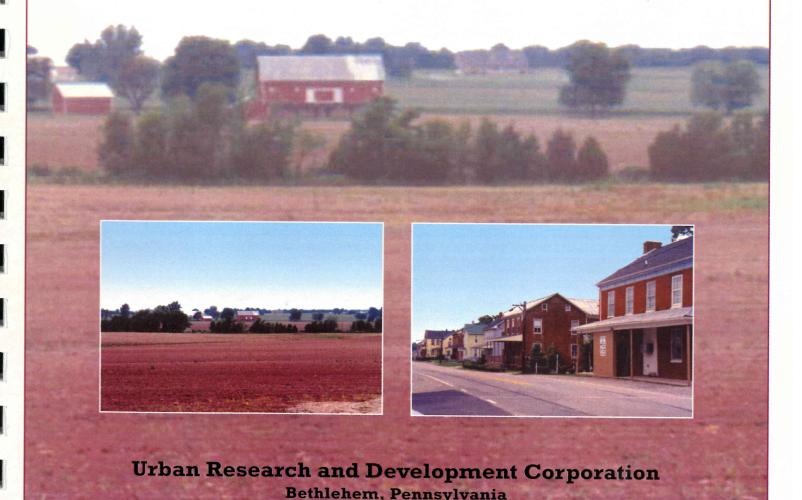
# COMPREHENSIVE PLAN

Bonneauville Borough and Mount Pleasant Township
Adams County, Pennsylvania



# BONNEAUVILLE BOROUGH AND MOUNT PLEASANT TOWNSHIP

## **COMPREHENSIVE PLAN**

## Adams County, Pennsylvania

As Developed by the Bonneauville - Mount Pleasant Township Regional Comprehensive Plan Committee

Funding Credit to be added.

Community Planning Consultants

Urban Research and Development Corporation Bethlehem, Pennsylvania

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### INTRODUCTION

### What is the Comprehensive Plan?

This Comprehensive Plan primarily addresses future land uses and conservation of important natural features. The Comprehensive Plan is intended to be used as a basis for revisions to the municipalities' development regulations. The inventory and analysis section is intended to provide a solid foundation for decision making by providing analysis of important existing conditions and trends. Then, goals will be developed to provide overall direction for the Plan. The next step will then be to develop recommendations to guide the development and conservation of the region over the next 10 to 15 years.

### An Overview of the County Comprehensive Plan

State law requires that any municipal comprehensive plans must be generally consistent with the Adams County Comprehensive Plan. The County Comprehensive Plan provides overall policies for the development and preservation of the County. The County Plan seeks to steer most new development in the County to locations within boroughs and immediately adjacent areas where public water and sewage services can be efficiently provided. This use of public water and sewage services can greatly minimize the total amount of land area that is consumed by development, because each building needs much less land.

For example, the County Plan recommends steering most of the region's growth to Bonneauville, New Oxford, McSherrystown, Littlestown and immediately adjoining areas. The implementation of this policy has been aided by the availability of sewage capacity in most of the Boroughs, the allowance of higher densities, and the difficulty of finding suitable on-lot septic systems in many rural areas. In addition, the County Plan seeks to preserve creek valleys in open space and maximize the preservation of farmland.

In this region, the County Plan seeks to concentrate most new development in the Lake Heritage area, within and immediately around Bonneauville, and in a growth area along a portion of Route 30. The center of Bonneauville is recommended to be a "Borough Center" with a mix of business, residential and institutional uses. The denser areas closer to the center or Bonneauville are recommended as Medium Density Residential with a mix of housing types. The areas surrounding the outskirts of the Borough are recommended to be Medium to Low Density Residential. A band of preserved open space is then recommended around the Bonneauville growth area.

The village of Centennial and the area around the intersection of Route 30 and Brickcrafters Road are recommended as Village Centers, with a mix of light business and residential uses. Most adjoining areas along Route 30 are recommended to be Medium to Low Density Residential. Creek corridors, major drainageways and the East Cavalry Battlefield are recommended to be permanently preserved as open space, which may be privately owned.

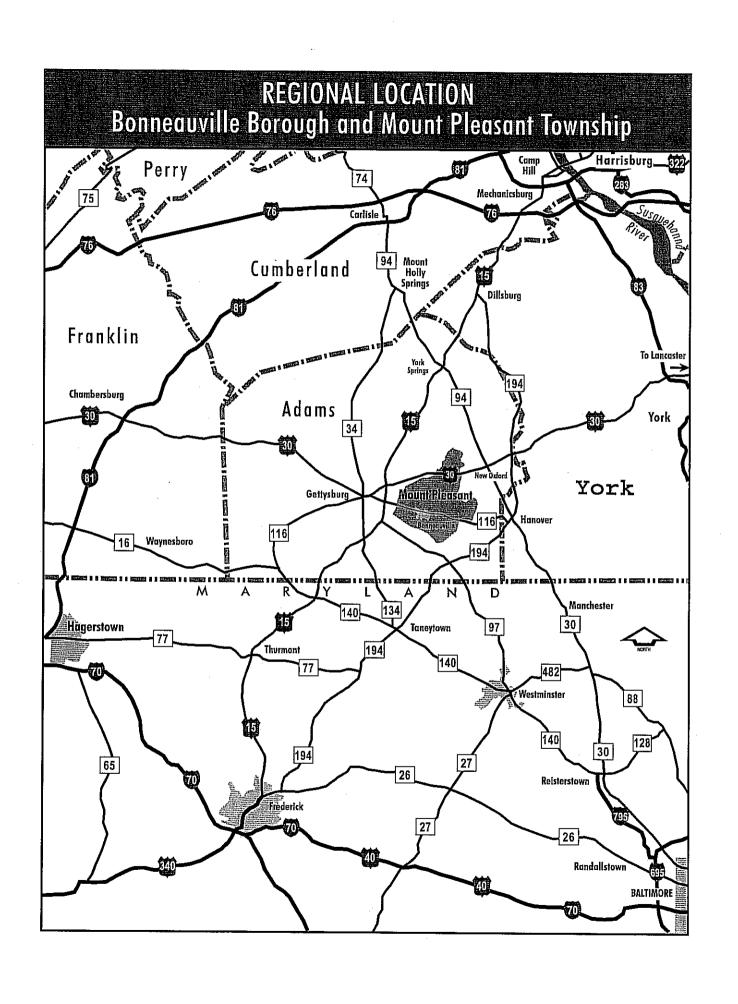
The remaining areas of the Township are designated "Agriculture/Resource Conservation/Very Low Density Residential." These areas are intended for agricultural conservation, other open space oriented uses and some residential development. The Plan encourages any residential development in these outlying areas to be developed in a cluster arrangement, with most of the tract being permanently preserved in open space.

### Bonneauville/ Mount Pleasant Township Within the Region

Regional growth pressures are affecting Mt. Pleasant Township and Bonneauville Borough, particularly as growth moves northward from metropolitan areas in Maryland. With these growth pressures, the area's population, labor supply, housing stock, and traffic volumes are also increasing.

The following map highlights the two municipalities' location within the surrounding region. Mt. Pleasant Township and Bonneauville Borough are located in southeast Adams County. Bonneauville is surrounded by Mount Pleasant. The southern border of Mount Pleasant is 2.5 miles from the State of Maryland border to the south. Bonneauville is approximately 5 miles east of Gettysburg, 8 miles west of Hanover and 23 miles southwest of York.

The Route 15 expressway, with an interchange with Hanover Road/Route 116, provides high-speed links to Frederick County to the south and to the Pennsylvania Turnpike and the Harrisburg metropolitan area to the north. Hanover Road provides connections to Gettysburg to the west and Hanover to the east. Route 30 provides connections to Gettysburg to the west and New Oxford and the City of York to the east. The Borough of New Oxford is just to the east of Mount Pleasant, along Route 30.



### **EXECUTIVE SUMMARY**

The following overall goal provides direction for this Plan.

To manage change to improve the quality of life, maintain a rural character, strengthen the agricultural economy, minimize traffic problems, and provide for compatible land uses.

This Plan is also intended to work to preserve agricultural lands and important natural features. In addition, this plan endeavors to make sure that land uses are compatible, that a rural character is maintained in most of the Township, that open space is permanently preserved as part of most new development, and that the center of Bonneauville is strengthened with new business development.

Natural Features - This Plan includes recommendations to protect creeks and creek valleys. It is important to maintain thick natural vegetation along creeks. The municipalities should require setbacks from the top edge of the bank of creeks. This setback could apply to buildings, parking areas and storage.

It is important to avoid development on steep slopes to control: erosion problems, high speed storm water problems, avoid overly steep roads and driveways, excessive costs to construct and maintain roads and utilities, and destruction of scenic natural resources.

The municipalities should promote recharge of stormwater runoff into the groundwater supplies. This includes minimizing the amount of land that is covered by surfaces that do not allow recharge. Also, the municipalities should promote ways to control the water quality of runoff by avoiding the mixing of pollutants into runoff.

Agricultural Conservation - Agricultural preservation zoning should be continued in key areas of the Township. In these areas, the number of new houses should be limited based upon the size of the tract. The remainder of a tract would need to remain in large tracts. The intent is to maintain farmland in tracts of land (preferably over 50 acres) that can be efficiently farmed. New homes should be carefully located so that conflicts with agricultural activities are minimized.

Through Transfer of Development Rights (described below), developers would be encouraged to pay property owners in these areas to preserve their land. In return, the developer could achieve a higher density in the residential areas. Owners of land in the Agricultural Preservation area should be given a bonus if they sell their development rights. Therefore, for instance, for every housing unit that is not built in the Agricultural Preservation area, a developer should be allowed to build 5 housing units in another location. This incentive would help to compensate landowners for preserving their land.

On larger tracts, farmers should be allowed a wider range of small non-agricultural businesses than is currently allowed. These are called "Farm-Based Businesses." These businesses are important to offer opportunities for supplemental sources of income. Furthermore, retail sales of agricultural products should be allowed by right throughout the Township, to help farmers capture a higher percentage of the retail value of their products.

Land Use and Housing - The use of Conservation Development should be promoted. This involves the permanent preservation of substantial open spaces within new development. Attractive incentives

and strong disincentives are needed so that any development of the large open tracts of land in the Township would most likely be developed with substantial areas of preserved open space (such as 35 to 80 percent). Conservation Development involves promoting the clustering of homes on the most suitable portions of a tract, while permanently preserving important features of the tract in some form of permanent open space. The intent is to design development in a manner that conserves the important natural, scenic and historic features of a site. In comparison, with standard "cookie-cutter" subdivisions without open space preservation, every lot is the same size and shape - regardless of the features of the land.

The Transfer of Development Rights (TDR) should be an option in the Zoning Ordinance(s) that would provide incentives for private developers to pay to preserve farmland. If a developer would pay a private owner of farmland or an important natural area to permanently preserve their land, then the developer could receive approval to build at a higher density in an area of the municipality that is suitable for a higher density. The developer and the owner of the farmland/natural area would negotiate a price on their own to preserve the land.

The municipality would then approve the development at a higher density at the same time as a conservation easement went into effect to preserve the other land. The densities are discussed below. The preserved land would remain privately owned and could be re-sold, as long as it was never developed.

The "Land Conservation" areas on the Land Use Plan are recommended to include large areas of the Township, particularly where there is less potential for service by public water and sewage systems. If an applicant proposes conventional development without permanent preservation of open space, the minimum lot area would be large, such as 3 to 5 acres. Applicants would be strongly encouraged to use "Conservation Development" in these areas. This would allow lots of one acre with on-lot utilities or smaller lots (such as 1/3 acre) with appropriate central water and sewage services. The overall density would be controlled, but flexibility would be allowed in the lot layouts and lot sizes.

The "Rural Residential" areas are proposed to include existing concentrations of single family homes in the Township and the western part of the Route 30 corridor. This category would mainly provide for single family detached houses on lots of at least one acre. In the event that central water and sewage services would be provided, it may be appropriate to allow lots of approximately 1/2 acre with 50 percent of the tract preserved in open space as part of a Conservation Development."

The "Single Family Residential" areas include existing concentrations of single family homes and new single family areas around existing villages and the eastern part of the Route 30 corridor. This category would mainly provide for single family detached houses. A maximum density of 2 to 3 homes per acre is recommended with appropriate central water and sewage services, and 1 home per acre with wells and septic systems. Through the Transfer of Development Rights (described above) higher densities could be appropriate (such as 5 homes per acre).

The "Mixed Dwelling Residential" areas are necessary to meet the region's obligations under State law to allow a variety of housing types. If central water and sewage facilities are provided in the future, this category would provide for a mix of housing types and a maximum density of 3 homes per acre. A 1 acre minimum lot would be required with on-lot wells and septic systems. If a developer preserved outlying farmland through TDR, then a maximum density of up to 6 homes per acre could be possible.

The "High Density Residential" areas are proposed to provide for a mix of housing types, including manufactured home parks. A maximum density of approximately 3 homes per acre would be appropriate, with up to 5 homes per acre with TDR. Because manufactured homes are typically one story buildings with a high building coverage, higher densities (such as 6 or more homes per acre) are not appropriate.

The "Village Center/Town Center" areas would provide for light commercial uses and a mix of residential uses. These areas would provide for lighter commercial uses, such as offices, retail stores, personal services and banks. Heavy commercial uses should be prohibited, such as new gas stations and auto body shops. The goal is to maintain the character of older areas of the region, and encourage new development that is similar in character.

The "Highway Commercial" areas are intended to provide for a wide range of commercial uses, including light and heavy commercial uses. These areas might also provide for some very light manufacturing, such as apparel and furniture manufacturing. The goal is to avoid additional strip commercial development in areas along Hanover Road and Route 30 where there are few existing commercial uses.

The "Industrial" areas are intended to provide for a range of industrial uses. Heavier types of industrial uses should need to meet a strict set of standards and need approval from the Zoning Hearing Board.

Center of Bonneauville - A stronger "sense of place" should be created in the center of Bonneauville, including use of colorful banners, additional street trees, traditional styles of street lights and a new pedestrian trail running parallel to Hanover Street through existing recreation areas. Efforts are needed to increase pedestrian safety. A traffic signal may eventually be needed at Maple and Hanover Street to allow safe left-hand turns onto Hanover Street. An alternative location would be at Bon Ox Road/Cedar Street/Hanover Street, which would have better sight distance. A traffic signal at any location along Hanover Street would help to reduce speeds along the corridor and provide breaks in traffic that would make it easier to turn left at many different intersections.

A distinctive "Welcome to Bonneauville" sign should be placed at each end of town to provide more of a community identity. Adjacent businesses should provide interconnected parking lots and/or shared driveway entrances. It should be possible to travel from one business to another adjacent business without having to re-enter Hanover Street.

**Transportation** - Along Route 30, the emphasis should be placed upon maintaining the ability of the highway to carry through-traffic. If the entire corridor would be zoned for commercial development, the large number of resulting turn movements on and off of Route 30 could result in serious traffic safety and congestion hazards. Proposed commercial development is proposed to be concentrated on portions of the highway that are already include significant commercial development. This particularly includes land around the intersection of Kilpatrick Road and around the intersections of Fleshman Mill and Bon Ox Roads.

It would be desirable to link together traffic access between adjacent commercial uses so that it would be possible to visit more than one business without having to repeatedly enter and exit Route 30. As new commercial businesses are developed, they should be required to have interconnected driveways. Ideally, a rear access road would be developed that would connect together all of the businesses along

one side of Route 30. This access road could then direct traffic to an intersection that could be signalized to allow safe left-hand turns.

Along Route 30 and Hanover Road, left-turn and/or right-turn lanes should be constructed over time at major road intersections. These turn lanes would reduce hazards from rear-end collisions of vehicles waiting to make left-hand turns.

As traffic increases, additional four way stops may be appropriate to increase the safety of intersections and reduce speeds, particularly where there is limited visibility of oncoming traffic (which is called "sight distance"). This Plan does not recommend removing the "S" turn along Route 116/Hanover Street in the center of Bonneauville. There are too many buildings close to the road. In fact, a number of Borough residents have commented that the S turn in the only feature that causes traffic to slow down as it passes through the center of town.

The present road system in Bonneauville works like spokes in a wagon wheel. To travel from one area of the Township to another area of the Township, it is often necessary to drive into Bonneauville. Bonneauville and Mount Pleasant should work over time to provide alternative routes for traffic around Bonneauville. This is not intended to be a complete bypass around town, but instead to provide two-lane alternative routes in certain directions. The goal is to allow motorists to travel from one side outside of town to another side without needing to drive into the center of Bonneauville. As new development is proposed, Mount Pleasant should seek the construction of new road links. Some road links may need to be built in phases with a "stub" street that can be extended in the future when the adjacent property is proposed for development.

A sight distance problem exists at the intersection of Storm Store Road and Route 116. The Township should work with the adjacent landowners and PennDOT to consider relocating part of Storm Store Road and/or Hanover Road to a location where sight distance would be acceptable. An alternative would involve reducing the height of the hill along Route 116. Short-term improvements could include a flashing warning light and additional warning signs.

Likewise, a sight distance problem exists along Centennial Road between Hill and Honda Roads, where a hill and a curve combine to create difficulties. This problem is likely to be aggravated by increased traffic from the adjacent proposed Centennial Meadows development.

Another sight distance problem exists at the narrow intersection of Whitehall Road at Locust Lane. The Township is planning a project that will widen and improve this intersection.

A sight distance problem also exists along Route 116 at Low Dutch Road. This problem is caused by a barn close to the intersection and a hill.

**Parks** - Mount Pleasant Township should seriously consider developing a Township Park. A location should be considered adjacent to an existing community facility so that joint use can be made of parking and so there can be security and oversight during many times of the week.

### INVENTORY AND ANALYSIS

This section addresses major existing conditions and trends.

### An Overview of the History of the Area

The following is primarily based upon information provided by the Mount Pleasant Township Secretary, with assistance by the Adams County Historical Society.

Adams County was originally part of Lancaster County. When the area became part of the new County of York, the new township of Mount Pleasant was established in 1749. Mount Pleasant then became part of the new Adams County when it was formed in 1800. The County was named after then-President John Adams. In 1800, the county included over 13,000 residents.

Most early settlers of the lands in the Township were Scot-Irish. By 1800, much of the land was being settled by persons from Holland and Germany. Most settlers were members of the Presbyterian, Dutch Reformed, Lutheran, Reformed, Roman Catholic and United Brethren religions. The two older churches still in existence are the Salem United Methodist and St. Luke's Lutheran Churches. Later churches included Faith United Church of Christ and St. Joseph the Worker Catholic Church. Two of the oldest cemeteries are next to Salem United Methodist Church and St. Luke's Lutheran Church.

Mount Pleasant Township's borders changed little from the borders of 1749, with the exception of land conceded to help form Union Township in 1841 and the formation of the Borough of Bonneauville in 1961. Bonneauville originally had the name Bonaughtown.

Most early settlers were farmers and fruit producers. As development continued and roads were approved for construction, supervisors of the highways were appointed in 1751. Samuel Gettys established a tavern and store in 1762 in present day Gettysburg. By 1786, his son James had laid out 210 lots that became Gettysburg. James Gettys went on to become a major civic leader in the region.

Mount Pleasant Township experienced steady growth in its early years the mostly wooded landscape was cleared with great effort for farms. Mount Pleasant Township included approximately 500 residents in 1762 and nearly 1,000 residents by 1800. By 1850, the population rose to approximately 1,600 and to 2,000 by 1900.

As the Township grew during the 1800s, a number of taverns, distilleries and mills were developed. Taverns often served as polling places for elections. A railroad was built through the northern portion of the Township. Post offices were established in the villages of Centennial, White Hall and at "Square Corner" just outside of Bonneauville.

In the early 1800s, many schools were constructed on private lands for the area children. In 1834, a new State law authorized the establishment of publicly funded school systems. The Township's school system was established in 1838. As many as eleven schools existed in the township from the early days through 1954. Some of those buildings still exist throughout the township.

By 1860, Gettysburg had 2,400 residents and 450 buildings, including factories, shops and banks. In 1860, the County included over 28,000 residents. Ten roads in the area led into Gettysburg - which helped set the stage for the Battle of Gettysburg. Neither army had planned on a battle at Gettysburg. In early July of 1863, the battle occurred, involving 75,000 Confederate and 97,000 Union troops.

The vast majority of fighting occurred to the north, south and west of Gettysburg. However, the East Cavalry Battlefield located in western Mt. Pleasant Township was the site of one of the largest mounted cavalry battles of the Civil War. This was a failed Confederate cavalry attempt to circle behind the Union Lines and attack the troops retreating from Cemetery Ridge. Before the battle, Confederate troops moved along the present day Route 30 to seek control of the Susquehanna River bridges. Before the battle, many Union troops moved to Gettysburg on roads from the Hanover area.

Lincoln's Gettysburg Address added a special meaning to the battle in the public mind. Soon after the battle, private citizens organized the Gettysburg Battlefield Memorial Association to purchase and preserve key parts of the battlefield. Several hundred acres of ridgetops were preserved by 1890, with assistance from several state parks and the veterans of the Grand Army of the Republic. In 1895, Congress established the Gettysburg National Military Park to commemorate the battle. Most of the park acquisitions followed an 1895 plan by former General and then Congressman Daniel Sickles. The park expanded over the years in land area, as well as the number of visitors - making tourism a key part of the area's economy.

Tourism was helped by the extension of additional rail lines to Gettysburg in the 1880's. The Lincoln Highway (Route 30) was designated to become the first paved east-west highway across the United States, which attracted many vacationers through the area.

In 1960, there were approximately 2,500 residents in Mount Pleasant just before Bonneauville Borough was established as a separate municipality. Then, in 1961, by referendum, the new Borough of Bonneauville was formed out of Mount Pleasant. Bonneauville is one of the newest boroughs in the County and is surrounded by the Township.

Mount Pleasant became part of the Lower Adams County Joint School System in 1948. In 1961, the Township was divided between the Littlestown and New Oxford school systems, which eventually became the present Littlestown Area and Conewago Valley School Districts.

Over the last few decades, development has increased in Mount Pleasant, Bonneauville and surrounding municipalities. One of the two largest residential developments in the County is Lake Heritage, which is partially in Mount Pleasant. Development has been spurred by the completion of the Route 15 expressway, and increase in tourism in the Gettysburg area and the growth of business employers, particularly in the Hanover area. The region has also experienced an influx of residents from Maryland, including many persons who commute to jobs to the south and many retirees and semi-retirees.

