance services between 1990 and 1995. In 1996 alone, a total of 586 services received some funding toward equipment. Purchase of automated external defibrillator (AED) equipment in rural areas is a high priority for the use of these funds. As a result, the Newton Hamilton Volunteer Fire Company has been equipped with an AED unit. Furthermore, there has been an expansion of items eligible for partial

funding with EMSOF money, including pediatric care and electronic data collection items.

Mifflin County's fire and EMS services (includes both paid and volunteer) are funded through various resources, which include fund-raising and donations, municipal contributions, state insurance rebates (i.e., out-of-state fee for insurance companies), local government financial assistance, workman's compensation and vehicle insurance.

*Hazardous Materials Team*

In Pennsylvania, each county is required under Act 165 to have a contract with a state-certified hazardous materials response team. The program, which is managed by the Pennsylvania Emergency Management Agency (PEMA), establishes operational, staffing, training, medical monitoring, supply, and equipment guidelines. Of the 42 state-certified hazardous material teams, Mifflin County is serviced by the Mifflin County Haz-Mat Team 27. The team is responsible for

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responding to a wide variety of incidents involving the storage and transport of hazardous materials. A more comprehensive focus on the types of hazardous materials being stored in and transported through Mifflin County may be found in the County's Hazardous Commodity Flow Study.

Each of Pennsylvania's 67 counties is designated as a Local Emergency Planning District and each is required to have a Local Emergency Planning Committee (LEPC). Mifflin County LEPC members are appointed by the governor from a list of nominees submitted by the governing body of the county. The Mifflin County LEPC is comprised of the county emergency services director, one county commissioner, and at least one person selected from the following groups:

- ▶ Elected officials representing local government within the county;
- ▶ Law enforcement, first aid, health, local environment, hospital and transportation personnel;
- ▶ Firefighting personnel;
- ▶ Civil Defense and emergency management personnel;
- ▶ Broadcast and print media;
- ▶ Community groups not affiliated with emergency services groups; and
- ▶ Owners and operators of facilities subject to the requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

LEPC responsibilities are essentially those established by SARA (Superfund Amendments and Reauthorization Act of 1986) Title III<sup>2</sup>, with additional specific

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<sup>2</sup> One part of the SARA legislation is Title III, which is also known as the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). The EPCRA requires states to implement procedures for organizing local chemical emergency preparedness programs and to receive and disseminate information on hazardous chemicals present at

requirements under Pennsylvania Act 165. In Pennsylvania, an offsite emergency response plan is required for each SARA EHS planning facility. This plan becomes a supplement to the county emergency operations plan. Mifflin County has 17 SARA EHS planning facilities, each having a plan filed with the county's emergency management office. According to the Mifflin County Emergency Services Office, there are no SARA EHS planning facilities located in the Western Mifflin County study area. A current list of SARA planning facilities may be obtained from the Mifflin County Emergency Services Office.

### *Emergency Management*

#### Overview

The Pennsylvania Emergency Management Services Code (35 Pa. C. S. Section 7101-7707) requires that all counties and municipalities develop and maintain an emergency management program consistent with state and federal emergency management programs. Each county and municipal program is administered by a director, who is appointed by the Governor based upon the recommendation of county and or municipal officials and the Pennsylvania Emergency Management Agency.

Recently, the Mifflin County Board of Commissioners created a director's position for the County's Office of Public Safety. The duties of this position include supervising and coordinating activities of the County's emergency services department, overseeing the operations of the emergency communications and enhanced 911 center and hazardous materials response. Currently, the County is contracted with an outside agency to

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facilities within local communities.

perform a needs and realignment assessment of the Office of Public Safety.

Mifflin County has a government-sponsored search and rescue team (Team 44) operating under the auspices of the Mifflin County Emergency Services Department. Requests for team activation must have approval of the county emergency services director. In-county responses are made by Mifflin County's local emergency management coordinators or police officials. Out-of-county responses are honored only when requested by the jurisdiction's emergency services director.

The Pennsylvania Wing, Shade Mountain Squadron 1302, of the Civil Air Patrol (CAP) is also operational in Mifflin County. The CAP is an aviation-oriented volunteer organization, which is the federally chartered auxiliary of the United States Air Force. Each state comprises a Wing. Shade Mountain Squadron 1302 is comprised of senior members. There currently is not an active Cadet program in Mifflin County.

Each municipality included in the Western Mifflin County study area has adopted an Emergency Operations Plan (EOP), which has been approved by the Mifflin County Office of Public Safety and PEMA.. The purpose of the EOP is to address a municipality's natural and man-made hazard risks, and to establish a standard operating procedure for effectively managing and recovering from these hazard risks.

### **UTILITY NETWORKS**

With increased residential, commercial, and industrial development activity, more demand is placed on gas, electricity, and communication systems. Although most utilities have the ability to meet increased demands, it is essential to provide a brief review of the study area's service providers and issues relating to their activity.

### *Telecommunications*

Telecommunication services within the Western Mifflin County study are provided by Verizon.

Wireless telecommunication service in the past was rarely a land use issue, but the proliferation of cellular phone tower construction has caused it to become an important planning issue throughout Pennsylvania, particularly for local municipalities. The demand for wireless services requires providers to construct coverage facilities to assure service throughout the market area and then to add capacity facilities which make available additional channels to accommodate new subscribers. There are at least eight wireless communication towers located in Mifflin County, however, none are located within the study area.

The 1996 Telecommunications Act generally protects local zoning authority over the placement of cellular towers. However, each municipality included in the study lacks a zoning framework to effectively deal with the placement of wireless facilities.

### *Mifflin County Digital Community Program*

The Mifflin County Management Information Systems (MIS) Department is currently working on several "Digital Community" projects throughout the county. One such project is the fiber optics network. It will a high-speed network connection that will benefit the county in several ways. By touting such a network, the county will be more appealing to businesses that are looking to relocate to an area that can accommodate their business needs. It will also benefit the schools and the hospital by providing them high-speed access to the Internet. The network is limited, but is expected to grow as time goes on.

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Other projects include networking the law enforcement agencies, such as Mifflin County Probation, District Justices, Police, etc. The benefit will be in the transmitting of secured, accurate information that can be entered once into a computer and shared with any appropriate offices connected to the network.

The MIS department is also managing a Social Network (SNET) project that will link the human service agencies throughout the county, and in some cases to their state partners in Harrisburg. Through use of this network the agencies can share data where appropriate and legally acceptable. This will allow them to take a proactive role in the community. Instead of waiting for the client to come to them, they can go to the client, having been informed ahead of time through the referral aspect of the network.

### *Electric Service*

Residents within the study area receive electric services from the Pennsylvania Electric Company (Penelec/GPU) and Valley Rural Electric Cooperative (VREC).

In 1998, the Pennsylvania Electric Company provided electric service to approximately 1,460 customers within the Western Mifflin County study area. Of this total, Kistler Borough provided 149 customers, Newton Hamilton Borough provided 123, and Wayne Township provided 1,188 customers. A historic comparison of Penelec/GPU's customer base for these municipalities reveals that the highest consumer growth is occurring in Wayne Township, where from 1991 to 1998, the GPU customer base grew from 1,108 to 1,188, or by 7.2 percent. During this same period, GPU's customer base in Newton Hamilton grew from 116 to 123 customers, or by approximately 6 percent, while Kistler's customer base grew from 146 to 149, or by 2.1 percent.

Valley REC, who is a cooperative member of the Pennsylvania Rural Electric Association, was incorporated November 1, 1938 and provided its first electric service in November 17, 1939. Currently, VREC provides services to approximately 538 residential customers in the Ferguson Valley area of Mifflin County, which includes Granville (48 residential customers), Oliver (332 residential customers), and Wayne (158 customers) Townships. Historic trends in Valley REC's Mifflin County customer base were unavailable from the cooperative. However, VREC uses a 1.73 percent consumer growth rate to predict its future service needs.

As with telecommunication services, electric service has also increasingly become a land use issue, particularly at the local level when utilities attempt to locate additional facilities, such as substations and new or larger transmission lines.

### *Natural Gas Service*

Natural Gas service is currently not available in the Western Mifflin County study area. However, these services are provided elsewhere in Mifflin County; specifically, by Penn Fuel Gas Company, Interboro Gas Company, and Lewistown Gas Company. Penn Fuel Gas provides full or partial services to various municipalities, which includes Armagh, Bratton, Brown, Derry, Granville, Menno, and Union, Townships. Interboro Gas Company services the Lewistown Borough area.

The proximity of land development relative to pipeline locations is an important land use issue, as pipelines are occasionally damaged due to excavation and construction. Federal law mandates certain safety codes, which must be met before and during the operation of the pipeline. An emergency preparedness and response plan is also required.

**EDUCATIONAL FACILITIES**

*Public and Private Schools*

The Western Mifflin County study area is included in the Mount Union Area School District. The district obtains leadership and education services through the Tuscarora Intermediate Unit (IU #11). Services provided include curriculum planning, instructional materials, continuing professional education, and special education to all local schools. The IU receives funding through both the Pennsylvania Department of Education (PADE) and the local school districts.

The Mount Union School District has a current (i.e., 2000-2001) enrollment of 1,601 students. This represents a 1.0 percent increase (15 students) from the district's 1999-2001 enrollment of 1,586 students. It is projected that the 2001-2002 school year enrollment will equal 1,581 students.

The Mount Union School District does not maintain enrollment records by place of residence. However, there are currently 504 students enrolled in the district who reside in Mifflin County (i.e., Wayne Township, Kistler Borough and Newton Hamilton Borough). This figure was obtained through the Mount Union School District.

The Kistler Elementary School, which is located in Kistler Borough and included in the Mount Union School District, provides primary level (i.e., Grades 4 and below) education services to Wayne Township, and Kistler and Newton Hamilton Boroughs. The current enrollment level for the school is 53 students.

According to the PADE, the Kistler Elementary School currently has eight computers available for student use. However, only one of these computers is equipped with CD-ROM capabilities.

Additional technological capabilities include Internet access, and broadcast and cable television services. Furthermore, the following programs are currently offered by the Kistler Elementary School:

- ▶ Half-day kindergarten;
- ▶ Art instruction with a certified art instructor;
- ▶ Music instruction with a certified music instructor;
- ▶ Enrichment programs;
- ▶ Tutorial or extra help programs;
- ▶ Physical education instruction with a certified physical education instructor; and
- ▶ Education field trips

Included in the Mount Union School District's proposed \$10 million construction project is the demolition and reconstruction of the Kistler Elementary School facility. Demolition has already occurred and the new facility is currently under construction. During this entire process, the students will attend classes at the Shirley Township facility. The new Kistler Elementary school will accommodate 350 to 400 students and will replace the existing Mount Union Elementary school facility.

According to the PADE, the unadjusted 1996-97 expenditures per pupil for the Mount Union Area School District was \$5,814. This represents a slight, but real increase in expenditures when compared to the district's 1990 adjusted<sup>3</sup> expenditure level of \$5,088. In comparison, the district's 1996-97 expenditures were almost equal to the Mifflin County School District's level of \$5,854, but were considerably lower than the commonwealth's expenditures of \$7,483.

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<sup>3</sup> Adjusted by the Consumer Price Index (CPI) for the 1990 and 1998 calendar years. Inflation Index for this period equals 1.247

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The IU number 11 operates the Huntingdon County Career and Technical Center, which is located in Mill Creek. The center offers a total of 11 work force preparation courses for students in grades 10 through 12. Courses are divided into two program categories, which are the Tech Prep Advanced Skills Preparation and Vocational Skills Preparation. The Tech Prep Advanced Skills category is designed for those students who are pursuing careers that require post secondary education. The Vocational Skills category is designed for students wishing to enter the workforce upon their graduation from high school.

Mifflin County 2000, Inc., is a nonprofit organization focused on improving the education of all in Mifflin County. Developed in concert with the nation's educational improvement initiative (America 2000), Mifflin County 2000 is comprised of a grass roots coalition of education, business, parent, and student groups. The primary objectives of this organization are to:

- ▶ improve the graduation rate;
- ▶ restructure the core curriculum, with emphasis on school-to-work programs and quantifiable performance standards; and
- ▶ further develop the region's post-secondary education opportunities.

These objectives are primarily achieved through various programs, which include grants for educators, scholarships, annual career and science fairs, and annual recognition of new teachers and student achievements.

There are three private educational facilities located in Mifflin County. These include the Sacred Heart Catholic School, Mifflin County Christian Academy and Belleville Mennonite School. Several Western Mifflin County children are enrolled at the Belleville Mennonite School. In addition to these

facilities, some students from Mifflin County are also enrolled in the two Huntingdon County-based private schools, which are the Calvary Christian Academy and Huntingdon Christian Academy.

### *Higher Education*

Higher education opportunities are provided through various two and four-year degree granting institutions located throughout central Pennsylvania. These include Penn State University, Bucknell University, Juniata College, Susquehanna University, DuBois Business School and the Pennsylvania College of Technology, which is a wholly owned affiliate of Penn State University. In addition, the South Hills School of Business and Technology recently opened a branch campus in Lewistown. Based in State College, the school offers five Associate Specialized Business degree programs and three Associate Specialized Technology degree programs.

Higher education institutions have a number of important roles that have a positive impact on both the region and Mifflin County's businesses. First, they serve the higher education needs of students from in and out of the county. Second, through research and achievements in science, technology, and the arts and humanities, they fuel the state's economy and enrich its culture. Finally, they provide specific services to business and industry, particularly in worker preparedness.

### **HEALTH CARE FACILITIES**

The citizens of Western Mifflin County are serviced by a wealth of medical facilities and expertise. The Lewistown Hospital, a private, non-profit hospital operating as an entity of the Lewistown Healthcare Foundation, serves as Mifflin County's primary medical facility. This facility, a 190 bed acute care community hospital accredited by the Joint Commission on the Accreditation of Healthcare

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Organizations, serves a population of approximately 80,000 in Mifflin, Juniata, and surrounding counties. In conjunction with the Lewistown Hospital, the Endoscopy Center of Pennsylvania in Lewistown is a separately-licensed facility that provides specialty or multi-specialty outpatient surgical treatment on a regular and organized basis. In addition, the Geisinger Health System is planning to develop a new clinic in Derry Township on the former site of the Mifflin County Farm. This 40,000 square foot facility will offer primary practice services with outreach programs and will be staffed with specialists from both Danville and Milton S. Hershey medical centers. These specialists will meet with patients on a scheduled basis.

In addition to the Lewistown Hospital, the residents of Western Mifflin County also utilize the JC Blair Memorial Hospital, which is located in Huntingdon Borough, Huntingdon County. According to the Pennsylvania Department of Health, this hospital is classified as a general service, non-profit controlled facility, which has 104 licensed beds, 104 setup/staff beds and 14 well infant bassinets.

The Pennsylvania Department of Health's Division of Home Health is responsible for the licensing and oversight of Pennsylvania's home health agencies. Total Life Care Home Care Services of Lewistown is the county's only licensed home health care agency. This agency is both Medicare and Medicaid certified.

Long term care services in Mifflin County are provided through five (5) agencies, which are the Malta Home for the Aging, Ohesson Manor, Valley View Haven, Meadowview Manor, and William Penn Nursing Center. A constant issue for these facilities is the task of assessing the various service needs of the county's aging population, such as the need for special care services, continuing-life care

service, and assisted and independent living quarters.

Meadowview Manor, which is located in Wayne Township, is a personal care and rehabilitation center that was started on June 15, 1982. It is licensed by the PA Department of Health for 52 beds and services an area stretching from Huntingdon County to Lewistown. The facility also has a full service rehabilitation center that offers physical, occupational, and speech therapy.

Malta Home for the Aging (Granville Township) has 20 personal care beds and 40 nursing home beds, and is currently at maximum capacity. Furthermore, it is implementing a three-phase retirement community development in Granville Township that will add an additional 200 units. This development, which is called Knight's Haven, will provide single family housing units for the region's senior population.

William Penn Nursing Center (Lewistown) has 121 beds and is near capacity. It currently has no future plans for expanding its current facilities.

Ohesson Manor (Derry Township) has 27 units for assisted living and 134 nursing home beds. It is currently at or near capacity, but has no immediate plans to expand its facilities. The facility recently completed a special care unit for Alzheimer patients and persons with Dementia.

Valley View Haven in Union Township has 118 duplex units and six single units for unassisted living, as well as 46 beds for assisted living and 122 nursing home beds. This facility is near capacity levels and has recently expanded its facility by implementing an assisted living area. Additional expansion is not planned at this time.

### LIBRARIES

Public library services are provided through the Mifflin County Library system, which is part of the Central Pennsylvania District Library Consortium. The Mifflin County Library is based in Lewistown and includes four branch libraries, which are located in Allensville, Belleville (Kish Branch), McVeytown (Rothrock Branch), and Milroy. Of these facilities, the Rothrock branch library provides the closest service for Western Mifflin County citizens. There are no public library facilities located within the study area.

The library system is funded through county tax dollars and state aid. The library system offers a variety of services including, but not limited to interlibrary loan, audio/video lending service, Internet and fax service, computer services, summer reading, and adult programs. Additional library services available to the public include the Mifflin County Law and Historical Libraries.

In addition, the Mount Union Branch Library of the Huntingdon County Library System also services Western Mifflin County citizens. Located at 9-11 West Market Street in Mount Union, the Mount Union Branch Library is newly renovated and provides a wide variety of services through the Huntingdon County Main Library. These services include, among others, the Children's Program and Summer Reading Club, inter-library loan and ACCESS PA interlibrary loan program services, and computer and Internet access. Furthermore, the Huntingdon County Library System operates the Barth Bookmobile, which services 24 local communities throughout Huntingdon County on a bi-weekly basis. The bookmobile carries a selection of over 4,000 books and magazines for adults and children and operates all year-round. The Huntingdon County Library System operates with local, municipal funds provided by the Huntingdon County Commissioners and many townships

and boroughs. It also receives state tax funds from the Pennsylvania Department of Education.

### STORMWATER MANAGEMENT

Within Pennsylvania, stormwater management planning and decisions are performed by municipalities through local subdivision and land development ordinances. But too often, local officials only focus their planning and decision making efforts within their municipal boundaries and do not consider the impacts of their actions on downstream communities. Therefore, adequate planning cannot be thoroughly accomplished on a parcel-by-parcel or municipality-by-municipality basis. Compounding the problem is a lack of clear legal guidance and sufficient hydrologic information. These together have hampered the ability of municipalities to make sound stormwater management decisions. Multimunicipal cooperation and joint participation by everyone to resolve flooding problems are the keys to the successful resolution.

Design standards for drainage and stormwater management improvements within the study area are subject to the requirements contained in the Mifflin County Subdivision and Land Development Ordinance.

The Pennsylvania Stormwater Management Act 167 of 1978, requires counties to prepare stormwater management plans on a watershed-by-watershed basis. These plans must be prepared in consultation with the affected municipalities. Standards for control of runoff from new development are a required component of each plan and are based on a detailed hydrologic assessment. A key objective of a stormwater management plan is to coordinate the decisions of the watershed municipalities. A plan is

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implemented through mandatory municipal adoption of ordinance provisions consistent with the plan.

The Western Mifflin County study area is located in the Lower Juniata Watershed (Subbasin 12) and is drained by both the Kishacoquillas and Aughwick Creek Watersheds. Subbasin 12 is included in the Susquehanna River Drainage Basin. A stormwater management plan is currently being prepared for the Kishacoquillas Creek Watershed, which will include its tributaries-- Laurel Creek and Honey Creek. There is no stormwater management plan for the Aughwick Creek Watershed.

Plans prepared under the Stormwater Management Act will not resolve all drainage issues. A key goal of the planning process is to maintain existing peak runoff rates throughout a watershed as land development continues to take place. Although this process does not solve existing problems, it should prevent their escalation. The correction of the existing problems is the responsibility of the affected municipalities.

### **SOLID WASTE MANAGEMENT**

The Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act 101 of 1988, requires counties to develop formal plans for managing municipal wastes. Plans are subject to municipal ratification and approval from the PADEP. In accordance with the Act, each County must ensure 10 years of available disposal capacity and establish a post-closure care trust fund for landfills. The Mifflin County Solid Waste Management Plan, which was completed in 1991 for the Mifflin County Solid Waste Authority, was prepared in accordance with the Act 101 requirements. As mandated by Act 101, the County is initiating a decennial update of its plan. Plan updates are also

required when a landfill's remaining disposal capacity drops below three years.

Municipal solid waste in Mifflin County is defined as waste generated from residential, commercial, industrial office/lunch room, institutional, and community activities, with 60 percent of the total currently being generated from residential sources. Most municipal solid waste from Mifflin County is deposited at the Authority's Barner Landfill. The landfill, which began operating in August 1988, accepts waste from all municipalities in Mifflin County and some waste from Juniata and Huntingdon Counties.

The total amount of waste disposed in Mifflin County's Barner Landfill decreased by four percent, from 38,610 tons in 1992, to 36,977 tons in 2000. The 2000 tonnage level represents a 26 percent decrease from the 49,809 tons of waste disposed in the landfill in 1999.

There are six major solid waste haulers that utilize the Barner Landfill. These include the Borough of Lewistown, Eagle Waste (WSI), Cocolamus, Parks Garbage Service, S&S Trash Service, and D and M Grove, as well as other private commercial and private cash customers. The majority of the refuse disposed at the landfill is generated in both Mifflin and Juniata Counties.

The landfill's remaining disposal capacity is limited to three years. To prepare for future solid waste disposal activities the Authority and County Planning staff are cooperating in the preparation of the Mifflin County Solid Waste Plan Update. In the first phase of the plan update, the Authority has determined the Barner Landfill's remaining disposal capacity, has examined future closure and post-closure costs, and has begun to examine short and long-term disposal alternatives. The second phase of the plan update, which is now underway, will help secure long-term disposal

capacity, review current and proposed recycling activities, identify steps to maximize land clean-up of open space dumping activities throughout the County, review the feasibility of a waste transfer station at the Barner Landfill site, and examine the future role of the Authority's staff in solid waste management activities for the County. The County expects to finalize a draft of the plan update by the end of 2001.

The Authority submitted a permit application to the PADEP in February 1999 for a transfer station on the present landfill property. In April 2000, the Solid Waste Authority received a permit from PADEP to construct and operate this transfer station, which is now known as the Barner Site Transfer Station. This facility may accept for transfer municipal solid waste, including commercial and household nonhazardous waste, and construction/demolition waste. The plan update will help determine whether to construct this proposed transfer facility.

**PUBLIC WATER  
SERVICE FACILITIES**

The Western Mifflin County is serviced by four Community Water Systems (CWSs). Figure 6-1 identifies these various providers and their respective service areas. Table 6-2 lists each CWS along with their respective service area(s), customer connections, and water sources. The following section provides a descriptive overview of these four CWS and any known planned improvements.

*Wayne Township Municipal Authority*

Wayne Township Municipal Authority is located in Wayne Township. It serves approximately 79 customer connections in an area consisting of the old Methodist Training Camp and an adjacent area located to the east along the railroad tracks. Water to supply the system is purchased from Newton Hamilton

which is a consecutive water system to Mount Union Area Water Authority. Approximately 9,800 feet of eight inch and 1,700 feet of six inch main transmit water from the master meter through the system to a 200,000 gallon steel storage tank. The water system is metered. Water treatment is provided by the Mount Union Area Water Authority prior to its transmission to Newton Hamilton and Wayne Township. Additional treatment is not provided by Wayne Township. There are no planned improvements to the water system at this time.

*Newton Hamilton Borough Water Department*

Newton Hamilton Borough is located in Wayne Township along the Juniata River east of Mount Union. The Newton Hamilton Borough Water Department's water system serves a total of approximately 116 customer connections located in the Borough of Newton Hamilton and Wayne Township. Newton Hamilton Borough receives water from the Mount Union Area Water Authority through a master meter located adjacent to River Road, approximately 3,000 feet south of the borough. Newton Hamilton sells water to Wayne Township through a 6-inch meter located along Wayne Street, approximately 200 feet southeast of the railroad bridge. Water treatment is not provided by Newton Hamilton for water purchased from Mount Union or transmitted to Wayne Township. The distribution system contains approximately 11,800 feet of 6-inch diameter transit pipe and approximately 2,500 feet of four inch diameter transit pipe. Newton Hamilton provides no storage in their distribution system.