### THE PEOPLE AND HOUSING OF THE REGION

This section analyzes data about the residents and housing of Mt. Pleasant Township and Bonneauville Borough. This information is compared to the County-wide averages. In some cases, information is also provided for the Lake Heritage development, which also includes some residents of Straban and Mount Joy Townships. Unless otherwise stated, all data is from the U.S. Census.

### Total Population

Both Boneauville Borough, and Mt. Pleasant Township have experienced continuous growth since the 1970s. Mt. Pleasant township's decline in population during the 1960s is explained by the incorporation of Bonneaville Borough.

# TOTAL POPULATION Bonneauville Borough and Mt. Pleasant Township 1960-2000

MUNICIPALITY		POPULATION					PERCENT
WONCIFALITY	1960	1970	1980	1990	2000	CHANGE 1990-2000	CHANGE 1990-2000
Bonneauville Borough		819	920	1,282	1,378	96	7.5
Mt. Pleasant Township	2,531	1,817	3,473	4,076	4,420	344	8.4

As of July 2002, the U.S. Census estimated that Bonneauville included 1,401 residents, while Mt. Pleasant included approximately 4,625 residents, and Adams County included approximately 94,437 residents.

### Regional Population

The following table compares growth in Bonneauville and Mt. Pleasant to eight surrounding municipalities. All of these municipalities are part of Adams County. While only four of the surrounding municipalities have larger populations than Mt. Pleasant Township, all eight have a larger population than Bonneauville. According to the 2000 Census, Conewago Township has the largest population in this region with a total of 5,709 people. Oxford Township had the largest growth rate during the 1990s - at 42%. Bonneauville and Mt. Pleasant had the slowest growth rate in this region with the exception of Straban Township, who had a decrease in population. Adams County's population grew by 17% during the 1990s.

TOTAL POPULATION
Adjacent Municipalities and Adams County
1990-2000

AREA	1990	2000	1990-2000 NUMBER CHANGE	1990-2000 PERCENT CHANGE
Conewago Township	4,532	5,709	1,177	26.0
Germany Township	1,949	2,269	320	16.4
Hamilton Township	1,760	2,044	284	16.1
Mount Joy Township	2,848	3,232	384	13.5
Oxford Township	3,437	4,876	1,439	41.9
Reading Township	3,828	5,106	1,278	33.4
Straban Township	4,565	4,539	-26	-0.6
Union Township	2,178	2,989	811	37.2
Adams County	78,274	91,292	13,018	16.6

### Population Projections

As shown in the population and housing inventory section, the population of Bonneauville increased by 96 persons from 1990 to 2000 to 1,378 residents. The population of Mount Pleasant Township increased by 344 persons from 1990 to 2000 to 4,420 persons.

The rate of population growth depends upon many variables, including mortgage rates, zoning, employment growth, willingness of property-owners to sell, the availability of central water and sewage capacity, the availability of funding to buy conservation easements on farmland, and other factors. Another major factor is the financial feasibility and market strength for particular types of development. For example, will the proposed manufactured home park in Bonneauville move forward? The pending completion of construction in the Mount Pleasant portion of Lake Heritage will also affect growth rates, because for many years Lake Heritage was one of the centers of residential growth in the entire County.

Based upon 1997 population estimates, and projections of the likely locations of development, the County Water Supply Plan projected that Bonneauville's population would increase to 1,900 persons by 2010, while Mount Pleasant's population would increase to 6,000 persons by 2010. However, it appears this study overestimated the population of each municipality as of 1997.

If we assume that each municipality will increase in population by the same number of residents as occurred during the 1990s, then Bonneauville's population in 2010 would be projected to be 1,474 residents, and 1,570 residents in 2020. However, if all of the undeveloped land in the Borough would be developed with central water and sewage service, a much higher population could be possible.

If we assume that Mount Pleasant will increase in population by the same number of residents as occurred during the 1990s, then Mount Pleasant's population in 2010 would be projected to be 4,764, with 5,108 residents in 2020.

However, much of the past growth in Mount Pleasant occurred in locations with central water and sewage systems, and when there were no zoning regulations. It is much more difficult to obtain approval for a new central sewage system than was previously the case. Also, the Bonneauville system will run out of treatment capacity if all of the proposed projects would be developed.

Another method of estimating growth considers the total number of residents that would be possible if all of the undeveloped land would be developed according to existing or proposed zoning. However, with so much undeveloped land in Mount Pleasant, this type of estimate would result in an unrealistic total growth.

From the mid-1970s to the present, much of the growth in Eastern Adams County has occurred in the Lake Heritage and Lake Meade developments. As these developments are completed, the growth may spill out into more sprawled developments, including in this region.

### Age Distribution

The ages of population affect needs for social services, recreation, housing and many other factors. The median age means that half of the residents were older than that age, while half were younger. Bonneauville had a median age of 33 years in 2000, which was younger than Mt. Pleasant Township's median age of 37 years, which was close to the County-wide median.

Residents age 65 and older accounted for 9.6% of the population in Bonneauville Borough, and 11.8% of the population in Mt. Pleasant Township as of 2000. The 65 and older population of Adams County as a whole was

13.9% - which is higher than the two municipalities. Growing municipalities usually have a smaller proportion of older persons because of new housing, particularly single-family detached homes, tends to attract younger families with children.

Lake Heritage includes residents of the entire development, which crosses into three townships. In 2000, a high 15 percent of residents were age 65 or older. This number can be explained by the number of retirees who moved into the development.

AGE DISTRIBUTION
Bonneauville, Mt. Pleasant Township and Adams County - 2000

AGE	BONNEAUVILLE		MT. PLEASANT TOWNSHIP		ADAMS COUNTY
	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT
Under 5	115	8.3	266	6.0	5.9
5-19	325	23.6	1,038	23.4	22.2
20-24	78	5.7	- 216	4.9	6.1
25-44	450	32.6	1,322	30.0	28.9
45-54	172	12.5	669	15.1	13.8
55-64	106	7.7	387	8.7	9.2
65+	132	9.6	522	11.8	13.9
Total	1,378	100.0	4,420	100.0	100.0
Median	33.4	-	36.9	<b>-</b>	-

### Household Size

The average household size is the average number of persons living in each housing unit. Bonneauville and Mt. Pleasant had a larger average number of persons per household compared to Adams County's 2.6 people per household in 2000. This correlates with the lower elderly population in these two municipalities compared to the County-wide average.

HOUSEHOLD SIZE Bonneauville, Mt. Pleasant and Adams County - 2000

AREA	AVERAGE PERSONS PER HOUSEHOLD
Bonneauville Borough	2.79
Mount Pleasant Township	2.74
Adams County	2.61

### **Housing Units**

Bonneauville Borough had the least number of housing units in the region with 494 units according to the 2000 Census. Mt. Pleasant Township had 1,616 housing units in the year 2000, which was lower than most surrounding municipalities. Adams County had a total of 33,562 housing units in 2000.

HOUSING UNITS
Bonneauville, Mt. Pleasant, Surrounding Municipalities and Adams County -2000

AREA	TOTAL NUMBER OF HOUSING UNITS
Bonneauville Borough	494
Mount Pleasant Township	1,616
Conewago Township	2,128
Germany Township	773
Hamilton Township	740
Mount Joy Township	1,191
Oxford Township	1,694
Reading Township	1,803
Straban Township	1,687
Union Township	1,074
Adams County	33,652

### Housing Type

About seven out of ten homes in both Bonneauville Borough and Mt. Pleasant Township are single-family detached units. The table below shows single-family attached homes (twins or row houses) accounted 12% of all housing units in Bonneauville Borough, and 4% of homes in Mt. Pleasant Township. Boneauville Borough, also had more units in 2+ unit structures than Mt. Pleasant had as a whole. In Mt. Pleasant Township, 24% of the housing units were mobile homes, many of which are located within four major manufactured home parks.

HOUSING TYPE Bonneauville, Mt. Pleasant and Adams County -2000

	BONNEAUVILLE BOROUGH		MT. PLEASANT TOWNSHIP		ADAMS COUNTY	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Single-Family Detached	349	67.9	1,169	69.5	25,867	72.2
Single-Family Attached	63	12.3	60	3.7	2,407	6.7
Units in 2-4 Unit Structures	51	10.0	36	2.1	2,941	8.2
Units in 5+ Unit Structures	44	8.4	9	0.5	1,490	4.2
Mobile Homes/Other	7	1.4	407	24.2	3,126	8.8
TOTAL	514	100.0	1,681	100.0	35,831	100.0

### Housing Ownership and Vacancy

Approximately seven out of ten homes in Bonneauville, and nine out ten homes in Mt. Pleasant Township were owner-occupied units in 2000. Adams County was 77% owner-occupied in 2000.

Vacancy rates were low in both the Bonneauville and Mt. Pleasant Township in the year 2000. Both municipalities had a vacancy rate of 3.9% compared to Adams County's rate of 6.1%. Vacancy rates from 2% to 4% are usually considered average, and allow a reasonable turnover of homes.

HOUSING OWNERSHIP AND VACANCY
Bonneauville Borough and Mt. Pleasant Region and Adams County -2000

	BONNEAUVILLE BOROUGH		MT. PLEASANT TOWNSHIP		ADAMS COUNTY	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Owner-Occupied Units	366	74.1	1,412	87.4	25,861	76.8
Renter-Occupied Units	128	25.9	204	12.6	7,791	23.2
Total Occupied Units	494	100.0	1,616	100.0	33,652	100.0
Vacant Units	20	3.9	65	3.9	2,179	6.1

The owner-occupancy rate was an unusually high 94 percent in the Lake Heritage development in 2000.

### Housing Value

In 2000, the median housing value in Bonneauville Borough was \$97,400 compared to \$116,200 in Mt. Pleasant Township. This compared to Adams County's median housing value of \$110,100. This reflects the fact that much of Mt. Pleasant Township's involves single family detached houses on larger lots than are present in the Borough. The highest median price for homes was within the Lake Heritage development, which had a median of \$133,000 in 2000.

HOUSING VALUE
Bonneauville, Mt. Pleasant, Surrounding Municipalities and Adams County -2000

AREA	MEDIAN VALUE OF OWNER-OCCUPIED HOUSING
Bonneauville Borough	97,400
Mount Pleasant Township	116,200
Conewago Township	104,400
Germany Township	120,600
Hamilton Township	125,100
Mount Joy Township	118,000
Oxford Township	98,400
Reading Township	107,500
Straban Township	113,900
Union Township	143,500
Adams County	110,100

### Rental Costs

The median rent in 2000 was very similar in the two municipalities - \$549 in Mount Pleasant and \$559 in Bonneauville. These were higher than the Countywide median of \$509.

### Median Income and Poverty

Both Bonneauville Borough and Mt. Pleasant Township had a lower median household income than Adams County as a whole as of 1999. All eight of the surrounding municipalities had higher median household incomes than Bonneauville and Mount Pleasant. The highest income levels were found in the Lake Heritage Development, which had a median income of \$55,250 in 1999.

The percentage of families with income below the poverty level in 1999 was an usually high 10 percent in Bonneauville. Mount Pleasant also had a higher than average number of families below the poverty level.

### MEDIAN INCOME AND POVERTY Bonneauville, Mt. Pleasant Township, Adjacent Municipalities and Adams County - 1999

AREA	MEDIAN HOUSEHOLD INCOME	PERCENT OF FAMILIES IN POVERTY
Bonneauville Borough	40,221	9.5
Mount Pleasant Township	41,132	7.2
Conewago Township	47,920	2.9
Germany Township	46,806	4.2
Hamilton Township	48,937	3.3
Mount Joy Township	46,101	2.1
Oxford Township	42,041	1.4
Reading Township	47,571	6.9
Straban Township	44,008	4.5
Union Township	47,619	2.0
Adams County	42,704	4.9

### Education

Education has become increasingly complex as the employment market has changed over time towards higher numbers of skilled and technical jobs. Mt. Pleasant Township has a higher percentage of high school and college graduates than the Borough and the County as a whole.

The residents of the Lake Heritage development on the average had high educational levels, with 94 percent having graduated high school and 39 percent having graduated college.

EDUCATION
Bonneauville Borough and Mt. Pleasant Township Region and Adams County - 2000

	EDUCA	EDUCATION				
	PERCENT HIGH SCHOOL GRADUATE OR HIGHER	PERCENT BACHELOR'S DEGREE OR HIGHER				
Bonneauville Borough	75.5	7.9				
Mt. Pleasant Township	81.2	10.5				
Adams County	79.7	16.7				

### **Employment by Occupation**

The most common occupational area among Borough and Township residents in 2000 was production, transportation, and material moving. This probably reflects the proximity of the two municipalities to industrial employment in the Hanover area. Sales and office work make up the second largest number of jobs by residents.

EMPLOYMENT BY OCCUPATION
Bonneauville, Mt. Pleasant and Adams County - 2000

	PERCENT EMPLOYMENT BY OCCUPATION			
	Bonneauville	Mt. Pleasant Township	Adams County	
Management, professional	15.8	17.0	24.9	
Service	17.1	14.1	14.9	
Sales and office	20.6	25.6	23.8	
Farming, fishing, forestry	0.3	1.2	1.7	
Construction, extraction, maintenance	14.7	11.4	11.8	
Production, transportation, material moving	31.6	30.8	23.0	

### Employment by Industry

Manufacturing is the largest employer by industry in the two municipalities and in the County. Education, health and social services and retail trade all follow closely. The 18 percent of Mount Pleasant residents who work in retail sales was unusually high. Almost five percent of Mount Pleasant Township residents reported they worked in the agricultural or forestry industries.

EMPLOYMENT BY INDUSTRY Bonneauville, Mt. Pleasant and Adams County - 2000

	PERCENT EMPLOYMENT BY INDUSTRY			
	Bonneauville	Mt. Pleasant Township	Adams County	
Agriculture, forestry, fishing and hunting, mining	1.4	4.5	3.5	
Construction	9.8	7.2	8.0	
Manufacturing	21.5	25.1	22.6	
Wholesale Trade	6.4	2.2	3.8	
Retail Trade	12.2	17.6	11.7	
Transportation and warehousing, and utilities	7.0	6.8	4.2	

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	PERCENT EMPLOYMENT BY INDUSTRY		
	Bonneauville	Mt. Pleasant Township	Adams County
Information	1.3	3.5	2.6
Finance, Insurance, Real Estate and Rental	4.0	2.4	3.7
Professional, scientific, management, administrative, and waste management	3.4	1.8	4.9
Educational, health, and social services	16.8	14.1	18.7
Arts, entertainment, recreation, accommodation, and food service	6.8	9.2	7.5
Other services (except public administration)	5.8	4.4	4.4
Public administration	3.6	1.1	4.3

### Unemployment

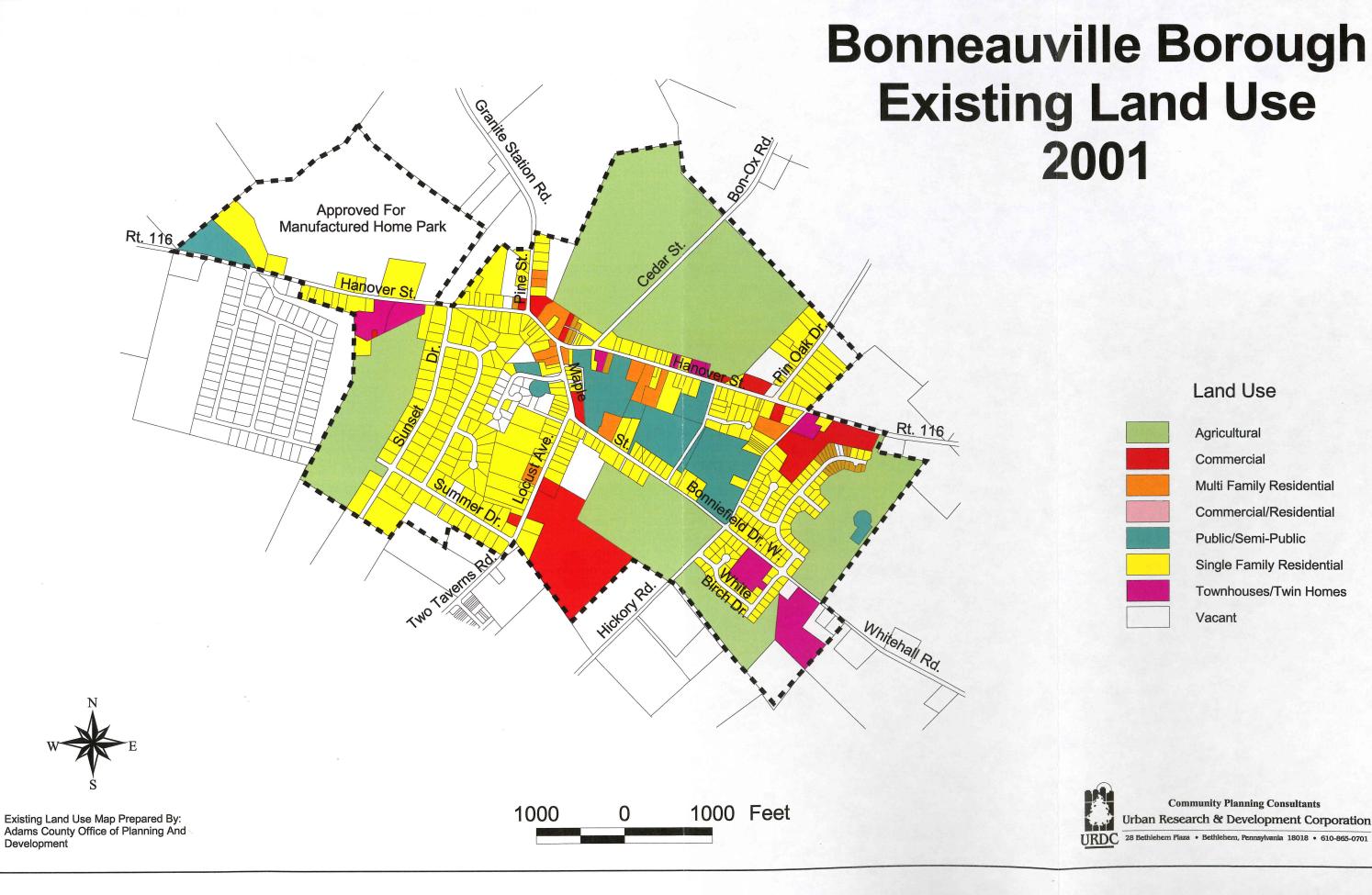
The unemployment rate in 2000 was reported to be only 1.3 percent among Mount Pleasant Township residents, compared to 2.2 percent for Bonneauville residents and 2.9 percent for the County as a whole.

### EXISTING LAND USES

An understanding of the existing uses of land is essential in preparing a comprehensive plan.

### Existing Land Uses Maps

A base map that depicts roads and property lines in the Borough and the Township was prepared using County property tax mapping and other information. Field surveys were then conducted by the County Office of Planning and Development to categorize how each property in two municipalities was being used as of 2001. The results of the field survey and mapping are illustrated on the accompanying Existing Land Use Maps and are described below.









Mount Pleasant Existing Land Uses Map

### Residential Uses

Single-family detached homes are the most prevalent type of housing in the Region. In the Borough, there are older homes and some apartments along Hanover Street, and a number of modern subdivisions, such as along Bonniefield Drive (including "Bonney Fields" which is mostly singles with some twins) and along Summer Drive. One new single family subdivision ("Noble's Ridge) is under construction west of Maple Street, and the development at the east end of town near the new water tower was planned to allow additional phases of homes. On the northwest side of the Borough north of Hanover Street, a large manufactured/mobile home park named "The Meadows" has been approved. That development is proposed to include over 100 homes in five phases. There are also a number of other attached homes in the Borough, including apartments on Locust Avenue.

Most housing units in the Township are single family detached houses, except for some scattered conversions of buildings into apartments, four manufactured/mobile home parks and townhouses south of Bonneauville. The four mobile home parks are: 1) on the north side of Hanover Road next to the East Cavalry Battlefield, 2) on the north side of Hanover Road in a location almost surrounded by the Borough, adjacent to Granite Station road, 3) north of Route 30, and 4) along Bon-Ox Road at Kohler School Road.

Other than the mobile home parks, the densest concentrations of homes in the Township are in the village of Centennial and south of Bonneauville. The development south of the Borough on Two Taverns Road includes the Colonial Ridge Townhouses, which will eventually include approximately 150 units. A major new subdivision of over 100 homes is proposed along Centennial Road east of Honda Road, west of the village of Centennial.

### Commercial Uses

Most commercial land uses in the Region are located along Hanover Road, including within the Borough. The commercial uses in the Borough are mostly small in size are intended to serve the immediate area, including convenience stores, gas stations, a mini-mall and a bank. The majority of the commercial needs of residents are currently met by the Route 30 corridor in Straban Township and commercial development in the Hanover area.

### Industrial Uses

The two municipalities have very limited industrial development. A former brickworks north of Route 30 is currently zoned for industrial development and is proposed for a new industrial subdivision. Most new industrial development in the region is expected to be concentrated at the Adams County Commerce Center at Routes 30 and 15, and the Hanover area, which is a traditional industrial center with rail access.

### Public/Semi-Public Uses

Public/semi-public uses include the Borough's water and sewage plants, churches, the Township Building off of Bon-Ox Road, the Borough Building on Hanover Road, the water tanks in the Borough, the fire companies and the Borough Park on Elm Avenue. There are no public schools in the two municipalities.

### The Natural Features of the Region

Land in the region varies in its suitability for different intensities of development. Some areas, such as flood-prone creek valleys and wetlands, are not suitable for any development. Other areas are only suitable for very low-intensity development. Still other areas are appropriate for intensive development. Open land is particularly important to:

- 1. recharge groundwater supplies,
- 2. protect the quality of creeks and the groundwater,
- 3. avoid development on lands that are prone to erosion or are otherwise not physically suitable for development, and
- 4. preserve habitats and cover for birds, fish and wildlife.

The most important natural features in Mount Pleasant include the South Branch of the Conewago Creek, which forms the eastern border, and the Swift Run creek, which forms the northern border. Lake Heritage is a large man-made lake along the White Run Creek that forms the western border of the Township. There are also a number of smaller creeks and major drainageways.