**Table 6-2  
Community Water Systems Serving Western Mifflin County**

Public Water Supply Name	Service Area	Customer Connections	Primary Source(s)		Consecutive Source(s)
			Groundwater	Surface Water	
Meadowview Manor, Incorporated	Meadowview Manor, Incorporated	Self Serving	1	0	-
Mount Union Area Water Authority	Kistler Borough, Wayne Township, Newton Hamilton	475*	0	2	-
Newton Hamilton Borough Water Department	Newton Hamilton Borough, Wayne Township	116	0	0	Mount Union Area Water Authority
Wayne Township Municipal Water Authority	Methodist Training Camp	79	0	0	Mount Union Area Water

\* Mifflin County-based customers only. (Mount Union Water Authority serves 2,279 customer service connections in its entire service area.)  
Sources: PA Dept. of Environmental Protection, Public Water Supply Report 1999

Mifflin County Water Supply Plan, Gannett Fleming, Inc., 2000

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### *Mount Union Area Water Authority*

The Mount Union Area Water Authority provides water service in Northern Huntingdon County and western Mifflin County. The Authority serves 2,279 customer connections, of which 475 are located in Mifflin County. Water to the supply system is obtained from two surface water sources—Licking Creek and Singers Gap Run. A 1.5 mile cast iron main transmits raw water from the Licking Creek intake to the Licking Creek treatment facility. Approximately 100 feet of 12-inch piping delivers raw water from Singers Gap Reservoir to the Singers Gap treatment facility. Finished water is delivered to the distribution system through 1.5 miles of 12-inch and 6.5 miles of 10-inch main from Singers Gap and 8 miles of 10-inch main from the Licking Creek supply. Acceptable pressure levels are maintained in the Singers Gap transmission main by a pressure reduction valve.

Water treatment processes currently used by the Mount Union Area Water Authority include coagulation, filtration, disinfection and corrosion control. Raw water is filtered and then disinfected with chlorine prior to pumping to storage at Singers Gap and discharge to the transmission main at Licking Creek.

The distribution system contains two (2) finished water storage tanks and approximately sixteen (16) miles of distribution main. These mains range in diameter from 2-inch to 8-inch. Fire hydrants are available for fire protection. All customer connections are metered.

Recent water use restrictions have demonstrated the need for additional water supply. The authority is currently in the process of identifying potential water well sites.

### *Meadowview Manor, Incorporated*

Meadowview Manor, Inc., provides water service at its personal care and rehabilitation facility located along U.S. Route 22/522 in Wayne Township. The water system currently serves the 50 residents and 20 staff members at the facility. Water supply for the system is provided by a single well. Approximately 40 feet of one inch pipe delivers raw water from the well to the treatment facility. Disinfection is the only treatment process provided by Meadowview Manor. Raw water enters the treatment facilities and is disinfected prior to the two 220-gallon detention tanks and two pressure tanks. Water is distributed throughout the facility by a one inch water line. Pressure in the system is provided by the well pump and maintained by the hydropneumatic tank. No improvements to the personal care facility are planned.

Meadowview Manor utilizes an elevated sand mound system for its sewage disposal functions. This system services the entire facility and is functioning adequately.

### *Mifflin County Water Supply Plan*

The last comprehensive review and evaluation of the long-term water needs of Mifflin County was conducted in 1979. The Mifflin County Board of Commissioners recognized the importance of safe, adequate, reliable, drinking water to the vitality of Mifflin County and decided to take an active role in updating the 1979 County Water Supply Plan. The PADEP awarded Mifflin County a grant of up to \$63,900 to prepare a countywide water supply plan. The final draft of the plan was recently completed and it evaluates the long-range needs of all 15 community water supplies in the county. In addition, the plan identifies the current and future technical, managerial, and financial needs of the systems, taking into consideration the most recent changes to the Safe Drinking Water

Act. Furthermore, there is an evaluation of the ways that small systems can benefit from consolidation with large systems, cooperative agreements, and shared services. Water supply planning and sound land use planning are being closely coordinated.

### **PUBLIC SEWER SERVICE FACILITIES**

The Pennsylvania Sewage Facilities Act of 1966 as amended, commonly referred to as "Act 537", is the primary law controlling individual and community sewage disposal systems. Act 537 requires that every municipality in the state prepare and maintain an up-to-date sewage facilities plan. Act 537 requires municipalities to review their official plans at five-year intervals and perform updates, as necessary. Municipalities can apply to the PADEP for up to 50 percent reimbursement of the cost of preparing an Act 537 plan.

High growth municipalities are frequently performing updates to their Act 537 Plan. For stable or slow growth municipalities, 20 years or more may elapse between editions. Regardless of timing, such plans and their approval by PADEP are needed before any major sanitary sewer projects are eligible for funding by the state.

The majority of the Western Mifflin County study area is serviced by on-lot sewage systems, of which many have experienced malfunctions. However, small portions of the study area, such as Kistler Borough and the Methodist Camp, are serviced by a public sewage collection system and a community package collection and treatment system, respectively (Figure 6-1).

A significant problem confronting many municipal sewage treatment needs is soil suitability for on-lot disposal systems (OLDS). Due to a variety of soil characteristic

limitations, the effectiveness of OLDS is diminished. As shown in Figure 9-4, much of the study area's soils are limited in their ability to support on-lot disposal systems and therefore, require specialized disposal technologies. Addressing these needs requires a revision to a municipality's Act 537 plan. It is important to note that analysis at this scale, based upon available data, is not a substitute for site testing. This analysis should be used only as a general indication of those areas that may be suitable for on-lot systems.

Information regarding Western Mifflin County's municipal Act 537 plans was gathered from PADEP and the respective municipal engineers. Key issues and recommendations contained in these Act 537 Plans are summarized as follows:

#### *Kistler Borough Act 537 Plan (April 2000)*

The Borough of Kistler accepted bids for the selected alternative in the borough's Act 537 Plan dated April 2000. This project has been completed. The borough's Act 537 plan indicated that a complete system of combined sanitary and stormwater collection sewers were installed at the time of the original development of the borough by the American Refractories Corporation. This system is comprised entirely of eight-inch diameter vitrified clay pipe with concrete joints. Due to the age of this system, many problem areas exist, such as broken pipes, displaced joints and blockages resulting from root penetration. The majority of improved properties in the borough are served by the existing sewer collection network, which discharges directly into the Juniata River.

A number of residential properties in the borough exist beyond the extent of the existing collection system. These systems are served by on on-lot disposal systems.

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## Chapter 6 - Community Facilities and Services Analysis

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The Act 537 plan recommended that a new sewer system be installed and sewage conveyed to the Mount Union Wastewater Treatment Plant (WWTP). This development of this system was recently completed.

### *Newton-Hamilton Borough Act 537 Plan (September 1993)*

A review of the existing wastewater treatment facilities and technology shows that the on-lot disposal systems currently serve all portions of the borough. Many of these appear to be malfunctioning and are proposed to be replaced by public sewerage, as recommended by the plan. This Act 537 Plan proposes to publicly sewer the entire borough of Newton Hamilton. A previous alternative was to tie in with the Mount Union system.

Currently, Borough officials are waiting for Wayne Township to adopt their Act 537 Plan to determine a course of action in updating their system.

### *Wayne Township Act 537 Plan*

The Wayne Township Act 537 Plan is presently before the Board of Supervisors for their review. The alternative selected for implementation in the plan involves the construction of a 0.19 mgd extended aeration package wastewater treatment plant and collection system in Wayne Township that will provide service to five areas of Wayne Township and accept sewage from the Borough of Newton Hamilton.

*Mount Union Borough [Huntingdon County, PA] Act 537 Plan (Prepared May 1995, Amended October 1999)*

The Mount Union Borough Wastewater Treatment Plant (WWTP) currently serves the Borough of Mount Union and portions of Wayne and Shirley Townships. The permitted capacity of the WWTP is 0.6265 million gallons per day (MGD). The annual average flow for 1998 was 0.42 MGD, while the maximum consecutive three month average daily flow was 0.75 MGD. According to the 1998 Municipal Management Wasteload Report, the WWTP was hydraulically overloaded and is projected to be hydraulically overloaded in the next five years due to the expansion of the sewer service area. Also, starting in the Year 2000 and progressing up through the Year 2003, the WWTP is projected to be organically overloaded. In addition to limited system growth within the next five years, the Borough of Mount Union anticipates providing service to Kistler Borough and campsites in Wayne Township, as well as the Industrial Park in Shirley Township.

## **PARKS AND RECREATION**

Residents within the Western Mifflin County study area are offered a variety of recreation options, from publicly-owned lands (i.e., state, county, and municipal) to private facilities. An inventory of public park and recreation facilities in the county is provided in Table 6-3. These facilities are open to the public on a year-round, full-time or part-time basis. These facilities constitute approximately 4,259.8 acres of recreational land and provide the citizens with an abundance of both active and passive recreational opportunities.

## Chapter 6 - Community Facilities and Services Analysis

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As shown in Table 6-3, each facility is further characterized by the National Park and Recreation Association (NRPA) by classification, location, and size criteria standards. Mifflin County's facilities are classified as one of the four following park types:

- ▶ Neighborhood Park: Neighborhood parks remain the basic unit of the park system and serve as the recreational and social focus of the neighborhood. A neighborhood park should be centrally located within its service area, which encompasses a 1/4 to 1/2 mile distance uninterrupted by non-residential roads and other physical barriers. Demographic profiles and population density within the park's service area are the primary determinants of a neighborhood park's size. Generally, five acres is accepted as the minimum size,...while 7 to 10 acres is considered optimal.
- ▶ School-Park: Depending on the circumstances, school-park facilities often compliment other community open lands. The optimum size of a school-park site is dependent upon its intended use.
- ▶ Community Park: A community park serves to meet a community's recreational needs, as well as preserving unique landscapes and open spaces. They are generally larger in size and serve a broader purpose than neighborhood parks. A community park should serve two or more neighborhoods and has an optimal size between 20 and 50 acres, which is based on the land area needed to meet a community's recreational needs.
- ▶ Natural Resource Areas: These park types serve to protect significant natural resources, unique landscapes, and open space, and scenic viewsheds. Size and location criteria standards are dependent on resource availability and opportunity.
- ▶ Park Trail: Park trails serve as multipurpose pathways and are typically located within greenways, parks, and natural resource areas. Their focus is on recreational value and harmony with the natural environment.

Although Mifflin County's draft recreation plan has not been updated since 1978, the county has been actively involved in park planning, acquisition, and development activities. For example, the county has assisted in various local projects including development of the McVeytown Community Park, the Kistler Borough recreation plan, Longfellow Park improvements, and the Union Township recreation plan.

In the past, the common measure of a park, recreation, and open space system's spatial and service requirements was the application of acres per 1,000 population standard. Since then, the NRPA has revised their recreation, park and open space standards and guidelines to include various planning factors such as a community's participation rates and patterns, needs and preferences, quality of a recreation experience, economic benefits, and desire or demand for certain types resources and facilities. These revised standards allow communities to address their park and recreation needs in terms of its unique social, economic, and institutional structure. Therefore, a standard for parks and recreation cannot be universal, nor can one community

Table 6-3  
Parks and Recreation Facilities, Western Mifflin County

Park	Location	Acres	Owner	Bowling Alley	Fishing Pond	Tennis Courts	Golf Course	Swimming Pool	Basketball Courts	Ball Fields	Playground	Walking/Bike Trails	Orientation (Passive or Active)*	Classification	Location Criteria	Size Criteria
Kistler Borough Park	Kistler Borough	1.0	Kistler Boro.	-	-	-	-	-	1	-	2	-	A	C	>	
Newton Hamilton Playground	Newton Hamilton Boro.	1.0	Newton Hamilton	-	-	1	-	-	1	-	-	-	A	C	>	
Tuscarora State Forest	Wayne Township	3,543.3	PA Bur. Of	-	-	-	-	-	-	-	-	Yes	P	NR	v	v
American Legion County Club	Wayne Township	130.5	American Legion	-	-	-	1	1	-	-	-	-	A	P	>	
Beacon Lodge Camp	Wayne Township	583.0 (1)	n/a	1	1	-	9-hole mini	2	½	-	1	1+	A	P	v	
Wayne Twp. Ballfield	Wayne Township	1.0	Wayne Township	-	-	-	-	-	-	1	-	-	A	C	>	
<b>Total</b>	-	4,259.8														

(1) Of the 583 acres, only 20 acres are considered developed. The balance remains as forested land area.

\* A=Active; P=Passive

C = Community Park; NR = Natural Resource Area; P = Private

> = Determined by the quality and suitability of the site. Usually serves two or more neighborhoods and 1/2 to 3 mile distance.

^ = Determined by location of school district property.

v = Variable

| = As needed to accommodate desired uses. Usually between 30 and 50 acres.

Sources: National Recreation and Park Association, 1996.

PA Department of Conservation and Natural Resources, Recreation Resource Inventory, 1999.

Mifflin County Planning and Development Department, 1999.

Mifflin County Mapping/MIS Department Online. "Experimental GIS Web Site." <http://mifflincounty.leworkshop.com/>, 2000.

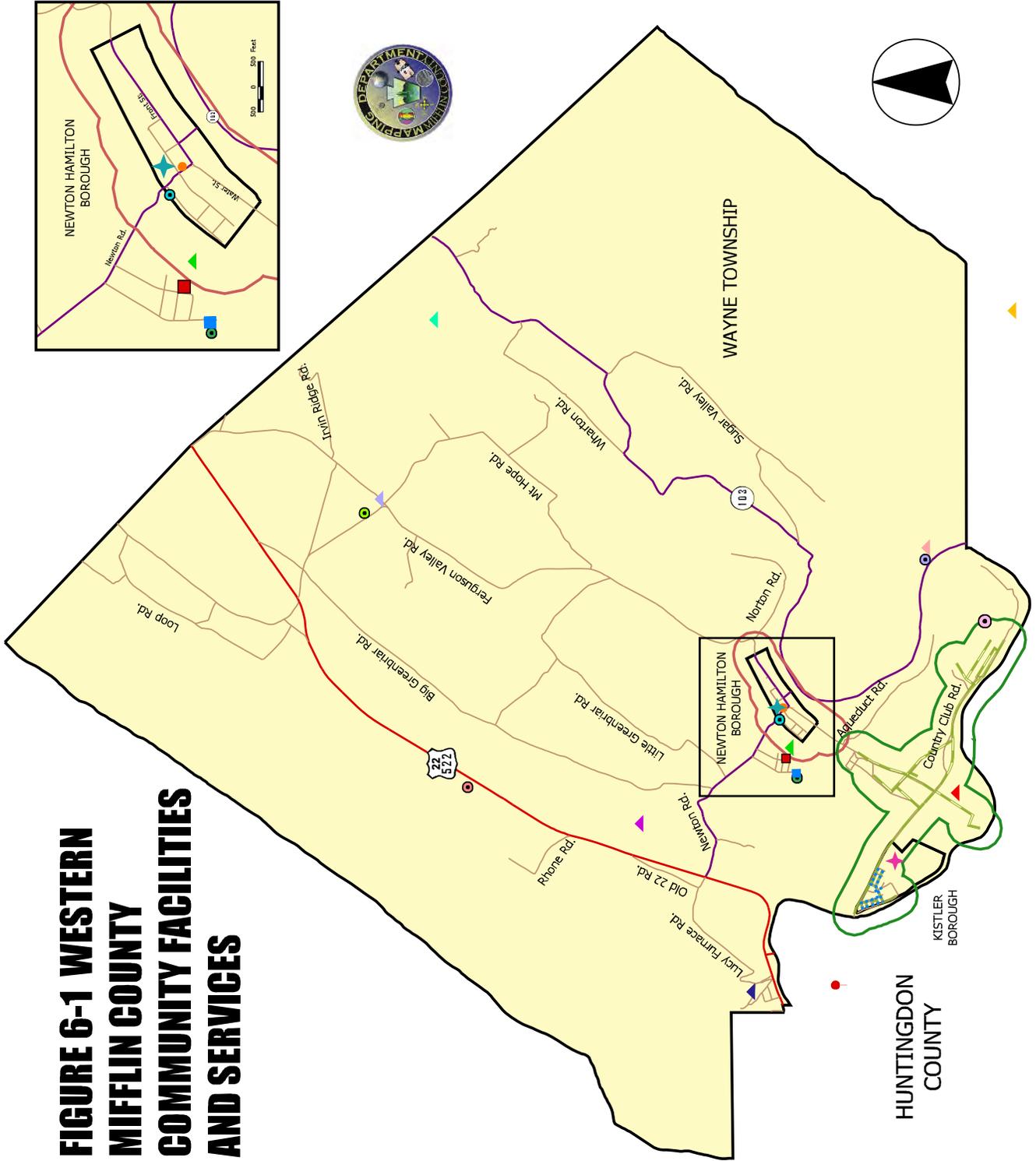
be compared with another, regardless of their similarities (NRPA 1996).

### *Unique Outdoor Recreation Opportunities*

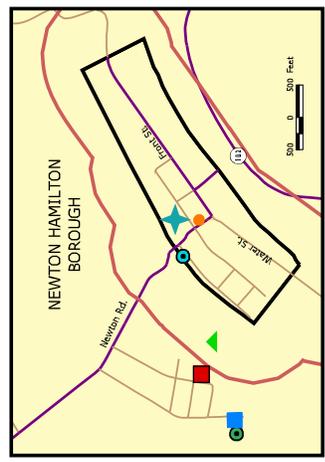
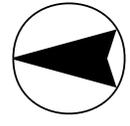
Recreational boating activities are an important component to the study area's various recreational opportunities. Much of Western Mifflin County's recreational boating activities are conducted on the Juniata River. The Juniata River provides good fishing for bass and other warm water fish. The Pennsylvania Fish and Boat Commission maintains a list of boating access areas under the ownership or control of the commission. Currently, the commission maintains a boating access area along the Juniata River in Newton-Hamilton Borough.

The Roth Rock and Tuscarora State Forests provide both local and regional residents with a variety of outdoor recreational opportunities, including hunting, cold water fishing, snowmobiling, and hiking and biking. These forests are most heavily used during the commonwealth's annual big game hunting seasons, which primarily run from October through January. Hunting and other outdoor recreation opportunities are important to the Western Mifflin County area; particularly in terms of supporting the local economy. However, these outdoor activities occasionally generate local problems and hazards, such as littering, trespassing and firearm safety.

# FIGURE 6-1 WESTERN MIFFLIN COUNTY COMMUNITY FACILITIES AND SERVICES



Prepared by the Mifflin County Mapping Department February 20, 2007.  
Data sources from aerial photography of Mifflin County, PA flown April 5th 1995 and field investigations.



## Chapter 7 - Transportation Analysis

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**INTRODUCTION**

The transportation network of a community is the backbone for its development and prosperity. It can help to attract a thriving society of merchants and residents and is the overall base plate for community growth. A carefully planned roadway network, designed to properly fit the structure of the community and suit its needs will ultimately mold the framework for its future population. The advancement and success of a community is often influenced by its transportation network, and if poorly planned or maintained, it can sometimes deter affluence and overshadow many of the community’s positive attributes.

**EXISTING ROADWAY NETWORK**

The existing roadway network of Wayne Township consists of a system of principal arterials (US 22/522), minor arterials (SR 103 & Newton Rd.), collectors and local roads (Figure 7-1). The roadway network for the Borough of Newton Hamilton is a system of local roads connected to Newton Rd. The roadway network for the Borough of Kistler is a system of local roads connected to Kistler Rd. The local roadways were originally established to connect the various farms and towns within the community. The major barriers of US 522, the railroad and the Juniata River, combined with a roadway network initially designed to suit the needs of the local community, results in an asymmetric roadway system layout.

The major roadways servicing the Township and Boroughs are as follows:

- ▶ US 22/522 provides northeast/southwest travel through the northern portion of the Township and provides indirect service to the Boroughs of Newton Hamilton and Kistler. The easternmost point of US 522 begins at Selinsgrove, connected

to US 11&15. The roadway continues in a southwest direction to Lewistown where it merges with US 22. US 22/522 enters Wayne Township at the northern boundary with Oliver Township and traverses the Township in a southwest direction to the southern boundary with Huntington County at Mt. Union, where US 22/522 splits into 22 and 522. At this juncture, the Dicosmo Bypass was recently constructed as part of Route 522 and serves to divert truck traffic around Mount Union Borough. US 22 continues west to Ohio, running through Pittsburgh, and US 522 continues south connecting with the PA Turnpike at Fort Littleton and continuing into Maryland and West Virginia.

- ▶ SR 103 provides northeast/southwest travel through the Township south of the Juniata River and provides indirect service to the Boroughs of Newton Hamilton and Kistler. The easternmost point of SR 103 begins at Lewistown and continues southwest, entering Wayne Township at the northern boundary with Bratton Township. The roadway traverses the township in a southwest direction and exits the Township at the southern boundary with Huntington County, south of the Juniata River. SR 103 continues along the Juniata River to Mt. Union.
- ▶ Newton Rd. provides north/south travel through the Township and the Borough of Newton Hamilton and provides indirect service to the Borough of Kistler. Newton Rd. connects US 22/522 with SR 103.

- ▶ Ferguson Valley Rd, although considered a local road and not a major roadway, is a highly utilized roadway for travel throughout the center of Wayne Township. This road provides for travel through the central portion of the Township north of the Juniata River and provides indirect service to the Boroughs of Newton Hamilton and Kistler.

### ACCESS POINTS TO MAJOR ROADWAYS

As indicated in above, US 22/522, SR 103 and Newton Rd. are the major roadways servicing Wayne Township and indirectly the Boroughs of Newton Hamilton and Kistler.

US 22/522 provides several at-grade signed intersections along its length within the township. These intersections are located at Ferguson Rd., Newton Rd./Lucy Furnace Rd., Big Greenbriar Rd., Fairview Rd., Old 22 Rd., and Phone Rd. In addition, it also provides two at-grade signalized intersection at the split into US 22 and US 522.

SR 103 provides several at-grade signed intersections along its length within the township. These intersections are located at Sugar Ridge Rd., Sugar Valley Rd., two intersections with Wharton Rd., Ryde Rd., and the Juniata River Bridge at Newton Hamilton Borough.

### ROADWAY CLASSIFICATIONS

Wayne Township contains principal and minor arterial roadways, collectors and local roads. Newton Hamilton Borough contains local roads that connect with the minor arterial, Newton Rd. Kistler Borough contains local roads that connect with the collector, Kistler Rd. Table 7-1 summarizes the roadway classifications. All roads shown on Table 7-1 are owned by either the

commonwealth or Wayne Township. No local roads for either Newton Hamilton or Kistler Borough are shown. Figure 7-1 illustrates the study area's roadway classifications.

#### Roadway Classification Definitions

##### *Interstate*

Limited access highways designed for traffic between major regional areas or larger urban communities of 50,000 or more; these highways extend beyond state boundaries, with access limited to interchanges located by the U.S. Department of Transportation.

##### *Freeway*

Limited access roads designed for large volumes of traffic between communities of 50,000 or more to major regional traffic generators (such as central business districts, suburban shopping centers and industrial areas); freeways should be tied directly to arterial roads, with accessibility limited to specific interchanges to avoid the impediment of thru traffic.

##### *Principal Arterials*

Principal Arterials provide land access while retaining a high degree of thru traffic mobility and serve major centers of urban activity and traffic generation. They provide a high speed, high volume network for travel between major destinations in both rural and urban areas.

##### *Minor Arterials*

Minor Arterials give greater emphasis to land access with a lower level of thru traffic mobility than principal arterials and serve larger schools, industries, institutions, and small commercial areas not incidentally served by principal arterials.

### *Collectors*

Collector Roads serve dual functions—collecting traffic between local roads and arterial streets and providing access to abutting properties. They serve minor traffic generators, such as local elementary schools, small individual industrial plants, offices, commercial facilities, and warehouses not served by principal and minor arterials.

### *Local Roads*

Those that are local in character and serve farms, residences, businesses, neighborhoods and abutting properties.

## **ROADWAY CONDITIONS**

Several of the Township roads are in need of improvements to facilitate increased safety, promote growth and accommodate the growing needs of the community. Improvements to existing established roadways generally consist of pavement overlays, pavement widening, shoulder construction and/or widening, pavement markings, guide-rail installation and drainage improvements.

In general Wayne Township, Kistler Borough and Newton Hamilton Borough roadways have poor or non-existent pavement markings, specifically center and edge lines. According to the Manual of Uniform Traffic Control Devices there are basically 3 types of centerline configurations that are recommended for use; (1) double solid yellow centerline, (2) single hatched yellow centerline, (3) double yellow centerline with one side hatched to identify passing lanes. Solid white edge lines create an easily identifiable travel lane and are especially useful to motorists at night and at times of inclement weather. Table 7-2 lists the roadways requiring attention and their associated deficiencies.

### Geometric Deficiencies

Several locations within the Township require attention for geometric improvement. Poor horizontal and vertical geometry is a safety hazard and deters the development of surrounding areas. Roadways that are not in conformance with design and/or construction standards can cause the need for excessive maintenance or repair of rutted roadway or off-road repair for accidents or instances of vehicles “running off the road.”

Table 7-3 list those roadways with poor geometric designs and their associated problems.

### Crash and Safety Analysis

A safety analysis was conducted to identify the number and types of crashes that occur at various locations throughout Wayne Township. Table 7-4 displays this data.

Crash data for the Township was obtained from the Pennsylvania Department of Transportation for the years 1994 through 1999. This information identifies number and type of crashes.