Flood-Prone Areas - To comply with State requirements, the Township and Borough already have regulations that limit buildings within flood-prone areas. These regulations apply within the "100-year floodplain," as shown on the Woodlands and Floodplains Map. The 100-year floodplain includes areas forecast to be flooded during the worst flood expected in an average 100-year period. The primary floodprone areas are along the South Branch of the Conewago Creek in the east, the Swift Run in the northwestern part of Mount Pleasant, the White Run running north-south to the west of Bonneauville, the Brush Run runs north-south across Route 30, an unnamed drainageway running to the east of Storm Store Road, an unnamed drainageway running south of Whitehall. The main floodprone area in Bonneauville, Chicken Run, runs south of Hanover Street.

If desired, the provisions could be strengthened by prohibiting any new buildings in the 100-year floodplain, as opposed to allow new buildings in parts of the floodplain if they are flood-proofed.

<u>Creeks and Water Quality</u> - The Pennsylvania Department of Environmental Protection (DEP) classifies all creeks according to water quality standards. The highest level of protection are "Exceptional Value" creeks. The next highest level of protection are "High Quality" creeks. An Exceptional Value or High Quality creek involves much stricter regulations upon water quality, particularly for effluent from sewage systems. Then, a basic level of protection involves "Warm Water Fisheries" or "Cold Water Fisheries." The creeks in Mount Pleasant Township are currently rated as "Warm Water Fisheries," without special water quality protection.

# Bonneauville Borough and Mt. Pleasant Township Adams County, Pennsylvania

# Woodlands And Floodplains



100 Year Floodplain



Woodlands



# Bonneauville Borough and Mt. Pleasant Township Adams County, Pennsylvania

# **Steep Slopes**



15-25%



25% +



# Bonneauville Borough and Mt. Pleasant Township Adams County, Pennsylvania

## **Water Resources**



**Known Wetlands** 



Hydric Soils



Water Bodies



# Bonneauville Borough and Mt. Pleasant Township Adams County, Pennsylvania

# Suitability For On Lot Septic Systems

Severe Limitation

Moderate Limitation

Slight Limitation



Areas with Special Natural Diversity - Certain areas serve as habitats for rare or endangered species of animals or plants. A Countywide study of these areas was completed in 1996 by the Nature Conservancy. That study identified one area in Mount Pleasant Township, which stretched into Oxford Township. This is known as "Irishtown Woods" along the South Branch of the Conewago Creek. It includes a species of tree that is endangered in Pennsylvania. The study reported that only about a dozen of these trees were present and that there were aging. The study recommended that logging of the trees be avoided and that weedy non-native species within the woodland (such as multi-flora rose and garlic mustard) be cut back so they did not compete with the trees and inhibit reproduction of the trees.

Steeply Sloped Lands - The locations of steeply sloped lands are highlighted on the Steep Slopes Map. Most of the region is not steeply sloped. Most steep lands are located along the creek valleys, particularly along the Swift Run and White Run creeks and along drainage channels that feed into the South Branch of the Conewago Creek. A 15 percent slope would have a rise of 15 feet for every 100 feet of horizontal distance.

It is important to avoid development to steep slopes to control: erosion problems, high speed storm water problems, avoid overly steep roads and driveways, excessive costs to construct and maintain roads and utilities, and destruction of scenic natural resources. Steep slopes also limit the placement of on-site sewage systems.

<u>Wooded Areas</u> - As seen on the Woodlands and Floodplains Map, there are many areas of woodlands, but they are mostly scattered throughout the Township. Most woodlands are in wet and rocky areas that were not suitable for crop farming. The woodlands add character to the landscape, help preserve the water quality of creeks and provide important wildlife habitats. Trees also are important to purify the air and control erosion.

Stormwater Management - State law requires that Stormwater Management Plans eventually be prepared for all watersheds in the State. This region is within two main watersheds - areas that flow to the south towards the Monocacy River and those that flow northeast towards the Conewago Creek. Adams County has completed a regional stormwater management plan for the portion of the Monocacy River Watershed within Adams County. To carry out the Plan, a model stormwater management ordinance has been prepared. Under State law, the Plan requires each municipality to implement the findings of the Plan. The stormwater management guidelines of the Plan include:

- controlling the peak rates of discharge of stormwater from new development so that it is not increased as a result of the development,
- controlling the velocities of stormwater runoff from new development to avoid erosion and damage to property,
- making sure that detention basins are properly designed,
- promoting use of methods that cause stormwater to be recharged into the groundwater, particularly to make sure that the amount of recharge is not decreased as a result of development,
- making sure that there is a proper method in place to maintain stormwater detention basins over time, and
- promoting methods to screen sediment and pollutants from stormwater runoff before the runoff enters a creek, to protect water quality.

Traditionally, stormwater management only addressed controlling the peak amounts of stormwater runoff during severe rainstorms. This typically involves detaining the heaviest amounts of stormwater runoff in

detention basins so that the water can be gradually released over time to avoid flooding. Under the new Stormwater Plan, municipalities must also address ways to encourage recharge of runoff into the groundwater supplies. This concept of "infiltration" into the ground is particularly important in eastern Adams County, which has limited supplies of groundwater and does not have large rivers.

The Watershed Plan also emphasizes ways to control the water quality of runoff by avoiding the mixing of pollutants into runoff. By improving the water quality of runoff, we can help protect the water quality of creeks and water supplies and preserve habitats for fishing. The Stormwater Plan recommends that developers install water quality measures to screen out pollutants - particularly from the "first flush" of stormwater that comes from a site near the beginning of a storm.

<u>Wetlands</u> - The Water Resources Map on a following page shows: a) the locations of known wetlands based upon U.S. Fish and Wildlife Service mapping and b) "hydric soil" areas that are likely to include areas of wetlands, but are not entirely wetlands. Most of the known wetlands are along creeks and major drainage channels. The hydric soils include much larger and much more scattered areas that have soils that are not well-drained. It is extremely important to protect wetlands to control flooding, provide wildlife and aquatic habitats and recharge groundwater. Other benefits of wetlands are described in the "Natural Features Conservation Plan" section.

Amounts of Groundwater - Geology affects the soil conditions and greatly impacts upon groundwater supplies. The Pennsylvania Geological Survey's 1981 report entitled Groundwater Resources of Adams County describes some of the difficulties with groundwater yields in the region.

The report stated that wells in the region are usually adequate for single family homes, but that some wells only produce marginal supplies of less than five gallons per minute and some produce total inadequate supplies of less than one gallon per minute. For example, the diabase geology is "one of the poorest aquifers in the County" and may be "inadequate for water supply." The report states that wells need to be "carefully located" where Gettysburg formation geology is present. The median domestic well in the Gettysburg formation was rated at 12 gallons per minute, while 69 gallons per minute was the average for non-domestic wells. The Gettysburg formation includes most of Bonneauville and the western half of Mount Pleasant. In the New Oxford formation, the report stated that only 25 percent of wells produced more than 45 gallons per minute. The New Oxford formation includes most of the eastern part of Mount Pleasant. A part of Mount Pleasant near the Conewago Township border is within the Kinzers formation. The report found that these areas had well yields between 4 and 20 gallons per minute, with the median yield being 10 gallons per minute.

<u>Water Supply Protection</u> - The 2001 Adams County Water Supply and Wellhead Protection Plan includes a wide range of recommendations to provide adequate water services and to protect the water quality of groundwater and creeks. Many of those recommendations are incorporated into the recommendations section of this Plan. In addition, the County Plan includes the following major recommendations to protect groundwater:

- The County should work with municipalities (using State grants) to collect hazardous materials from households, so they can be sent for properly disposed.
- Educational programs are needed to make homeowners aware of actions they can take to avoid water contamination. These include minimizing the use of lawn chemicals and household chemical products, recycling used motor oil, keeping animals away from stream banks, and planting thick vegetation along creeks.

- Educational programs and enforcement are needed to make sure that on-lot septic systems are properly maintained and failing systems are repaired or replaced. Most on-lot septic systems should be pumped approximately once every three years.
- The County Conservation District should continue to work with farmers to institute proper conservation measures to avoid water pollution, particularly from pesticides and manure.
- The County Conservation District and municipalities should continue to inspect land developments to make sure that proper soil erosion control measures are carried out.

<u>Suitability for On-Lot Septic Systems</u> - The Suitability for On-Lot Septic Systems Map on a preceding page shows the suitability of soils in various areas of the region for conventional types of in-ground on-lot sewage systems. This information is based upon the Adams County Survey, which was prepared by the U.S. Department of Agriculture. That information shows that the vast majority of the land areas have "severe" limitations for conventional septic systems. A few areas with better drained soils in the east and southern part of the Township are rated as having "moderate" limitations.

Because of the soil limitations in the region, many lots without public sewage service have had to include more expensive "mound" septic systems. In other cases, individual spray irrigation systems have been installed. In still other cases, the land has been determined to not be suitable for any type of on-lot septic system. However, as technologies improve, many areas that had been determined to be unbuildable because of soil limitations may be found acceptable for new types of individual sewage systems.

### **Agricultural Features**

Most of the undeveloped lands in Mount Pleasant Township are used for some form of agriculture. The Prime Farmland Map shows areas with "Prime Agricultural Soils." These are areas with the most productive soils for corn and similar crops, as estimated in the County Soils Survey. The County Soils Survey rates soil types by "Agricultural Capability Classes." Class I and II soils are the best farmlands. There is very little Class I soil in the Township, but substantial areas of Class II. Class III soils are still considered prime, but typically are not as productive. The majority of the land area of Mount Pleasant is Class II and III. Most remaining farmland areas are Class IV, which is less productive.

However, it is important to remember that this classification system is primarily aimed towards corn, wheat and other crops. There are many other types of agriculture that do not need highly productive soils, such as Christmas tree farms, horse farms, poultry operations and forestry.

As seen on the Agricultural Features Map, large areas of the Township have been designated as "Agricultural Security Areas." A farmer voluntarily asks the Township Supervisors to include their land as a Security Area. A Security Area does not result in any additional regulations upon a private property owner, nor upon private development. Once designated, the landowner becomes eligible, if they wish, to ask to have their land preserved under an Agricultural Easement (see below). Moreover, a Security Area provides a farmer with extra protection against nuisance lawsuits, municipal regulations of agriculture and government condemnation.

Certain lands have been permanently preserved through conservation easements that involve the County purchasing the "development rights" of the land. This program uses funds from the State and the County to pay property owners to preserve their land. Property owners voluntarily apply to the County for

consideration. Applicants are then ranked based upon the importance of their land for agriculture, the County's planning policies, the proximity of other preserved farms, and other factors. The farms with the highest ranking are then offered easement purchases, with the number of farms limited by the available funding. If the landowner accepts the offer to purchase the easement, the landowner is paid the difference between the market value of the land and the value as farmland. A permanent "Conservation Easement" is then placed on the land that permanently prevents its use for non-agricultural uses. The land remains privately owned and can be sold to another farmer, but cannot be subdivided.

The Agricultural Features Map shows the areas that have been preserved under this program.

Agricultural Data - The 1997 U.S. Census of Agriculture reported that the median size of a farm in Adams County was 85 acres. This means that half of the farms were larger than 85 acres, and half were smaller. As part of a national trend, farming operations are becoming separated into two types—farms operated by full-time farmers, which have had to increase in size to be efficient, and smaller farms that are operated as a part-time source of income. As part of this trend, Adams County has been experiencing a decrease in the number of farms that are between 50 and 100 acres in size.

In 1997, 55 percent of farm operators in Adams County had farming as their primary operation. Thirty-four percent of farm operators reported that they worked 200 or more days a year off of the farm. In 1997, the average market value of products sold per farm in Adams County was \$152,000. However, after expenses, the average net cash income per farm was only \$18,000.

These statistics emphasize the importance of the availability of jobs that provide supplemental sources of income to farmers, including zoning provisions that allow accessory businesses on farms.

Agricultural Land Losses - Only a few substantial largest conversions of agricultural land to other uses have occurred in recent years in the region. These have included areas south of Bonneauville along Two Taverns Road and areas in the eastern part of Bonneauville. Two additional large developments would remove land from agricultural uses: a proposed manufactured home park in the northwestern part of Bonneauville and a proposed development along Hill Road north of Centennial Road.

# Bonneauville Borough and Mt. Pleasant Township Adams County, Pennsylvania

# **Agricultural Features**



Agricultural Security Areas



Permanately Preserved Farmlands



Community Planning Consultants
Urban Research & Development Corporation

28 Bethlehem Plaza • Bethlehem, Pennsylvania 18018 • 610-865-0701

# Bonneauville Borough and Mt. Pleasant Township Adams County, Pennsylvania

# Prime Agricultural Soils



Class I & II



Class III



### **Historic Buildings**

Most of the historic buildings in the region are old houses in Mount Pleasant. The largest concentration of historic buildings is along Hanover Road, within Centennial, along the South Branch of the Conewago Creek and in the eastern part of Mount Pleasant Township. The East Cavalry Battlefield is also in Mount Pleasant Township, as well as a historic farmstead owned by the National Park Service on the south side of Hanover Road.

The County Historical Society completed a study of historic buildings throughout the County in the late 1980s. Most of the buildings identified in that study were houses and schools built before the late 1800s. Those buildings include a large number of stone houses. The most significant concentration of historic buildings is along the South Branch of the Conewago Creek. A historic stone humpback bridge has been preserved over the creek along Storms Store Road. Other concentrations of older buildings are in the village of Centennial, along other portions of Centennial Road and in the village of Whitehall.

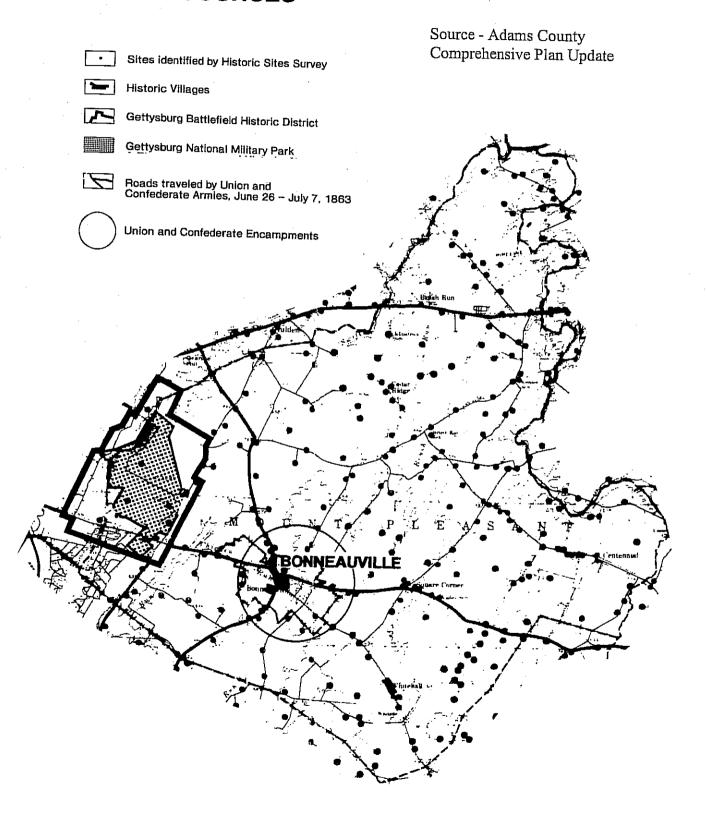
### **Community Facilities and Services**

<u>Police Protection</u> - Mount Pleasant is served by the State Police, while Bonneauville is served by a combination of one full-time officer and the State Police.

<u>Fire Protection</u> - There are two firefighting companies located within the region: Bonneauville on Elm Street south of Hanover Street in Bonneauville and Centennial on Centennial Road in the eastern part of Mount Pleasant. The service areas do not follow municipal borders. Therefore, four other fire companies have responsibility for other parts of the region: Gettysburg for Lake Heritage, New Oxford for the northern part of Mount Pleasant, for the southern part of Mount Pleasant and Brushtown for a small part of southeastern Mount Pleasant. Mount Pleasant Township financially supports all six fire companies that serve the Township. A mutual aid agreement makes sure that sufficient numbers of personnel and equipment are available for each call. For example, multiple companies are typically called to respond for a house fire.

<u>Recycling and Solid Waste</u> - Solid waste is collected by private contractors. There are no active solid waste landfills in Adams County, but disposal facilities exist in York and Franklin counties. Recycling is important to save resources and reduce landfill costs. Bonneauville has curbside pickup of recyclables. Residents can also drop off many types of recyclables at the Rescue Mission on Route 30 in Straban Township. The Rescue Mission also periodically accepts materials in New Oxford and Littlestown. A number of farmers also accept newspapers for use as animal bedding.

# HISTORIC RESOURCES



<u>Sanitary Sewage Services</u> - There are two main public sewage service systems that serve this region: the Bonneaville system and the White Run system.

The White Run Municipal Authority operates a wastewater treatment plant in Mount Joy Township near the Gettysburg Village Outlet Stores. In addition to serving the outlet mall, the system primarily serves approximately 725 homes in the Lake Heritage development. The Authority was created jointly by Mount Joy, Straban and Mount Pleasant Townships, which are the three municipalities that are served. The treatment plant in 2002 was expanded to a capacity of 330,000 gallons per day. However, the existing capacity is likely to be consumed by unbuilt lots within Lake Heritage and proposed commercial development along Baltimore Pike in Mount Joy Township.

The Bonneauville sewage system is a regional system that serves both the Borough and the adjacent parts of the Township. The treatment plant on the west end of the Borough has a capacity of 331,000 gallons per day. The average use is 150,000 gallons per day. While this means that substantial treatment capacity is available, it may be entirely consumed if all of the development that has been discussed would be completed. It is difficult to provide an exact count on the sewage demands because most developers have not purchased reservations of capacity. Therefore, the capacity will be available on a "first come, first served" basis. It is unclear whether the large manufactured home park on the north side of Hanover Road in Bonneauville will move forward, which by itself would likely could consume half of the remaining available treatment capacity.

A new central sewage plant is proposed along Hill Road near the South Branch of the Conewago Creek as part of a residential development.

There are private sewage systems serving four large mobile home parks in the Township, including the Chesapeake Estates system that uses spray irrigation and a treatment system along Route 30 that has been upgraded.

<u>Central Water Services</u> - There are two main central water supply systems that serve this region: the Bonneaville system and the Pennsylvania American system. The Pennsylvania American Water Company system primarily serves the Lake Heritage development. The system uses two wells. In addition, there are private central water systems serving the existing mobile home parks in the Township. For example, the Chesapeake Estates mobile home park includes five wells and the Cavalry Heights mobile home park includes two wells.

The Bonneauville system has had water capacity problems in the past. This issue is being resolved by requiring that every new development include a well of sufficient capacity to handle the increased demand. These new wells are then incorporated into the Borough system. The system includes seven wells including one along Route 116 near the sewage plant, one south of the mini-mart south of Route 116, one in the Springfield Estates development behind Summer Drive, one on Circle Drive near the Fire Company, one by the old water plant, one near the water tower in the Bonneyfield development, and a seventh well in the Hickory Ridge development. Two additional wells are planned in the manufactured home park that is proposed in the northwest part of the Borough.

The Bonneauville system includes two water storage tanks with a total of 400,000 gallons of storage, which is about a three day supply. In any water system, there are concerns about protecting the supply from contamination. This includes avoiding accidental spills into the ground in areas around wells. The Borough Manager reports that the Borough water system could function if one well would not be usable because of contamination, but would have difficulties in the contamination spread to more than one well. The

Bonneauville system has corrected several major water leaks from pipes, but leaks from the system are still a concern.

A new central water system is being discussed for a new residential development along Hill Road, west of Centennial.

<u>Municipal Buildings</u> - The Borough Hall is located on the south side of Hanover Street, adjacent to the Borough Park. The Borough Hall includes the municipal offices, a meeting room and the police office. The Borough Manager reports that the building is adequate for the Borough's needs.

The Township Building and public works facilities are located on both sides of Beck Road south of Bon-Ox Road. As of 2003, construction was underway on additional office and meeting facilities.

Parks and Recreation - There are no local public parks within Mount Pleasant Township. There is a playground, pavilion, paved trails and a ballfield in the Bonneauville park behind the Borough Hall. In addition, the Catholic War Veterans operate baseball fields in the Borough. The Chesapeake Estates Mobile Home Park includes its own playground. Lake Heritage has its own recreational facilities for residents of that development. There are no public school recreational facilities in the Borough or the Township. Most residents travel to Gettysburg, Littlestown or New Oxford for organized recreational programs and athletic fields. The County currently does not operate any parks, but has discussed developing a new park in another part of the County.

County Park, Recreation and Open Space Plan - The Adams County Park, Recreation and Open Space Plan was prepared in 1997. The Plan uses Recreation Planning Areas that are generally based upon the School District boundaries. Therefore, this region is divided between the Eastern Adams/Conewago Valley and Littlestown Area Planning Areas. National standards were used to estimate the amount of parkland that will be needed based upon the current number of residents and expected population growth.

The Littlestown Planning Area included 83 acres of public recreation land, most of which is located in Littlestown. There was another 79 acres of "special use areas." By the year 2010, the Plan projected that there will be a deficit of 74 acres of local parkland.

The E. Adams/Conewago Planning Area included 75 acres of public recreation land in 1997. There also was 394 acres of National Park Service land in the East Cavalry Battlefield, which is not truly recreation land. Most of that land is leased for farming. The Plan projected a deficit of 201 acres of local parkland by the year 2010.

When the Plan was prepared, the Littlestown Area included 3 baseball fields, 10 softball/Little League fields, 3 soccer/football fields, 6 basketball courts, a swimming pool and 6 tennis courts.

The Plan projected that by 2010, the Littlestown Area will need the following additional recreation facilities: 2 baseball fields, 4 football/soccer fields, 3 volleyball courts, and 2 tennis courts.

The E. Adams/Conewago Area included 7 baseball fields, 16 softball/Little League fields, 5 soccer/football fields, 14 basketball courts, 4 volleyball courts, and 9 tennis courts. The Plan projects that by 2010, the E. Adams/Conewago Area will need the following additional recreation facilities: 2 baseball fields, 2 softball/Little League fields, 7 soccer/football fields, no additional basketball courts, 1 volleyball court, a swimming pool and 5 tennis courts.

Because there is such strong growth in interest in soccer, the Plan noted that larger numbers of soccer fields will likely be needed than are recommended by these national standards. At the same time, there has been declining interest in most areas in tennis.

The Plan recommended the following new public parks in the vicinity of Bonneauville/ Mount Pleasant Township:

- a new public recreation area combined with a new public school somewhere in the Littlestown area,
- a new "sub-regional park" somewhere in the vicinity of the Route 30 corridor in Mount Pleasant,
- a new neighborhood park somewhere in the Bonneauville area (probably west of the center of town)
   and
- a new community-wide park east of Mount Pleasant along Hanover Road.

Unlike many other counties in Pennsylvania, Adams County does not own any public parks and does not provide recreation programs to the public. The Plan recommended that a "Blue Ribbon Committee" be established to investigate alternative methods of financing the projects recommended in the Park, Recreation and Open Space Plan. One of the major alternatives would be a County bond issue. This method has been used in most counties in southeastern Pennsylvania to provide parkland and preserve open space. In several cases, voters were asked to approve the bond issue by referendum.

The main State funding programs for parkland acquisition and recreation facility development only pays for 50 percent of the project cost. Many municipalities have difficulty raising the remaining 50 percent on their own, even if their State grant request is approved. The County Plan recommends that the County consider offering a competitive grant program to municipalities, which could be matched with the State grant program.

#### Public Schools

The region is divided between the Conewago Valley School District to the north and the Littlestown Area School District to the south. The dividing line is along Hanover Road.

All of the schools of the Littlestown Area School District are within the Borough of Littlestown. These are:

- Littlestown High School on Myrtle Avenue, which has a capacity of 801 students and a 2001 enrollment of 726 students,
- the Maple Avenue Middle School on Maple Avenue, which has a capacity of 841 students and a 2001 enrollment of 754 students, and
- the Rolling Acres Elementary School on Mytle Avenue, which has a capacity of 925 students and a 2001 enrollment of 824 students.

The Littlestown Area School District reports that they are expecting enrollments to increase at a rate of approximately 2.5 to 3 percent per year. To address long-term needs for school capacity, the District is planning on constructing a new elementary school in Littlestown with a capacity of 415 students.

Most of the schools of the Conewago Valley School District are in New Oxford along Berlin Avenue, including the New Oxford High School with approximately 1,100 students, New Oxford Middle School with approximately 1,200 students, and New Oxford Elementary School with approximately 750 students. In addition, the Conewago Elementary School is located on W. Elm Avenue outside of Hanover and serves approximately 600 students. The Conewago Valley School District is building a new Intermediate School,

in addition to completing renovations and additions to existing buildings. This will involve a total cost of \$35 million.

#### School Enrollment

One of the biggest impacts of population growth is increases in the numbers of public school students. This has dramatic effects upon real estate tax rates, particularly if new school buildings or expansions are needed because of the growth. Route 116 is the dividing line between the Conewago Valley and the Littlestown Area School Districts.

The State Department of Education annually prepares projections of student enrollments for each school district. These projections mainly are based upon the number of students in each grade who are then projected as moving up in grade level each. The projections estimate the number of new students who recently have come into the district at each grade level (such as students moving from Catholic to public schools when they reach 9th grade, as well as the number of students who drop out before 12th grade). The projections assume the same rate of residential growth as has occurred over the past few years. It is particularly hard to estimate the number of incoming elementary students more than 5 years in advance because those students have not yet been born.

In the 2001-2 school year, the Littlestown Area district included 2,295 students. This was a 6 percent increase from 1997-8. The enrollments are projected to increase 2% by 2003-4, 4% by 2005-6, and a total of 10% by 2009-10. By 2009-10, the largest increases are projected to be at the elementary school level.

In the 2001-2 school year, the Conewago Valley district included 3,402 students. This was a 7 percent increase from 1997-8. The enrollments are projected to increase 5% by 2003-4, 8% by 2005-6, and a total of 13% by 2009-10. Over the next ten years, the enrollments are projected to increase relatively uniformly across grade levels.

### Transportation

Road Classifications - Roads and streets are classified by three major types: Arterial Roads, Collector Roads and Local Roads. Arterial roads provide access between major commercial developments and parts of a metropolitan area. Arterials are designed for high volumes of traffic at moderate speeds. Hanover Road/Street and Route 30 are arterial roads. Collector roads provide connections between arterial roads, connect together residential neighborhoods and gather traffic from local roads. Collector roads are intended to provide for moderate volumes of traffic at low speeds. Local roads provide direct access from many adjacent properties, and then channel traffic to reach collector roads.

<u>Traffic Volumes</u> - In 2001, the Pennsylvania Department of Transportation estimated that the following segments of roads had the following average daily volumes of traffic within Bonneauville and Mt. Pleasant. The most heavily travelled road was Route 30, followed by Hanover Road/Rt. 116. Volumes of other roads were much lower, the next highest being Bon-Ox Road.

Brickcrafters Rd. n. of Rt. 30	1,100
Rt. 30	12,000
Kilpatrick Rd. s. of Rt. 30	1,000
Bon-Ox Rd. n. of Centennial Rd.	2,000
Bon-Ox Rd. s. of Centennial Rd.	1,500
Bon-Ox Rd. n. of Bonneauville	1,100
Granite Station Rd.	850

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Centennial Rd. s. of Rt. 30	700
Centennial Rd. southeast of Kilpatrick Rd.	1,300
Centennial Rd. through Centennial village	2,100
Rt. 116 west of Bonneauville	8,000
Rt. 116 in the center of Bonneauville	7,700
Rt. 116 east of Bonneauville	7,700
Irishtown Rd.	500
Honda Rd. n. of Rt. 116	300
Honda Rd. s. of Rt. 116	500
Bulk Plant Rd.	150
Locust Av. in Bonneauville	1,300
Whitehall Rd. in Bonneauville	1,400
Whitehall Rd. e. of Bonneauville	1,800
Hickory Rd.	150
Two Taverns Rd.	1,300

Regional Traffic Study - In 1996, the Southeastern Adams County Transportation Study was completed. The vast majority of the recommendations in that Plan were in areas outside of Bonneauville and Mount Pleasant. The Plan recommended that the length of Route 116 be widened and reconstructed from Route 15 to Littlestown, for an estimated cost of \$3.5 million. The Plan noted that additional right-of-way would have to be acquired, that wetlands would need to be disturbed at several creek crossings, and that many historic buildings are located close to the road. As a result, the Plan recommended emphasizing improvements along the existing road wherever possible, with an emphasis upon reducing curves and hills to improve sight distance, particularly near intersections. The Plan also noted that opportunities should be provided in selected areas for passing. The Plan also recommended the provision of 6 to 8 feet wide shoulders on each side of Route 116.

The Southeastern Adams Plan studied whether the "S" turn along Hanover Street in the center of Bonneauville should be eliminated. That Plan noted that eliminating the "S" turn would require the removal of existing homes and businesses. That Plan proposed an alternative of constructing a new alignment of Hanover Street/Route 116 in the center of town that would run behind existing homes and businesses. The recommended alternative in that Plan was for a new Route 116 route from Pine Street/Granite Station Road to just east of Cedar Street/Bon Ox Road. However, this alternative may no longer be feasible considering that new development has been approved in the Borough north of the Pine Street/Route 116 intersection. Also, any alternative route would require removal of some homes and businesses. The Southeastern Adams Plan also questioned whether the intersection of Maple Street and Hanover Street in the center of Bonneauville should be realigned.

Other Road Segments of Concern - Most traffic safety problems in this region result from excessive speeding, and not the design of the road. The following intersections and road segments are matters of concern, particularly in their ability to handle increased traffic in the future.

- Along Route 30 and Hanover Road, there is a lack of left-turn and/or right-turn lanes at major road intersections. Turn lanes could reduce hazards from rear-end collisions of vehicles waiting to make left-hand turns.
- The intersection of Maple Avenue and Locust (Two Taverns) Avenue in the Borough is rather awkward.

- At peak hours, there are difficulties making left hand turns at the intersection of Maple and Hanover Streets, particularly because of limited sight distance from the curve to the west. However, there may not be adequate sight distance at the current intersection of Maple and Hanover Streets to allow the placement of a signal.
- A sight distance problem exists at the intersection of Storm Store Road and Route 116.
- A sight distance problem exists along Centennial Road between Hill and Honda Roads, where a hill
  and a curve combine to create difficulties. This problem is likely to be aggravated by increased traffic
  from the adjacent proposed Centennial Meadows development.
- Another sight distance problem exists at the narrow intersection of Whitehall Road at Locust Lane. The Township is planning a project to widen and improve this intersection.
- A sight distance problem also exists along Route 116 at Low Dutch Road. This problem is caused by a barn close to the intersection and a hill.
- There are few provisions for pedestrian and bicycle travel throughout the region. Most significantly, there are very few sidewalks along the main streets in Bonneauville. Most roads in the region have no shoulders at all or only narrow shoulders, which forces bicyclists into the travel lanes.

### DIRECTION: THE MAJOR GOALS OF THIS PLAN

The following goals provide overall direction for this Plan. The recommendations were then prepared to carry out these goals.

Overall Goal: To manage change to improve the quality of life, maintain a rural character, strengthen the agricultural economy, minimize traffic problems, and provide for compatible land uses.

### Natural Features and Agricultural Conservation

- Work to maintain productive agricultural and animal-raising activities in most of the region, with an emphasis on preserving large contiguous areas with prime agricultural soils.
- Make sure that development respects the natural features of the land, especially creek valleys, wetlands, flood-prone areas and steeply sloped lands.
- Protect the amounts and quality of groundwater and creek waters.

### Land Uses and Housing

- Provide for orderly patterns of development that provide compatibility between land uses, particularly to protect the livability of existing residential areas.
- Seek to extend the best features of older development into newer development.
- Maintain an attractive rural character in most of the Township, including maintaining the attractiveness of Hanover Road and other highly visible roads.
- Make sure that the municipalities meet their obligations under State law to provide opportunities
  for all types of housing and all legitimate types of land uses, with coordination between the two
  municipalities.
- Direct most development to locations that can be efficiently served by central water and central sewage services, in order to minimize the total amount of land that is consumed by development and to direct most housing away from agricultural areas.
- Moderate the density of development to relate to the availability of central utilities and surface water and groundwater supplies.
- Seek to cluster development on the most suitable portions of a tract, in order to permanently preserve important natural features and open spaces.
- Work to strengthen the center of Bonneauville as a focus for the surrounding region, including developing a stronger "sense of place." Promote a range of public, institutional and commercial uses in Bonneauville to serve the surrounding area.

- Direct most new commercial uses to commercial areas of Bonneauville, portions of Route 30 and selected other locations that allow for safe and efficient traffic access, as opposed to long strip commercial development along major highways with individual driveways. Support the County Comprehensive Plan's goal of strengthening the Downtowns of Gettysburg, New Oxford, McSherrystown and Littlestown.
- Recognize that the road system, the proximity of homes and the goal of preserving agriculture limit the suitability of most areas of the region for major industrial uses.

### Historic Preservation

• Encourage the preservation and sensitive rehabilitation of important historic buildings and sites, and maintain a suitable setting around the East Cavalry Battlefield.

### **Transportation**

- Carefully plan road patterns and access from development according to the function each road is intended to serve within the overall road network.
- Seek cost-effective solutions for problem road segments, in cooperation with PennDOT and adjacent landowners/developers.
- Work to improve opportunities throughout the region for safe bicycle and pedestrian travel, carpooling and public transit.

### Community Facilities and Services

- Make sure that high quality community facilities and services are efficiently provided to serve existing needs and future growth.
- Make sure that adequate on-lot or central water and sewage services are provided throughout the region, in full coordination with development patterns.

### Putting this Plan into Action

- Maintain regular communications and cooperation with neighboring municipalities and the County Government, particularly to result in compatible development and road patterns.
- Update the municipalities' development regulations to carry out this Plan, and periodically update the regulations as needed.
- Carry out this Plan through a continuous program of citizen involvement, updated planning and implementation of needed actions.

### NATURAL FEATURES CONSERVATION PLAN

The important natural features are described in the Inventory and Analysis section of this Plan.

## Recommendation: Protect creeks and creek valleys, including maintaining a natural buffer along creeks.

It is important to maintain thick natural vegetation along creeks. This thick vegetation is essential to provide high quality habitat for fishing and to filter out eroded soil and pollutants from storm water runoff. At best, to maintain the proper temperature of creeks and filter out pollutants, there should be mature canopy trees over a creek, plus thick underbrush.

The Watershed Association of Adams County is a volunteer-based organization that is working to protect the water quality of creeks. The Association stresses educating the public about how they can affect water quality. This particularly includes educational efforts aimed towards property-owners and farmers. Among other activities, the Association is preparing an inventory of the Conewago Creek watershed. That inventory is intended to determine the following: Which segments of creeks are experiencing the most stress? What are the causes of that stress? What areas are most in need of protection?

### Recommendation: Consider strengthening floodplain regulations to prohibit all new buildings.

To comply with State requirements, the Township and Borough already have regulations that limit buildings within flood-prone areas. These regulations apply within the "100-year floodplain," as shown on the Woodlands and Floodplains Map in the inventory section. The 100-year floodplain includes areas forecast to be flooded during the worst flood expected in an average 100-year period. If desired, the provisions could be strengthened by prohibiting any new buildings in the 100-year floodplain, as opposed to allow new buildings in parts of the floodplain if they are flood-proofed.

### Recommendation: Establish building and paving setbacks from creeks.

The Township and Borough should also require setbacks from the banks of creeks. This setback should apply to buildings, parking areas and commercial/industrial storage. The municipalities should not require any setback from a creek for crop farming. These building/paving/storage setbacks are important because the floodplain regulations do not prohibit paving over a floodplain and removing all of the vegetation. Also, outdoor storage can obstruct floodwaters or become dangerous moving items if picked up by floodwaters. In addition, some 100 year floodplains may be very narrow and not prevent the construction of a building close to a creek bank. It may be appropriate to require a 75 foot setback for major creeks and a 50 foot setback for minor creeks that are "perennial" with year-round flows.

The Adams County Park, Recreation and Open Space Plan was prepared in 1997. That Plan also included recommendations for a system of greenways throughout the County. None of the creek corridors in this region were recommended to have an emphasis upon intensive public recreation.

- The South Branch of the Conewago Creek along the east and northeast sides of Mount Pleasant was recommended to be treated as "Passive Streamways." In these areas, the emphasis is recommended to be placed upon conservation, not recreation. Public access is primarily intended to be limited to access for fishing at selected points, not trails or other public access.
- The White Run, Swift Run and Brush Run creeks were recommended as "Stream Conservation Corridors." These segments, which mainly pass through farmland, are not recommended in the County Plan for any public recreation or public access. Instead, the emphasis is solely upon preserving the natural features of the land and the water quality of the creeks.

Recommendation: Use conservation easements and work with groups such as the Land Conservancy of Adams County to preserve key open spaces.

Conservation easements should be used to preserve land where it is not appropriate to buy the land outright for public parkland. With a conservation easement, the land remains privately-owned, which avoids the expense of public maintenance. The easement involves the property owner voluntarily agreeing to donate or sell the right to develop his or her land. The property owner agrees to place a restriction in the deed of the property which becomes binding on all current and future owners of the land. In many cases, property-owners are willing to sell an easement, but are not willing to sell the land. In many cases, a property-owner is willing is sell an easement for much less cost than if the land would be purchased outright.

The easement can be written in many different ways to restrict or not restrict certain types of activities. Most conservation easements prohibit the construction of most types of new buildings, the subdivision of land and the clearcutting of woods. If the easement is donated by the landowner or sold at a cost less than the full market value of the easement, the person granting the conservation easement can receive Federal income tax benefits.

The Land Conservancy of Adams County is a private organization that seeks private tax-exempt donations of funding, land and conservation easements. The Township should work to connect interested landowners with the Conservancy. The Conservancy also has the ability to conduct fundraisers for land preservation, to provide advice to property-owners and to apply for a pool of State grants that is available to conservancies.

The County Agricultural Lands Preservation Program already works to preserve land with higher quality soils for crop farming. Therefore, the emphasis for the Township should be placed upon permanently preserving areas of natural open space along creeks, particularly along the South Branch of the Conewago Creek. In one or more selected cases, public ownership would be desirable for a passive park. However, in most cases, it would be appropriate to use easements to make sure the land is never developed.

Recommendation: Work to preserve the Irishtown Woods.

As described in the Natural Features inventory section, one area in Mount Pleasant Township has been identified as a habitat for rare or endangered species of trees. This is known as "Irishtown Woods" along the South Branch of the Conewago Creek. It includes a species of tree that is endangered in Pennsylvania. The study reported that only about a dozen of these trees were present and that there were aging. The study recommended that logging of the trees be avoided and that weedy non-native species within the woodland (such as multi-flora rose and garlic mustard) be cut back so they did not compete with the trees and inhibit reproduction of the trees.

The most appropriate method to protect this area would probably be to work with the property-owner to make him aware of the value of the trees and to recommend proper ways to manage the land. An alternative would be to seek a conservation easement that would preserve the land in private ownership.

## Recommendation: Amend the Township zoning ordinance to control development on steeply sloped lands.

The locations of steeply sloped lands are highlighted on the Steep Slopes Map in the inventory section of this Plan. There are not sufficient steeply areas in the Borough to be worth regulating the feature. It is important to avoid development to steep slopes to control: erosion problems, high speed storm water problems, avoid overly steep roads and driveways, excessive costs to construct and maintain roads and utilities, and destruction of scenic natural resources. Steep slopes also limit the placement of onsite sewage systems.

An applicant for development should be require to designate the locations of all steep slopes on the land. Then, moderately steeply sloped lands (15 to 25 percent) should be limited through zoning regulations to low intensity development, such as one acre minimum single family detached house lots. Very steep lands (over 25 percent) are generally not suitable for any development. If development occurs on over 25 percent slopes, a large lot size should be required (such as over 2 acres) and the disturbance of trees and other natural vegetation on the steep areas should be minimized to avoid erosion. An applicant could be allowed to avoid these regulations if the development plan would legally limit the construction of buildings to areas that do not have steep slopes.

### Recommendation: Seek proper management of wooded areas.

As seen on the Woodlands and Floodplains Map in the inventory section, there are many areas of woodlands, but they are mostly scattered throughout the Township. Forestry is appropriate if properly managed and must be allowed under State law. However, clear-cutting of woods should be prohibited, and proper erosion controls should be in place for any large-scale tree-cutting. A timber management plan can be required and it may be advisable to limit forestry immediately along roads and property boundaries. Also, it would be appropriate to limit the amount of forestry near creeks and steep slopes.

### Recommendation: Preserve natural drainageways.

The natural drainageways should be left in place as much as possible, with wide swaths of green space that allow storm water to be absorbed. If housing is clustered on the most suitable portions of a tract (as recommended in the Land and Housing Plan section), it will be easier to maintain wide natural drainageways in open space.

# Recommendation: Make sure that storm water is properly managed, including using methods to recharge stormwater into the groundwater and to protect water quality.

The storm water management portion of the Inventory section of this report describes recommendations from the Monocacy River Watershed Stormwater Plan that should be used to address storm water in this region.

In addition to the recommendations in the Stormwater Plan, developers should be required to use types of methods to promote groundwater recharge and protect water quality that are described in the manual entitled "Best Management Practices for Developing Areas in Pennsylvania," which is available through the County Conservation District. For example, storm water can be held within "retention basins" that allow some storm water to be absorbed into the ground. Depending upon soil conditions, infiltration trenches and french drains can be used to recharge some runoff into the ground.

### Recommendation: Ensure that detention basins are properly maintained.

To make sure that detention basins are properly maintained, the municipalities should consider accepting dedication of a basin to the municipality if the developer funds an account to cover the costs of the maintenance over time. This policy would not apply to a basin that only served a single lot.

# Recommendation: Work to minimize the amount of impervious surfaces and maintain natural vegetation.

"Impervious surfaces" are areas covered by buildings, paving or other materials that prevent stormwater from recharging into the ground. To better manage stormwater runoff, the following policies should be followed:

- seek to avoid excessively wide streets and excessive amounts of parking being required, including promoting shared parking among adjacent uses,
- consider alternatives to paved parking, such as use of gravel in less used parking areas or new types of "porous paving" that allow stormwater to pass through the paving, such as permeable concrete paving blocks or perforated brick pavers,
- avoid requiring sidewalks on low traffic streets, or only provide sidewalks on one side of a street.
- minimizing the amount of natural vegetation that is disturbed, particularly including forested areas, and promoting the planting of thick vegetation along waterways and drainage channels,
- encouraging drain pipes from roofs to be directed to open vegetated areas, stone filled infiltration trenches or underground "dry wells" so the runoff can be absorbed into the ground,
- designing detention basins so that they contain runoff long enough to allow sediment and other particulates to settle out of runoff before it is released, and
- avoid steep banks in detention basins, which are difficult to mow and which create safety hazards for small children.

Recommendation: Adopt the stormwater management ordinance that is recommended in the Monocacy River Watershed Stormwater Plan.

For consistency, the municipalities should also have this ordinance apply to the entirety of areas in their jurisdiction, including areas in the Conewago Creek watershed.

### Recommendation: Preserve wetlands as important natural resources.

The Water Resources Map in the inventory section shows: a) the locations of known wetlands based upon U.S. Fish and Wildlife Service mapping and b) "hydric soil" areas that are likely to include wetlands.

It is extremely important to protect wetlands control flooding, provide wildlife and aquatic habitats and recharge groundwater. Wetlands also slow stormwater runoff, which helps to filter impurities that can contribute to surface water and groundwater pollution. Wetlands are defined based upon the soil types, depth of the water table and types of vegetation. Wetlands not only include swamps, but also areas that are typically wet during parts of the year. The main role of the municipalities is to make sure that applicants for development have a qualified professional determine whether wetlands are present. Once wetlands are identified, the municipalities should then require proof from the applicant that they have received required State and/or Federal wetland permits if there will be any disturbance to the wetlands.

### Recommendation: Maintain an active role in controlling erosion.

Whenever there is major earthmoving, a developer is required to prepare an erosion and sedimentation control plan that meets the requirements of the County Conservation District. The main role of local municipalities is to oversee construction to report situations to the Conservation District where the approved erosion plan is not being carried out.

Farmers should continue to work with the County Conservation District to make sure that wastes from livestock are not washed into creeks. State funding is available to keep livestock from crossing creeks at locations that cause erosion.