As indicated in Table 7-4, the four major documented types of crashes were improper turning, driving too fast for conditions, driving on the wrong side of the road and loss of control. The causes for these types of crashes may range from poor lane identification to limited sight distance. The location of each type of crash will require field inspection to ascertain the likely cause and appropriate mitigation. When a predominant crash pattern exists at a particular location,

**Table 7-1  
Existing Roadway Classifications**

Rural Principal Arterial	Rural Major Collector	Rural Minor Collector	Local Road
U.S. 22/522	SR 103	Juniata River Bridge at Newton Hamilton (SR 3021)	Newton Rd. (SR 3019)
			Ferguson Valley Rd. within Newton Hamilton Borough (SR 3017)
			Ferguson Valley Rd.
			Big Greenbriar Rd.
			Little Greenbriar Rd.
			Mt. Hope Rd.
			Fairview Rd.
			Loop Rd.
			Lucy Furnace Rd.
			Old Pike Rd.
			Country Club Rd.
			Lower Country Club Rd.
			Kistler Rd.
			Silverford Heights Rd.
			1st St.
			Memorial Rd.
			Parsons Rd.
			Wharton Rd.
			Sugar Ridge Rd. (Gravel)
			Sugar Valley Rd. (Gravel)
			Ryde Rd. (Gravel)
			Greenbriar Crossover (Gravel)
			Little Kansas Rd. (Gravel)
			Irvine Ridge Rd. (Gravel)
			Vineyard Rd. (Gravel)
			Norton Rd. (Gravel)
			Gillian Rd. (Gravel)
			Aqueduct Rd. (Gravel)
			Fielders Rd. (Gravel)
			Dale Rd. (Gravel)
			Bryce Ln. (Gravel)
			Roads within Newton Hamilton Borough not previously listed
			Roads within Kistler Borough not previously listed
			All other roads not listed

Source: Gannett Fleming, Inc. and PADOT, 1999.

**Table 7-2  
Roadway Conditions and Deficiencies**

Roadway	Condition/Deficiency
<b>State Roads</b>	
SR 103	17''-18'' width / Prone to flooding
SR 3017 (Sect. of Ferguson Valley Rd. through Newton Hamilton Borough)	Narrow roadway
<b>Wayne Township Roads</b>	
Ferguson Valley Rd. north of 22/522	Steep driveways wash gravel and debris onto roadway
Big Greenbriar Rd.	Narrow roadway; 40 mph speed limit is too high; Steep edges west end north side with no guide-rail
Little Greenbriar Rd.	17'' width
Mt. Hope Rd.	Sections with poor surface condition, 17'' width
Fairview Rd.	Sections with poor surface condition
Lucy Furnace Rd.	17'' width; Steep edges with no guide-rail
Old Pike Rd.	Utility pole in middle of road
Wharton Rd.	Spring crosses under road (no pipe); Floods due to proximity to river
Loop Rd.	Narrow roadway
1st st	17'' width
Kistler Rd.	Steep edges on east side with no guide-rail
Country Club Rd.	Sections with poor surface condition; Steep edges on east side with no guide-rail
Lower Country Club Rd.	Narrow roadway; Trees in clear zone
Dale Rd.	16'' width
Vineyard Rd. (Gravel)	Steepness causes washout
Little Kansas Rd. (Gravel)	Narrow roadway
<b>Borough Roads</b>	
Roads within Newton Hamilton Borough	Narrow roads, no shoulders
Roads within Kistler Borough	Narrow roads, no shoulders, 16''-17'' width

Source: Gannett Fleming, Inc., 1999.

**Table 7-3  
Geometric Deficiencies**

Roadway	Geometric Deficiency
<b>Wayne Township Roads</b>	
Ferguson Valley Rd. immediately east of Newton Hamilton	Poor sight distance at Conrail bridge; Sharp curve onto bridge
Ferguson Valley Rd. at intersection with Fairview Rd.	Poor sight distance due to Township maintenance bldg.
Big Greenbriar Rd.	Offset roadway alignment at intersection with Ferguson
Little Greenbriar Rd.	90 degree curve with poor sight distance
Mt. Hope Rd.	Two 90 degree curves signed in both directions
Lucy Furnace Rd.	90 degree curve with poor sight distance
Ryde Rd.	1st 100 yards is very steep
Little Kansas Rd.	Poor horizontal geometry due to stream

Source: Gannett Fleming, Inc., 1999.

**Table 7-4  
Crash Types and Number of Occurrences**

Crash Type*	Number of Occurrences
Improper Turning	24
Too fast for driving conditions	24
Driving on wrong side of road	23
Loss of control	18
Driver Drinking	12
Failure to heed stopped vehicle	11
Over posted speed	10
Pulled out too soon	8
Tailgating	8
Improper entrance	8
Overcompensation	6
Too fast for road design	6

Source: PADOT Bureau of Highway Safety and Traffic Engineering, 1994-1999

\* Specific crash locations were withheld under the direction of the PADOT. Municipal officials may obtain such specific information for internal use only upon request from PADOT.

improvements can sometimes be implemented to minimize the frequency of incidents based on an assessment of the probable cause.

Curb and Sidewalk Conditions

Subdivision and land development activities in Wayne Township, and Kistler and Newton Hamilton Boroughs are regulated by the Mifflin County Subdivision and Land Development Ordinance. According to the ordinance's minimum design standards for low density residential areas, "Sidewalks will not be normally required except where needed to facilitate pedestrian traffic to school, shopping, park, or other uses which generate pedestrian traffic" (p.25). As a reflection of these standards, there are limited to no curb and sidewalk facilities existing in Wayne Township, which is primarily due to the existence of single family homes (e.g., farmsteads) situated on large (i.e., > one acre) tracts of land. These low density rural development settings do not facilitate the need for pedestrian movement facilities such as sidewalks. Limited sidewalk facilities exist only in Kistler and Newton Hamilton Boroughs. However, these facilities mostly exist in a deteriorated condition.

Curbing is also limited to non-existent in the Wayne Township, which is not required under the county's subdivision and land development ordinance. According to local officials and as witnessed during field inspections, the township has experienced moderate to severe roadside drainage and erosion problems on both public and private road systems, which may be attributed to the lack of curbing. Limited curbing facilities do, however, exist in Newton Hamilton Borough, but are mostly in a poor to deteriorated condition.

**TRANSIT SERVICES**

Historically, the development of area trolley and bus services was a natural outgrowth linking the region's job opportunities with the residences of employees. At one point there were over 50 buses covering up to 6,000 miles a day in the County.

Today, the County's taxi and other mass transit services are inefficient and lacks a centralized service center.

*Bus Service*

Today, intercity bus service is provided by Greyhound Bus Lines and Fullington Trailways for both passenger and package shipments. Lewistown is an intermediate stop for both bus services, who operate along U.S. Route 322 from Harrisburg to State College, Altoona, Pittsburgh, and points west. These bus lines operate four east and west bound buses from Lewistown.

Recently, the Greyhound Bus Lines were forced to terminate their operations at the Gables Inn in Lewistown. Although Greyhound continues to service Mifflin County residents, the bus line has no ticket agency in Lewistown. This, in turn, causes passengers to be picked up at the Square and then taken to the next scheduled stop to purchase their tickets. Furthermore, the lack of a centralized transportation center poses several problems, such as passenger safety deficiencies and coordination between modes of transportation (i.e., Amtrak and bus services).

*Public Transit Service*

The Mifflin-Juniata Agency on Aging provides rural transit services throughout the two county area. The majority of patrons are persons 65 years of age and older requesting trips to local senior centers, shopping

facilities, and medical facilities. The service is funded by various sources including the Shared-Ride Program, Act 26, medical assistance, program income, and County funds.

Ridership information gathered from the agency is summarized as follows:

- ▶ From FY 1996-97 to FY 1998-99, one-way trips decreased from 63,420 to 56,937, or by 10.2 percent.
- ▶ Decreases in ridership are directly related to decreased attendance at senior citizen centers.
- ▶ Trips to local medical facilities are increasing, but at a slower rate than the decrease in other trips.

In addition to its current services, the Mifflin-Juniata Area Agency on Aging is being designated by Mifflin County as the provider of the Medical Assistance Transportation Program. This program annually generates approximately 7,500 trips.

The most significant problem associated with the Mifflin-Juniata Agency on Aging's transit service is the requirement that patrons must schedule pick-up service 24 hours in advance. This requirement is of particular concern for patrons needing medical services.

In conclusion, this comprehensive planning process has indicated a real need for improved local and regional transportation services. For example, the Quality of Life Survey revealed that the majority of respondents (48 percent) gave a moderate to high priority to establishing a local bus service. Also, the majority of respondents rated the County's public transit services as being either poor (over 49 percent) or fair (24 percent).

### RAIL TRANSPORTATION

Passenger rail service is provided by Amtrak which services points both east (i.e., Harrisburg, Philadelphia, and New York) and west (i.e., Altoona, Johnstown, Pittsburgh, Cleveland, Toledo, and Chicago) of Lewistown. Service is provided by the *Pennsylvanian*, *Three Rivers* and the *Skyline Connection* trains on a daily basis. A detailed schedule for these train connections at Lewistown is provided in Table 7-5.

In 1989 the Pennsylvania Intercity High Speed Rail Passenger Commission conducted a study to determine the feasibility of constructing and implementing a high speed rail system between Philadelphia and Pittsburgh. The corridor has been designated by the Federal Railroad Administration (FRA) as a highspeed rail corridor and is therefore eligible for consideration in demonstration funding packages. This system, which would be operated by Amtrak, would include a station stop in Lewistown. Based upon the study's recommendations, the commission voted for magnetic levitation for Pennsylvania. Since the completion of this study, there has been no substantive work performed on the Philadelphia-Pittsburgh high speed rail corridor. Ongoing work that has been done in the corridor is between Harrisburg and Philadelphia; as a result, this increases the possibility of extending service west of Harrisburg.

Norfolk Southern provides freight rail service in the area operating the former Conrail lines between the New York metropolitan area and the Midwest through Allentown, Harrisburg, Altoona, and Pittsburgh. Norfolk Southern also operates the Lewistown station in Mifflin County. Additional freight lines or other improvements to the existing Norfolk Southern service at Lewistown are not anticipated in the near future.

**Table 7-5  
Amtrak’s Pennsylvania Route Schedule and  
Services from Lewistown (Mifflin County), Pennsylvania**

Connection to Points West of Lewistown (Altoona...Johnstown...Pittsburgh...Cleveland...Chicago)			Connection	Connection to Points East of Lewistown (Harrisburg...Philadelphia...New York)		
Pennsylvanian	Three Rivers	Skyline Connection	Train Name	Pennsylvanian	Three Rivers	Skyline Connection
43	41	45	Train Number	44	46	40
Daily	Daily	Daily	Days of Operation	Daily	Daily	Daily
10:21 AM	6:37 PM	(1)	Service Time	8:49 PM	12:47PM	(1)

Notes: (1) Service to commence on a date to be announced.  
Schedules are subject to change without notice. For current schedule, visit [www.amtrak.com](http://www.amtrak.com) on the Internet.  
Source: Amtrak Online. [http://www.amtrak.com/timetables/pennrt\\_sum00.pdf](http://www.amtrak.com/timetables/pennrt_sum00.pdf). August 22, 2000.

Norfolk Southern’s services are supplemented with the services provided through the SEDACOG Joint Rail Authority (JRA). The JRA is a multi-county municipal authority responsible for preserving rail freight service and jobs in central Pennsylvania. The JRA is comprised of nine member counties, which in addition to Mifflin County, include Centre, Clinton, Columbia, Montour, Northumberland, Union and Lycoming Counties. Each county is represented on the Authority by two members, with one appointee usually being a shipper.

**TRAILS AND BIKEWAYS**

Pennsylvania Rails-to-Trails Act, (P.L. 748, No. 188 of 1990). This act was established to facilitate the conversion of abandoned railroads into public recreational trails. According to PA Rails-to-Trails database, no formally developed rail-trails exist in the study area. However, there does exist a portion of the 6.2 mile abandoned East Broad Top rail line segment stretching from Shirleysburg to Mt. Union Borough.

Other trail systems, such as the numerous hiking, biking, and cross-country skiing trail located within Bald Eagle State Forest and the

State Game Lands, provide area residents with adequate opportunities for outdoor recreation.

**AVIATION**

Aviation services are provided by the Mifflin County Airport located in Brown Township and the Huntingdon County Airport located in Shirley Township.

*Mifflin County Airport*

The Mifflin County Airport, which is owned and operated by the Mifflin County Airport Authority, is classified as a business service airport by the Pennsylvania Bureau of Aviation. The authority is scheduled to begin updating the Mifflin County Airport Master Plan during the latter part of 2000.

The Mifflin County Airport supports the general aviation needs of local and visiting businesses, and increases their business efficiency and flexibility. In addition, the airport supports various recreational aviation activities. The airport is located approximately 2.0 miles from U.S. Route 322 and approximately 30 miles south of Interstate 80. In addition, both the airport and the Lewistown region are in close proximity to various scheduled aviation facilities such as

Pittsburgh International, Philadelphia International, and Baltimore/Washington International.

According to PADOT, the Mifflin County Airport, with 18 based aircraft, experiences over 10,000 annual operations. The airport's single runway—Runway 6/24—is 5,001 feet long and 75 feet wide, and is coupled with a full-length parallel taxiway. Both runway ends have non-precision approaches. Jet A and 100 octane low lead aviation gas is available on-site, as well as rental cars and taxi service.

The economic impact of the Mifflin County Airport has been analyzed in the PADOT, Bureau of Aviation's technical report entitled *The Economic Impact of Aviation in Pennsylvania* (1994) and is described as follows: "For 1994, the total output (including direct and secondary impacts) stemming from all on-airport tenants and general aviation visitors to the Mifflin County Airport was approximately \$448,700. Total full-time employment related to airport tenants and general aviation visitors, including all secondary impacts, is estimated at nine persons, with a total annual payroll (direct and secondary) of approximately \$147,200 associated with these jobs."

In addition, Mifflin County is also supported by scheduled aviation services from the Harrisburg International Airport in Middletown (Dauphin County) and the University Park Airport in State College (Centre County).

#### *Huntingdon County Airport*

The Huntingdon County Airport is a privately-owned, public use airport that serves both business and recreational flying. The airport is classified as a general aviation facility by the Pennsylvania Bureau of Aviation.

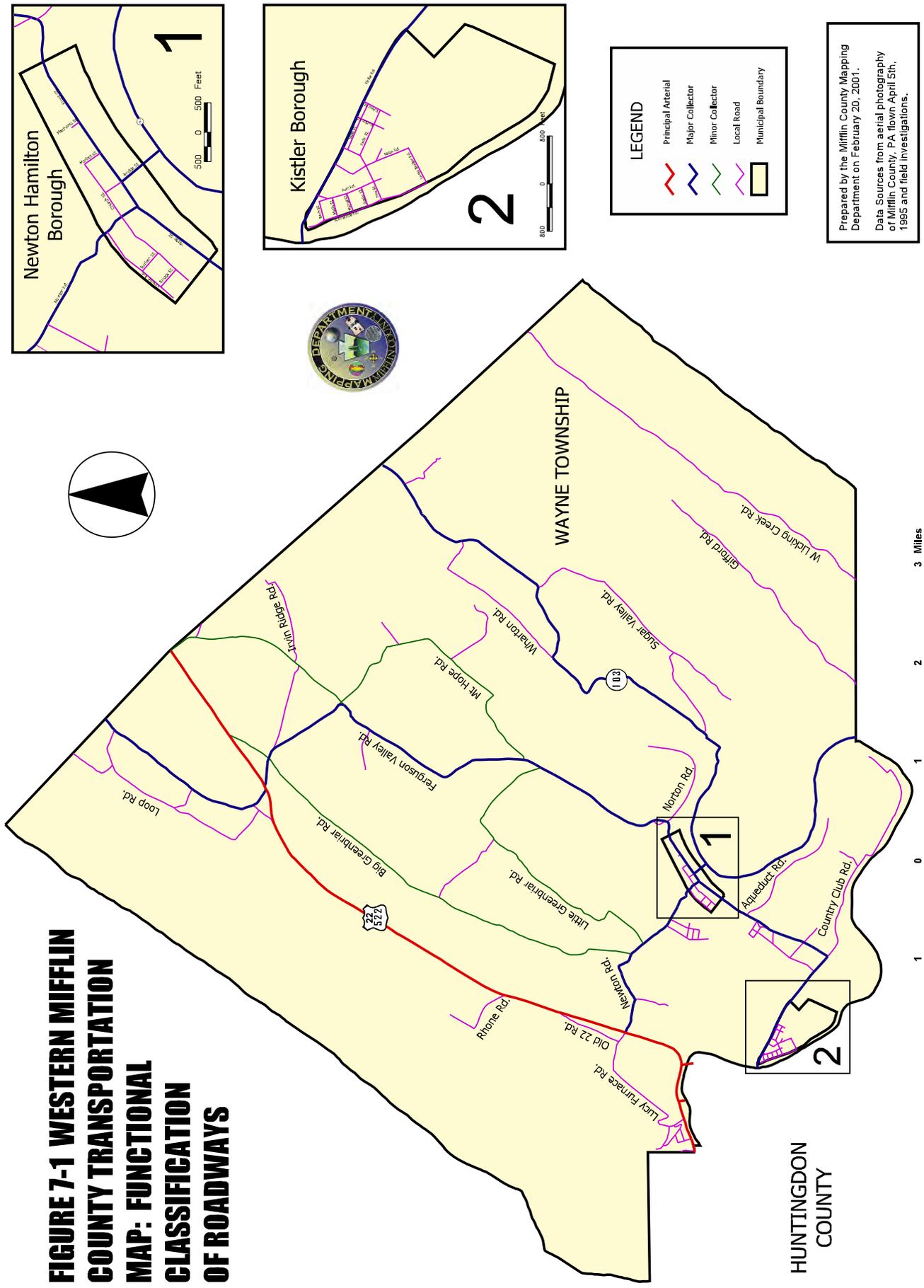
## **LIQUID FUELS TAX**

Chapter 449 of the Pennsylvania Code establishes a permanent allocation of a portion of the liquid fuels and oil company franchise tax proceeds to cities, boroughs, incorporated towns and townships for their maintenance and new construction of locally owned roads, streets and bridges. The allocation amount is based upon a specific formula that accounts for the total number of local highway miles in each municipality.

A problem faced by many rural municipalities is the fact that transportation maintenance and construction expenditures consistently exceed liquid fuel tax revenues. As a result of this statewide trend, the County Commissioners Association of Pennsylvania recently adopted a resolution that supports a revision of the county liquid fuels tax distribution formula (CCAP, August 1999). Currently, Mifflin County distributes liquid fuels tax funds to its municipalities based on the typical population and road miles formula system. Other counties, such as Lycoming and Clinton, split their allocation between the typical method and a competition basis. Mifflin County is currently considering a similar type of system.

Lycoming County's competitive allocation method, for example, uses a procedure by which the distribution of liquid fuels tax funds are based on various criteria such as traffic counts, crash statistics, potential impact on economic development, impact on emergency services, percent of cost the county would be funding, whether or not the project is included on PADOT's Twelve Year Program and whether or not the municipality has received funding in the past.

# FIGURE 7-1 WESTERN MIFFLIN COUNTY TRANSPORTATION MAP: FUNCTIONAL CLASSIFICATION OF ROADWAYS



## Chapter 8 - Cultural Resources Analysis

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### INTRODUCTION

Cultural resources consist of prehistoric and historic districts, sites, structures, artifacts, and other physical evidence of human activities considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. A wealth of cultural resources are found throughout Mifflin County, including the Western Mifflin County study area. A review of these resources increases our understanding and appreciation of our local heritage and improves the quality of life. Many significant cultural resources are of value to the local economy because they serve as tourist attractions.

### HISTORIC PRESERVATION

Federal and state historic preservation laws require federal and state agencies to consider the effects of their actions on all historic and prehistoric sites, districts, buildings, and structures eligible for inclusion in the National Register of Historic Places. According to the National Park Service, “The National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources.” Federal legal mandates include Section 106 of the National Historic Preservation Act of 1966, Executive Order 11593, and the regulations of the Advisory Council on Historic Preservation. Pennsylvania’s legal mandates include the Environmental Right Amendment, Article 1, Section 27 of the Pennsylvania Constitution, and the Pennsylvania Historic Preservation Act of 1978.

Information regarding Western Mifflin County’s historic properties was collected from the Pennsylvania Historic and Museum Commission (PHMC) and the National Park Service, and are listed in Table 8-1. As shown, there are no “listed” historic properties

located within the study area. However, the three properties shown are listed as “eligible” properties, which means they meet the criteria established by both the PHMC and the National Park Service (Figure 6-1).

In addition to the historic properties contained in Table 8-1, the Mifflin County Planning Commission prepared the 1978 “Historical Sites Survey–Mifflin County.” This report provides an inventory of structures in Mifflin County that were built before 1875 and have, for the most part, retained their architectural or historical integrity. The report is divided into three parts. Part I provides a brief history of Mifflin County and its inhabitants. Part II, which is the main body of the report, contains a photograph, narrative description and historical overview, site number, and map location of each inventoried site. Part III is a summary of the report that also includes the guidelines used for inventorying, as well as the registration process for the National Register of Historic Places. Of the 148 sites inventoried, 15 were identified as being located in Wayne Township, and one each in Newton Hamilton and Kistler Boroughs. Table 8-2 provides a listing of these sites along with their respective locations.

There have been a number of historic preservation efforts in recent years to further promote the preservation of Mifflin County’s historic resources. For example, the Pennsylvania Canal Society has recognized this comprehensive plan as a tool to have the Juniata Division of the Pennsylvania Main Line Canal identified as a National Register “listed” property. As stated by the society, “Mifflin County contains about 45 miles of the Juniata Division, but more importantly, it contains the only restored and watered section of the entire 127.5-mile Division and the longest restored and watered section of the

**Table 8-1**  
**National Register of Historic Places**  
**Listed and Eligible Properties in Western Mifflin County, PA**

Historic Name	Municipality	Address	Listed	Eligible
-	Newton Hamilton Boro.	Front, Church, Bridge St, Wayne	-	11/16/1993
G&H Wharton Farmstead	Wayne Twp.	Eastside of SR 3021	-	11/16/1993
Kistler Historic District	Kistler Boro.	Riverside Rd, Park Rd, Beaver	-	12/19/1988

Sources: Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation.  
 National Park Service. Online. National Register of Historic Places Research Page. <http://www.nr.nps.gov/nrshome.htm>.

**Table 8-2**  
**Historic Surveyed Sites for Western Mifflin**  
**County, 1978**

Site Name	Municipality
Kenneth Covert Residence	Kistler Borough
Clemens Residence	Newton Hamilton Borough
Arnone Property	Wayne Township
Bruce Bratton Residence	Wayne Township
Elam Hostetler Residence	Wayne Township
Grace Bratton Residence	Wayne Township
Henderson Log House	Wayne Township
J.C. Bratton Property	Wayne Township
Jerry Boyer Residence	Wayne Township
Matilda Furnace	Wayne Township
Paul Forgy Residence	Wayne Township
Pine Tree	Wayne Township
Reverend Bruce Grove Property	Wayne Township
Sportmen's Club	Wayne Township
Walter Smith Residence	Wayne Township
Wayne Church	Wayne Township
Witchell Gearhart Residence	Wayne Township

Source: Mifflin County Planning and Development Department,  
 "Historic Sites Survey." 1978.

entire 394.5-mile Pennsylvania Main Line System.”

Several organizations, focused on the promotion and preservation of the county’s rich history, exist in the county. The most prominent is the Mifflin County Historical Society. The society’s mission is to promote an understanding of the history of Mifflin County and its relationships to regional and national events through preservation, research, education, and restoration. The society takes an active lead in assisting with the Pennsylvania Historical and Museum Commission’s goals by identifying and protecting those resources having historical significance.

Mifflin County is currently involved in securing funding for the restoration of the Old Mifflin County Courthouse. The total project cost is estimated to be between \$700,000 to \$1 million. In June 1999, the County prepared and submitted a \$100,000 application to the PHMC’s Keystone Historic Preservation Grant Program. A grant of \$46,100 was awarded to the County in December 1999. However, the County was notified that \$785,000 was set aside in the state’s capital budget to assist in the rehabilitation effort. But, these funds are in the control of the Governor and will require a strong lobbying campaign to have the funds released. In support of these lobbying efforts, the County completed a Draft Master Plan in 1999 to provide a blueprint for reusing the courthouse.

Additional historic programs existing in Mifflin County include the Friends of the Embassy Theatre in Lewistown, Kishacoquillas Valley Historical Society, and the Pennsylvania Historical Railroad Society in Granville Township. The Friends of the Embassy Theater—an independent 501 (c) 3 non-profit organization—is actively involved in its restoration and conversion of the facility into a multiple-use theater and community arts

center. The Kishacoquillas Valley Historical Society was formed approximately eight years ago in Allensville with the purpose of preserving the Kish Valley. The society owns and operates a museum (138 East Main Street) that has a significant collection of primitive art by local Amish and Mennonite artists, as well as a collection of early indigenous American Indian artifacts. The museum was built in 1838.

## Chapter 9 - Environmental Resources Analysis

### INTRODUCTION

The inventory and identification of Western Mifflin County's environmental resources is an important part of the planning process. Delineation of these resources serves as a guide for future planning decisions. For example, the Mifflin County's Subdivision and Land Development Ordinance, which governs subdivision and land development activities in Wayne Township, and Kistler and Newton Hamilton Boroughs, requires the consideration of environmental issues as part of the plan review process for land development activities.

The following sections of the plan will identify and describe the study area's environmental features. This information will serve to assist various constituents in their decision making processes.

### FLOODPLAINS

Floodplain areas absorb and store large amounts of water, which is a source of aquifer recharge. Natural vegetation supported by floodplains helps to trap sediment from upland surface runoff, stabilize stream banks, and reduce soil erosion. Floodplains also provide shelter for wildlife and proper stream conditions for aquatic life. Many scenic areas in Western Mifflin County are found within the floodplains of the Juniata River. The Juniata River 100-year floodplain is delineated on Figure 9-1.

Regulation of floodplains helps to reduce the threat to human life and property caused by periodic flooding. For regulatory purposes, a floodplain is defined by the 100-year or base flood which has a one percent chance of being equaled or exceeded in a given year.

The Pennsylvania Floodplain Management Act (Act 166 of 1978) requires municipalities identified as being flood-prone, to enact

floodplain regulations which, at a minimum, meet the requirements of the National Flood Insurance Program (NFIP). The NFIP is a federal program that allows property owners in participating communities to purchase insurance protection against losses from flooding.

The NFIP Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. The National Flood Insurance Reform Act of 1994 codified the CRS in the NFIP. Under the CRS, flood insurance premium rates are adjusted to reflect the reduced flood risk resulting from community activities that meet the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance.

There are ten CRS classes—Class 1 requires the most credit points and gives the largest premium reduction, where Class 10 receives no premium reduction. The CRS recognizes 18 creditable activities, organized under four categories numbered 300 through 600—Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.

According to the Federal Emergency Management Agency's (FEMA's), NFIP Community Status Book, Wayne Township, and Kistler and Newton Hamilton Boroughs are participating in the NFIP program and have adopted floodplain ordinances. These ordinances regulate development within the floodplain. However, none of these municipalities are participating in the CRS program.

### WETLANDS

Wetlands are unique environments that perform a variety of important functions. They moderate stormwater runoff and

downstream flood crests because they are natural water storage areas. Wetlands provide important habitats for many species of plant and animal life. Wetlands also help to maintain a stream flow and groundwater recharge.

There are problems associated with developing on wetland soils. Wetlands located in floodplains are often flooded. Draining or filling in of upland wetlands removes natural water storage, which can add to stormwater runoff problems downstream. Wetland soils are easily compacted. This results in uneven settling of structures. Wetland soils with low permeability and high groundwater tables are not suitable for the installation of on-lot septic systems.

Laws, such as the Federal Clean Water Act and similar state and local laws, have led to the enforcement of wetland protection. In Pennsylvania, development in wetland areas is strictly regulated by the U.S. Army Corps of Engineers and the Pennsylvania Department of Environmental Protection. Therefore, any development of these areas is subject to both federal and state permitting processes.

As shown on Figure 9-1, wetlands are prevalent within the study area with the highest concentrations occurring along the Juniata River. It is important to note that the wetland areas shown were derived from the 1980 National Wetland Inventory, which have limited accuracy and therefore, do not fully represent the extent and locations of all wetlands in the county.

### **STEEP SLOPES**

Western Mifflin County is located entirely within the tightly folded and faulted Ridge and Valley Province of the Appalachian Physiographic Region. Much of the study area contains sizeable areas of steep slopes

located along Jacks Mountain and Blue Mountain.

Slopes with grades of 15 percent or greater are considered steep. If disturbed, these areas can yield heavy sediment loads on streams. Very steep slopes, with over 25 percent grade, produce heavy soil erosion and sediment loading. Figure 9-2 illustrates the study area's steep slopes.

Though erosion and runoff in steep slope areas are natural processes, development activities located in these areas can alter the gradients and upset the natural balance. However, by redirecting water runoff from buildings and impervious surfaces away from the face of steeper slopes, severe soil erosion and drainage problems can be avoided.

The four factors influencing soil erosion are vegetation, soil type, slope size and inclination, and the frequency and intensity of rainfall. On most surfaces, vegetation is the single most important erosion control factor. The higher the cover density, the lower the soil loss to runoff.

Septic systems for on-lot sewage disposal are impractical to construct and maintain on very steep slopes because the downhill flow of the effluent is too rapid. Improperly treated effluent is likely to surface at the base of the slope, causing wet, contaminated seepage spots. If there is a layer of impervious material such as dense clay or rock under shallow soils, the effluent may surface on the slope and run downhill unfiltered.

### **SOILS**

The *Soil Survey of Juniata and Mifflin Counties, Pennsylvania* (1981) combines soils into Soil Associations, which emphasize how soil depth, slope, and drainage affect potential land use. The associations are helpful in attaining a general idea of soil quality, in

comparing different sections of the study area and locating large areas suited for certain uses.

### *Prime Agricultural Soils*

Prime farmland, as defined by the U.S. Department of Agriculture (USDA), is the land that is best suited to producing food, feed, forage, and fiber and oilseed crops. It has the soil quality, growing season, and water supply needed to economically produce a sustained high yield of crops when it is treated and managed using acceptable farming methods. According to the USDA, prime farmland soils are usually classified as capability Class I or II. Of Western Mifflin County's total land area, 296.5 acres are classified as Class I soils and 18,663.1 acres are classified as Class II soils.

Farmland soils of statewide importance are soils that are predominantly used for agricultural purposes within a given state, but have some limitations that reduce their productivity or increase the amount of energy and economic resources necessary to obtain productivity levels similar to prime farmland soils. These soils are usually classified as capability Class II or III. As shown on Figure 9-3, Western Mifflin County's prime agricultural soils are primarily concentrated in Ferguson and Juniata River Valleys.

### *Highly Erodible Soils*

Of the 79,400 acres of farmland in Mifflin County, approximately 45,000 acres are considered Highly Erodible Land (HEL) as defined by the USDA Natural Resource Conservation Service (NRCS). Therefore, agricultural activities should be conducted in accordance with Mifflin County Conservation District approved conservation plans. Fifty conservation plans have been written for 6,353 acres in Wayne Township. No plans have been developed in Kistler and Newton Hamilton Boroughs.

### *On-lot Septic Suitability*

The soil properties, which are of primary concern in the unsewered portions of the county, are the suitability for septic tank installation. Soil properties affecting effluent absorption are permeability, depth to seasonal high water table, depth to bedrock, slope, and susceptibility to flooding. Without proper soil conditions, septic tanks will not operate properly and health hazards may result.

According to the 1981 Soil Survey, approximately 87 percent of the county's soils have a *severe* degree of soil suitability for septic tank absorption fields. Therefore, major soil reclamation, special technologies, or intensive system maintenance is required to achieve satisfactory system performance.

Figure 9-4 identifies the soil locations which are potentially unsuitable for on-lot systems; suitable for alternative systems such as trench-type and elevated sand mound technologies; and potentially suitable for conventional gravity fed systems. It is important to note that analysis at this scale, based upon available data, is no substitute for site testing. This analysis should be used only as a general indication of those areas that may be suitable for on-lot systems.

## WATER QUALITY AND SUPPLY

### *Surface Waters and Drainage*

Surface waters include rivers, streams and ponds, which provide aquatic habitat, carry or hold runoff from storms, and provide recreation and scenic opportunities. Surface water resources are a dynamic and important component of the natural environment, but ever-present threats such as pollution, construction, clear-cutting, mining, and overuse have required the protection of these valuable resources.

## Chapter 9 - Environmental Resources Analysis

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The Western Mifflin County study area is located in the Lower Juniata River Subbasin (Subbasin Number 12) and is drained by both the Aughwick Creek and Kishacoquillas Creek Watersheds (Subbasin Number 12) is included in the Susquehanna River Basin.

The Pennsylvania Chapter 93 Water Quality Standards classify all surface waters according to their water quality criteria and protected water uses. Selected water bodies that exhibit exceptional water quality and other environmental features are referred to as “Special Protection Waters.” Certain activities in those watersheds that could adversely affect surface water are more stringently regulated to prevent degradation. All land development, sewage treatment and disposal, industrial and municipal waste, mining and quarrying, timber harvesting, stormwater management, and confined feeding operations must follow guidelines found in the Special Protection Waters Implementation Handbook, or other regulations relative to Special Protection Waters. More than half of Mifflin County’s land area lies within Special Protection Watersheds.

Various public agencies, organizations, and concerned citizens located within the Juniata River watershed have recognized the importance of protecting and restoring the Juniata River and its tributaries through the creation of the Juniata Clean Water Partnership (JCWP). The JCWP is a team of citizens, community groups, non-profit conservation organizations, county planning offices, and county conservation districts who spearheaded local support for the development of a Rivers Conservation Plan. In May 1998, the Southern Alleghenies Conservancy and the Mid-State Resource Conservation and Development Council, on behalf of the JCWP, received a grant from the PADCNR Keystone Rivers Conservation Program to develop the plan. The purpose of the plan is to implement

a regional effort to create a comprehensive watershed plan that identifies natural resource issues, concerns, threats, and opportunities. A preliminary draft of the plan has been completed. The final plan was completed and released to the public during the Fall of 2000.

The Department of Conservation and Natural Resources (DCNR) selected the Juniata River as “Pennsylvania’s Feature River of the Year” for 2001. In honor of this designation, the JCWP will host an 8-day river sojourn in June, which will be the focus of DCNR’s June Rivers Month activities.

### *Groundwater Quality and Supply*

Groundwater quality and supply is ultimately controlled by bedrock geology. Geologic factors such as rock type, intergranular porosity, rock strata inclination, faults, joints, folds, bedding planes, and solution channels affect groundwater movement and availability. Groundwater quality is dependent on the interaction between the groundwater and the bedrock. The more soluble bedrock, such as limestone, allow more compounds to be dissolved in the groundwater, thus resulting in increased hardness values.

Western Mifflin County is underlain by a wide variety of sedimentary rocks, which are folded into moderately open to closed plunging folds. Rocks underlying the county were formed during the Devonian (365 to 405 million years ago), Silurian (405 to 430 million years ago), and Ordovician (430 to 500 million years ago) periods. Western Mifflin County’s geologic formations are shown on Figure 9-5 and characterized in Table 9-1.

### **KARST TOPOGRAPHY**

Portions of Western Mifflin County’s landscape is underlain by limestone based geologic formations, which are identified in Table 9-1. Limestone, which is a carbonate

rich material, is highly soluble and susceptible to the formation of solution caverns and sinkholes. (i.e., karst topography). Karst refers to any terrain where the topography has been formed chiefly by the dissolving of rock. Landforms associated with karst include sinkholes, caves, sinking streams, springs, and solution valleys. Because of the unique geologic and hydrologic features associated with highly developed subterranean networks, the scope of problems related to the karst environment is large. Karstic landscape is particularly sensitive to environmental degradation, with the depletion and contamination of groundwater supplies being among the most severe.

Stormwater runoff also contributes to sinkhole activity. According to Kochanov, “The stormwater drainage problem is compounded in karst areas by the fact that development reduces the surface area available for rainwater to infiltrate naturally into the ground. A typical residential development having quarter-acre lots may reduce the natural ground surface by 25 percent, whereas a shopping center and parking lot may reduce it by 100 percent. If storm water, gathered over a specific area, is collected and directed into a karst area, the concentration of water may unplug one of the karst drains” (p .19)<sup>1</sup>

Although karst landforms pose hazardous conditions, they are, in fact, valuable for various reasons including serving as areas for endangered species of flora and fauna, may contain cultural resources (i.e., historic and prehistoric), contain rare minerals or unique landforms, and provide scenic and challenging recreational opportunities.

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<sup>1</sup> Kochanov, W. E., 1999, Sinkholes in Pennsylvania: Pennsylvania Geological Survey, 4th ser., Educational Series 11, 33 p.

Table 9-1  
Engineering Characteristics of Western Mifflin County's Geologic Formations

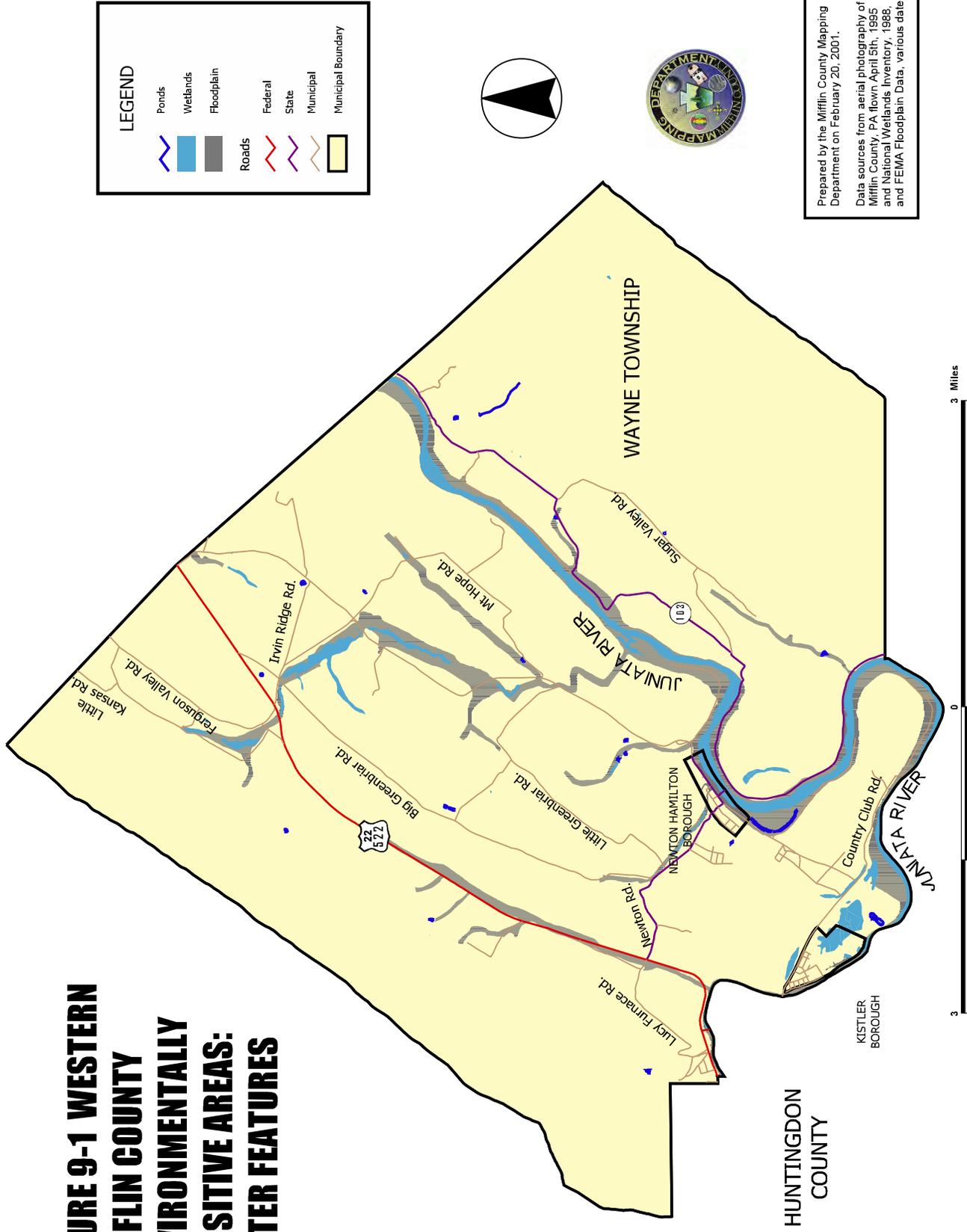
Formation	Description	Porosity	Permeability	Ease of Excavation	Foundation Stability*	Quantity of Groundwater (Median Yield)
Bloomsburg Fm	Red shale and siltstone	Low to Moderate	Moderate	Moderately easy	Good	45 gpm.
Clinton Group	Fossiliferous sandstone; hematitic sandstone and shale	Low	Low	Moderate	Good	12 gpm
Hamilton Group	Fossiliferous siltstone and shale; oolitic hematite; conglomerate	Low to Moderate	Moderate	Moderate	Good	30 gpm
Juniata Fm	Brownish-red, fine-grained to conglomerate, quartzitic sandstone	Low	Low	Difficult	Good	17 gpm
Keyser Fm	Medium-gray limestone and calcareous shale	Medium to High	Moderate to low	Difficult	Good	30 gpm
Mifflintown Fm	Shale interbedded with fossiliferous limestone	Low	Moderate to Low	Moderate to Difficult	Good	20 gpm.
Old Port Fm	Includes sandstone, chert, shale, and limestone	Moderate to High	Moderate to High	Difficult	Good	5 gpm
Onondaga Fm	Medium-gray limestone and calcareous shale	Moderate	Moderate to Low	Difficult	Good	30 gpm
Tonoloway Fm	Laminated limestone interbedded with shale and siltstone	Moderate	Moderate to Low	Difficult	Good	30 gpm
Tuscarora Fm	Sandstone and quartzite	Low to Moderate	Low	Difficult	Good	23 gpm
Wills Creek Fm	Greenish-gray shale containing local limestone and sandstone	Low	Low	Moderate	Good	32 gpm

\* Note: Formations containing limestone should be investigated thoroughly for solution openings.

Sources: Pennsylvania State University, Earth Resources Research Institute, 1994.

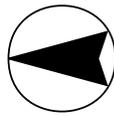
Alan R. Geyer and J. Peter Wilshusen, Engineering Characteristics of the Rocks of Pennsylvania. 1992. (Pennsylvania Geological Survey, Harrisburg, PA).

**FIGURE 9-1 WESTERN  
MIFFLIN COUNTY  
ENVIRONMENTALLY  
SENSITIVE AREAS:  
WATER FEATURES**



**LEGEND**

- Ponds
- Wetlands
- Floodplain
- Roads
- Federal
- State
- Municipal
- Municipal Boundary



Prepared by the Mifflin County Mapping Department on February 20, 2001.  
Data sources from aerial photography of Mifflin County, PA flown April 5th, 1995 and National Wetlands Inventory, 1988, and FEMA Floodplain Data, various dates.

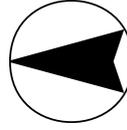


# FIGURE 9-2 WESTERN MIFFLIN COUNTY ENVIRONMENTALLY SENSITIVE AREAS: STEEP SLOPES

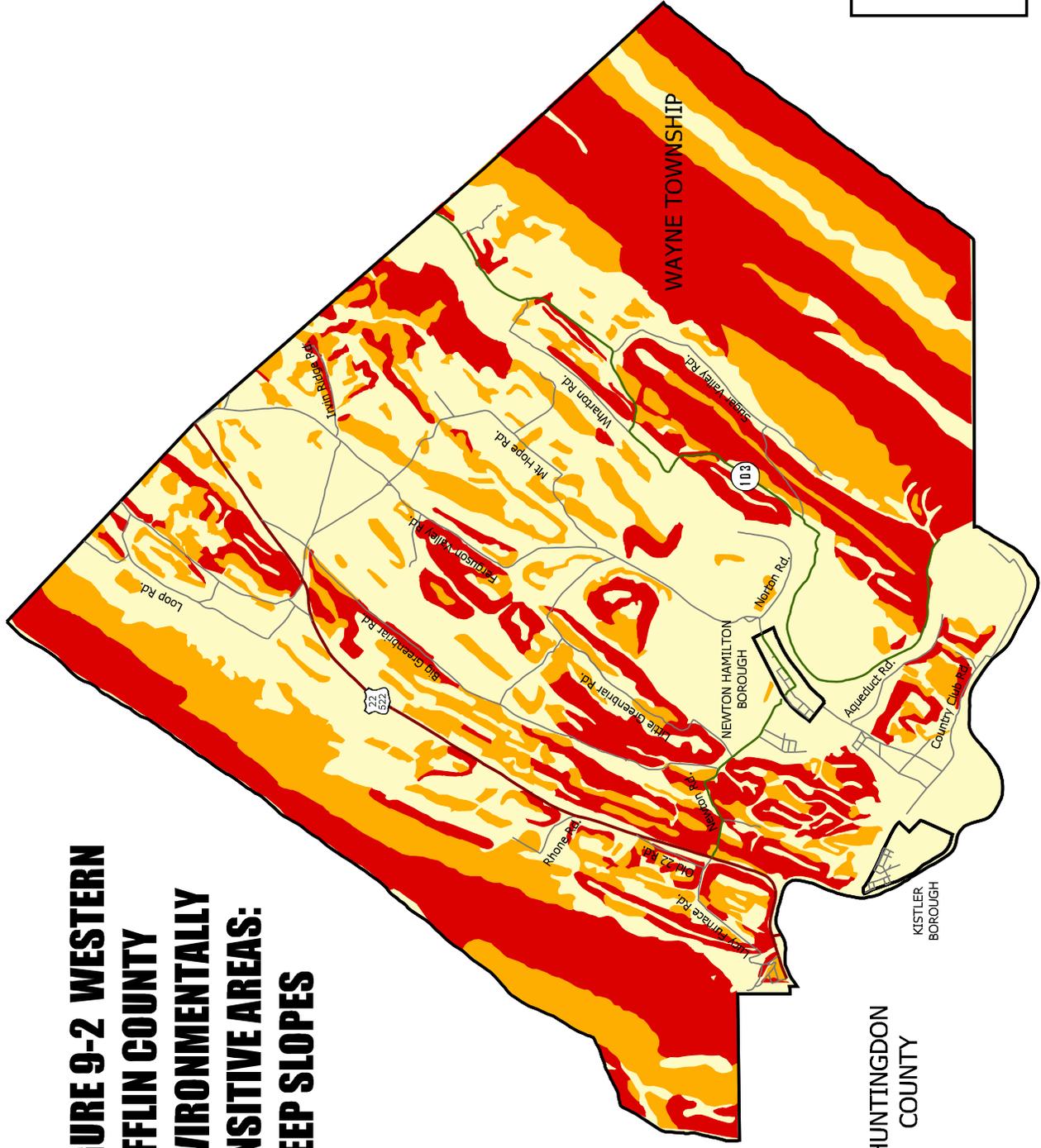


**LEGEND**

	15 - 25% slope
	Greater than 25% Slope
<b>Roads</b>	
	Federal
	State
	Municipal
	Municipal Boundary



Prepared by the Mifflin County Mapping Department February 20, 2001.  
 Data sources from aerial photography of Mifflin County PA flown April 5th, 1985, and USDA, NRCS Soil Survey Geographic Database (SSURGO) digitally created in 1980 from the Mifflin-Juniata Soil Survey Report.