### Recommendation: Protect the amounts and quality of groundwater.

Geology affects the soil conditions and greatly impacts upon groundwater supplies. A description of groundwater resources is included in the Natural Features inventory section of this Plan.

The 2001 Adams County Water Supply and Wellhead Protection Plan includes a wide range of recommendations to provide adequate water services and to protect the water quality of groundwater and creeks. Many of those recommendations are incorporated into the preceding sections (such as the Natural Features inventory section) and in the Water Supply portion of the Community Facilities and Services Plan section of this report. In addition, based upon the County Plan, Mount Pleasant and Bonneauville should carry out the following major recommendations to protect groundwater:

- Water systems and fire companies should update their emergency response and emergency operations plans, and complete related training. This is particularly important to know how to respond in case of a spill of a hazardous substance that could contaminate groundwater or a creek, especially near a public water source.
- The most likely sources of potential water contamination should be identified so that proper measures can be instituted with the business owner to avoid problems.

- The public and private central water systems should prepare wellhead protection plans to protect the quality of water near major water supply wells. A State grant program is available that could help to fund these efforts. A wellhead protection plan identifies the land areas around a well that are most likely to contribute towards contamination of the well, considering the underlying geology. The plan then recommends methods that can be used to avoid contamination in these areas, such as purchasing a conservation easement around the water supply to keep the land in open space or to limit the types or intensities of development. However, in Bonneauville, most of the existing wells are already surrounded by existing or approved development. Therefore, this recommendation mainly applies to any future wells.
- Wherever feasible, each private and public central water system should have an emergency interconnection with another water system. Specifically, the County Plan recommends an eventual interconnection between the Pennsylvania American water system that serves Lake Heritage and the Gettysburg Area water system.

Other issues involving water supplies and also well construction are discussed in the Community Facilities and Services Plan section.

### AGRICULTURAL CONSERVATION PLAN

Maps of agricultural features and soils and data regarding agricultural trends are included in the inventory section of this report.

The Agricultural Preservation land use category is described in the Land Use and Housing Plan section and is shown on the Land Use Plan Map. Zoning recommendations to carry out the Agricultural Preservation policies are included in the "Putting this Plan Into Action" section.

Recommendation: Continue to use agricultural preservation zoning in key areas of the Township.

The Land Use Plan Map in the following Land Use Plan section shows the areas recommended for Agricultural Preservation zoning. In these proposed Agricultural Preservation areas, the number of new houses should be limited based upon the size of the tract. The remainder of a tract would need to remain in large tracts. The intent is to maintain farmland in tracts of land (preferably over 50 acres) that can be efficiently farmed. New homes should be carefully located so that conflicts with agricultural activities are minimized.

One of the goals of this approach is to avoid the subdivision of farmland into 3 to 10 acre lots that waste land and are too small to farm. To minimize the consumption of land, each new home lot should have the smallest lot area that still meets septic requirements (which will typically be one to two acres).

The major benefits of agricultural preservation zoning include:

- Strengthening the Agricultural Economy Agriculture is one of the largest employers in the County. It is not only important to maintain farming for the jobs on the farms, but also for the jobs in related services (such as farm equipment repair, sales of farm supplies, and processing of farm products). At the same time, if the agricultural economy shrinks, and these support businesses no longer exist, it will be harder for the remaining farmers to operate.
- School Taxes Agricultural zoning in Mount Pleasant Township and other townships in the school districts can help moderate the rate of construction of new homes. Every major study in Pennsylvania has shown that the vast majority of new housing results in much higher school expenses than the housing generates in school taxes. These costs can be particularly dramatic if there is a need to construct new schools.
  - Therefore, if a school district experiences large amounts of new home construction, it will typically have to continually raise real estate taxes faster than inflation. Increased real estate taxes, in turn, can force farmers to sell their land.
- <u>Priority in Development Rights Purchases</u> Adams County receives State funds each year to purchase "development rights" from farmers. Farmers voluntarily apply for the purchase. If the development rights are purchased, the farmer continues to own the land, can continue

to farm it or can sell it to another farmer. However, the land cannot be developed, except for farm structures.

- The number of applicants for this program exceeds the funding that is available. Applicants for the funding are ranked based upon a set of standards, such as the quality of the soils. The County also has a goal of preserving farms that are adjacent to each other. Therefore, the County provides extra points in its ranking system if a farm is adjacent to other farms that are in an agricultural zoning district. Therefore, if a farm in Mount Pleasant Township is surrounded by an agricultural district, and a very similar farm in another township is not adjacent to an agricultural district, then the farm in Mount Pleasant Township should receive priority for the funding. As a result, agricultural zoning may make it easier for farmers in Mount Pleasant Township to sell their development rights.
- Avoiding Nuisance Complaints Agricultural zoning can reduce conflicts between homes and farming operations. Because fewer homes would be built near farms, there would be less potential for complaints about odors, flies, early morning and late night noise, and use of pesticides. This is particularly a concern to avoid one farm becoming intensely developed for homes in the middle of several active farms.
- Avoiding Crop Damage Agricultural zoning works to avoid the construction of many homes near farms. As a result, increased problems can be avoided from young people and all-terrain vehicles damaging crops.
- Avoiding Traffic Problems Agricultural zoning can avoid large numbers of new homes in agricultural areas, which helps to avoid large increases in the speeds and amounts of traffic. As a result, increased difficulties of operating farm equipment on roads can be avoided.
- Reducing Costs of Road Improvements If large numbers of new homes are permitted, it would greatly increase traffic on rural roads and cause the need for major improvements. Agricultural zoning can reduce the need for the Township to spend large amounts of tax dollars on major improvements to existing roads.
- <u>Minimizing Regulations on Agriculture</u> Compared to the current zoning, more livestock and poultry operations could be permitted by right, instead of needing special zoning hearing board approval. Agricultural zoning can make it easier for a township to resist public pressure to over-regulate livestock, poultry and other agricultural activities within agricultural districts. However, very intense types of concentrated animal feeding operations would still be carefully regulated to avoid major problems.
- Reducing the Costs of Subdividing Lots If the Township knows that the total number of homes in an agricultural area will be limited, it may be logical for the Township to reduce certain regulations for new lots in that area. For example, the Township could allow roads to be more narrow in the agricultural area than in a residential area. The Township could permit subdivision plans in the agricultural area to be simpler, which saves engineering costs and time. Curbing can be waived in agricultural areas. As a result, it would be less expensive to create one, two or three new lots.

- Minimizing the Total Amount of Land that is Developed Agricultural zoning can direct most homes to locations where they can be served by central water and central sewage services. This greatly minimizes the total amount of land that is developed, and avoids sprawl. For example, if there is demand for 50 new homes, and if the homes use wells and septic systems, the homes would typically consume 70 or more acres. However, if the same 50 homes are developed with central water and sewage services, they could easily be accommodated on 15 acres. Therefore, the sprawled development consumes 5 or more times as much land for the same number of homes.
- <u>Making it Easier for Farmers to Expand their Farms</u> Many farmers find that they must farm larger amounts of land in order to be efficient. This becomes difficult when farmers find they are outbid by developers and speculators.

### Recommendation: Provide opportunities for agri-businesses.

Agricultural businesses need access to other businesses that provide the supplies and equipment they need and that process and purchase agricultural products. These areas do not have to be within the immediate Mount Pleasant-Bonneauville region, but do need to be reasonably accessible. The zoning ordinances should carefully distinguish among the various types of agri-businesses, with a goal of providing widespread opportunities for those uses that are less likely to create nuisances and hazards. The more intensive uses and the uses that would generate substantial amounts of tractor-trailer traffic should be limited to industrial zoning districts.

### LAND USE AND HOUSING PLAN

This section addresses recommendations to direct development and redevelopment of various types of residential and non-residential in different areas of the two municipalities. Maps of existing land uses are included in the inventory section of this report.

Recommendation: Promote the use of Conservation Development that involves the permanent preservation of substantial open spaces within new development.

In areas that are not categorized as "Agricultural Preservation," this Plan recommends an increased emphasis upon permanently preserving important open spaces as part of new development. Attractive incentives and strong disincentives are needed so that any development of the large open tracts of land in the Township would most likely be developed with substantial areas of preserved open space (such as 35 to 80 percent), as opposed to standard "cookie-cutter" type lots. This method of Conservation Development is discussed further in the "Putting This Plan into Action" section.

Conservation Development should be promoted in many areas of the region, but would have the most applicability in the areas shown on the Land Use Plan Map as "Land Conservation."

### Recommendation: Promote the use of Transfer of Development Rights (TDR) to direct growth.

TDR should be an option in the Zoning Ordinance(s) that would provide incentives for private developers to pay to preserve farmland. If a developer would pay a private owner of farmland or an important natural area to permanently preserve their land, then the developer could receive approval to build at a higher density in an area of the municipality that is suitable for a higher density. This method is discussed in the "Putting This Plan Into Action" section.

TDR should be promoted in many areas of the region, but would have the most applicability to help preserve areas shown on the Land Use Plan Map as "Agricultural Preservation" and "Land Conservation."

# Recommendation: Direct development using the following Land Use Plan categories and the Land Use Plan Map.

The Land Use Plan Map shows the recommended land use categories for different areas of the two municipalities. These land use categories are described below.

<u>Public Recreation and Battlefield Preservation</u> - This category includes the existing National Park Service land within the East Cavalry Battlefield and the existing recreation areas in Bonneauville. Recreation is also discussed in the Community Facilities and Services Plan section.

Major Community Facilities - This category includes the existing municipal buildings and fire companies.

<u>Conservation Corridors</u> - This category highlights the areas immediately along the South Branch of the Conewago Creek and the Brush Run, Swift Run, White Run and Littles Run creeks. Natural feature recommendations are included in the Natural Features and Agricultural Conservation Plan section.

<u>Agricultural Preservation</u> - This category is intended to seek to preserve large contiguous areas of farmland. The Agricultural Preservation category is mainly recommended where there are concentrations of prime agricultural soils and relatively few intrusions from intense residential development.

Recommendation: Limit the amount of non-agricultural development in areas designated for Agricultural Preservation.

The primary purpose of the Agricultural Preservation land use category is to maintain viable farmland and agricultural uses so that the region's agricultural economy is maintained. These areas are also important to provide opportunities for intensive agricultural uses (such as intensive livestock and poultry operations) in locations that are less likely to conflict with existing and proposed areas of non-agricultural development.

Agricultural preservation zoning should be used in these areas, particularly to protect the public investment in purchasing the development rights of farmland. If a significant area of farmland has already been preserved, it is important to make sure that a large housing development will not occur immediately next door and create conflicts with the agricultural activities.

The major benefits of agricultural preservation zoning are described later in the "Putting this Plan Into Action" section of this document.

In Agricultural Preservation zoning areas, the number of new houses should be limited based upon the size of the tract. The remainder of a tract would need to remain in large tracts. The intent is to maintain farmland in tracts of land (preferably over 50 acres) that can be efficiently farmed. New homes should be carefully located so that conflicts with agricultural activities are minimized.

One of the goals of this approach is to avoid the subdivision of farmland into 3 to 10 acre lots that waste land and are too small to farm. To minimize the consumption of land, each new home lots should have the smallest lot area that still meets septic requirements (which will typically be one to two acres).

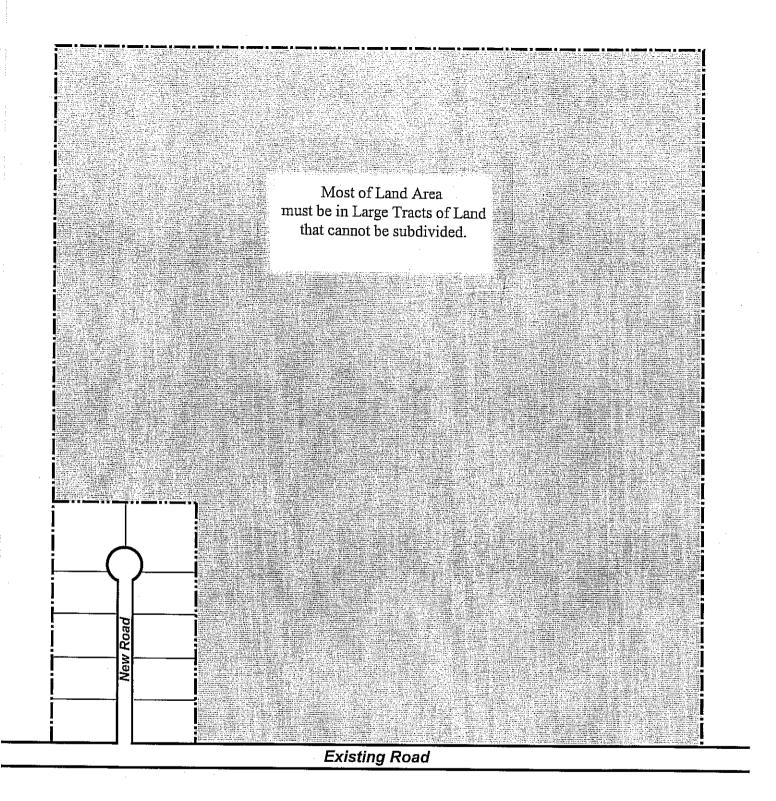
The sketch on the next page illustrates a typical site developed under agricultural preservation zoning.

<u>Land Conservation</u> - This category is recommended to include large areas of the Township, particularly where there is less potential for service by public water and sewage systems.

Recommendation: Encourage use of "Conservation Development" in the Land Conservation areas to result in permanent preservation of substantial percentages of the tract in open space.

• These areas are intended to maintain a rural character and discourage intensive residential subdivisions that would conflict with nearby agricultural areas. These areas are also intended to conserve important natural features, such as wooded areas, flood-prone areas, and wetlands.

- These Land Conservation areas should provide for a range of agricultural uses. However, the most intensive types of livestock and poultry operations should be limited to the Agricultural Preservation areas. The Land Conservation areas serve as a transitional area between other areas planned for more intensive development and the Agricultural Preservation areas. For example, the Land Conservation areas provide a transition between the Lake Heritage developments, the Borough of Bonneauville, the village of Centennial and other past subdivisions versus areas planned for Agricultural Preservation.
- In these Land Conservation areas, "cookie-cutter" types of development (in which every lot is the same size and shape regardless of the features of the land) should be discouraged. If an applicant proposes a conventional development without permanent preservation of open space, the minimum lot area would be large, such as 2 to 5 acres.
- Applicants would be strongly encouraged to use "Conservation Development" in these areas. This would allow lots of one acre with on-lot utilities or smaller lots (such as 1/3 acre) with appropriate central water and sewage services. The overall density would be controlled, but flexibility would be allowed in the lot layouts and lot sizes. For example, an average density of one dwelling for every 2 to 3 acres could be required.
- These provisions would encourage homes to be clustered on the more suitable portions of a tract, with preserved open space. This would moderate the total amount of housing allowed on a tract, which would help to minimize groundwater shortages, storm water problems and traffic problems. However, it would not waste the most suitable land in large minimum lots.
- The Transfer of Development Rights (TDR) option is discussed later in this section and in the "Putting this Plan Into Action" chapter. Among other locations, TDR could be used to allow homes to be transferred from one part of the Land Conservation areas to other parts of the Land Conservation areas.



Typical Agricultural Preservation Zoning.

The vast majority of the tract must be preserved in large tracts of land.

The number of new homes is minimized, and they must be clustered in a location where they will have minimal impact upon farming on this tract and adjacent tracts.

- The applicant would have to prove that the site was laid out in a manner that preserved important natural features and/or farmland. For example, the larger lot might include lands along a creek. Conservation easements would be required to make sure that important natural features remain in open land.
- The advantages and mechanics of Conservation Development are described later in this report, in the "Putting this Plan Into Action" section. As described in that section, appropriate controls are needed to make sure that Conservation Development includes a modest but not excessive density incentive compared to conventional development. Also, as described in that section, proper controls are needed to make sure there is an effective mechanism to ensure the proper long-term ownership, maintenance and use of the open space.

<u>Rural Residential</u> - This category is proposed to include existing concentrations of single family homes in the Township and the western part of the Route 30 corridor. This category would mainly provide for single family detached houses on lots of at least one acre. In the event that central water and sewage services would be provided, it may be appropriate to allow lots of approximately 1/2 acre with 50 percent of the tract preserved in open space as part of a Conservation Development."

<u>Single Family Residential</u> - This category would include existing concentrations of single family homes and new single family areas around existing villages and the eastern part of the Route 30 corridor. This category would mainly provide for single family detached houses. A maximum density of 2 to 3 homes per acre is recommended with appropriate central water and sewage services, and 1 home per acre with wells and septic systems. Through the Transfer of Development Rights (described below and in the "Putting this Plan into Action" section), higher densities could be appropriate (such as 5 homes per acre).

Mixed Dwelling Residential - These areas are necessary to meet the municipality's obligations under State law to allow a variety of housing types. If central water and sewage facilities are provided in the future, this category would provide for a mix of housing types and a maximum density of 3 homes per acre. A 1 acre minimum lot would be required with on-lot wells and septic systems. If a developer preserved outlying farmland through Transfer of Development Rights, then a maximum density of up to 6 homes per acre could be possible.

<u>High Density Residential</u> - These areas are proposed to provide for a mix of housing types, including manufactured home parks. A maximum density of approximately 3 homes per acre would be appropriate, with up to 5 homes per acre with Transfer of Development Rights. Because manufactured homes are typically one story buildings with a high building coverage, higher densities (such as 6 or more homes per acre) are not appropriate.

<u>Village Center/Town Center</u> - These areas are intended to maintain the character of older areas in the center of Bonneauville and the village of Centennial. The goal is to provide for types of business uses that most likely would use existing buildings or construct new buildings that are similar to what already exists in these areas. The types of business uses should be limited to types that would be compatible with nearby homes. The goal is to have a balanced mix of businesses that will primarily serve local needs, in addition to places of worship, clubs and a variety of types of homes.

The Village Center/Town Center areas would provide for light commercial uses and a mix of residential uses. These areas would provide for lighter commercial uses, such as offices, retail stores, personal

services and banks. Heavy commercial uses should be prohibited. Heavy commercial uses, such as auto body shops, gas stations, auto sales and car washes are most likely to involve demolition of older buildings and to cause conflicts with nearby homes. Adult bookstores would also be prohibited.

The goal is to maintain the character of older areas of the region, and encourage new development that is similar in character. This is known as Traditional Village or Traditional Neighborhood Development, as seen on the sketch on the following page. At best, Traditional Village Development should include most or all of the following major features:

- 1. Most parking should be placed to the rear or side of buildings, as opposed to being the most prominent feature in front of buildings.
- 2. Most buildings should be placed relatively close together and relatively close to the road, particularly along local roads. This promotes the placement of parking to the rear and sides of buildings, and encourages people to walk between buildings. In older areas, it may be desirable to establish a maximum building setback from the road for new buildings.
- 3. Front porches should be encouraged, to promote interaction amongst neighbors.
- 4. If central water and sewage services are provided, the overall density should be substantial enough that a developer can fund the needed amenities.
- 5. Most homes should be within reasonable bicycling and walking distance to reach a park and a store.

As described in the Transportation Plan section, to the maximum extent feasible, access to commercial uses should be provided from shared driveways, a rear alley, a side street or interconnected parking lots, as opposed to a driveway entering directly onto a heavily travelled road.

When the zoning ordinances are revised, this category should be divided into two zoning districts. Most of these areas in Bonneauville and Centennial should be placed in a Village Center zoning district that reflects the historic character. Most of the other areas in Mount Pleasant Township should be placed in a Mixed Residential/Light Business zoning district, that reflects more of a corridor setting.

# Suburban Neotraditional Design Suburban Design Deep front yards Trees in yards Garages forward No Sidewalks Trees along Shallow yards, Garages on alleys porches Sidewalks street **Alley** Neotraditional Design

<u>Highway Commercial</u> - These areas are intended to provide for a wide range of commercial uses, including light and heavy commercial uses. These areas might also provide for some very light manufacturing, such as apparel and furniture manufacturing. The goal is to avoid additional strip commercial development in areas along Hanover Road and Route 30 where there are few existing commercial uses.

There should be an emphasis on landscaping in new business development. This is the best way to improve the appearance of business development – particularly because a municipality cannot control architecture outside of an historic district. Shade trees would be required within parking lots. A green strip should be provided adjacent to all streets. Any overnight outdoor storage of multiple trucks should be screened by plants from view from streets. Evergreen plants would be required to be planted between any new or expanded business and adjacent homes.

This category will help to meet the Township's legal obligations to provide opportunities for a wide range of business uses. A large buffer area should be required between new business uses and existing homes.

<u>Industrial</u> - Under State court decisions, every municipality in Pennsylvania must provide opportunities for all legitimate industrial uses, including quarrying and manufacturing. This area is intended to provide for a range of industrial uses. Heavier types of industrial uses should need to meet a strict set of standards and need approval from the Zoning Hearing Board.

### Recommendation: Provide for a variety of housing types to meet various needs.

The Population and Housing inventory section describes the characteristics of existing households in the region. A large percentage of households are "non-traditional" in nature - including senior citizens, single parents, separated and divorced persons, parents whose children have moved out and other types of households. For example, among households of Bonneauville and Mount Pleasant residents as of 2000, only 29 percent involved a married couple with children under age 18. In Bonneauville, 12 percent involved a female head of household with no husband present, while this number was 7 percent in Mount Pleasant. Seventeen percent of households in Bonneauville and 18 percent of households in Mount Pleasant involved a person living by themself.

As a result, there is a need for a variety of housing types, including twin homes, townhouses and apartments. This Plan recommends an emphasis on controlling the overall density of development, while being flexible in many cases in the types of housing units. Particularly through the use of Transfer of Development Rights, it should be possible in selected growth areas to develop medium densities of development (such as 4 or more units per acre) that would help to meet these various housing needs.

As of 1999, the median household income of residents of Bonneauville was approximately \$40,000, while the median in Mount Pleasant Township was \$41,000. With inflation, these incomes have probably increased approximately 6 to 9 percent by 2003. With these median incomes, it would be possible to qualify for a mortgage for a \$100,000 home with a \$5,000 downpayment. To qualify for a \$150,000 home with a 7 percent downpayment (\$10,000) would require at least \$54,000 in annual household income.

These incomes are based upon the industry standard that a household's total expenses for mortgage payments, insurance and taxes cannot exceed 28 percent of their total monthly income. A second standard that must be met is that the household's total monthly debt payments (including housing, car payments, student loans and credit cards) cannot exceed 36 percent of their total monthly income. These are maximums, and some households may not be deemed able to pay 28 percent of their income for housing because of other debt that they have.

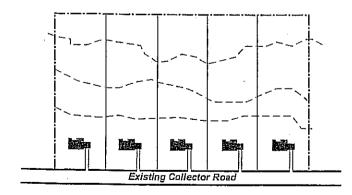
However, the majority of the market for newly constructed homes in this region is not from existing residents. Instead, the majority of the market is from persons moving from Maryland. These persons are often seeking lower housing costs, including being able to avoid up to \$15,000 in impact fees per home that is being charged by some jurisdictions in Maryland. These persons typically are commuting to higher income jobs in metropolitan areas in Maryland.

### Recommendation: Encourage greater use of interior roads vs. road frontage development.

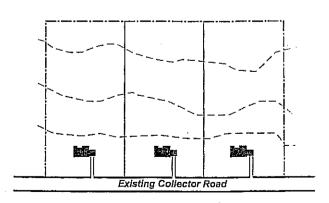
A common concern in the region is that most new homes in rural areas have been constructed fronting on existing roads. Many persons would prefer that new residential development involve newly constructed roads in the interior of a tract of land. These interior roads would minimize traffic safety concerns from having so many driveways entering directly onto through-roads. Also, interior roads can help to maintain more of a rural character - particularly if open space along the existing roads is permanently preserved through the incentives described in the previous section.

To encourage interior roads, a larger lot width should be required if a new lot will have its own driveway onto an existing through-road. These through-roads are called "arterial" and "collector" roads. A smaller lot width should be required if a lot will have access onto a new "local" road. In addition, the Township's road standards need to be re-examined. It may be logical to allow less wide new local roads and longer cul-de-sac local roads if a road will not serve through-traffic. If these adjustments lower the costs of building new roads, developers are much more likely to propose new interior roads.

This issue is discussed further in the Transportation Plan section.



Typical Rural Development Using Existing Road Frontage. Even if land is left open, it is not visible from a road. Multiple driveways cause conflicts with through-traffic.



If a larger minimum lot width is required for new lots with driveways along major roads, it limits the number of new driveways along those major roads.

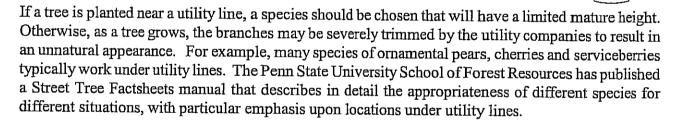
This encourages subdividers to construct a new internal road, along which smaller lot widths are allowed.

Recommendation: Emphasize appropriate types of development and improvements along Hanover Street in Bonneauville.

A stronger "sense of place" should be created in the center of Bonneauville. Colorful banners should be hung from utility posts to better identify Bonneauville as a pleasant town. There is only limited public space in the center of town. The existing triangular area at Maple and Hanover Streets is used for the town's Christmas Tree. It would be desirable to add an attractive clock as a community focal pont.

Traditional styles of street lights should be installed at a few highly visible locations in the center of town to provide more of a historic character. If it is too expensive to replace existing street lights with historic-style poles, then historic style light fixtures can be added halfway up existing utility poles.

A stronger sense of place can also be established through additional street trees. However, there are limitations created from the location of utility poles and lines along both sides of Hanover Street. Where space permits, it would be desirable to encourage the planting of street trees in the front yards of properties, as opposed to within the street right-of-way, to avoid interference with the utility lines and to avoid creating safety hazards for motorists (especially if most of Hanover Street continues to not have curbing).



If a tree is planted between a curb and sidewalk, there should be a vegetative area at least four feet wide. A wider width is very desirable. Because there often is not space to maintain these widths, it often is more appropriate to place the trunks of street trees immediately outside of the right-of-way. This can still result in a "canopy effect" over a street, while minimizing conflicts between tree limbs and overhead utilities and between tree roots and underground utilities and sidewalks.

The Borough could promote street tree plantings without the Borough paying for the street trees. For example, the Borough could offer a service of helping residents locate the most appropriate location for a street tree and the most appropriate species, considering underground and overhead utilities. The property-owner would then be responsible for buying and planting the street trees. The Borough could also distribute information on the best way to plant a street tree. Many studies show that street trees can increase property values of homes. In front of businesses, species of street trees can be recommended that would not obstruct the visibility of businesses.

As traffic continues to increase along Hanover Street, it will become even less suitable for pedestrians if no action is taken. A more pedestrian-friendly environment should be created within Bonneauville (and similarly in Centennial). Various "traffic calming" measures should be investigated to consider whether they would be workable within Bonneauville. These traffic calming measures are described in detail in the State Department of Transportation's Traffic Calming Handbook. However, care is

needed because many of the recommendations in this Handbook have not been widely accepted by the PennDOT Engineering District personnel who need to approve their use along a State highway.

There are three main types of traffic calming methods: those designed to reduce the volume of traffic, those designed to decrease speeds, and those designed to improve the safety and convenience of pedestrian crossings. There are no good alternative routes for the diversion of traffic, therefore, it is not practical to reduce the volume of traffic on Hanover Street. To a certain extent, traffic on Hanover Street may be able to be reduced as a result of planned traffic flow improvements to Route 30. Although Route 30 may be a longer route for many drivers, it may become a faster route.

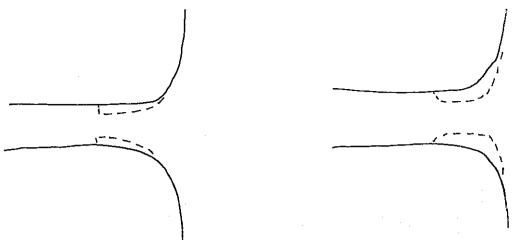
As discussed in the Transportation Plan section, it would be desirable over the long-run to have developers build some near road connections around the outskirts of town that could divert some traffic. However, those alternative routes would primarily pass through new residential developments, and not allow heavy truck traffic.

The narrowness of the right-of-way of Hanover Street in Bonneauville reduces the applicability of many of the traffic calming methods. For example, it is not practical to develop a median down the center of Hanover Street that would provide a refuge for pedestrians crossing one lane of traffic at a time. Another example of a traffic calming method would be to construct a crosswalk using a textured colored patterned concrete, which can make pedestrian crossings more visible. The noise of the textured material can remind motorists of the location of the pedestrian crossing. However, it is difficult to encourage pedestrians to cross at one selected location when the commercial development is relatively dispersed and when sight distances for motorists of pedestrians are somewhat limited by the "S" turn on Hanover Street.

At a major pedestrian crossing, a "speed table" is sometimes combined with a crosswalk. This involves raising a crosswalk slightly above (such as 3 inches) the road surface to slow down traffic. A speed table is intended to work like a speed bump, but it is much less abrupt and not as high. However, PennDOT has hesitated to approve this design, even though it is included in the PennDOT Traffic Calming Handbook.

The Borough should ask owners of businesses along Hanover Street to funnel their driveway entrances to selected locations. Many commercial businesses have "open" frontages that allow vehicles to enter and exit the property at any portion of the road. Landscaping can be used to direct motorists to enter and exit at one spot, which would reduce conflicts with pedestrian crossings, and simplify movements of vehicles on the lot.

Another method that can be used to make it easier to cross a street is a "bulb out" curb. This involves extending the curb outward at an intersection on each side of a street so that a pedestrian does not need to walk as long a distance to cross the street. The extended curb also makes the pedestrian more visible to motorists and reduces speeds of vehicles making turns. However, this method may be practical at an intersection that is already at an angle (which includes many intersections along Hanover Street in Bonneauville). A long bulb out is only suitable at an intersection that does not experience turning movements by heavy trucks. However, it is still possible to have a bulb out at an intersection that experiences turns by trucks if the curb is extended without affecting the turning radius, as seen in the sketch below.



A type of bulb-out curb at an intersection without turning movements by heavy trucks.

A type of bulb-out curb at an intersection that does involve turning movements by heavy trucks.

Most of Hanover Street has only narrow shoulders and narrow front yards. If sufficient room is available, it would be desirable over the long-term to provide sidewalks along Hanover Street in Bonneauville. However, there are several limitations to sidewalk construction, including:

- Sidewalks along Hanover Street would need to be accompanied by curbing. The costs per lot for sidewalk and curbing would likely exceed several thousand dollars. It may be possible to obtain a Federal Transportation Enhancement Grant to fund some of the construction of the improvements. These grants are competitive.
  - However, even if the grant would be approved, the Transportation Enhancement Grants typically cannot be used for engineering and PennDOT permit costs. The costs of engineering and permits along a State road would likely add tens of thousands to the cost. Also, if Federal funds are used, then all workers must be paid the prevailing union wage rate, which greatly increases total costs.
  - Any use of the Transportation Enhancement Grant program typically requires a series of additional expenses, including completion of a historical review, environmental review and possibly an archeological excavation.
  - Transportation Enhancement Grants cannot be used for any work to underground or above ground utilities that may be needed to construct curbs and sidewalks.
- If additional right-of-way would be needed for sidewalk and curbing, this can add significant costs for acquisition. If one property-owner refuses to provide right-of-way, it can result in substantial legal costs for condemnation.
- In many cases, there are major drainage channels immediately along the roadway that would need to reconstructed if sidewalks would be installed. In certain cases, these drainage channels involve a steep drop adjacent to the roadway, with little room to relocate the drainageway. In some cases, such as in the western part of Hanover Street, a guiderail is the only feature separating the roadway from a steep drop. If curbs and sidewalks would be installed, it would increase the amount of land covered by surfaces impervious to water, which would further aggravate drainage problems. With the narrow areas available between the road and buildings, it may be necessary to build expensive underground storm sewers.

- The bridge in the western part of Hanover Street is narrow. This bridge is scheduled to be re-built in 2005, but the ravines along the side may make it difficult to widen the bridge sufficiently to provide for safe sidewalks.
- To avoid the need to acquire additional right-of-way, the curb would likely be immediately placed along the travel lanes, thereby removing the shoulder. This could create additional traffic hazards for bicyclists, who typically are not allowed to use sidewalks. Also, this could create a hazard if pedestrians are encouraged to walk a couple feet away from a highway that carries heavy truck traffic. A vehicle could jump the curb and injure a pedestrian.
- There are steps, trees and shrubs that obstruct the most likely locations for sidewalks along Hanover Street. These features would need to be removed, which could prove unpopular among residents. Also, there are changes in grade that in some cases would require the construction of expensive retaining walls.
- Sidewalks would consume sites that otherwise could be used for attractive street trees. Most species of trees need at least a 4 feet wide area that is not covered by concrete or paving. If sufficient room is not provided for the long-term growth of street trees, they can damage sidewalks. This problem can be minimized through the careful selection of species.
- Any sidewalks that would be built would need to comply with Federal standards under the Americans With Disabilities Act (ADA). This would limit flexibility to vary the width and slope of sidewalks to fit site conditions.
- There are utility poles along both sides of Hanover Street in the path of potential sidewalk locations. To meet the minimum clear width for a sidewalk under the ADA, many of these poles would probably have to be relocated at great expense.

It is much easier to construct sidewalks as part of new construction than on existing older lots. Sidewalks should be required in new developments along streets that will carry through-traffic. Sidewalks are currently required for any new subdivision or land development in the Borough. This may create an awkward situation where a sidewalk is required for one new business when there are no sidewalks on adjacent properties. In this situation, some municipalities require that builder place a covenant to "defer" the construction of curb and sidewalk. In this case, the approved plan would clearly state that the then-current owner of the property is required to pay for the construction of curb and sidewalk at a future date that may determined by Borough Council. Over the long-term future, it then may make sense for the Borough to work to complete "missing links" of sidewalks between segments that have been completed.

One additional alternative would be to only construct sidewalks on one side of a street. This alternative works well at reducing costs when it is not difficult to cross a street. However, along existing development, there may be controversy if property-owners on one side are required to pay for sidewalks, while owners on the other side are not.

In any case, a new pedestrian pathway parallel to Hanover Street has been recommended in the Transportation Plan. This pathway would provide a good alternative for persons who otherwise would

wish to walk along Hanover Street. This pathway would connect the neighborhoods east of the Catholic War Veterans property to the Borough Park, to the St. Joseph's Church property to Locust Avenue. From these points, most residents would be able to access the pathway using lower-traffic residential streets. This pathway could be constructed at a reasonable cost because it would mainly cross public or semi-public land, and hopefully involve cooperative property-owners. Also, unlike work along Hanover Street, detailed engineering and PennDOT approvals, permits and inspections would not be required. These PennDOT approvals, permits and inspections typically are time-consuming and greatly increase the total expense of a project.

The Borough could apply for a Small Communities Grant under the State Community Conservation Grant program to pay for the 100 percent of the materials to build this trail. This grant program involves dramatically fewer bureaucratic requirements than the Transportation Enhancement Program, and does not require the payment of prevailing union wage rates. An alternative, if sidewalks will not be built in the near future along Hanover Street, would be for the Borough to apply for a Transportation Enhancement Grant to complete this pedestrian pathway. A pedestrian easement would be needed in order to obtain Federal funds. However, that Federal program would involve much greater administrative expenses than the State programs.

Any pedestrian pathway in the center of Bonneauville should be interconnected with new and existing developments. It would be particularly important to build a pedestrian path where it is not possible to travel from one development to the center of town without walking along a heavily traveled road.

As an alternative to constructing expensive sidewalks, the Borough could work on a voluntary basis with property-owners to have them maintain a strip of land at least four feet wide along the shoulder of Hanover Street that is walkable. This strip of land most likely would remain in grass. Property-owners would be asked to keep this strip clear of shrubs and other obstructions to pedestrians. Where slopes exist, property-owners could be encouraged to level off an area so that it is walkable. If justified by pedestrian traffic, this strip might eventually be covered with bituminous asphalt or crushed stone, which are much less expensive than concrete.

One theory is that narrowing the cartway of Hanover Street would reduce traffic speeds. There is some evidence that narrower streets have a psychological impact that discourages speeding. However, for motorists that do not reduce their speeds, the removal of the existing narrow shoulders along Hanover Street could also leave little margin for error.

PennDOT should allow the reduction of the speed limit along Hanover Street in Bonneauville from 35 to 25 miles per hour. However, the installation of signs is unlikely to reduce speeds unless it is regularly enforced. Local police are not permitted to use radar or laser speed devices, but may use alternatives such as Vascar.

A traffic signal may eventually be needed at Maple and Hanover Street to allow safe left-hand turns onto Hanover Street. An alternative location would be at Bon Ox Road/Cedar Street/Hanover Street, which would have better sight distance. A traffic signal at any location along Hanover Street would help to reduce speeds along the corridor and provide breaks in traffic that would make it easier to turn left at many different intersections. As an interim step, it may be desirable to install a flashing signal at one of these intersections, with flashing red on the side street and flashing yellow along Hanover Street.

Vehicles should not back onto Hanover Street from driveways. Wherever sufficient room is available, homeowners should be encouraged to provide an area in their front yard to allow a "K-turn" so their vehicle can face onto Hanover Street when the vehicle enters the street. This type of turning arrangement should be required for any new development or any conversion of a house into a business.

As described earlier in this Land Use and Housing section, the types of commercial uses along Hanover Street in Bonneauville should be carefully controlled to avoid intensive uses that would be incompatible with neighboring homes. Additional stores, services and restaurants should be sought that will serve the needs of local residents. Any new commercial buildings should be designed with parking to the rear or side of the buildings, with only moderate building setbacks from Hanover Street. This will help create more of a "town" feel, as opposed to a commercial strip with large parking lots in front of buildings. To make businesses more visible, it may be appropriate to allow small signs to project perpendicular to the building. The sizes, heights and lighting intensity of signs should be controlled to avoid nuisances to neighbors and a "commercial strip" type of appearance.

There are only a limited number of historic buildings in Bonneauville. The most prominent historic building is a stone house and barn along the north side of Hanover Street across from the mini-mall. This building is worthy of continued preservation. The St. Joseph's Catholic Church is also a local landmark.

All buildings should be encouraged to have unenclosed front porches. These porches encourage interaction amongst neighbors.

A distinctive "Welcome to Bonneauville" sign should be placed at each end of town to provide more of a community identity.

As described in the Transportation Plan section, adjacent businesses should provide interconnected parking lots and/or shared driveway entrances. It should be possible to travel from one business to another adjacent business without having to re-enter Hanover Street. Where practical, a rear alley should be build as part of adjacent development or a condition of converting a house into a business. This rear alley would allow traffic from multiple properties to enter Hanover Street from an intersection such as Pine Street/Granite Station Road, Cedar Street/Bon-Ox Road, or Pine Oak Drive. One of these intersections is likely to be served by a traffic signal in the future. This would reduce the need for traffic to make left-hand turns onto Hanover Street at unsignalized driveway locations.

As discussed in the Transportation Plan section, the U.S. Postal Service should be asked to allow the placement of mailboxes on both sides of Hanover Street to avoid the need for many residents to walk across Hanover Street every day for their mail.

### Recommendation: Emphasize appropriate types of development along the Route 30 corridor.

The Land Use and Housing Plan for the Route 30 corridor emphasizes maintaining the ability of the highway to carry through-traffic. If the entire corridor would be zoned for commercial development, the large number of resulting turn movements on and off of Route 30 could result in serious traffic safety and congestion hazards.

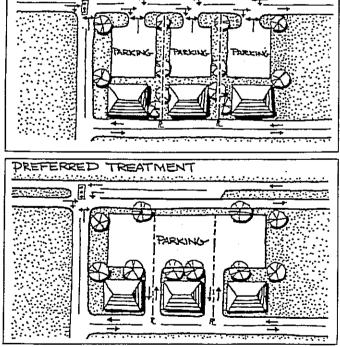
Proposed commercial development is proposed to be concentrated on portions of the highway that already include significant commercial development. This particularly includes land around the intersection of Kilpatrick Road and around the intersections of Fleshman Mill and Bon Ox Roads.

Most of the proposed commercial areas are planned as "Village Center" areas. The Village Center zoning district is proposed to mainly provide for types of land uses that would be compatible with nearby homes. These include small retail stores, offices, day care centers, personal services, banks and residential uses. The Village Center areas are not proposed to provide for the most intense and highest traffic commercial uses, such as large convenience stores, gas stations, fast-food restaurants and auto repair businesses.

It would be desirable to link together traffic access between adjacent commercial uses so that it would be possible to visit more than one business without having to repeatedly enter and exit Route 30. As new commercial businesses are developed, they should be required to have interconnected driveways. Ideally, a rear access road would be developed that would connect together all of the businesses along one side of Route 30. This access road could then direct traffic to an intersection that could be signalized to allow safe left-hand turns.

### Reverse Frontage Road

Access on the reverse frontage road decreases the accident rate on the primary road by eliminating access points and by focusing turning movements to channelized, signalized intersections.



IMPROPER ACCESS TREATMENT

Source - Chester Co. Planning Commission Circulation Handbook

As traffic increases along Route 30, there will eventually be a need for one or more traffic signals to make it possible for traffic to make a safe left-hand turn onto Route 30. One potential location would be at the intersection of Fleshman Mill Road and Route 30. This intersection could serve most of the business development areas along the eastern part of the corridor, and most of the north-south traffic, as well as the existing mobile home park. Traffic headed north or northwest from Bon Ox Road would

be encouraged to turn onto Fleshman Mill Road to access the signal. If traffic increases along Fleshman Mill Road west of Bon Ox Road, cooperative efforts should be sought with the landowner to build a new link around the current "S" turn at a farmstead.

A significant buffer of natural vegetation should be maintained along the South Branch of the Conewago Creek. Historic buildings should be rehabilitated and appropriately reused, such as the historic house on the north side of the intersection of Bon Ox Road and Route 30.

New business development should be promoted along open lands along Brickcrafters Road. Ideally, new business would make use of the existing railroad line to minimize truck traffic. Intensive development would be difficult in many areas north of the railroad because of the difficulty of obtaining approval for new or intensified railroad crossings.

Most of the remaining lands fronting on Route 30 are proposed to be zoned Single Family Residential, allowing a relatively low density of 2 to 3 homes per acre if there would be central sewage and water services.

Over the long-run, an extension of central sewage westward from the New Oxford system should be sought if it is cost-effective and if the costs could be largely borne by new development.

### Recommendation: Promote compatible development across municipal borders.

It is essential to seek compatibility in development across all municipal borders. The majority of immediately adjacent land areas in surrounding municipalities is zoned in a compatible manner with Mount Pleasant Township. As of early 2003, these areas include:

- In Straban, the Lake Heritage development is zoned for single family detached homes. North of Route 116, and in the Brickcrafters Road area, almost all of the land is within Straban's Residential Agricultural district. That district mainly provides for agricultural uses and single family homes on 1.4 acre minimum lots. Lots of slightly less than one acre are possible with central water and sewage services. In addition, Employment Center zoning is in place in Straban along both sides of Route 30 west of the Mount Pleasant border. Those areas along Route 30 primarily provide for industrial uses, offices and some commercial uses. In areas of Straban in the Oxford Road area near Mount Pleasant's northern border, a Low Density Residential zoning district applies, with a lot size of one acre with on-lot utilities and one-half acre with central water and sewage.
- One area of Reading Township is adjacent to Mount Pleasant Township. This area is zoned Agricultural Conservation and allows single family homes on one acre lots. A cluster option allows lots as small as 1/4 acre, with open space preservation.
- The following description for Mount Joy Township is based upon the update of their zoning ordinance, which was being considered for adoption in early 2003. In Mount Joy, the Lake Heritage development and adjacent areas along Low Dutch Road are zoned for single family detached houses at 1/2 to 1/3 acre lots. Mount Joy Township has considered Agricultural Conservation zoning (which would limit housing to 10 percent of a tract) along large parts of the Mount Pleasant border, but that zoning is no longer being considered. Instead, the remaining land in Mount Joy along the Mount Pleasant border is proposed to be within a Rural Residential

district. This district is proposed to start with a 3 acre minimum lot size. However, if open space is permanently preserved on a tract, then one acre minimum lots would be possible. Smaller lots would also be possible if larger amounts of open space are provided and if central water and sewage services would be provided.