# FIGURE 9-3 WESTERN MIFFLIN COUNTY ENVIRONMENTALLY SENSITIVE AREAS: PRIME AGRICULTURAL SOILS



**LEGEND**

Soil Classes

- 1
- 2
- 3

Roads

- Federal
- State
- Municipal
- Municipal Boundary

**Capability Classes**

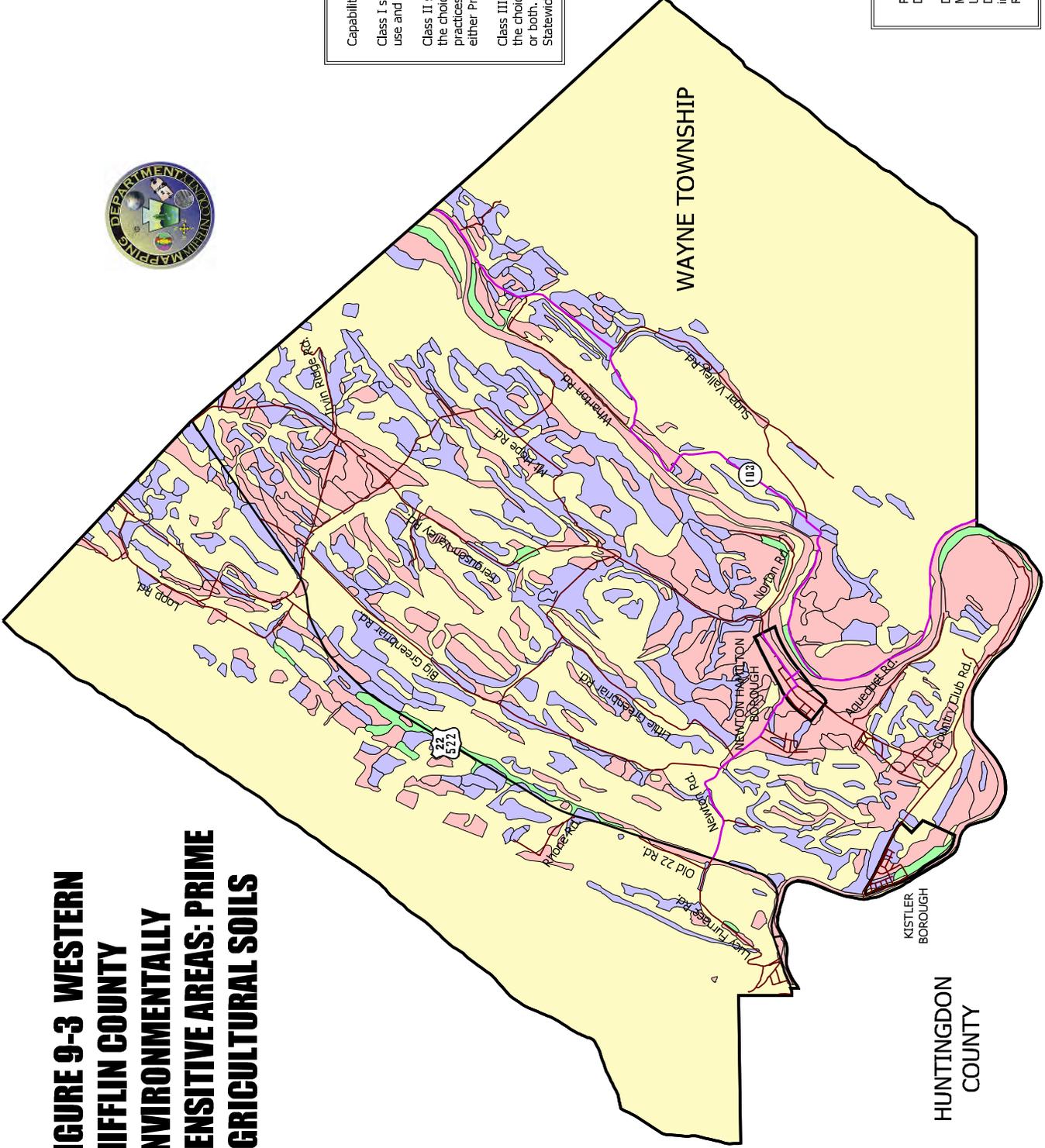
Class I soils have few limitations that restrict their use and are usually classified as Prime Farmland Soils.

Class II soils have moderate limitations that reduce the choice of plants or require moderate conservation practices, or both. These soils are usually classified as either Prime Farmland Soils or Soils of Statewide Importance.

Class III soils have severe limitations that reduce the choice of plants or require very careful management, or both. These soils are usually classified as Soils of Statewide Importance.

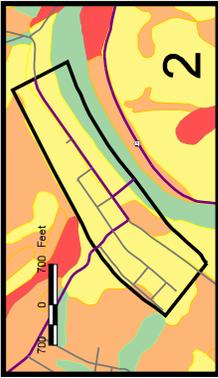
Prepared by the Mifflin County Mapping Department February 20, 2001.

Data sources from aerial photography of Mifflin County, PA flown April 5th, 1995 and USDA, NRCS Soil Survey Geographic Database (SSURGO) digitally created in 1980 from the Mifflin, Juniata Soil Survey Report.

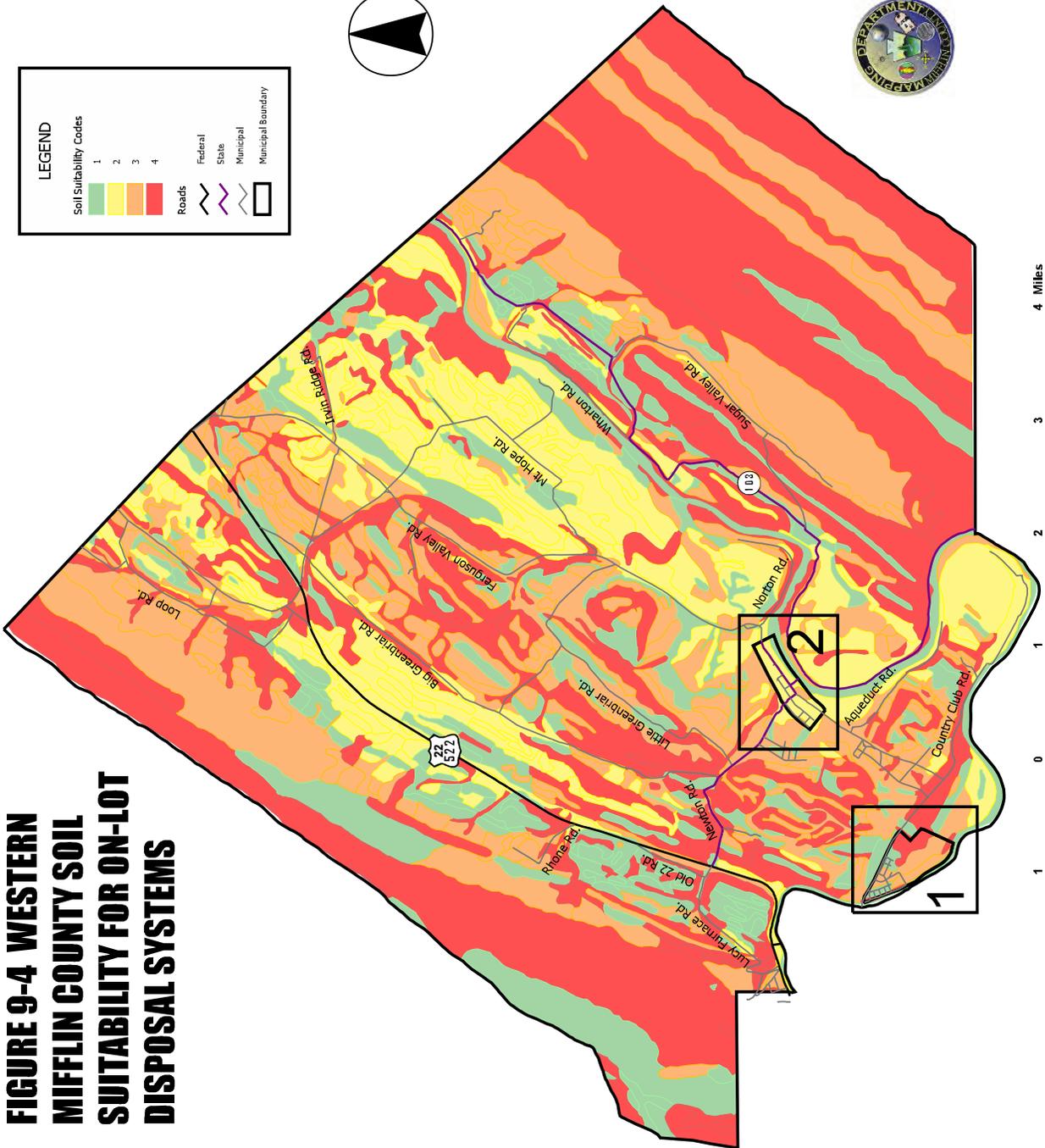
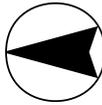
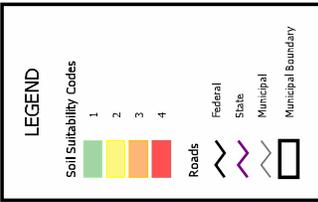
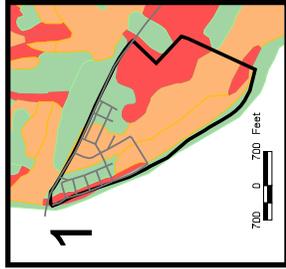


**FIGURE 9-4 WESTERN  
MIFFLIN COUNTY SOIL  
SUITABILITY FOR ON-LOT  
DISPOSAL SYSTEMS**

Newton Hamilton Borough



Kistler Borough



Code	Description
1	Generally suitable for a variety of on-lot sewage disposal systems which may include the following: in-ground systems, elevated sand mounds, Individual Residential Spray Irrigation Systems (IRSIS), or other experimental or alternative technologies.
2	Generally suitable for a variety of on-lot sewage disposal system types, which include all of Code 1 systems except in-ground systems.
3	Generally suitable for IRSIS only.
4	Not suitable.

Data Sources include the Mifflin County Mapping Department, 2001, USDA soil data, and the NRCS Soil Survey Geographic Database (SSURGO) digitally created in 1980 from the Mifflin-Juniata County Soil Survey Report.

Note: Analysis at this scale, based upon available data, is not substitute for site testing. This analysis should be used only as a general indication of those areas that may be suitable for on-lot systems.

# FIGURE 9-5 WESTERN MIFFLIN COUNTY SURFACE GEOLOGY

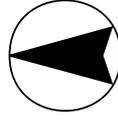
**LEGEND**

**Surface Geology**

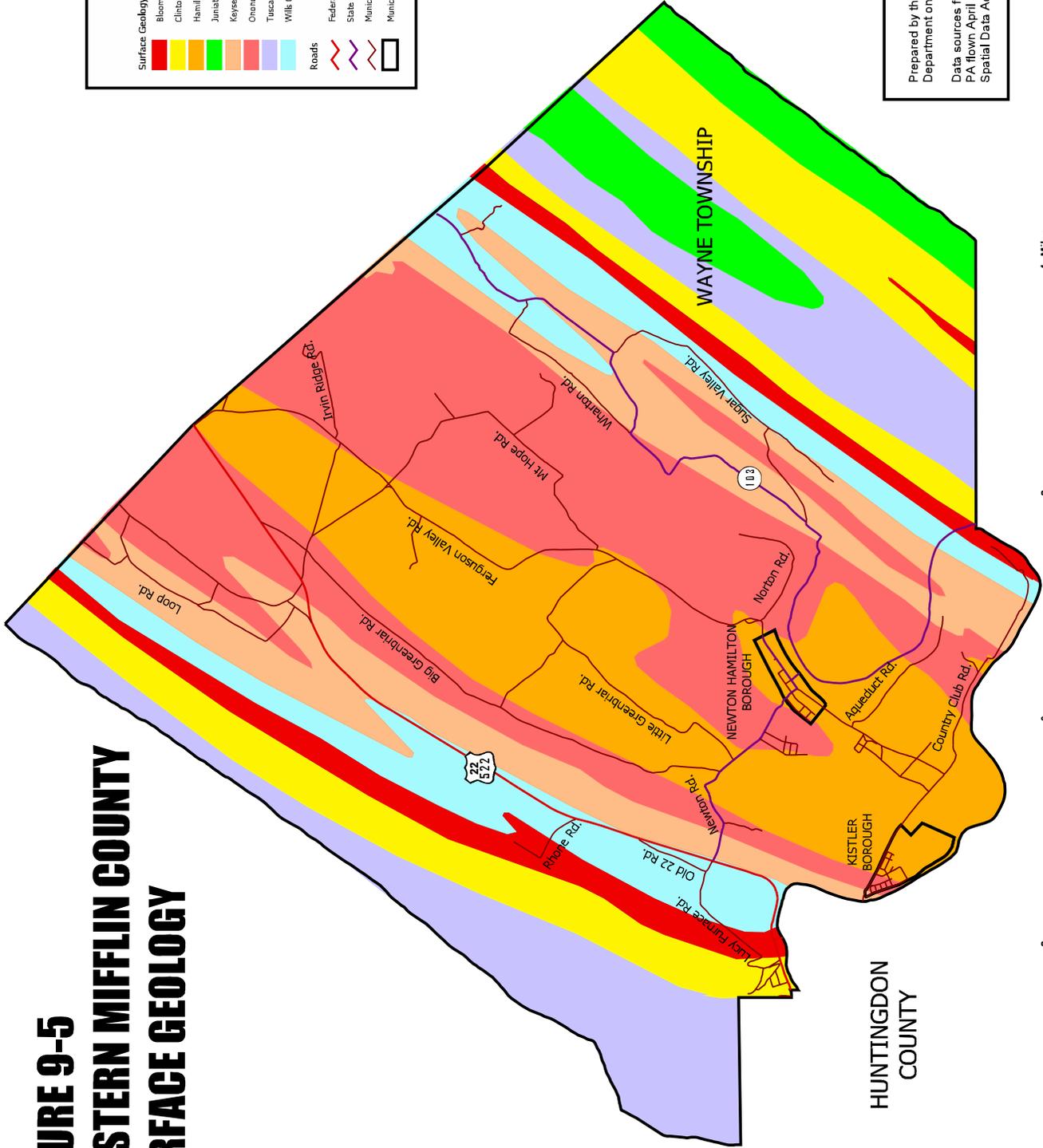
- Blensburg Formation and Mifflintown Formation Undivided
- Clinton Group
- Hamilton Group
- Junata Formation
- Keiper Formation and Tonoloway Formation Undivided
- Onondaga Formation and Old Port Formation Undivided
- Tuscarora Formation
- Willis Creek Formation

**Roads**

- Federal
- State
- Municipal
- Municipal Boundary



Prepared by the Mifflin County Mapping Department on February 20, 2001.  
Data sources from aerial photography of Mifflin County, PA from April 5th, 1985 and PASDA (Pennsylvania Spatial Data Access).



***Part Two - Goals, Objectives, and Action Strategies***

## Chapter 10 - Housing Plan

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**INTENT**

Western Mifflin County has a good housing stock however, significant deterioration exists and there is some concern that many of the camps and seasonal units are below standard and use unsafe sewage disposal methods.

The intent of these Goals and Objectives is to facilitate continuing improvement of the housing stock, in this region.

---

**GOAL: To provide an adequate, affordable, and a well diversified stock of housing opportunities for the residents of Western Mifflin County.**

---

Action and Implementation Strategies have been developed to fulfill the goals and objectives developed for this section. Action and Implementation Strategies serve as recommendations for providing for Western Mifflin County's future growth and development. Each strategy contains an Action Statement (AS) and Recommendation(s) for implementation. Each strategy is given a priority level (i.e., H=High, M=Medium, and L=Low), and identifies the entities responsible implementation (i.e., C=Mifflin County, L=Local Municipalities, S=State Agencies, P=Private; or SD=Mount Union School District) Each Action Strategy also provides a time frame in which it should occur. Finally, each strategy is referenced to the categorized list of potential funding sources contained in Chapter 17 of this Comprehensive Plan.

**Housing Objectives**

- ▶ **Encourage the development of senior housing in under-served areas to provide an option for older homeowners.**

- ▶ **Continue and increase housing rehabilitation efforts throughout Western Mifflin County.**
- ▶ **Work to increase the diversity of housing units in the area so that persons of all income levels and lifestyles may find appropriate housing.**

**Action Strategies:**

*AS: Consider adopting and enforcing a building code to assure that all housing units including camps and seasonal units are safe and non-polluting.*

**Recommendation:**

- ▶ Adopt the commonwealth's Statewide Building Code and consider the following enforcement options: (1) hire a professional engineering consultant on a retainer fee, (2) hiring a qualified part-time staff person or (3) designate the County for enforcement duties based on an established fee schedule.

Priority Level: H

Responsible Entity(ies): L

Time Frame: 2001-2004

Funding Sources: See Chapter 17

---

*AS: Encourage public/private partnerships to develop more affordable housing, and*

*AS: Encourage the development of new housing in the moderate to middle income range to meet the needs of in-migrating families and those households seeking to upgrade from existing housing units.*

Recommendation:

- ▶ Strengthen relationships with local developers and realtors to further identify the needs and opportunities for developing a range of housing opportunities to meet the needs of existing and future residents.

Priority Level: M

Responsible Entity(ies): L, C, P

Time Frame: Ongoing

Funding Sources: See Chapter 17

---

*AS: Support the continuation of the Mifflin County's Housing Rehabilitation Program and its goal of improving the lives of low to moderate income families.*

Recommendations

- ▶ Encourage the development of HOME applications in the future, as well as the use of CDBG and Act 137 funds where appropriate.
- ▶ Support programs, such as the PA Access Program, to assist with handicapped accessibility needs of low to moderate families.
- ▶ Prepare and maintain a list of housing rehabilitation needs for the Western Mifflin Region and submit it for inclusion in Mifflin County's long-term housing rehabilitation strategy. This would include the possibility of the three communities jointly submitting a HOME application for housing rehabilitation.

Priority Level: H

Responsible Entity(ies): C, S, L

Time Frame: Ongoing

Funding Sources: See Chapter 17

---

*AS: Monitor multi-family housing availability for seniors and households seeking rental and condominium units.*

Recommendation:

- ▶ Work with the Mifflin County Planning and Development Department and local health facilities to continue to identify needs and opportunities for senior level housing.

Priority Level: H

Responsible Entity(ies): L, C, P, S

Time Frame: Ongoing

Funding Sources: See Chapter 17

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## Chapter 11 - Economic Development Plan

**INTENT**

The purpose of this chapter is to promote economic development opportunities within the Western Mifflin County Region. Responses to Mifflin County's Quality of Life Survey (Summer 1998) revealed that almost 40 percent of the Western Mifflin County respondents indicated that employment opportunities in their community and the surrounding area were fair to poor and that they would be willing to pay for efforts to improve them. The action strategies presented herein should be implemented in conjunction with the economic development efforts of Mifflin County.

---

**GOAL: To provide opportunities that enhance the economic base of Mifflin County while remaining vigilant to maintain the County's overall quality of life.**

---

**Economic Development Objectives:**

- ▶ **Support the efforts of Mifflin County in developing a Comprehensive Economic Development strategy.**
- ▶ **Expand the role of tourism in Mifflin County by capitalizing on the region's recreational amenities.**
- ▶ **Strengthen existing communities through business revitalization efforts.**
- ▶ **Promote the reuse of former industrial sites.**
- ▶ **Identify opportunities to promote the development of new businesses and industries.**

- ▶ **Provide educational opportunities to meet the demands for a changing workforce.**

**Action and Implementation Strategies:**

Action and Implementation Strategies have been developed to fulfill the goals and objectives developed for this section. Action and Implementation Strategies serve as recommendations for providing for Mifflin County's future growth and development. Each strategy contains an Action Statement (AS) and Recommendation(s) for implementation. Each strategy is given a priority level (i.e, H=High, M=Medium, and L=Low), and identifies the entities responsible for implementation (i.e., C=Mifflin County, L=Local Municipalities, S=State Agencies, P=Private; or SD=School Districts). Each Action Strategy also provides a time frame in which it should occur. Finally, each strategy is referenced to the categorized list of potential funding sources contained in Chapter 17 of this Comprehensive Plan.

*AS: Work with Mifflin County in developing a strategy to assure better coordination of economic development activities.*

**Recommendations:**

- Support the efforts of such organizations as Team Mifflin County, an outgrowth of the County's Economic Development Strategy, to improve and sustain employment opportunities in the county.
- Provide input into the process by working through the Mifflin County Planning and Development Department.

## Chapter 11 - Economic Development Plan

---

Priority Level: H  
Responsible Entity(ies): C, L, S, P  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Continue to promote the reuse of the former Empire Chicken Processing Plant through such programs as EPA's Brownfields Pilot Assessment Program, as well as other State and Federal programs that support economic development.*

Recommendation:

- ▶ Mifflin County should further strengthen this effort by coordinating the efforts and resources of the Mifflin County Industrial Development Corporation (MCIDC) and Huntingdon County Business and Industry (HCB&I).

Priority Level: H  
Responsible Entity(ies): C, L, P  
Time Frame: 2001  
Funding Sources: See Chapter 17

---

*AS: Consider revitalizing areas such as Newton Hamilton and Kistler Borough into functional village centers as described in the Future Land Use Plan (Chapter 12).*

Recommendation:

- ▶ Work with the County to develop an overall marketing strategy and coordinate promotion of the area.

Priority Level: H  
Responsible Entity(ies): L, C, P, S  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Continue to improve the region's infrastructure to accommodate future commercial and land development opportunities.*

Recommendation:

- ▶ Continue to work with the County and strengthen relationships with neighboring municipalities to identify opportunities to improve local highways and expand the provision of public sewer and water services in the region.

Priority Level: H  
Responsible Entity(ies): C, S, L  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: In cooperation with the Mifflin County Planning and Development Department, consider working with the Tourism Promotion Agency (i.e., Mifflin County Chamber of Commerce) to determine mechanisms for strengthening the role of tourism in the Western Mifflin County region.*

Recommendation:

- ▶ Encourage the County to explore the feasibility of developing a Regional Tourism Plan involving Mifflin, Huntingdon and Juniata Counties.

Priority Level: H  
Responsible Entity(ies): C, P, L  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Assist Mifflin County in evaluating its training and post secondary educational needs to insure that the necessary skills are available to support a changing economy.*

Recommendations:

- ▶ Provide input into the process to improve the quality and availability of the Vocational Technical School program as well as post-secondary educational programs in Mifflin County.
- ▶ Support efforts to expand School-to-Work and apprenticeship programs to help the Western Mifflin Region's youth find meaningful employment.

*AS: Support Mifflin County's efforts to enhance its agricultural industry.*

Recommendation:

- ▶ Participate in the proposed Mifflin County Agricultural Enhancement Committee to work with the local agricultural community to shift from dairy to other agricultural activities in order to explore other agricultural activities to support the dairy industry.

Priority Level: H

Responsible Entity(ies): L, C, P, S

Time Frame: Ongoing

Funding Sources: See Chapter 17

---

## Chapter 12 - Future Land Use Plan

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---

**INTENT**

The municipalities included in the Western Mifflin County study area primarily serve as convenient residential locations for many employees of businesses and industries located within or in close proximity to the Mount Union and Lewistown Borough regions. Western Mifflin County is well connected to these regions by U.S. Route 22/522, which provides its citizens access to a wide range of social and cultural opportunities.

Significant recreational opportunities are also readily accessible within Western Mifflin County. Tuscarora State Forest, the largest public land holding in the study area, provides ample opportunities for both passive and active recreational activities. Furthermore, the Juniata River and the remnants of the Pennsylvania Canal, not only provide opportunities for recreation, but also provide the region with incentives for economic development.

This Plan provides a vision for Western Mifflin County's future growth and development. This chapter explains and defines each of the land use categories, shown on the Future Land Use Plan Map, and provides criteria that describe the vision, characteristics, and criteria for each land use category.

The following sections provide specific courses of action to be taken following the adoption of this Plan. These courses of action were developed jointly with the Community Development Steering Committee. The actions recommended will require considerable effort and collaboration on the part of local, county, and state officials, as well as school district officials, community and business leaders, and citizens.

The Components of this Land Use Plan include:

- Future Land Use Plan Map
- Goal, Objectives, Action Strategies and Implementation Plans

**GENERAL LAND USE PLAN (MAP)**

The purpose of the General Land Use Plan Map is to create a general framework for development that will be implemented through both the Mifflin County and Western Mifflin County's Comprehensive Plans, the Mifflin County Subdivision and Land Development Ordinances, and the Kistler Borough Zoning Ordinance.

Although, for some time, the Pennsylvania Municipalities Planning Code (MPC) has required municipal comprehensive plans to be generally consistent with the County Comprehensive Plan, the recent amendment (June 2000) to the MPC has further elaborated on this. The new amendment enhances the consistency requirement between municipal and multi-jurisdictional plans with the County Plan. County comprehensive plans must now be updated every ten years and local plans must be reviewed every ten years. Consistency with the County Plan has now been reinforced in terms of its impact on certain funding sources from the state including providing priority to those municipalities which are consistent with the County Plan. This means that the Mifflin County Comprehensive Plan should have some overriding concept of goals and objectives that can be related to the Western Mifflin County Comprehensive Plan.

For consistency purposes, the General Land Use Plan for the Western Mifflin County study area was adapted from the Mifflin County General Land Use Plan. The development of the County's General Land Use Plan Map began by subdividing the

County into six “general” land use classifications: Urban Center, High Growth Areas, Residential and Commercial/Industrial, Village Centers, Limited Growth Areas, Rural Development Areas and Natural Resource Protection Areas.

Based on the present character of Western Mifflin County, the Village Center, Limited Growth, Rural Development and Natural Resource Area classifications have been designated to shape study area’s future growth and development. These four general land use classifications are defined in the following sections.

**Village Center**

The Village Center depicts those portions of the study area that have mixed residential, commercial, industrial and public uses, and generally do not have zoning. Furthermore, they have lots sizes equaling one acre or less, may have access to water or sewer, and are within ½ mile of a state highway. The most prevalent Village Areas include the Boroughs of Kistler and Newton Hamilton, as well as a portion of Atkinson Mills.

While the Boroughs of Kistler and Newton Hamilton are currently served by public water facilities, it is the intent of this plan to promote the implementation of public sewer services to facilitate existing development, as well as accommodate future growth within and adjacent to these boroughs.