- As of 2003, Germany Township does not have zoning regulations. Most housing is limited to one acre lots with on-lot septic systems.
- The land area in Union Township adjacent to Mount Pleasant is Rural Residential. This district provides for single family detached houses on 1.4 acre lots. The lot sizes increase to 3 acres in areas with high levels of nitrates in the groundwater.
- The land area in Conewago Township that is immediately along Mount Pleasant is in the 100 year floodplain. An existing subdivision north of Centennial Road is zoned Suburban Residential. The majority of the land area in Conewago Township adjacent to Mount Pleasant north of that subdivision is in the R2 Mixed Use district, which mainly provides for residential development. The majority of the land in Conewago south of Centennial Road is zoned Agricultural Preservation.
- A narrow area of Berwick Township is adjacent to Mount Pleasant along Black Lane south of Irishtown Road. This area is in the one hundred year floodplain, which makes it difficult to develop any buildings.
- As of 2003, Oxford Township does not have zoning regulations. Most housing is limited to one acre lots with on-lot septic systems.
- Hamilton Township has Creekside Residential zoning along the Mount Pleasant border in the area of Boy Scout Road, north of Oxford Road. This zoning generally is intended to avoid intensive residential development.

## Recommendation: Consider the timing of development.

The private real estate market will continue to be the primary influence on the timing of development in the region. The real estate market is greater affected by interest rate fluctuations and economic cycles. The availability of central water and sewage services will also greatly affect the timing of development, as well as State regulations on septic systems and nitrates in wells.

This Plan is intended to address development over the next 10 to 15 years. The Plan should be reexamined every five years and updated if needed. As development continues to occur, and if undeveloped land becomes scarce in growth areas, it may be logical to consider additional phases of development in future years. This could, for example, include providing for additional growth areas near Bonneauville. Other issues involving population projections are discussed in the Appendix of this Plan.

Recommendation: Carefully consider the impacts of housing growth upon community facilities and services.

It is important to estimate future growth trends to understand impacts of development upon roads, water systems, sewage systems, public schools and other community services and facilities. The following estimates of potential growth in housing units only considers areas that are proposed to be designated as growth areas. Therefore, these estimates do not consider growth that may occur in areas that the Plan recommends be Conservation Corridors, Agricultural Preservation or Land Conservation. The proposed densities in three categories are much lower than in other parts of the Region.

If all of the development that could be served by central sewage service in the growth areas would be developed and would be served by central sewage, then approximately 550 new housing units would be possible under this Plan within the Borough and an additional 1,410 new housing units would be possible within the Township, for a total of 1,960. These numbers include lands including several housing developments that have already been approved or are about to be approved.

The number of housing units in the Borough would be even higher if the proposed manufactured home park north of Hanover Street moves forward as originally approved and if the Borough does not reduce the allowed densities in other areas of the Borough.

If we assume that all new development would occur without central sewage service, then the densities would be much lower. This lack of sewage would reduce the number of potential housing units to approximately 110 units in the Borough and 680 in the Township, for a total of approximately 790 units. This would be less than one-half the density compared to if central sewage would be used.

It is unlikely in the next decade that central sewage will be available to serve all of the land areas where the Plan designates as potential sites for central sewage. The Bonneauville sewage plant will likely run out of capacity after projects that are currently proposed are approved. The potential new sewage plant along Hill Road is initially only designed to serve one development, but could conceivably be expanded to serve larger areas. Advance planning has not even started on an extension of public sewage service westward along Route 30 from New Oxford. There are time-consuming and complex studies, permits and approvals that are needed before a new sewage treatment plant could be constructed or an existing plant could be expanded. The Pennsylvania Department of Environmental Protection can also reject a proposal for a new sewage plant, and or can require such a high level of treatment that a plant is not cost-effective. Typically, most municipalities will not commit to invest in a new plant or major expansion unless developers have already committed in advance to pay for it. The construction of a new private sewage plant is often beyond the financial capabilities of a single developer.

It is important to provide flexibility in land use planning so that the private real estate market is allowed to work. If, for example, new townhouses or apartments would be limited to a single lot, then that property-owner would be able to command monopolistic prices to any developer who wished to build apartments or townhouses in the Region. Some landowners also may not desire to sell their land for development, or factors may arise that makes a particular site infeasible for development. Therefore, land use planning should allow 2 to 3 times as much land for a residential use as is actually expected to be needed.

The most likely scenario is a mix of central sewage and on-lot sewage. It is estimated that this would result in a "build-out" of approximately 550 housing units in the Borough that are served by public sewage, 420 housing units in the Township adjacent to the Borough that are served by public sewage,

and 650 housing units in the remainder of the Township - for a total of approximately 1,620 housing units.

If we assume that each new housing unit on the average would generate one new public school student, it would result in approximately 1,620 new school students. The average number of school students per house is typically much higher for new housing units than older housing units because households typically move into a new home when they have school-age children.

Studies across the State have shown that most types of new housing generate thousands of dollars of expenses per year to the local school district beyond the taxes that are paid by the new households. For example, if a new house involves two new public school students, it could easily generate \$15,000 of additional expenses to the school district. The school district might only receive a few thousand dollars of additional revenue from the State because of the additional students. The additional taxes paid by a new household is unlikely to generate more than \$3,000 to \$5,000 of additional taxes to the school district, depending upon the household's earned income and the assessed value of their house.

As a result, a few thousand dollars of additional expenses would likely be experienced by the school district for each new house. This deficit would need to be filled by increased taxes or increased business development (which generates new tax revenue without directly generating additional students).

The 970 new housing units forecast for the Borough and adjacent areas of Bonneauville would be expected to generate approximately 291,000 gallons per day of water and sewage usage. It is common in water and sewage planning to project demand to much higher than average usage to provide a margin for error. Therefore, if the average usage is projected at 400 gallons per household, the water and sewage usage would be projected to be approximately 388,000 gallons per day.

The average new single family detached house generates an average of 10 trip-ends per weekday. The average new townhouse or apartment generates an average of 7 to 8 trip-ends per weekday. If we assume an average of 9 trip-ends per household, the 1,620 new housing units would be projected to approximately 14,600 new trip-ends. While some of this traffic would be dispersed over the entire road system, the greatest impacts would be expected near the projected growth areas - within and adjacent to the Borough. This traffic increase does not consider growth from new business development or in adjacent municipalities.

As of 2000, the average number of persons per household in the Region was approximately 2.75. If this average continues, then the 1,620 new housing units would be projected to result in approximately 1,510 new residents in the Borough and 2,940 new residents in the Township - for a total increase of 4,440 new residents in the two municipalities. This would represent a 110 percent increase in the Borough's population and a 66 percent increase in the Township's population.

As discussed in the "Population and Housing" section of the Inventory and Analysis Chapter, the County Water Supply Plan projected that by 2010, Bonneauville's population will be 1,900 and the Township's will reach 6,000. The "build-out" analysis in this section does not conclude that the growth areas will be completely developed by a particular date. However, once the growth areas would be fully developed under the most likely scenario, the Borough's population could reach almost 2,900 persons and the Township's population could reach approximately 7,400 persons - for a total of 10,300 residents.

## COMMUNITY FACILITIES AND SERVICES PLAN

Recommendation: Consider alternatives to provide cost-effective police protection.

- A study is currently underway to consider a joint regional police force serving Gettysburg and Mount Pleasant, Cumberland and Straban Townships. The Gettysburg police currently serve Straban during portions of the week, and Cumberland has its own police force. Mount Pleasant is served by the State Police, while Bonneauville is served by a combination of one full-time officer and the State Police.
  - Particularly if a larger regional police force does not move forward, Mount Pleasant should seriously consider contracting with Bonneauville or another adjoining municipality. This would likely involve providing police protection during peak periods of police calls, such as evenings and weekends.
  - A joint police force involves two or more municipalities establishing one police force that is directed by commission members appointed by each municipality. Another option is to have one municipality contract for police services from a second municipality, which then manages the force. A joint police force makes it easier to provide 24 hour service and specialized services, such as for investigations and youth issues. A joint police force can result in increased training and professionalism, which can reduce liability costs. A joint force also makes it easier to investigate crime that crosses municipal borders.

Recommendation: Make sure local fire and ambulance companies have the resources they need to provide quality services.

The fire companies that serve the region are described in the Community Facilities inventory section.

Efforts are needed to make sure that adequate numbers of volunteer emergency service workers are available. It is particularly difficult to provide adequate numbers of volunteers during weekday mornings and afternoons - when many persons are working outside of the area. The municipal governments and area businesses can provide assistance by encouraging their employees to volunteer, and to allow them to leave work for emergency calls, which is already done in Mount Pleasant. The municipalities should also give preference to volunteer firefighters and emergency medical workers in hiring - so that the region is assured of having persons available during the day. Some municipalities are also providing limited compensation to volunteers - such as providing a modest pension program tied to the number of calls responded to by each person.

The municipalities should endeavor to provide sufficient financial support to the fire companies so that the volunteers are not overburdened with fundraising. Municipalities are authorized to enact a special real estate tax that can be provided directly to emergency services. This type of tax is valuable to make sure that the costs of emergency services are fairly distributed.

An emphasis is needed upon joint training among all of the emergency service providers in the region.

Recommendation: Promote additional recycling and composting.

Recycling is important to save resources and reduce landfill costs. Bonneauville has curbside pickup of recyclables. Residents can also drop off many types of recyclables at the Rescue Mission on Route 30 in Straban Township. The Rescue Mission also periodically accepts materials in New Oxford and Littlestown. A number of farmers also accept newspapers for use as animal bedding.

Composting at home is an effective method of turning many types of waste into excellent fertilizer. Leaves can be easily composted on an individual lot or at a central facility. However, there are much stricter State regulations on centralized composting of grass because it can generate polluted runoff and odors. Therefore, residents should be encouraged to mulch their grass clippings.

## Recommendation: Make sure adequate sewage services are provided.

There are two main public sewage service systems that serve this region: the Bonneaville system and the White Run system. These systems are described in the Community Facilities inventory section of this Plan.

It would be difficult to extend the system in Mount Pleasant beyond Lake Heritage because the Lake Heritage system mainly uses a low pressure system with grinder pumps, as opposed to conventional gravity system.

A new central sewage plant is proposed along Hill Road near the South Branch of the Conewago Creek as part of a residential development. This system should be designed with suitable easements and sufficient capacity so that the village of Centennial could be efficiently connected into the system in the future. Reportedly, this system has been designed to be expandable.

Ideally, any new sewage treatment plants would be controlled by a municipal authority. The system could still be maintained by a private company under contract, but the municipality would have the ability to oversee the system. If this is not practical, then the Township should ensure that there is a long-term operation and maintenance contract with an experienced operator. Great care is needed to make sure that central systems are viable over the long-run. If a central sewage system includes a small number of customers (such as under 500 connections), it may be difficult for the operators to properly fund needed maintenance, repairs and upgrades over time. Small water and sewage systems generally should be avoided, unless the system is necessary to address failing septic systems. Any new central sewage system should be subject to inspection by Township representatives during construction, and the design of the facility should need approval by the Township. This is particularly important because many systems will eventually become the responsibility of the municipality, even if that was not originally intended.

To the maximum extent feasible, any proposed new central sewage system should use spray irrigation or drip irrigation. These methods recharge the effluent after treatment into the groundwater. These methods also help to pay for the permanent preservation of the open space that is needed for the system.

Over the long-run, consideration should be given to extending public sewage service from the New Oxford system westward along Route 30. This extension would allow more intense business development to generate tax revenue and avoid problems with failing private on-lot and central sewage systems. Fortunately, most development in the eastern part of the Route 30 corridor within Mount Pleasant can drain by gravity towards New Oxford, which would reduce the costs of extending service. However, pumping would then be needed to reach lines on the east side of the creek.

The Township should continue to require that any new lot include two tested sites for on-lot septic systems if the soils are marginal for on-lot treatment. This process is important to make sure that an alternative septic site will be available if the initial site fails.

## Water Supply Plan

## Recommendation: Make sure adequate water services are available.

As described further in the Community Facilities inventory section, there are two main central water supply systems that serve this region: the Bonneauville system and the Pennsylvania American system. The Pennsylvania American Water Company system primarily serves the Lake Heritage development. The system uses two wells.

The Bonneauville system has had water capacity problems in the past. This issue is being resolved by requiring that every new development include a well of sufficient capacity to handle the increased demand. These new wells are then incorporated into the Borough system. The system includes seven wells, with two more proposed.

In any water system, there are concerns about protecting the supply from contamination. This includes avoiding accidental spills into the ground in areas around wells. Protection of water supplies is discussed in the Natural Features Plan section of this Plan. The Borough Manager reports that the Borough water system could function if one well would not be usable because of contamination, but would have difficulties in the contamination spread to more than one well.

The Bonneauville system has corrected several major water leaks from pipes, but leaks from the system are still a concern.

Central water service is particularly important to avoid public health hazards from contaminated private wells. Well water is particularly subject to contamination from failing septic systems. Also, well water may be subject to high nitrate levels from agricultural activities. These high nitrate levels are particularly a hazard to pregnant women and small children.

At the same time, great care is needed to make sure that central water systems are viable over the long-run. If a central water system includes a small number of customers (such as under 500 connections), it may be difficult for the operators to properly fund needed maintenance, repairs and upgrades over time. The design of any new central water system should need approval from the Township. The system should also be inspected by Township representatives during construction. The system should be required to include a long-term operation and maintenance contract with a qualified professional operator. In most cases, to provide better reliability, it is better to extend an existing water system than to establish a new water system.

If adequate storage and pressure can be provided, central water service can also provide water for firefighting. However, most small water systems do not have sufficient storage or pressure for firefighting.

Over the long-run, central water service should be extended from New Oxford west along Route 30 to serve proposed growth areas.

Unfortunately, few State and Federal grants are available to resolve water supply problems. Instead, most funding that is available is primarily in the form of low-interest loans, unless a community can prove that it is experiencing financial hardships. Federal Community Development Block Grant (CDBG) funds that are administered by Adams County could possibly be available to improve water or sewage systems that serve areas where 51 percent of the residents have low or moderate incomes.

## Recommendation: Pursue the development of central water service in the Centennial Area.

Central water service should be promoted for the village of Centennial. A new central water system is being discussed for a new residential development along Hill Road, west of Centennial. This system conceivably could be extended to serve Centennial in the future.

The Hanover Water Company is owned by the Borough of Hanover and serves McSherrystown, Penn Township, Conewago Township and Hanover Borough. It may be possible over the long-run to extend service from this system to Centennial and the adjacent parts of Mount Pleasant Township.

# Recommendation: Work with adjacent municipalities to resolve water problems from the Hanover water system.

The Hanover water system is experiencing serious water capacity problems, including difficulties finding appropriate sites for new wells. The Hanover Water Company has continued to allow connections by new developments. The water supplies are greatly affected by extensive pumping of water by area quarries. Most of the water supply for the Hanover system is drawn from the Slagle Run, which receives millions of gallons of water that is pumped from quarries. Hanover is working on expanding their water supplies by connecting to an additional quarry along Route 97 north of Hanover. Moreover, the water situation is complicated by the need to retain sufficient flow along the Conewago Creek to serve the downstream water needs of New Oxford.

A number of serious sinkholes have resulted within Mount Pleasant Township, including some in the creek bed of the South Branch of the Conewago Creek. This has caused sewage effluent from the Hanover Treatment Plant to drain directly into the groundwater.

## Recommendation: Work to avoid water supply problems.

A number of actions should be considered to avoid water supply problems in the Centennial area and other parts of the Bonneauville- Mount Pleasant region, including the following:

- 1. Reduce the density of allowed development in the eastern part of the Township. This will avoid severely increased water withdrawals from any new centralized system and from wells.
- 2. Throughout the region, avoid allowing excessive densities. Through the clustering/conservation development process, homes can be efficiently placed on the most suitable parts of a tract, while much of the tract is permanently preserved in open space. This open space serves as a recharge area and as a buffer area that can protects any well sites.
- 3. It is not enough for the applicant to simply show that a water system owner is willing to allow the development to connect. An applicant for a development with centralized water should be required to show that there is sufficient water capacity for the proposed development. For a larger

development, this should include a "draw down" test using a test well, and comparing changes in water levels in neighboring wells.

- Many communities are requiring a water supply study if a use will use more than 10,000 gallons per day, which is approximately equal to 33 homes. However, because of the serious water concerns, it may be logical to consider a study for 5,000 gallons a day or more.
- There also are some concerns about water use from concentrated animal feeding operations. However, most livestock and poultry operations generate much less water use and much more recharge into the groundwater than if the land would be developed in homes. For this reason, some municipalities vary the requirement for a water study with the size of the lotso that a farmer with 100 acres would be allowed a higher water use without a study than a developer with 10 acres.
- Any water study needs to consider drought conditions.
- 4. If a water study shows some negative impacts, consideration should be given to measures to reduce the impacts. For example, a use could commit in advance to reduce water use during drought conditions (Note The State normally does not apply this restriction to a water bottler, which may continue to use millions of gallons of water a day during a drought.) Or a use could commit to provide an improved water supply if a neighbor's well goes dry (which typically involves drilling a deeper well). Or, a use could be required to permanently preserve a large area of land with a conservation easement so that there will be sufficient land area for recharge of the groundwater.
- 5. Large water bottling operations for off-site use should be controlled to the maximum extent allowed by the law. Some communities treat these uses as industrial uses and limit them to an industrial district, because they involve large amounts of tractor-trailer trucks and loading and unloading operations. Other communities allow these uses with special exception approval, but require water studies and very large minimum lot size requirements. These lot size requirements are intended to make sure that land will be preserved to allow recharge.
- 6. Whenever a new water or sewage system is approved, it should be required to be designed so that it could be efficiently incorporated into a larger system in the future. For example, easements should be provided to allow future connections from neighboring properties.
- 7. To the maximum extent feasible, water systems should have emergency interconnections. This provides an alternative water supply if a water source becomes polluted or over-extended.
- 8. Industrial uses and other uses most likely to cause groundwater pollution should be avoided around central water system well sites.
- 9. It is desirable to use types of wastewater treatment that recharge water into the ground, after the water is treated. This particularly includes spray irrigation or drip irrigation. These methods keep the water in the same watershed. This method also helps to preserve large areas of land, and works particularly well with a golf course. In comparison, most central sewage systems collect water from a watershed and then empty into a creek where it flows out of the watershed.
- 10. Stormwater runoff should be considered a resource, instead of something to be disposed of. This includes maximizing recharge of stormwater runoff into the groundwater. The Natural Features

Plan section of this document and the Regional Stormwater Management Plan include many recommendations to carry out this policy.

The following statements are required to be included in this Plan under State law:

- 1. This Plan is generally consistent with the State Water Plan and water resources planning of the Potomac River Basin Commission. The Susquehanna River Basin has declared the Hanover area to be a water shortage area.
- 2. Lawful activities such as extraction of minerals impact water supply sources and such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities.
- 3. Commercial agriculture production may impact water supply sources.

### Recommendation: Adopt a Well Construction Ordinance.

This Comprehensive Plan recommends that Mount Pleasant Township adopt a well construction ordinance. This is important to make sure that new wells are properly constructed, including proper grouting to prevent contaminates from entering the well. As of mid-2003, there are no State regulations on the construction of a well. This Township Ordinance should also require the proper sealing of abandoned wells, to prevent pollutants from entering the groundwater.

### Recommendation: Expand municipal buildings as needed to accommodate growth.

The Borough Hall is located on the south side of Hanover Street, adjacent to the Borough Park. The Borough Hall includes the municipal offices, a meeting room and the police office. The Borough Manager reports that the building is adequate for the Borough's needs. If additional space would be needed in the future, the two second floor apartments could be converted into municipal space. These apartments have their own ground level entrance in the rear.

The Township Building and public works facilities are located on both sides of Beck Road south of Bon-Ox Road. The Township is currently expanding the facilities.

#### Recommendation: Cooperate with the two School Districts to meet educational needs.

The region is divided between the Conewago Valley School District to the north and the Littlestown Area School District to the south. The dividing line is along Hanover Road/Route 116. The existing schools and enrollments are described in the Community Facilities and Services inventory section earlier in this report.

To address long-term needs for school capacity, the Littlestown Area School District is planning on constructing a new elementary school in Littlestown with a capacity of 415 students. The Conewago Valley School District is building a new Intermediate School, in addition to completing renovations and additions to existing buildings. This will involve a total cost of \$35 million.

The municipalities should regularly communicate with the school district staffs to let them know about the status of proposed developments. This information is critical to help the school districts plan ahead for future growth.

The municipalities should also promote new business development in appropriate areas to help generate additional tax revenues to the school districts to offset the costs of educating new school students. Almost all students come to the same conclusion - most new residential development does not generate sufficient tax revenues to the school district to cover the costs of educating the new school students. If residential development is not accompanied by business development, it will result in dramatic increases in real estate tax rates, particularly if new school buildings or expansions are needed.

In addition, the municipalities should work with the school districts to find ways to cooperate in providing for local recreation needs. Furthermore, the municipalities and school districts should cooperate in providing the safest bus routes and bus stops that are possible, including considering bus stop locations when new developments are proposed.

#### Parks and Recreation Plan

Recommendations concerning open space preservation along creeks are discussed in the Natural Features Conservation Plan.

## Recommendation: Work to improve local parks.

There are no local public parks within Mount Pleasant Township. There is a playground, pavilion, paved trails and a ballfield in the Bonneauville park behind the Borough Hall. In addition, the Catholic War Veterans operate baseball fields in the Borough. The Chesapeake Estates Mobile Home Park includes its own playground. There are no public school recreational facilities in the Borough or the Township. Most residents travel to Gettysburg, Littlestown or New Oxford for organized recreational programs and athletic fields.

The National Recreation and Park Association developed nationwide standards that estimated an average need for 10.5 acres of local active public parkland for every 1,000 residents. Based upon the population projections for 2010 described in the Population and Housing section of this report, this guideline would estimate a need for 63 acres of public parkland in Mount Pleasant and 20 acres in Bonneauville. Once the existing public park and ballfields that serve a similar purpose are considered, this acreage need in Bonneauville could be met by a new neighborhood park on the north side of town if those areas develop residentially.

Mount Pleasant Township should seriously consider developing a Township Park. A location should be considered adjacent to an existing community facility so that joint use can be made of parking and so there can be security and oversight during many times of the week. For example, locations should be considered adjacent to the Township Building on Beck Road or adjacent to the Centennial Fire Company. A location next to the Township Building would have an added benefit because the maintenance equipment and staff would already be on-site, which would avoid time-consuming travel.