**Limited Growth Area**

The Limited Growth Area is represents those portions of Western Mifflin County that accommodate lower density residential, neighborhood oriented retail and service centers, and small scale commercial and industrial establishments located along major transportation corridors. The Limited Growth

Area serves as a transitional area between the Urban or Village Center and rural area where some development has taken place, where public water or sewer may be available, may or may not have zoning, and has good highway access (within 1,000 feet of an intersection involving a State Highway and a local road). Lot sizes are at least one acre or greater in size.

**Rural Development Area**

The Rural Development Area comprises the largest portion of the Western Mifflin County study area and accommodates agricultural, open space, forest lands, large lots, residential land uses (5 acres or more) as well as support services, including small scale commercial /industrial facilities. These areas can include Ag Security land.

The purpose of the Rural Development Area is to help preserve the existing agricultural economy, resources, and rural character, as well as protect the culture that is unique to the County’s Plain Sect population. To avoid the negative impacts of sprawl, the Rural Growth Area should not be served by public sewer services. However, it is the goal of the County to ensure this area is serviced by modern telecommunication services to facilitate county-wide communications and economic growth.

**Natural Resource Protection Area**

The purpose of the Natural Resource Protection Area is to delineate those areas unsuitable for development and to protect the environmentally sensitive resources located throughout Western Mifflin County. These sensitive resources include steep sloped areas, floodplains, wetlands, surface and groundwater resources, scenic vistas, and public lands. The natural resource parameters

are steep slopes (i.e.,  $\geq 15$  percent), 100 Year Flood Plan, wetlands, and public lands.

---

**GOAL: To accommodate orderly growth and development while preserving the rural character that currently exists in Western Mifflin County.**

---

**Action and Implementation Strategies:**

Action and Implementation Strategies have been developed to fulfill the goals and objectives developed for this section. Action and Implementation Strategies serve as recommendations for providing for Western Mifflin County's future growth and development. Each strategy contains an Action Statement (AS) and Recommendation(s) for implementation. Each strategy is given a priority level (i.e., H=High, M=Medium, and L=Low), and identifies the entities responsible implementation (i.e., C=Mifflin County, L=Local Municipalities, S=State Agencies, P=Private; or SD=Mount Union School District) Each Action Strategy also provides a time frame in which it should occur. Finally, each strategy is referenced to the categorized list of potential funding sources contained in Chapter 17 of this Comprehensive Plan.

**Village Center Objective: By encouraging appropriate levels and types of residential, commercial, and industrial activities to locate within or adjacent to Kistler and Newton Hamilton Boroughs, and Atkinson Mills.**

*AS: The Village Center Areas should be revitalized for the purpose of attracting appropriate commercial services for the local communities.*

**Recommendations:**

- ▶ Town centers should be established for Kistler and Newton Hamilton Boroughs. A revitalized town center produces many benefits such as the best use of infrastructure, conserving local wealth, historic preservation, establishing uniqueness, fostering civic spirit and engagement, creating a thriving small business environment that provides choices and tourism attractions. Successful town center revitalization requires developing civic capacity, stewardship of man made and natural resources and establishing a vibrant economy.
- ▶ Provide for neighborhood commercial service activities around Kistler and Newton Hamilton Boroughs, including professional office uses and possibly a specialty restaurant.
- ▶ Capitalize on the Governor's Project for Community Building, which includes the Community Economic Development Loan Program. According the PA DCED, all of Wayne Township, and Newton Hamilton and Kistler Boroughs meet the program's poverty, income, and unemployment level criteria. For more information, contact [www.dced.state.pa.us/PA\\_Exec/DCED/community/economic.htm](http://www.dced.state.pa.us/PA_Exec/DCED/community/economic.htm).

Priority Level: H  
Responsible Entity(ies): C,L,S,SD,P  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Update the Kistler Borough Zoning Ordinance to provide consistency with this Comprehensive Plan, as well as the Mifflin County Comprehensive Plan.*

**Recommendation:**

- ▶ In cooperation with the Mifflin County Planning and Development Department, Kistler Borough officials should amend their zoning ordinance to provide regulations compatible with “Village” development. For example, the ordinance should provide for a mix of residential and neighborhood commercial services uses, as well as provide for regulations for the Borough’s Historic District.

Priority Level: M

Responsible Entity(ies): C,L,SD

Time Frame: 2001-2002

Funding Sources: See Chapter 17

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*AS: Coordinate with the Mifflin and Huntingdon County Planning Commissions, as well as with Mount Union Borough, to identify land development initiatives in the Western Mifflin County region.*

**Recommendations:**

- ▶ Consider the feasibility of creating a regional (i.e., joint) planning commission to implement the Western Mifflin County Comprehensive Plan.
- ▶ The Western Region municipalities should work cooperatively with both the Mifflin and Huntingdon County Planning Commissions, as well as the public and private sectors-at-large (including MCIDC and HCB&I) to develop a community based economic revitalization strategy. This strategy should capitalize on the Mifflin

County Brownfields Pilot Program and other economic development initiatives that support the redevelopment of old industrial sites, such as the former Empire Chicken Processing Facility.

Priority Level: L

Responsible Entity(ies): C,L

Time Frame: 2001-2003

Funding Sources: See Chapter 17

---

*AS: Support Mifflin County’s Brownfields initiative to revitalize the former Empire Chicken Processing Plant. This former industrial site provides opportunities for job creation and will support the nearby “Village Development Areas.”*

**Recommendation:**

- ▶ Assist the Mifflin County Planning and Development Department in their efforts to revitalize the former Empire Chicken Processing Facility. Such assistance would include supporting a higher use for the facility to provide more job opportunities and support for the local economy. In addition, a capital improvements program to facilitate the site’s revitalization should also be developed.

Priority Level: M

Responsible Entity(ies): C,L,S, P, SD

Time Frame: 2001-2004

Funding Sources: See Chapter 17

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**Limited Growth Area Objective:**

*AS: Encourage the Mifflin County and Huntingdon County Planning and Development Departments to work cooperatively with PennDOT to prepare a transportation corridor plan for the U.S. Route 22/522 corridor.*

Recommendation:

- ▶ A transportation corridor plan is both a description and a vision of what the corridor is, what it should be and what it may be in the future. Such a corridor analysis plan should seek to maintain mobility, increase motorist safety, explore the feasibility of widening the highway, and establish priorities for preserving and enhancing amenities of the U.S. Route 22/522 corridor. Furthermore, the plan should assist local officials in developing a transportation capital improvements plan for the corridor.

Priority Level: H  
Responsible Entity(ies):C,L,S  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

**Rural Development Area Objective:**  
**Promote Western Mifflin County’s agricultural economy and resources, and preserve the rural character presently found in these areas.**

*AS: Encourage agricultural preservation with priority given to areas having prime agricultural soils.*

Recommendations:

- ▶ Designate Agricultural Security Areas (ASAs) for areas having prime agricultural soils and where ASAs are desired.
- ▶ Encourage property owners to participate in the Pennsylvania Farmland and Forest Land Assessment Act of 1974 (a.k.a., Act 156 or Clean and Green).

- ▶ Educate and encourage members of the farming community to participate in the Mifflin County agricultural land preservation program.
- ▶ Discourage the extension of public water and sewer service areas into areas used for agricultural activities.

Priority Level: H  
Responsible Entity(ies): C,L,S,  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

**Natural Resource Protection Area Objectives:**

**By utilizing stream corridors to promote the preservation of open space.**

*AS: Consider establishing greenways or linear parks along the Juniata River.*

Recommendation:

- ▶ Work with the Mifflin County Planning Commission, local Municipalities, and environmental organizations to explore the potential of creating a greenway along the Juniata River. This greenway could provide for non-motorized connectivity between Kistler and Newton Hamilton Boroughs, and possibly the community of Lucy Furnace.

Priority Level: M  
Responsible Entity(ies): C,L,S,SD,P  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

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**By promoting the sound use of Western Mifflin County's natural resources for local economic prosperity.**

P.O. Box 8552  
Harrisburg, PA 17105-8552  
Phone: 717-787-2853.  
Email: edix@dcnr.state.pa.us

*AS: Protect and preserve both the Rothrock and Tuscarora State Forests from illegal dumping and forest fire impacts.*

Priority Level: H  
Responsible Entity(ies): C,L,S,  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

Recommendations:

- ▶ Continue to work with the PA DCNR, Bureau of Forest Fire Protection to ensure local fire suppression capabilities and training levels are sufficient to provide initial forest fire fighting activities.
- ▶ Support the implementation of the various state sponsored anti-littering campaigns and education programs, such as the Pennsylvania Litter Summit, Adopt-A-Highway and Adopt-A-Stream Programs, and Annual Keep Pennsylvania Beautiful Day.
- ▶ In cooperation with the County, local officials and citizens should work with the PA DCNR to identify grass-roots opportunities to assist in implementing the State Forest Resource Management Plan 2001-2005.
- ▶ Support the efforts of the new Mifflin County Chapter of PA Cleanways, which is attempting to eliminate illegal dumps in the County.
- ▶ Encourage local participation in the Department's various Forest Conservation Education programs. More information may be obtained by contacting:

Edward Dix  
Education Program Coordinator  
PA Bureau of Forestry

*AS: Protect and preserve Western Mifflin County's traditional agricultural activities and water resources.*

Recommendations:

- ▶ Support the Mifflin County Conservation District in their efforts to implement Best Management Practices (BMPs) throughout Western Mifflin County to enhance water quality and provide for erosion and sedimentation control.
- ▶ Consider implementing a local, citizen-based, watershed organization modeled on numerous organizations located throughout Pennsylvania. For more information, contact PADEP, Bureau of Watershed Protection's website at [www.dep.state.pa.us/dep/deputate/enved/watershed/watershed.htm](http://www.dep.state.pa.us/dep/deputate/enved/watershed/watershed.htm). This program should also include participation from the Mount Union School District.

Priority Level: H  
Responsible Entity(ies): C,L,S, SD, P  
Time Frame: 2001-2003 and Ongoing  
Funding Sources: See Chapter 17

---

**General Land Use Objective: Adopt and implement sound land use management practices throughout Western Mifflin County.**

and maintaining the Western Mifflin County's Comprehensive Plan.

*AS: Provide for the enforcement of the Mifflin County Subdivision and Land Development Ordinance.*

Priority Level: H

Responsible Entity(ies): C,L

Time Frame: Ongoing

Funding Sources: See Chapter 17

---

Recommendations:

- ▶ Encourage the Mifflin County Planning Commission to amend the County's Subdivision and Land Development Ordinance to address known deficiencies and to properly reference design standards and regulations.
  
- ▶ Strengthen the relationship with the Mifflin County Planning Commission in an effort to enhance communications and enforce local land use regulations.

Priority Level: H

Responsible Entity(ies): C,L,SD

Time Frame: Ongoing

Funding Sources: See Chapter 17

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*AS: Encourage the Mifflin County Planning and Development Department to continue to provide technical and non-technical planning assistance.*

Recommendation:

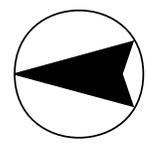
- ▶ The Mifflin County Planning and Development Commission should assist the Western Mifflin County municipalities in considering the feasibility of establishing a Joint Municipal Planning Commission, as well as to provide ongoing support and technical assistance in implementing



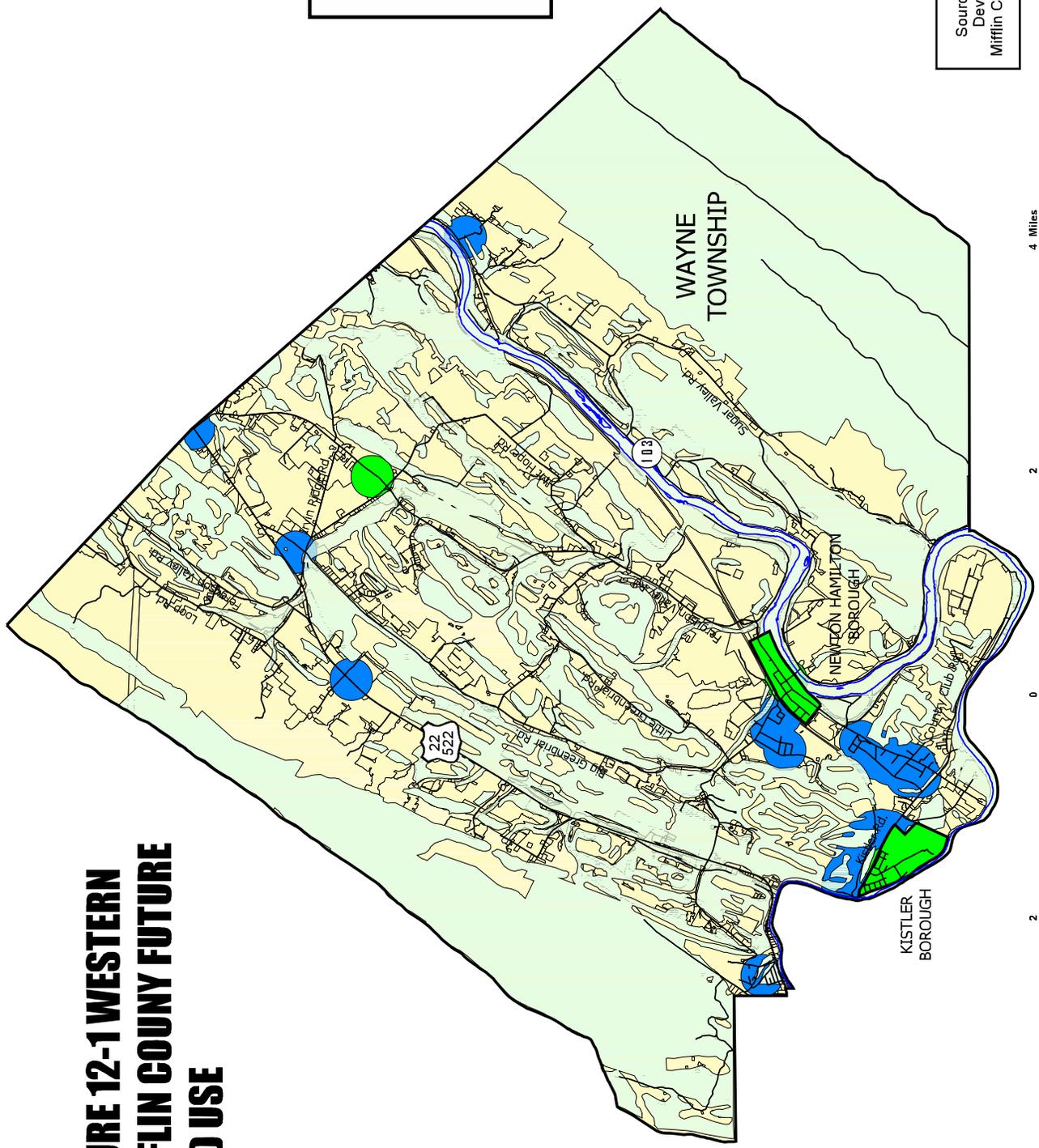
**FIGURE 12-1 WESTERN  
MIFFLIN COUNTY FUTURE  
LAND USE**

**Legend**

- Village Center (Green square)
- Limited Growth (Blue square)
- Rural Development (Yellow square)
- Natural Resources (Light Green square)
- Roads (Black line)
- Municipal Boundary (Black outline)



Source: Mifflin County Planning and Development Department and the Mifflin County Mapping Department, 2000.



## Chapter 13 - Community Facilities Plan

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**INTENT**

The Community Facilities Plan will facilitate the provision of adequate infrastructure systems, and community facilities and services in a manner consistent with the development patterns reflected by the General Land Use Plan Map. This plan is intended to provide recommendations commensurate with the respective responsibilities of both the private and public sectors to support the existing and envisioned land use patterns of Western Mifflin County.

---

**GOAL: To provide community facilities and services which promote the health, welfare, and safety of residents within Western Mifflin County.**

---

**Action and Implementation Strategies:**

Action and Implementation Strategies have been developed to fulfill the goals and objectives developed for this section. Action and Implementation Strategies serve as recommendations for enhancing Western Mifflin County’s Community Facilities. Each strategy contains an Action Statement(AS) and Recommendation(s) for implementation. Each strategy is given a priority level (i.e, H=High, M=Medium, and L=Low), and identifies the entities responsible implementation (i.e. , C=Mifflin County, L=Local Municipalities, S=State Agencies, P=Private; or SD=Mount Union School District) Each Action Strategy also provides a time frame in which it should occur. Finally, each strategy is referenced to the categorized list of potential funding sources contained in Chapter 17 of this Comprehensive Plan.

**Emergency Services Objective: By maintaining police, fire, emergency medical, and emergency services necessary to protect life and property throughout Western Mifflin County.**

*AS: Explore alternatives that would provide increased police protection in the region.*

Recommendations:

- ▶ Develop a working relationship with the Pennsylvania State Police in an effort to support their crime prevention and community outreach programs as well as improve response times to the Western Mifflin County region.
  
- ▶ Consider entering into a mutual aid agreement with Mount Union Borough for added police protection services.

Priority Level: H

Responsible Entity(ies): C,L,S

Time Frame: Ongoing

Funding Sources: See Chapter 17

---

*AS: Continue to support the Newton-Wayne Volunteer Fire Department in their efforts to maintain and attract new trained volunteers for fire service.*

Recommendations:

- ▶ Encourage volunteerism by use of public service announcements, volunteer recognition programs and other means. These mechanisms may also be supplemented by developing a promotional video and/or brochure targeted at the area’s younger populations; particularly, high school age groups.
  
- ▶ Consider performing an annual analysis of community fire service needs, including a replacement schedule for major equipment.

## Chapter 13 - Community Facilities Plan

Priority Level: H  
Responsible Entity(ies): C,L,SD,P  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Provide financial support to the Newton-Wayne Volunteer Fire Department.*

### Recommendation:

- ▶ Continue to financially support the Newton-Wayne Volunteer Fire Department by ensuring local municipal budgets provide for such support.

Priority Level: H  
Responsible Entity(ies): C,L,S  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Continue to identify new locations for the expansion of Wayne Township's dry hydrant system.*

### Recommendation:

- ▶ Utilize Mifflin County's GIS department to identify areas within the region that have access to a dependable water source.

Priority Level: M  
Responsible Entity(ies): C,L,S  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Through mutual aid agreements, continue to cooperate with other municipalities to provide adequate levels of emergency medical services.*

### Recommendation:

- ▶ Continue to support the Seven Mountains EMS Council in their efforts to provide future training and

administration support services to local EMS providers.

Priority Level: H  
Responsible Entity(ies): L,S,C  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

---

*AS: Support the Mifflin County Digital Community Program in their efforts to improve the county's telecommunications network and services. The provision of both residential and business broadband telecommunication services is critical for the area's marketability for both new business and industry, as well as future residents.*

### Recommendation:

- ▶ Encourage the County to continue support of the Mapping and MIS department to ensure adequate staffing, equipment, and other pertinent resources for the project's continued success.

Priority Level: M  
Responsible Entity(ies): C,L,S  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

**Water Supply and Sewage Facilities Objective: By providing adequate, high-quality water supply and sewage facilities to meet users needs, protect the environment and public health, and support development consistent with the Future Land Use Plan.**

*AS: Support, and where applicable implement, the recommendations contained in the Mifflin County Water Supply Plan.*

### Recommendation:

- ▶ Each municipal governing body, or representative of, should meet

regularly with the Mifflin County Planning and Development Department staff to identify opportunities for assisting in the Plan's implementation.

Priority Level: H  
Responsible Entity(ies): C, L  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

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*AS: Encourage the Mount Union Area Water Authority to become a regional authority to include member representation from its Western Mifflin County service area municipalities.*

Recommendation:

- ▶ In accordance with the Municipality Authorities Act (53 P.S.), the governing bodies of each Western Mifflin County municipality, with the support of their citizens and the Mifflin County Board of Commissioners, should explore with the Mount Union Water Authority the feasibility of expanding Board representation by developing a regional water authority as prescribed by Section 3.1 of the Municipalities Authorities Act.

Priority Level: H  
Responsible Entities: L, Mount Union Area Water Authority, C  
Time Frame: 2001  
Funding Sources: Mount Union Area Water Authority, Mifflin County and local funds. Also see Chapter 17.

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*AS: Provide for connections to the future Kistler Borough sewer collection system, as well as the future extended aeration package wastewater treatment plant and collection system in Wayne Township as well as support the improvements necessary to expand the Mount Union Waste Water Treatment Plant.*

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Recommendation:

- ▶ Consider developing a regional sewer authority to oversee the collection and treatment of wastewater generated from the Western Mifflin County and Mount Union Borough service areas.

Priority Level: H  
Responsible Entity(ies): C, L, S, P, SD  
Time Frame: 2001-2002  
Funding Sources: See Chapter 17

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AS: Implement a regional Sewage Facilities Planning program.

Recommendations:

- ▶ The Mifflin County Planning and Development Department should assist the Western Mifflin County region officials in implementing their respective Act 537 Plans.
- ▶ The Western Mifflin County officials should develop and implement an effective regional sewage management program as discussed in the PSATs publication entitled, "A Municipal Official's Guide to Managing Onlot Sewage Disposal Systems." To obtain a copy of this document, visit [www.dep.state.pa.us/dep/local\\_gov/Sewage/Sewage.htm](http://www.dep.state.pa.us/dep/local_gov/Sewage/Sewage.htm).

Priority Level: H  
Responsible Entity(ies): C, L, S  
Time Frame: 2001-2003  
Funding Sources: See Chapter 17

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## Chapter 13 - Community Facilities Plan

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**Recreational Opportunities Objective: By providing and maintaining adequate facilities, services, and open space areas to meet the recreation needs of Western Mifflin County residents and visitors.**

*AS: Preserve and maintain existing Natural and Cultural Resources that enhance recreational opportunities.*

Recommendation:

- ▶ Encourage Mifflin County to consider developing a non-profit organization whose goal should be to restore protect, and preserve the Juniata Division of the Pennsylvania Main Line Canal, as well as promote the resources of the county's watersheds through responsible land use, environmental research, and public education programs.

Priority Level: H

Responsible Entity(ies): C,L,S,SD,P

Time Frame: Ongoing

Funding Sources: See Chapter 17

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*AS: Emphasize the development of recreational opportunities throughout the Western Mifflin County study area; particularly in the Kistler, Newton areas.*

Recommendations:

- ▶ Encourage the Mifflin County Planning and Development Department to prepare a countywide Parks, Recreation, and Open Space Plan. This plan will further identify and prepare for recreation and open space opportunities throughout the Western Mifflin County area.
- ▶ Work with the Mifflin County Planning and Development Department to identify river front

recreation and economic development opportunities along the Juniata River and canal area.

- ▶ Support efforts to restore, preserve, and protect the Juniata Division of the Pennsylvania Main Line Canal.

Priority Level: H

Responsible Entity(ies): C,L,S,SD

Time Frame: Ongoing

Funding Sources: See Chapter 17

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**Stormwater Management Objective: By promoting the preservation and sound use of natural ground surface features which facilitate the effective management of stormwater runoff.**

*AS: Ensure the Kishacoquillas Creek watershed stormwater management plan is completed and is consistent with the goals and objectives contained within this plan.*

Recommendation:

- ▶ Provide the needed support to meet the schedule and assist in implementing the plan's recommendations.

Priority Level: H

Responsible Entity(ies): C, L, S, P

Time Frame: 2000

Funding Sources: See Chapter 17

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*AS: Encourage the Huntingdon County Conservation District (HCCD) to include representatives from Western Mifflin County (as well as Mifflin County) in any efforts to prepare an Act 167 Stormwater Management Plan for the Aughwick Creek Watershed.*

Recommendation:

- ▶ The Mifflin County Planning Commission should encourage the

HCCD to keep the Western Mifflin County officials—as well as Mifflin County officials—apprized of any plans to initiate an Act 167 Stormwater Management Plan for the Aughwick Creek Watershed.

Priority Level: H  
Responsible Entity(ies): C,L,S,P  
Time Frame: 2001-2004  
Funding Sources: See Chapter 17

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- ▶ In partnership with the Juniata Clean Water Partnership (JCWP) and Huntingdon County, consider obtaining state funding to support the preparation of an Aughwick Creek Watershed Stormwater Management Plan.

Priority Level: L  
Responsible Entity(ies): C, L, S, P, Huntingdon County  
Time Frame: 2001-2003  
Funding Sources: See Chapter 17

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*AS: Amend the county's subdivision and land development ordinance to enhance the existing stormwater, and erosion and sedimentation control measures.*

Recommendations:

- ▶ Include provisions for the use of Best Management Practices to minimize impervious areas by preserving natural cover and drainageways.
- ▶ Include provisions for the retention of wetlands and other groundwater recharge areas.
- ▶ Include standards to disperse and direct storm water away from sinkholes, closed depressions and other karst topography.
- ▶ Provide standards for minimum safe setbacks for proposed land uses from sinkholes and other karst topography.

## Chapter 14 - Transportation Plan

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**INTENT**

The intent of this Plan is to provide the municipalities of Western Mifflin County with a basic framework to meet the existing and future transportation needs of its citizens, and serve as a useful guide to Mifflin County in their efforts to program future transportation improvement projects.

The key components of the Plan are the transportation improvement recommendations and Transportation Map. Together, these instruments will help meet the transportation needs of existing and future development.

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**GOAL: To provide a safe, efficient, and adequate transportation system throughout Western Mifflin County.**

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**Action and Implementation Strategies:**

Action and Implementation Strategies have been developed to fulfill the goals and objectives developed for this section. Action and Implementation Strategies serve as recommendations for enhancing Western Mifflin County’s transportation facilities and services. Each strategy contains an Action Statement(AS) and Recommendation(s) for implementation. Each strategy is given a priority level (i.e, H=High, M=Medium, and L=Low), and identifies the entities responsible implementation (i.e. , C=Mifflin County, L=Local Municipalities, S=State Agencies, P=Private; or SD=Mount Union School District) Each Action Strategy also provides a time frame in which it should occur. Finally, each strategy is referenced to the categorized list of potential funding sources contained in Chapter 17 of this Comprehensive Plan.

**Transportation Improvements Objective:**  
**By assuring transportation improvements are planned and implemented systematically, and are consistent with**

**public health and safety, capital programming, in both the Western Mifflin and Mifflin County Comprehensive Plans.**

*AS: Continue to work with the Mifflin County Planning and Development Department to annually identify, prioritize, and implement transportation system improvements, as well as enhance existing conditions.*

Recommendations:

- ▶ Encourage the establishment of a transportation committee that would identify projects and improvements to be included in PADOTs twelve year program.
- ▶ Encourage the Mifflin County Planning and Development Department to amend the county’s subdivision and land development ordinance to provide for improved road and street design standards to more closely resemble standards set forth in A Policy on Geometric Design of Highways and Streets [AASHTO, (American Association of State Highway and Transportation Officials)], or the PADOT Design Manual, Part 2.
- ▶ Encourage the Mifflin County Planning and Development Department to amend its subdivision and land development ordinance to require all new street names conform with the county’s standardized street naming and addressing system, as well as to provide for enhanced driveway design standards. For example, consider the following:
- ▶ Driveways should be designed to allow for the unimpeded flow of stormwater runoff and should be

stabilized to their full width to prevent erosion. These and other designs should be in accordance with the PADOT Guidelines for Design of Local Roads and Streets, Publication No. 70, as revised. Local officials are encouraged to seek technical assistance from the Mifflin County Planning and Development Department in this effort.

- ▶ Driveway entrances or aprons within the street right-of-way shall be surfaced to their full width.
- ▶ Wayne Township officials should consider the feasibility of paving all municipal roadways within their jurisdiction to control dust and erosion and provide for long-term stability. This recommendation should be considered as a long-term goal (10-15 years). As part of the implementation process, local officials should discuss with the PADOT District 2-7 Engineer the benefits of participating in the Agility Program. For more information, contact the District at 717-248-7851 or the PADOT website at [www.dot.state.pa.us](http://www.dot.state.pa.us).
- ▶ Ensure that the Mifflin County Planning and Development Department includes the following Western Mifflin area transportation improvement projects on Pennsylvania's 2001 Transportation Improvement Program:
  - Corridor study of U.S. Routes 22/522 south of McVeytown to Mount Union. This study would look at improving traffic capacity, recommend overall improvements including road realignment and widening where necessary, and review land uses along

this corridor. (Note: This effort should also include the involvement of the Huntingdon County Planning and Development Department.)

- Replace the Beaverdam Run Bridge along Township Road 357 in Wayne Township (Structure I.D. No. - 44721003570129).
- Undertake a study to determine the course of action necessary to improve the Route 3019 railroad crossing bridge to facilitate local emergency services.

Priority Level: H  
Responsible Entity(ies): C,L,S,P,SD  
Time Frame: Ongoing  
Funding Sources: See Chapter 17

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**Intermunicipal Cooperation Objective: By cooperating with surrounding municipalities, the county, and the state to enhance the local transportation system.**

*AS: Establish a coordinated process with PADOT to review pending highway access permit approvals along state highways.*

Recommendation:

- ▶ Encourage the Mifflin County Planning and Development Department to amend the County's Subdivision and Land Development Ordinance to restrict direct highway access on major routes. Also, to ensure that a driveway permit has been issued prior to the approval of any plan or issuance of a building permit.

Priority Level: H  
Responsible Entity(ies): C,L,S,  
Time Frame: 2001-2004  
Funding Sources: See Chapter 17

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## Chapter 14 - Transportation Plan

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*AS: The majority of the roads within the township and boroughs are in need of safety improvements.*

### Recommendations:

- ▶ All roads should have roadway edge lines and center lines (with reflective glass beads). These will create an easily identifiable travel lane and are especially useful to motorists at night and at times of inclement weather.
- ▶ Install or re-paint stop bars (with reflective glass beads) at major intersections that require a stopped condition.
- ▶ Review the condition of roadway signage throughout the township and replace signs that no longer retain their reflectivity.
- ▶ Ensure that, where practical, roadways have a minimum of a two foot graded shoulder.
- ▶ Replace deteriorated curbing and sidewalks (mainly in Newton Hamilton Borough).

Priority Level: H

Responsible Entity(ies): C,L,S

Time Frame: Ongoing

Funding Sources: See Chapter 17

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*AS: Work with the Pennsylvania State Police and PADOT to review accident data annually and subsequently recommend appropriate improvement measures to the Mifflin County Planning and Development Department.*

### Recommendation:

- ▶ Utilizing the County's GIS capabilities, consider mapping accident data to better identify hazard areas.

Priority Level: H

Responsible Entity(ies): C,L,S,SD

Time Frame: Ongoing

Funding Sources: See Chapter 17

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*AS: Improve existing roadway conditions as recommended in Table 14-1, Improvement recommendations for roadway conditions. Also, see Figure 14-1 for corresponding location.*

*AS: Consider improving existing geometric deficiencies as recommended in Table 7-3, Geometric Improvements Recommendations.*

### Recommendation:

- ▶ Coordinate with the Mifflin County Planning and Development Department on implementing these projects into the County's Twelve-Year Transportation Improvement Program.

Priority Level: H

Responsible Entity(ies): C,L

Time Frame: Ongoing

Funding Sources: See Chapter 17

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**Non-vehicular Facilities Objective: By providing non-vehicular facilities, where possible, to link residential areas to scenic and natural areas, schools, businesses, and other community facilities; non-vehicular facilities include pedestrian walkways, trails, and bikeways.**

*AS: Promote the concept of liveable communities through the development of pedestrian walkways and bikeways within the Village Development Area.*

Recommendations:

- ▶ Assist the Mifflin County Planning and Development Department with the development of bike routes within the area.
- ▶ Explore various funding sources such as Keystone Community Grants, and CDBG monies to develop sidewalks or walking trails.

Priority Level: H

Responsible Entity(ies): C,L,S,

Time Frame: Ongoing

Funding Sources: See Chapter 17

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**Environmental and Cultural Resources**

**Objective: By minimizing the adverse impacts of the transportation system on the Western Mifflin County's environmental and cultural resources.**

*AS: Efforts should be made to improve rural transportation/transit to allow easier access to central service areas from rural residential settings.*

Recommendation:

- ▶ Assist the Mifflin-Juniata Agency on Aging in monitoring the transit needs of transit dependent individuals.

Priority Level: H

Responsible Entity(ies): C,L,S,

Time Frame: Ongoing

Funding Sources: See Chapter 17

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Table 14-1  
**Improvement Recommendations to Roadway Conditions and Estimated Costs**

See Figure 14-1*	Roadway	Improvement Recommendations	Estimated Costs (\$)				
			Design	Study	ROW	Construction	Total
1	Ferguson Valley Rd.	Widen roadway to provide 10 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure adequate signage at intersection with US-522. Provide shoulder swales to improve drainage. Improve approach signage at intersection with US 522.	32,000	13,000	60,000	399,000	504,000
2	Big Greenbriar Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical. Install guide rail in selected locations with steep side slopes. Reduce speed limit.	29,000	13,000	32,000	237,000	311,000
3	Little Greenbriar Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical.	12,000	7,000	9,000	124,000	152,000
4	Mt. Hope Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical. Replace deteriorated surface.	12,000	7,000	17,000	119,000	155,000
5	Fairview Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical. Replace deteriorated surface.	10,000	5,000	13,000	99,000	127,000
6	Lucy Furnace Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical. Install guide rail in selected locations with steep side slopes.	8,000	4,000	9,000	80,000	101,000
7	Old Pike Rd.	Relocate utility pole from middle of road.	0	0	0	2,000	2,000
8	Loop Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical.	16,000	9,000	20,000	162,000	207,000
9	1 <sup>st</sup> St.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical.	4,000	2,000	6,000	45,000	57,000

# Chapter 14 - Transportation Plan

Line No.	Roadway	Improvement Recommendations	Estimated Costs (\$1,000)					Total
			Design	Study	ROW	Construction		
10	Kistler Rd.	Install guide rail in selected locations with steep side slopes.	5,000	3,000	0	54,000	62,000	
11	Country Club Rd.	Install guide rail in selected locations with steep side slopes. Replace deteriorated surface.	11,000	6,000	0	109,000	126,000	
12	Lower Country Club Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical.	10,000	5,000	12,000	99,000	126,000	
13	Dale Rd.	Widen roadway to ensure 9 foot travel lanes and 2 foot minimum graded shoulder widths. Ensure clear zone of 10 ft on each side of the roadway where practical.	3,000	2,000	3,000	34,000	42,000	
14	Vineyard Rd. (Gravel)	Ensure road is crowned with 2% crossslopes and improve drainage swales.	600	400	0	6,500	7,500	
15	Little Kansas Rd. (Gravel)	Grade when necessary and ensure 2% crossslopes.	0	0	0	0	0	
16	Route 3019 Bridge Crossing	Undertake a study to determine the course of action necessary to improve the Route 3019 railroad crossing bridge to facilitate local emergency services.	0	38,000	0	0	38,000	
17	Ferguson Valley Rd. immediately east of Newton Hamilton Borough	Improve signage on the approach to the bridges. Improve alignment of roadway onto bridge.	5,000	3,000	4,000	45,000	57,000	
18	Ferguson Valley Rd. at intersection with Fairview Rd.	Improve intersection sight distance. Provide protected center turning lane.	0	0	0	3,000	3,000	
19	Big Greenbriar Rd.	Align Big Greenbriar Rd. at the intersection with Ferguson Valley Rd.	9,000	5,000	3,000	89,000	106,000	
20	Little Greenbriar Rd.	Remove vegetation on the inside of the 90 degree curve to improve sight distance. Sign as a 90 degree curve and add delineations and arrow signs to show direction around curve.	0	0	0	1,000	1,000	

**Chapter 14 - Transportation Plan**

Line No.	Roadway	Improvement Recommendations	Estimated Costs (\$1,000)				
			Design	Study	ROW	Construction	Total
21	Ryde Rd.	Short of closing this road or installing a large retaining wall system there is no real easy fix to this road without affecting the houses on each side of the road. Recommend continued grading and possible closings for limited durations during inclement weather. Provide protected center turning lane.	0	0	0	0	0
22	Newton Rd. at intersection with U.S. Route 522	Provide protected center turning lane.	0	0	0	0	0
23	Sugar Ridge and Sugar Valley Roads	Grading when necessary	0	0	0	0	0
24	Mount Hope Road	Straighten roadway to remove 90 degree curves.	4,000	2,000	4,000	41,000	51,000
25	Lucy Furnace Rd.	Improve signage and install delineations and arrow signs to show direction around 90 degree curve.	0	0	0	1,000	1,000
26	Little Kansas Rd.	Improve roadway alignment and stabilize side slopes to prevent erosion by the spring.	5,000	3,000	0	50,000	58,000
27	Ferguson Valley Rd. at intersection with U.S. Route 522	Re-alignment of intersection; preferably to a 90 degree angle.	3,000	2,000	3,000	27,000	35,000

Source: Gannett Fleming, Inc. 2001

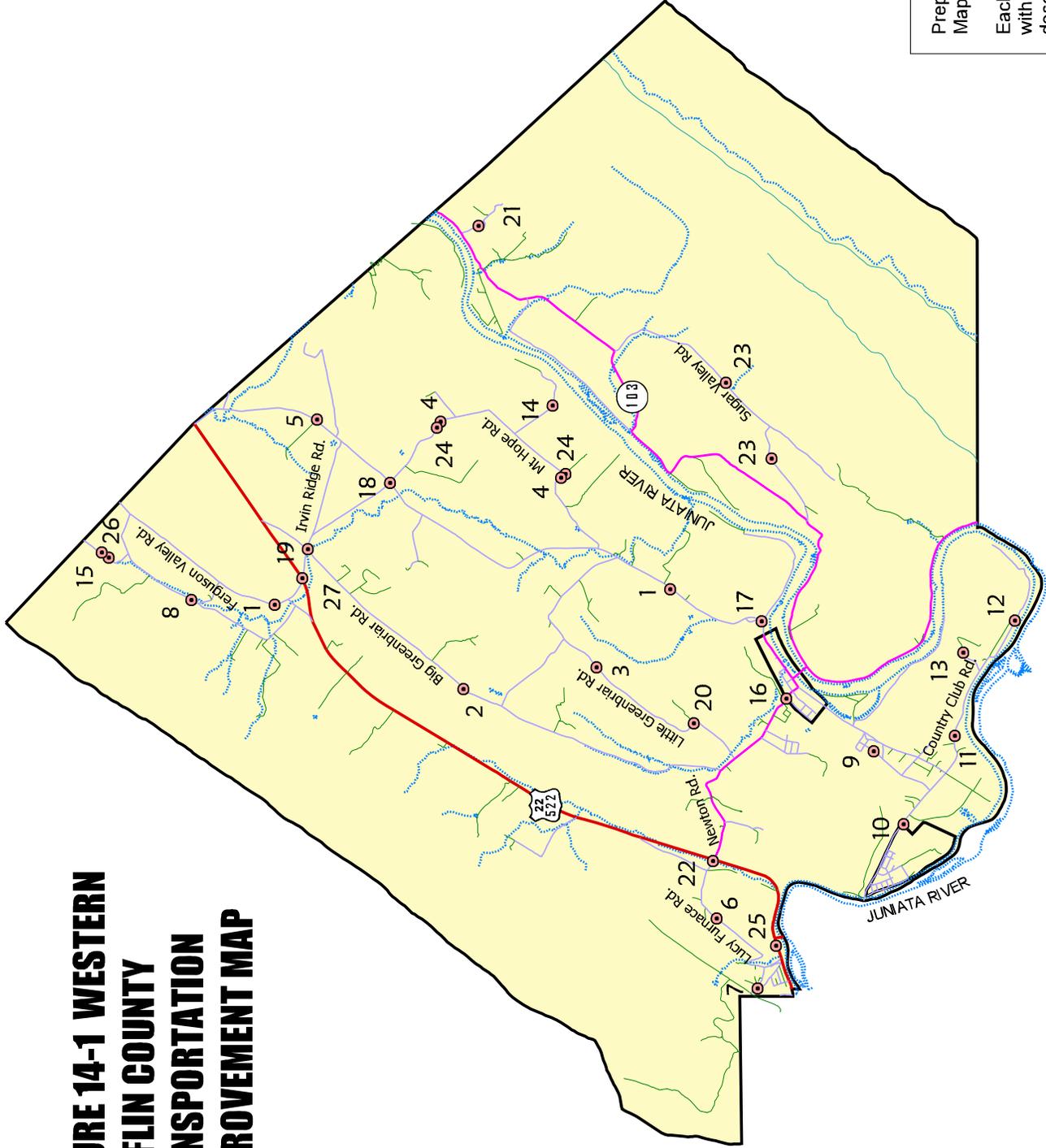
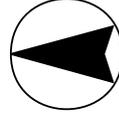
\* Does not denote level of importance, but rather references each improvements location as shown on Figure 14-1.



# FIGURE 14-1 WESTERN MIFFLIN COUNTY TRANSPORTATION IMPROVEMENT MAP

**LEGEND**

- Improvement Recommendations: Circle with a dot
- Hydrology: Blue wavy line
- Roads:
  - Federal: Red line
  - State: Yellow line
  - Municipal: Green line
  - Forest: Light green line
  - Private: Light blue line
- Municipal Boundary: Yellow shaded area



Prepared by the Mifflin County Mapping Department on July 3, 2001.  
Each referenced number corresponds with the respective improvement described in Table 14-1.

## Chapter 15 - Plan Interrelationships

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**INTRODUCTION**

As mandated by Section 301(4.1) of the Pennsylvania Municipalities Planning Code (MPC), comprehensive plans shall discuss the interrelationships among the various plan components. This demonstrates that the components of the plan are integrated and do not present conflicting goals, policies, or recommended courses of action.

**MPC AMENDMENTS**

Although, for some time, the Pennsylvania Municipalities Planning Code (MPC) has required that municipal comprehensive plans be generally consistent with the County Comprehensive Plan, the recent amendment (June 2000) to the MPC has further elaborated on this. The new amendment enhances the consistency requirement between municipal and multi-jurisdictional plans with the County Plan. County comprehensive plans must now be updated every ten years and local plans must be reviewed every ten years. Consistency with the County Plan has now been reinforced in terms of its impact on certain funding sources from the state including providing priority to those municipalities which are consistent with the County Plan. This means that the Western Mifflin County's Comprehensive Plan's goals and objectives should be interrelated with the goals and objectives contained in the Mifflin County Comprehensive Plan.

Furthermore, the new amendment authorizes counties and municipalities to enter into intergovernmental cooperative agreements to implement multi-municipal comprehensive plans. These agreements must establish a process to achieve general consistency between the comprehensive plan and the individual zoning ordinances, subdivision and land ordinances, and capital improvement plans. Cooperative implementation agreements may designate growth areas,

future growth areas, and rural resource areas within the plan.

To this extent, the Western Mifflin County Comprehensive Plan was prepared in conjunction with both the Mifflin County Comprehensive Plan and Brownfields Pilot Program. The consistencies between these comprehensive plans are evident throughout their respective planning elements. For example, the Future Land Use Plan for the Western Mifflin County region was adapted from the Mifflin County General Land Use Plan.

Interrelationships of Comprehensive Plan Elements

The planning elements contained within this Comprehensive Plan have been developed with consideration to each other. They are all interrelated and the consequences of any one element are reflected in the others. For example, the Future Land Use Plan and Map are based on the community goals and objectives, as well on the provision of services, environmental constraints, capacity of the transportation system, need for recreation, and obligation to provide a variety of housing opportunities.

Moreover, the Mifflin County Brownfields Pilot Project was conducted concurrently with this comprehensive planning effort, as well as with the Mifflin Comprehensive Plan development process. The results of these processes will, in part, enable the County to implement its countywide economic revitalization strategy.

*Regional Planning Relationships*

The Western Mifflin County region is bordered by the Pennsylvania counties of Centre, Huntingdon, and Juniata, Snyder, and Union. Historic and future development activities in these contiguous municipalities

have a direct impact on Mifflin County's land uses, infrastructure and economic vitality. Likewise, the future recommendations included in this plan also impact the development patterns of these neighboring counties. However, these impacts are not expected to pose harmful consequences on neighboring municipalities, but rather should provide opportunities to strengthen existing relationships or foster new ones.

Chapter 16 - Plan Review, Maintenance and Approval

## *Chapter 16 - Plan Review, Approval, and Maintenance*

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### **OVERVIEW**

Sections 301.3 and 302 of the Pennsylvania Municipalities Planning Code (MPC), sets forth the procedures that are to be followed to provide for review and adoption of the Western Mifflin County Comprehensive Plan.

Section 301.2 specifies that a municipality provide copies of the proposed plan to the county planning agency local school district(s), and contiguous municipalities prior to the governing body's public hearing on the Plan. Upon receiving the plan, these agencies then have 45 days to provide review and comment on the proposed Plan.

In the case of the Western Mifflin County Comprehensive Plan, the adoption of the plan begins with each municipal planning commission. Under Section 302, a municipal planning commission is required to hold at least one public meeting prior to forwarding the plan to their respective governing bodies. Each governing body should take into consideration comments on the plan and is required to hold at least one public hearing on the plan. Approval shall be by a resolution adopted by a majority.

The Western Mifflin County Comprehensive Plan will be useful only if it is regularly used and updated. For this to occur, it is recommended that a Joint Municipal Planning Commission be organized for the Western Mifflin County Planning region as provided for and in accordance with Article XI of the MPC. This Joint Municipal Planning Commission shall have the authority to:

- ▶ Annually evaluate the Western Mifflin County Comprehensive Plan and, if necessary, make modifications to the plan to ensure it remains useful in terms of guiding the decisions made

regarding the future growth and preservation of the western region.

- ▶ Submit an annual written report to each governing body, as well as the Mifflin County Planning Commission summarizing its conclusions on its evaluation of the Western Mifflin County Comprehensive Plan, the past year's major activities, the upcoming year's major projected activities, and crucial issues that will or may impact the region.
- ▶ Carry out additional powers and duties as specified in Article XI of the MPC.

## Chapter 17 - Funding Sources

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### INTRODUCTION

The development and implementation of a Capital Improvements Program will require support from a variety of funding sources. These sources can help to fund a variety of projects ranging from community planning, development and conservation to transportation. A directory of potential funding sources is provided in Table 17-1.

In addition to the funding sources contained in Table 17-1, the PA Department of Community and Economic Development's (DCED) Customer Service Center (CSC) publishes an annual Funding Source Directory containing information on DCED's programs and services. This directory serves as the entry point for the DCED Single Application for Assistance. Both the Funding Source Directory and Single Application for Assistance can be obtained by pointing your Internet browser to [http://www.dced.state.pa.us/PA\\_Exec/DCE\\_D/business/application.htm](http://www.dced.state.pa.us/PA_Exec/DCE_D/business/application.htm).

Currently, Pennsylvania has six major programs supporting parks, greenways and trails, which are relevant to the county. They are administered by the Pennsylvania Department of Conservation and Natural Resources (DCNR), Pennsylvania Department of Environmental Protection (PADEP), and the Pennsylvania Department of Transportation (PennDOT):

- Keystone Planning, Implementation and Technical Assistance Program (DCNR)
- Keystone Acquisition and Development Program (DCNR)
- Keystone Land Trust Program (DCNR)
- The Recreational Trails program (DCNR)

- Growing Greener Grant Program (PADEP)
- Transportation Enhancements Program (PennDOT)

However, funding sources change with bills passed, budgets adopted, and programs initiated by state and federal governments. For example, based on recommendations made by the 21<sup>st</sup> Century Environment Commission, Governor Tom Ridge is proposing to change the way over \$1.3 billion will be spent in the next five years to put Pennsylvania on the path to growing greener in the 21<sup>st</sup> Century ([www.dep.state.pa.us/growgreen](http://www.dep.state.pa.us/growgreen)).

**Table 17-1  
Directory of Potential Funding Sources**

Program	Program Description	Administering Agency/Internet Address
<b>Community Planning, Development, and Conservation Funding Sources</b>		
Community Development Block Grant (CDBG)	Offers grants for a wide variety of activities, provided the applicant proves by survey or census that the project will benefit 51% low and moderate income persons or handicapped persons or eliminate "blighted" conditions in officially designated areas. Funds can be used for water and sewage improvements, storm drainage, handicapped accessibility, housing rehabilitation, parks and recreation, street and sidewalk improvements, code enforcement, community planning, and historic rehabilitation.	U.S. HUD funds, implemented by DCED <a href="http://www.dced.state.pa.us/">www.dced.state.pa.us/</a> <a href="http://www.hud.gov/">www.hud.gov/</a>
CDBG Section 108	Program offers loan guarantees to municipalities to allow financing of large loans for major physical projects.	Same as CDBG
Community Facilities Loan Program (Federal)	Offers low-interest loans to construct, enlarge or improve essential community facilities for public use in rural areas and towns with population less than 50,000. Also offers guarantees of loans by private lenders.	U.S. Department of Agriculture Rural Housing Service (formerly Farmers Home Administration) <a href="http://www.rurdev.usda.gov/">www.rurdev.usda.gov/</a>
Historic Preservation Tax Credits	Offers Federal income tax credits for a percentage of the qualified capital costs to rehabilitate a certified historic building, provided the exterior is restored. The program is generally limited to income-producing properties.	National Park Service <a href="http://www.nps.gov/">www.nps.gov/</a>
Historic Preservation - Certified Local Government Grants	Provides modest-sized matching grants to provide technical assistance to municipalities that have official historic districts and meet other criteria to be "certified".	Federal program administered by PHMC <a href="http://www.phmc.state.pa.us/">www.phmc.state.pa.us/</a>
Historic Preservation Survey and Planning Grants	Matching grants for historic surveys, historic preservation planning and National Register nominations. Available to municipalities and non-profit organizations. Cannot be used for construction.	PHMC
Housing Programs - mainly including Federal HOME Program (Home Investment Partnerships Program)	Provides grants, low-interest loans and loan guarantees to for-profit and non-profit developers for the construction or rehabilitation of housing for low and/or moderate income persons. Funds are provided to local community-based housing development organizations to develop housing. Funds are also provided through private lenders to assist with down payment and closing costs for low income and disabled persons to purchase a home for their own occupancy.	PA Housing Finance Agency and DCED
Keystone Acquisition and Development Grant Program - Community Grants	Provide funding for the purchase of land for park, recreation, or conservation purposes and the rehabilitation and development of park and recreation areas and facilities, including greenways and trails. Municipalities COGs and some authorities are the only eligible applicants.	DCNR <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
Keystone Acquisition and Development Grant Program - Rails-to-Trails Grants	Provide for acquisition of abandoned railroad right-of-way and adjacent land, and to develop them for recreational trail use. Open to municipalities and non-profit organizations.	DCNR <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>

**Table 17-1  
Directory of Potential Funding Sources**

<b>Program</b>	<b>Program Description</b>	<b>Administering Agency/Internet Address</b>
Keystone Acquisition and Development Grant Program - Rivers Conservation Grants	Available to both municipalities and appropriate organizations for acquisition and development projects recommended in an approved Rivers Conservation plan (such as those created under the PITA Program; see below). To be eligible for acquisition or development funding, the Rivers Conservation Plan must be listed in the Pennsylvania Rivers Registry.	DCNR <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
Keystone Historic Preservation Funds	Provides 50% matching grants to fund analysis, acquisition or rehabilitation of historic sites. The site must be on the National Register of Historic Places, or officially determined to be eligible for listing. The site must be accessible to the public after funding. The grants can be made to public agencies or non-profit organizations.	PHMC <a href="http://www.phmcstate.pa.us/">www.phmcstate.pa.us/</a>
Keystone Land Trust Program	Provides grants to non-profit land trusts, conservancies, and organizations for acquisition and planning of open space and critical natural areas that face imminent loss. Although these funds are targeted to protecting critical habitat with threatened species, many of these lands also provide key open space, greenway, bikeway, trail and heritage corridor opportunities and connections in greenway systems. Lands must be open to public use and acquisition must be coordinated with the communities or counties in which the property is located. Funds require a 50-percent match.	DCNR <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
Keystone Planning, Implementation and Technical Assistance (PITA) Program - Community Grants	Provides 50% matching grants to municipalities to fund overall planning for park and recreation, master plans for individual parks, acquisition of parkland and nature preserves, countywide natural area inventories, and rehabilitation and improvements to public recreation areas. Grants up to \$20,000, without a local match, are available for material and design costs in small municipalities.	DCNR <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
Keystone Planning, Implementation and Technical Assistance (PITA) Program - Rails-to-Trails Grants	Available for feasibility studies, master site plans, acquisition and improvement of former railroad lines for recreation trails. A 50% local match is required. Open to municipalities, authorities and non-profits.	DCNR Southcentral Regional Office <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
Keystone Planning, Implementation and Technical Assistance (PITA) Program - Rivers Conservation Grants	Available to municipalities and appropriate non-profit organizations for conducting watershed and river corridor studies and plans, many of which include greenway and trail elements. A 50% local match is required.	DCNR Southcentral Regional Office <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
PENNVEST	Offers low interest loans for construction and improvement of drinking water and wastewater systems.	PA Infrastructure Investment Authority and DEP Bureau of Water Supply Management <a href="http://www.dep.state.pa.us/">www.dep.state.pa.us/</a>
Recreational Trails Program (Symms National Recreational Trails Act)	Grants are available to federal and state agencies, municipal government, organizations, and even private individuals. Money may be used for a variety of purposes, including work on trails to mitigate or minimize the impact on the natural environment, provide urban trail linkages, and develop trail-side and trail-head facilities. A 50% local match is required.	DCNR Southcentral Regional Office <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>

**Table 17-1  
Directory of Potential Funding Sources**

Program	Program Description	Administering Agency/Internet Address
Growing Greener Grant Program	The new Growing Greener Program signed into law by Gov. Tom Ridge will invest nearly \$650 million over the next five years to preserve farmland and protect open space; eliminate the maintenance backlog in State Parks; clean up abandoned mines and restore watersheds; and provide new and upgraded water and sewer systems.	DEP <a href="http://www.dep.state.pa.us/growgreen/default.htm">http://www.dep.state.pa.us/growgreen/default.htm</a>
Land Use Planning and Technical Assistance Program (LUPTAP)	Provides financial assistance (generally, a 50% match) to municipalities for the purpose of developing and strengthening community planning and management capabilities.	DCED <a href="http://www.dced.state.pa.us/">www.dced.state.pa.us/</a>
Stream Improvement Program	Provides design and construction assistance to eliminate imminent threats to flooding and streambank erosion.	DEP Bureau of Waterways Engineering. <a href="http://www.dep.state.pa.us/">www.dep.state.pa.us/</a>
Urban Forestry Grants	Provides grants for tree planting projects. Is also a Federal "America the Beautiful" grant program for tree planting.	DCNR <a href="http://www.dcnr.state.pa.us/">www.dcnr.state.pa.us/</a>
Office of Justice Programs	Operation Weed and Seed, a Department of Justice community-based initiative, is an innovative and comprehensive multi-agency approach to law enforcement, crime prevention, and community revitalization. Weed and Seed is a strategy to prevent, control, and reduce violent crime, drug abuse, and gang activity in targeted high-crime neighborhoods of all sizes nationwide.	U.S. Department of Justice, Office of Justice Programs. <a href="http://www.ojp.usdoj.gov/reports/98Guides/rural/">http://www.ojp.usdoj.gov/reports/98Guides/rural/</a>
Volunteer Fire Assistance Program (Formerly Rural Community Fire Protection)	This program authorizes the Secretary of Agriculture to provide technical, financial and related assistance to rural fire departments for training and equipping firefighters. The program is aimed at assisting rural communities with populations of 10,000 or less to establish new fire departments and to upgrade fire suppression capabilities of existing departments.	U.S. Department of Agriculture, Forest Service. <a href="http://www.fs.fed.us/fire/planning/vfa/">http://www.fs.fed.us/fire/planning/vfa/</a>
<b>Transportation Funding Sources</b>		
Impact Fees	Acts 203 and 209 of 1990 provide legal justification for the assessment of impact fees. The County and municipalities could give some consideration to implementing such a system to supplement state and other local sources; although the initial costs of establishing impact fees will likely prove too expensive for the individual municipalities.	PennDOT <a href="http://www.dot.state.pa.us/">www.dot.state.pa.us/</a>
	The laws authorize the use of impact fees for costs incurred for improvements designated in the municipalities' transportation capital improvement program attributable to new development, including the acquisition of land and rights of way; engineering, legal and planning costs; and all other costs directly related to road improvements within the service area or areas, including debt service.	

**Table 17-1  
Directory of Potential Funding Sources**

Program	Program Description	Administering Agency/Internet Address
Impact Fees (continued)	<p>Municipalities are expressly prohibited under the impact fee law from using impact fees for: (1) the construction, acquisition or expansion of municipal facilities that have not been identified in the Township’s Transportation Capital Improvement Program; (2) the repair, operation or maintenance of existing or new capital improvements; (3) the upgrade, update, expansion or replacement of existing capital improvements to serve existing developments to meet stricter safety, efficiency, environmental or regulatory standards that are not attributable to new development; and, (4) the preparation and development of land use assumptions and the Capital Improvements Plan.</p> <p>As a prerequisite to proceeding with plans for an impact fee ordinance, a municipality must have adopted a Township or County Comprehensive Plan, a subdivision and land development ordinance, and a zoning ordinance. In addition, municipalities must meet a number of specific requirements before adopting an impact fee ordinance, including:</p> <ul style="list-style-type: none"> <li>• Appoint an impact fee advisory committee</li> <li>• Develop future land use assumptions</li> <li>• Conduct a roadway sufficiency analysis</li> <li>• Develop a Capital Improvements Plan</li> <li>• Prepare an Impact Fee Ordinance</li> </ul> <p><i>Official Map</i> - Municipalities could prepare an official Map in accordance with Article IV of the Pennsylvania Municipalities Planning Code as amended. The Official Map would be used to delineate areas for future land acquisition or easements for future roadway and infrastructure needs.</p>	
Highway Transfer or Road Turnback Program	Under this program, PennDOT will bring a road up to current specifications and then dedicate it to the participating municipality. Annual maintenance fees are also included by PennDOT. In most instances, the municipalities may get a new roadway and funding for maintenance.	PennDOT <a href="http://www.dot.state.pa.us/">www.dot.state.pa.us/</a>
Local Share of Liquid Fuels Tax	This provides for a permanent allocation of part of the liquid fuels taxes collected by the state for municipalities. Liquid fuels allocations may be used for any road-related activity including maintenance, repair, construction, or reconstruction of public roads or streets. In any given year at least a portion of the money could be used for transportation facility projects.	PennDOT <a href="http://www.dot.state.pa.us/">www.dot.state.pa.us/</a>
SAMI: Safety and Mobility Improvements Program -	This program is aimed at improving highway safety and reducing congestion. The source of the funding is the Center for Program Development and Management at PennDOT.	PennDOT <a href="http://www.dot.state.pa.us/">www.dot.state.pa.us/</a>

**Table 17-1  
Directory of Potential Funding Sources**

Program	Program Description	Administering Agency/Internet Address
Transportation Equity Act for the 21 <sup>st</sup> Century (TEA-21)	Provides money for highway, highway safety, transit and other surface transportation programs through Fiscal Year 2003. TEA-21 builds on the initiatives established during Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Significant features of TEA-21 are assurance of a guaranteed level of Federal funding for surface transportation; extension of the DBE Program; strengthening of safety programs; and continuation of the program structure established under ISTEA. These elements include: scenic beautification along highways, historic preservation, restoration of historic transportation facilities (such as canals), preservation of rail corridors (particularly for bicycle/walking routes), control and removal of outdoor advertising, archeological research, and mitigation of water pollution due to highway runoff. All projects must have a direct relationship to transportation.	USDOT/FHWA funds administered by PennDOT. Typically prioritized through regional or county transportation planning organizations
Transportation Partnerships	Under Act 47 of 1985, as amended, it provided for the formation of "partnerships" between municipalities and, in most cases, local developers and businesses. A formal partnership requires the designation of a transportation development district in which all improvements will take place and in which assessments may be charged. Municipalities should consider participation in this program as a means of obtaining funding for roadway improvements.	PennDOT <a href="http://www.dot.state.pa.us/">www.dot.state.pa.us/</a>

Sources: Publications and Internet sites of various agencies, in addition to January 1997 issue of *Pennsylvanian* magazine, and the 1997 Pennsylvania Planning Association Statewide Conference.

Acronyms: DCED - Pennsylvania Department of Community and Economic Development  
 DCNR - Pennsylvania Department of Conservation and Natural Resources  
 DEP - Pennsylvania Department of Environmental Protection  
 FHWA - Federal Highway Administration  
 HUD - U.S. Dept. Of Housing and Urban Development  
 NRCS - U.S. Natural Resource Conservation Service  
 PennDOT - Pennsylvania Department of Transportation  
 USDOT - U.S. Department of Transportation

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## Chapter 19 - Definitions

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## *Chapter 19 - Acronyms and Definitions*

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<b>AED:</b>	Automated External Defibrillator
<b>ALS:</b>	Advanced Life Support
<b>ASA:</b>	Agricultural Security Area
<b>AASHTO:</b>	American Association of State Highway and Transportation Officials
<b>BLS:</b>	Basic Life Support
<b>BMP:</b>	Best Management Practices
<b>BOCA:</b>	Building Officials & Code Administrators
<b>CAP:</b>	Civil Air Patrol
<b>CCAP:</b>	County Commissioners Association of PA
<b>CSC:</b>	Customer Service Center
<b>CDBG:</b>	Community Development Block Grant
<b>CPI:</b>	Consumer Price Index
<b>CRS:</b>	Community Rating System
<b>CVMP:</b>	Citizen's Volunteer Monitoring Program
<b>CWS:</b>	Community Water Systems
<b>DBE:</b>	Disadvantaged Business Enterprise
<b>DCED:</b>	Department of Community and Economic Development
<b>DCNR:</b>	Department of Conservation and Natural Resources
<b>EHS:</b>	Emergency Health System
<b>EMS:</b>	Emergency Medical Service
<b>EMSOF:</b>	Emergency Medical Services Operating Fund
<b>EMT:</b>	Emergency Medical Technician
<b>EOP:</b>	Emergency Operations Plan
<b>EPA:</b>	Environmental Protection Agency
<b>FEMA:</b>	Federal Emergency Management Agency
<b>FHWA:</b>	Federal Highway Administration
<b>FRA:</b>	Federal Railroad Administration
<b>GIS:</b>	Geographic Information Systems
<b>HAZ-MAT:</b>	Hazardous Materials
<b>HCB&amp;I:</b>	Huntingdon County Business and Industry
<b>HCCD:</b>	Huntingdon County Conservation District
<b>HCPC:</b>	Huntingdon County Planning Commission
<b>HEL:</b>	Highly Erodible Land
<b>HUD:</b>	Department of Housing and Urban Development
<b>ISO:</b>	Insurance Service Office
<b>IU:</b>	Intermediate Unit
<b>JCWP:</b>	Juniata Clean Water Partnership
<b>JRA:</b>	SEDA-COG Joint Rail Authority
<b>LFPR:</b>	Labor Force Participation Rate
<b>LEPC:</b>	Local Emergency Planning Committee
<b>MCIDC:</b>	Mifflin County Industrial Development Corporation
<b>MIS:</b>	Mifflin County Management Information Systems Department
<b>MPC:</b>	Pennsylvania Municipalities Planning Code, Act 247
<b>NFIP:</b>	National Flood Insurance Program
<b>NRCS:</b>	Natural Resource Conservation Service
<b>NRPA:</b>	National Recreation and Park Association

## *Chapter 19 - Acronyms and Definitions*

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<b>OLDS:</b>	On-Lot Disposal System
<b>QRS:</b>	Quick Response Service
<b>PADE:</b>	Pennsylvania Department of Education
<b>PADEP:</b>	Pennsylvania Department of Environmental Protection
<b>PADOT:</b>	Pennsylvania Department of Transportation
<b>PEMA:</b>	Pennsylvania Emergency Management Agency
<b>PHMC:</b>	Pennsylvania Historic and Museum Commission
<b>PITA:</b>	Planning, Implementation and Technical Assistance
<b>PNDI:</b>	Pennsylvania Natural Diversity Inventory
<b>PPC:</b>	Public Protection Classification
<b>PSATS:</b>	Pennsylvania State Association of Township Supervisors
<b>PSP:</b>	Pennsylvania State Police
<b>SAMI:</b>	Safety and Mobility Improvement
<b>SARA:</b>	Superfunds Amendments and Reauthorization Act of 1986
<b>SEDA-COG:</b>	Susquehanna Economic Development Agency Council of Governments
<b>SPAG:</b>	State Planning Assistance Grant
<b>TEA-21:</b>	Transportation Equity Act for the 21 <sup>st</sup> Century
<b>TIP:</b>	Transportation Improvement Program
<b>USDA:</b>	United States Department of Agriculture
<b>USDOJ:</b>	United States Department of Justice
<b>USDOT/FHWA:</b>	United States Department of Transportation/Federal Highway Administration
<b>WSI:</b>	Waste Systems International
<b>WWTP:</b>	Wastewater Treatment Plant

**Agriculture:** The production, keeping, or maintenance, for sale, lease, or personal use, of plants and animals useful to man, including but not limited to; forages and sod crops; grains and seed crops; dairy animals and dairy products, poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules, or goats or any mutations or hybrids thereof, including the breeding and grazing of any or all of such animals; bees and apiary products; fur animals; trees and forest products; fruits of all kinds, including grapes, nuts, and berries; vegetables; nursery, floral, ornamental, and greenhouse products; or lands devoted to a soil conservation or forestry management program.

**Arterial Highway:** A Principal Arterial provides land access while retaining a high degree of thru traffic mobility and serves major centers of urban activity and traffic generation. They provide a high speed, high volume network for travel between major destinations in both rural and urban areas. A Minor Arterial gives greater emphasis to land access with a lower level of thru traffic mobility than a principal arterial and serves larger schools, industries, hospitals and small commercial areas not incidentally served by principal arterials.

**Aquifer:** A geologic formation that contains a usable supply of water.

**Ca:** Symbol for the element calcium.

**Calculated Median Sustained Yield:** The median amount of water, in gallons per minute, that can be obtained continuously from a well for 24 hours.

## *Chapter 19 - Acronyms and Definitions*

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**Calculated Sustained Yield:** The amount of water, in gallons per minute, that can be obtained continuously from a well for 24 hours.

**Calculations:** The studied care in analyzing or planning.

**Collector Road:** A Collector Road serves dual functions—collecting traffic between local roads and arterial streets and providing access to abutting properties. It serves minor traffic generators, such as local elementary schools, small individual industrial plants, offices, commercial facilities, and warehouses not served by principal and minor arterials.

**Commercial Land Use:** Land uses type that generally includes those establishments engaged in retail trade or services.

**Community Park:** Focuses on meeting community-based recreation needs, as well as preserving unique landscapes and open spaces; usually serves two or more neighborhoods and a ½ to 3-mile radius; and has an optimal size of between 20 and 50 acres, but should be based on the land area needed to accommodate the desired uses.

**Dwelling Unit:** A building or structure designed for living quarters for one (1) or more families, including manufactured homes which are supported either by a foundation or are otherwise permanently attached to the land, but not including hotels, boarding/rooming houses or other accommodations used for transient occupancy.

**Effluent:** A discharge of liquid waste, with or without treatment, into the environment.

**Flood, 100-year:** A flood which is likely to be equaled or exceeded once every 100 years (i.e., that has a one (1%) percent chance of being equaled or exceeded in any given year). A study by the Federal Insurance Administration, the United States Army Corps of Engineers, the United States Department of Agriculture's Soil Conservation Service, the United States Geological Survey, the Susquehanna River Basin Commission, the Department of Environmental Protection, or a licensed professional registered by the Commonwealth of Pennsylvania to perform such a study is necessary to define this flood.

**Flood Fringe:** That portion of floodplain outside the floodway.

**Floodplain:** A flood plain may be either/or a combination of: (a) a relatively flat or low land area which is subject to partial or complete inundation from an adjoining or nearby stream, river or watercourse, during a 100-year design frequency storm; or (b) any area subject to the unusual and rapid accumulation of runoff or surface waters from any source.

**Floodway:** The channel of a stream, river, or other body of water, and any adjacent floodplain areas, that must be kept free of encroachment in order that the 100-year flood can be carried without increasing flood heights by more than one (1) foot at any point and without creating hazardous velocities.

## *Chapter 19 - Acronyms and Definitions*

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**Forestry:** The management of forests and timberlands when practiced in accordance with accepted silvicultural principles, through developing, cultivating, harvesting, transporting and selling trees for commercial purposes, which does not involve any land development.

**Freeway:** Limited access roads designed for large volumes of traffic between communities of 50,000 or more to major regional traffic generators (such as central business districts, suburban shopping centers and industrial areas); freeways should be tied directly to arterial roads, with accessibility limited to specific interchanges to avoid the impediment of through traffic.

**Household:** A family living together in a single dwelling unit, with common access to and common use of all living and eating areas and all areas and facilities for the preparation and serving of food within the dwelling unit.

**Housing Unit:** A room or group of rooms used by one or more individuals living separately from others in the structure, with direct access to the outside or to a public hall and containing separate bathroom and kitchen facilities.

**Hydric Soil:** A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

**Industrial Land Use:** This land use category generally includes: (1) establishments engaged in transforming raw materials into new products, usually for distribution to other regions and not on sale on-site, and (2) establishments engaged in wholesale trade, storage or distribution with little or no retail trade or service.

**Local Roads:** Those that are local in character and serve farms, residences, businesses, neighborhoods and abutting properties.

**Minerals:** Any aggregate of mass or mineral matter, whether or not coherent. The term includes, but is not limited to, limestone and dolomite, sand and gravel, rock and stone, earth, fill, slag, iron ore, zinc ore, vermiculite and clay, anthracite and bituminous coal, coal refuse, peat, crude oil and natural gas.

**Mini Park:** Addresses limited, isolated, or unique recreational needs; usually serves less than a ¼-mile radius; and is less than 5 acres in size.

**Municipal Waste:** Municipal waste as defined in the Municipal Waste Planning, Recycling, and Waste Reduction Act of July 28, 1988 as may be amended and supplemented.

**Municipal Waste Planning, Recycling and Waster Reduction Act:** The Act of July 28, 1988, P.L. 556, No. 101, 53 P.S. \_\_\_\_4000.101 et.seq., as the same may be amended and supplemented.

**Municipalities Planning Code (MPC):** The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended and reenacted , 53 P.S. \_\_\_10101 et seq.

## Chapter 19 - Acronyms and Definitions

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**Mutual Aid Agreement Partners:** Local government bodies or agencies engaged in a pre-arranged system for the timely use of resources of neighboring service providers when local resources prove temporarily insufficient.

**Natural Resource Production Uses:** A lot of land or part thereof used for the purpose of, but not limited to, mineral extraction and forestry operations. (See also definitions for **Minerals** and **Forestry**.)

**Neighborhood Park:** As the basic unit of the park system, serves as the recreational and social focus of a neighborhood with opportunities for informal active and passive recreation; serves a ¼ to ½-mile radius uninterrupted by nonresidential roads and other physical barriers; and is at least 5 acres in size with 7 to 10 acres being optimal.

**On-Lot Disposal System (OLDS):** An individual sewage disposal system consisting of a septic tank, seepage tile sewage disposal system, or any other approved sewage treatment device serving a single unit.

**Open Space:** Any parcel or area of land or water essentially unimproved and set aside, dedicated, designated, or reserved for the public or private use or enjoyment or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space.

**Pennsylvania Municipalities Planning Code (MPC):** See definition of *Municipalities Planning Code (MPC)*.

**Prime Farmland Soils:** Prime farmland, as identified by the U.S. Department of Agriculture, is the land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and water supply needed to economically produce a sustained high yield of crops when it is treated and managed using acceptable farming methods. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment.

**Principal Arterial Highway:** Principal Arterials provide land access while retaining a high degree of thru traffic mobility and serve major centers of urban activity and traffic generation. They provide a high speed, high volume network for travel between major destinations in both rural and urban areas.

**Public/Institutional Use:** Land use category that typically involves establishments or properties that provide educational, cultural, or social services for the community. This category includes uses such as public and private schools, municipal offices and grounds, churches, and cemeteries.

**Public/Quasi-Public Land Use:** Areas or buildings where the public is directly or indirectly invited to visit or permitted to congregate.

**Pumping Station:** A building or facility containing the necessary equipment to lift sanitary sewage from a lower to a higher elevation.

**Recharge:** The addition to, or replenishing of, water in an aquifer.

**Recreational Land Use:** This land use category typically includes public and private parks and recreation areas.

**Retail:** The selling of goods or merchandise to the public for personal or household consumption and rendering services incidental to the sale of such goods. [Comment: An important characteristic of a retail trade establishment is that it buys goods for resale.]

**Sanitary Sewers:** Pipes that carry domestic or commercial sanitary sewage and into which storm, surface, and ground waters are not intentionally admitted.

**Single Family Residential:** Consists of the following types:

1. **Dwelling, Single Family, Attached (Row):** A dwelling designed, occupied or used by one family, having two (2) party walls in common with other buildings and no side yards, commonly called row houses or townhouses.
2. **Dwelling, Single Family, Detached:** A dwelling used by one (1) family, having one (1) side yard, one (1) party wall in common with another dwelling.
3. **Dwelling, Single Family, Semi-Detached:** One building arranged or designed for dwelling purposes where two dwelling units exist, separate from each other by a party wall and having two (2) side yards.

**Slope:** The deviation of a surface from the horizontal, usually expressed in percent degrees. (Comment: Slope percent is calculated by dividing the vertical distance by the horizontal distance times 100.)

**Wastewater:** Water carrying waste from homes, businesses, and industries that is a mixture of water and dissolved or suspended solids; excess irrigation water that is runoff to adjacent land.

**Watershed Stormwater Management Plan:** Defined in the context of Pennsylvania Act 167, it provides the framework for improved management of the storm runoff impacts associated with the development of land. The purposes of the Act are to encourage the sound planning and management of storm runoff, to coordinate the stormwater management efforts within each watershed, and to encourage the local administration and management of a coordinated stormwater program.

**Wetlands, Freshwater:** An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.