It would be desirable to concentrate most facilities for organized active recreation at one site in the Township. This would avoid the need for residents to have to drive between different parks if they have children in different activities. Also, having one larger park allows a family to enjoy a range of different activities at one site. For example, small children can play on a playground, while older children are involved in athletic games. Older family members can go walking or jogging while younger family members are involved in another activity. Concentrating facilities at one location also avoids the need

for workers to travel long distances between parks with equipment, and avoids the need to duplicate restrooms, parking and other facilities at different sites.

The Township and the Borough should each update their Subdivision and Land Development Ordinance to require new residential developments to include recreation land. Where it is not logical to provide recreation land within the development, then the Ordinance should provide that fees are paid in place of dedicating land. The fees would be required to be used to purchase parkland at another location or to improve an existing park. This process is specifically allowed under State law. It is particularly important to require on-site recreation land when dense or attached housing is involved - because there is little room for recreation on each home lot.

A new local park should be provided in Bonneauville on the north side of Hanover Street/Route 116 if those areas are proposed for residential development. This park site would be important because of the difficulty of crossing Hanover Street. Local streets or pedestrian paths should provide connections to a new park so that it could be accessed by nearby residents.

Consideration should be given to developing a passive recreation park along part of the South Branch of the Conewago Creek. This type of park would be particularly valuable for group picnics, to provide fishing access and for nature trails. This type of park would also help to permanently preserve scenic natural areas.

## Recommendation: Work to minimize municipal park and recreation liability.

Concerns have been expressed about liability in providing park facilities and trails. Two State laws greatly reduce the liability risk. The State Recreational Use of Land and Water Act generally states that if a landowner allows persons to use his land for recreation without charge, that landowner does not incur liability for any injury to persons or property. This law has generally been interpreted to apply to lands without developed recreational facilities. This law has been upheld in several court decisions.

To minimize liability, a municipality should regularly inspect parks and quickly resolve any safety hazards. A municipality is most likely to be found liable if the municipality is aware of a safety problem but does not correct it within a reasonable period of time. Any outdated playground equipment should be replaced with playground equipment meeting nationwide standards, with a sufficient soft surface under the equipment.

A second State law, the State Rails to Trails Act, generally applies to landowners (including a public agency) that allows the public to use a trail on their property. These landowners generally have no legal obligation to make sure the land is safe or to warn users of a hazard. The owner is not liable for injury to persons or property, provided the owner does not charge for the use of the trail.

Trail connections are discussed in the Transportation Plan section.

## TRANSPORTATION PLAN

There is further discussion about transportation improvements along Hanover Street in Bonneauville and along Route 30 in Mount Pleasant at the end of the Land Use and Housing Plan section.

Recommendation: Work with PennDOT to cost-effective improvements to roads to improve safety.

In 1996, the Southeastern Adams County Transportation Study was completed. The vast majority of the recommendations in that Plan were in areas outside of Bonneauville and Mount Pleasant. The Plan recommended that the length of Route 116 be widened and reconstructed from Route 15 to Littlestown, for an estimated cost of \$3.5 million. The Plan noted that additional right-of-way would have to be acquired, that wetlands would need to be disturbed at several creek crossings, and that many historic buildings are located close to the road. As a result, the Plan recommended emphasizing improvements along the existing road wherever possible, with an emphasis upon reducing curves and hills to improve sight distance, particularly near intersections. The Plan also noted that opportunities should be provided in selected areas for passing. The Plan also recommended the provision of 6 to 8 feet wide shoulders on each side of Route 116.

The Southeastern Adams Plan studied whether the "S" turn in Bonneauville should be eliminated. The Plan noted that eliminating the "S" turn would require the removal of existing homes and businesses. The Plan proposed an alternative of constructing a new alignment of Hanover Street/Route 116 in the center of town that would run behind existing homes and businesses. The recommended alternative was for a new Route 116 route from Pine Street/Granite Station Road to just east of Cedar Street/Bon Ox Road. However, this alternative may no longer be feasible considering that new development has been approved in the Borough north of the Pine Street/Route 116 intersection. Also, any alternative route would require removal of some homes and businesses. The Southeastern Adams Plan also questioned whether the intersection of Maple Street and Hanover Street in the center of Bonneauville should be realigned.

The Southeastern Adams Plan includes so many improvements that all of the projects are unlikely to be funded. Considering the many road projects for funding throughout the State, only the most cost-effective improvements or the improvements that will be partially funded by developers are likely to be completed.

In 2002, PennDOT announced plans for a series of improvements along Route 30. This will include widening. The western portion of Route 30 in Mount Pleasant would be one lane in each direction, plus a center turn lane. At the creek east of Swift Run Road, the road would go back to 2 lanes. Then it would return to having a center turn lane east of the bridge. At one point there would then be an eastbound passing lane, in addition to the center turn lane. Then Route 30 would return to one lane in each direction and a center turn lane towards the eastern part of Mount Pleasant.

Along other portions of Route 30 and Hanover Road, left-turn and/or right-turn lanes should be constructed over time at major road intersections. These turn lanes would reduce hazards from rear-end collisions of vehicles waiting to make left-hand turns.

Most traffic safety problems in this region result from excessive speeding, and not the design of the road. This Plan recommends that the speed limits along Hanover Street/Route 116 be reduced within Bonneauville. This will require approval from PennDOT.

As traffic increases, additional four way stops may be appropriate to increase the safety of intersections and reduce speeds, particularly where there is limited visibility of oncoming traffic (which is called "sight distance"). For example, the new four way stop at Bon-Ox and Centennial Roads has reportedly worked well. Similarly, a four-way stop works well at Centennial Road and Storms Store Road.

This Plan does not recommend removing the "S" turn along Route 116/Hanover Street in the center of Bonneauville. There are too many buildings close to the road. In fact, a number of Borough residents have commented that the S turn in the only feature that causes traffic to slow down as it passes through the center of town. Additional signage, possibly with a blinking light, may be valuable to warn persons who do not regularly travel through the area. It would be useful to target this area for speed limit enforcement. However, until the State Legislature acts to allow local police to use radar, it is difficult for a one person police force to enforce speed limits.

The intersection of Maple Avenue and Locust (Two Taverns) Avenue in the Borough is rather awkward. Improved channelization of traffic may be helpful.

At peak hours, there are difficulties making left hand turns at the intersection of Maple and Hanover Streets, particularly because of limited sight distance from the curve to the west. Eventually, a traffic signal may be needed at an intersection somewhere near the center of town, which can help to moderate speeds along the entire corridor. By having a traffic signal, it results in breaks in traffic that make it easier for persons to turn onto Hanover Street or walk across the street at other locations. However, there may not be adequate sight distance at the current intersection of Maple and Hanover Streets to allow the placement of a signal.

The present road system in Bonneauville works like spokes in a wagon wheel. To travel from one area of the Township to another area of the Township, it is often necessary to drive into Bonneauville. Bonneauville and Mount Pleasant should work over time to provide alternative routes for traffic around Bonneauville. This is not intended to be a complete bypass around town, but instead to provide two-lane alternative routes in certain directions. The goal is to allow motorists to travel from one side outside of town to another side without needing to drive into the center of Bonneauville. As new development is proposed, Mount Pleasant should seek the construction of new road links. Some road links may need to be built in phases with a "stub" street that can be extended in the future when the adjacent property is proposed for development.

For example, it would be desirable to have a road link outside of town between Whitehall Road and Hickory Road, and then between Hickory Road and Two Taverns Road. Moreover, it would be desirable to have a road link outside of town between Granite Station Road and Bon-Ox Road.

Similarly, Bonneauville should require interconnections between subdivisions so that there is an alternative route to Hanover Street - particularly for local residential traffic. Most existing subdivisions already include stub streets that can be extended. Interconnecting streets in residential area should be curved and include some "T" intersections with stop signs to reduce speeds. In some cases, it may be appropriate to make an interconnecting route somewhat circuitous to avoid short-cuts by heavy amounts of traffic. Trucks should also be prohibited from residential streets wherever an alternative route exists.

Additional recommendations regarding Hanover Street in Bonneauville are discussed in the "Encourage Appropriate Types of Development and Improvements Along Hanover Street" section of the Land Use and Housing Plan.

A sight distance problem exists at the intersection of Storm Store Road and Route 116. The Township should work with the adjacent landowners and PennDOT to consider relocating part of Storm Store Road and/or Hanover Road to a location where sight distance would be acceptable. An alternative would involve reducing the height of the hill along Route 116. Subsurface testing is needed to determine whether that alternative would be affordable.

Likewise, a sight distance problem exists along Centennial Road between Hill and Honda Roads, where a hill and a curve combine to create difficulties. This problem is likely to be aggravated by increased traffic from the adjacent proposed Centennial Meadows development.

Another sight distance problem exists at the narrow intersection of Whitehall Road at Locust Lane. The Township is discussing relocating Locust Lane along the west side of Whitehall Road to a new location where adequate sight distance is possible.

A sight distance problem also exists along Route 116 at Low Dutch Road. This problem is caused by a barn close to the intersection and a hill.

### Recommendation: Carefully manage traffic access onto major roads.

Traffic access management should including encouraging use of rear or side access to reduce the number of turning movements directly onto major roads. Inter-connections should be sought between adjacent non-residential uses to avoid the need to re-enter major roads.

Coordinated driveway access among adjacent businesses works best when uses are able to gain access to a major intersection (which may be signalized in the future). It is desirable to plan for the future locations of new traffic signals at carefully selected intersections. Traffic from new development should be directed towards intersections where traffic signals are proposed in the future.

Connections between adjacent uses should be completed parallel to Route 30 and Hanover Road to allow traffic to enter the road at carefully designed locations, where feasible. Ideally, along main roads, a new frontage road or service road would be constructed parallel to the main road to provide direct vehicle access to all of the lots along the road.

If alternative connections are provided to make left-hand turns at major intersections, then individual driveways onto major roads can be limited to right-hand turn in, and right-hand turn out.

Interconnections between adjacent non-residential uses along a major road allows traffic to visit more than one use to another use without needing to enter and re-enter major roads. These inter-connections can be required for a new development. If an existing adjacent use will not allow an inter-connection, then the new development should be required to provide the link as a stub. This stub can then be opened in the future when any development approval is sought on the adjacent lot.

Recommendation: Continue to improve shoulders along all through-roads.

Improved shoulders are needed for safety reasons along many roads, especially Hanover Road/Route 116. Most roads in the Township do not have any shoulders, which leaves little margin for minor errors by drivers and little room for bicyclists. Cooperative efforts are needed with PennDOT to seek shoulders along the most heavily traveled State roads.

# Recommendation: Take the initiative in municipal funding of engineering of needed road improvements.

It is important for municipalities to take the lead in identifying needed improvements on State roads. An improvement to a State road is much more likely to be funded by PennDOT in a timely manner if the municipality takes the initiative to pay for the initial engineering of improvements. A project is even more likely to receive State funding if the adjacent property owners donate the needed right-of-way. In such case, the value of the engineering and the donated right-of-way count as a "local match" that allows a project to receive priority for State funding.

## Recommendation: Establish a consistent set of street names across municipal borders.

A large number of street names change when the border is crossed between the Borough and the Township. This creates confusion among customers looking for businesses, as well as delivery persons. The street names should be made more consistent across the borders. The easiest street names to change would be those with the lowest numbers of homes along the affected section.

## Recommendation: Improve safety for bicyclists and pedestrians.

It is important to provide safe opportunities for walking and bicycling to provide alternatives to short vehicle trips and to promote exercise for better health.

Wider and smoother shoulders should be provided along all main through-roads. These shoulders are important for bicyclists, particularly persons riding to the East Cavalry Battlefield from Gettysburg. The shoulders also serve pedestrians and joggers, and provide a margin of safety for motorists. Shoulders should be separated from the travel lanes by white lines.

In cooperation with the County, PennDOT and adjacent municipalities, safe bicycle connections should also be provided from the Lake Heritage development to Gettysburg and the proposed recreation trail along the Rock Creek.

Along main through-roads, new developments should be required to include provisions for safe pedestrian access. In higher density areas, this should include concrete sidewalks. In lower density areas, asphalt paths can be appropriate, which are less expensive to install and which can also serve bicyclists. In rural areas, where a concrete or asphalt path is not needed, an alternative could include maintaining a grass area along the road that is graded and kept clear of obstructions to allow safe walking along the side of the road.

As a long-term goal, it would be desirable to provide sidewalks and/or wider shoulders along Hanover Street in Bonneauville. In addition, a walking path should be developed from Hickory Drive, through the edge of the Catholic War Veterans lands, through the Borough Park and the Fire Company grounds (with a link to Whitehall Road), past the water tower, to the St. Joseph the Worker Church. This would provide a safe alternative to walking along Hanover Street. It also could be designed for bicyclists. If

there are concerns about skateboarding and in-line skating, then it could be developed with a compacted stone surface instead of asphalt. An ordinance should prohibit use of the path during nighttime hours, which should be posted on signs. A fence may be appropriate to block off sections of the path at night and to keep out motorized vehicles.

When a cul-de-sac street is approved, the developer should be required to include a stone or paved pedestrian and bicycle easement at the end of the cul-de-sac. This type of easement is important to allow people to walk or bicycle from one development to another development without having to make lengthy detours along circuitous streets.

The Park and Recreation section of the Community Facilities Plan chapter of this Plan discusses how State law would protect the Borough and property-owners from liability if a path is provided without charge.

#### Recommendation: Place mail boxes on both sides of Hanover Street.

The location of all of the mail boxes on one side of Hanover Street creates a pedestrian safety hazard. Residents on the other side of Hanover Street must cross against speeding traffic to reach their mail boxes every day. This is particularly a concern because of the high number of older persons who live along Hanover Street. The U.S. Post Service should be requested to allow the placement of mail boxes on both sides of the street.

### HISTORIC PRESERVATION PLAN

This region has a rich heritage, as described in the history section in the Introduction and in the Historic Buildings inventory section.

Recommendation: Consider zoning ordinance provisions to protect the most important historic buildings.

In 2000, the State Planning Code was amended to provide more authority to protect historic buildings outside of a formal historic district. Zoning can be used to provide:

- 1) zoning incentives to encourage the rehabilitation of historic buildings,
- 2) a 90 day delay on any proposed demolition of a historic building, and
- 3) requirements that any application for a proposed subdivision, land development, conditional use or special exception use must include a full description of any historic building on the property and how the application may adversely affect the building.

An alternative to regulating demolition could involve a simple delay of up to 90 days from the time a person applied for a demolition permit until it could be approved. This delay would only apply to a list of important historic buildings. This delay is intended to provide time for interested persons to convince a property owner that there are alternatives for demolition. For example, a new buyer might be found who would be willing to restore the building, or the owner might be persuaded to incorporate the building into their plans for the property. An exception would be allowed where a building inspector certifies that a building needs to be demolished because of an imminent public safety hazard.

Consideration should be given to requiring that any demolition of a very significant historic building need approval from the municipality. The demolition would only be allowed if the applicant proved that the building could not be economically reused or that the demolition is necessary to allow a project of special public importance (such as an intersection improvement needed to improve public safety). This prohibition on demolition would only apply to buildings listed as the most significant.

In addition, the Zoning Hearing Board could be allowed greater discretion in approving modifications to lot and dimensional requirements (as a special exception use") if the modification would help to reuse a historic building. The Zoning Hearing Board could also be authorized to consider impacts upon historic buildings in determining whether to approve a special exception use. The Board could also be authorized to require additional landscaping if it would help to screen out a modern development from a historic building.

### Recommendation: Provide zoning incentives for rehabilitation of historic buildings.

If a designated building is preserved and rehabilitated in a sensitive manner, it should be able to be used for certain additional uses beyond those uses that are normally allowed under zoning. Therefore, for example, an historic building in a non-commercial zoning district should be allowed to be used as a bed and breakfast inn, office, day care center, antique store, funeral home or similar light commercial use. This should help create a stronger market to encourage investment in the restoration of these buildings. These uses would only be allowed within existing buildings, plus modest-sized building additions that are designed to be compatible with the historic building as viewed from the road. The applicant would

need to submit plans prepared by a registered architect showing that the important features of the building that are visible from a public road will be preserved and rehabilitated. Modern features could be added in areas that are not visible from a public road.

# Recommendation: Promote increased interest and awareness in historic resources, and more detailed identification of historic buildings.

Increased public interest in historic buildings can help spur interest in persons buying and rehabilitating historic properties. The County Historical Society is the lead historic organization in the County. The Society is a mostly volunteer organization with only limited staff and limited office hours. The Society should be encouraged to seek State grants to complete a more detailed inventory of historic buildings in the County.

Efforts should be considered to list additional buildings on the National Register of Historic Places. Listing on the Register does not by itself involve any additional regulations upon a private property owner. It does offer public recognition of the importance of a building, and can provide limited Federal income tax benefits as part of a major historic rehabilitation of an investment property. Listing on the National Register provides protection against actions involving Federal or State funds in ways that would adversely affect the building.

# Recommendation: Encourage property-owners to follow proper standards in making changes to older buildings.

It is important to make property-owners aware of appropriate ways that old buildings can be modernized or rehabilitated in ways that retain their historic appearance as viewed from a road. The following additional standards should be considered when rehabilitating historic buildings.

- 1. The proportional relationship between the width and the height of the front of the building.
- 2. The proportional relationship between the width and height of the windows.
- 3. The maintenance of a rhythm of solid wall areas and windows and doors.
- 4. The maintenance of any rhythm of building masses to spaces between them, if such rhythm exists along a street.
- 5. The continuation of a setbacks from a road that are similar to adjacent historic buildings.
- 6. The maintenance of a rhythm of entrances and building projections and roof lines.
- 7. The use of materials (such as brick, stone and older styles of siding), that is similar in appearance to authentic materials of surrounding buildings.
- 8. The continuation of rough or smooth textures.
- 9. The maintenance and continuation of architectural details, such as cornices, lintels, arches, railings, shutters, iron work and chimneys.
- 10. The use of compatible roof shapes and lines.
- 11. The use of appropriate fences and walls.
- 12. The maintenance of barn walls in wood, preferably painted red, white or other historic colors.
- 13. Views of outdoor storage from streets and residential properties should be minimized.

## Recommendation: Assist in carrying out the Lincoln Highway Study.

The Lincoln Highway Heritage Corridor was extended through Adams County. It now extends from the eastern end of Adams County, along Route 30 into western Pennsylvania. The Heritage Corridor

is primarily designed to promote tourism and economic growth that builds upon the history and culture of the region. This known as "heritage tourism."

A non-profit organization, Lincoln Highway Heritage Corridor Inc. leads heritage tourism efforts along the corridor. It is part of the State Heritage Parks program, overseen by PA. DCNR.

Route 30 is part of the first highway across the United States, stretching from New York City to San Francisco. It was designated the Lincoln Highway in 1914, although the paving of the entire route was not completed until years later. Route 30 follows a much older turnpike route, which in turn followed an old Native-American path. Before the completion of parallel parts of the Pennsylvania Turnpike in 1940, the highway was a primary east-west route across the country. That highway causes much of the longer-distance traffic to bypass Route 30.

In addition to Gettysburg, the highway also links the attractions in New Oxford, including the historic train station museum. The Management Plan recommends an emphasis on increasing awareness about the history and importance of the Highway, which will promote historic preservation, tourism and investment. This is similar to the way Route 66 has been re-established as a major tourism route in the western U.S. The Plan also recommends decentralized interpretative information, such as signs at gas stations, parks, and other sites.

In 1928, 3,100 concrete mile markers with an image of Lincoln were installed by Boy Scouts nationwide along the highway. Most have disappeared. The Corridor organization wishes to have similar markers be re-installed. Two remaining markers still exist in New Oxford, including one in the Center Square. The management plan recommends emphasizing certain themes, including the movement to build better roads in Pennsylvania, stories about the traveling public, stories about highway businesses, and stories about the road first being used to travel to the frontier. The plan also recommends:

- using coordinated designs for signs and exhibits about attractions along the corridor,
- developing exhibits along the road, such as highway site markers,
- developing expanded exhibits at key sites, such as Gettysburg and New Oxford, which could serve
  as orientation centers for the surrounding corridor,
- preparing informational brochures,
- offering additional special events built around local history and culture,
- preparing an audio tour of the corridor,
- selling a multi-media CD-ROM that describes the corridor and its history,
- providing educational programs in schools,
- promoting suggested driving loops and walking tours to see different attractions,
- promoting the rehabilitation of existing older commercial businesses, and investment in new businesses that build upon the historical themes,
- working with property-owners to improve the appearance of the corridor, including through landscaping and suggestions from designers to property-owners on how to make low-cost improvements to the fronts of their businesses,
- setting up a revolving loan fund to help fund historic rehabilitation projects,
- providing assistance to property-owners in taking advantage of Federal tax credits for historic rehabilitation.
- preserving scenic views along the corridor, and
- promoting high quality design of new development.

## PUTTING THIS PLAN INTO ACTION

This section describes methods that should be considered to implement this Plan.

GOAL: Promote substantial citizen input, including making sure residents are well-informed about community issues and encouraging volunteer efforts to improve the community.

The volunteer efforts of neighborhood and civic organizations and individuals are essential to further improve the region and to carry out this Plan. The objective is to strengthen community pride and emphasize volunteer efforts for residents and property-owners to improve their surroundings.

If is essential to keep citizens informed and provide opportunities for meaningful eitizen input, while making use of new teelmologies for communication.

The municipalities should consider an internet site that is regularly updated with information that will help spur public interest, enthusiasm and involvement. This should include information on recreation programs and agendas for upcoming municipal meetings. Opportunities for citizen involvement should also be highlighted through the newspaper and other media.

GOAL: Continually work to put this Plan into action - through a program of updated planning and many short-term actions within a long-range perspective.

Planning is an on-going process. The Comprehensive Plan should be implemented through a continuous process of follow-up planning and action. The most immediate action will be updating as needed of each municipality's development regulations.

Maximize communications, coordination and cooperative efforts between the municipalities, the School Districts, adjacent municipalities, the County and other agencies and organizations.

To be effective, community efforts need wide participation. A close working relationship is needed with Federal, State and County agencies and adjacent municipalities.

The municipalities cannot implement this Comprehensive Plan alone.
Involvement is needed by residents, neighborhood organizations, civic
proups, businesses, institutions, property owners and many other groups.

This Comprehensive Plan should be consistently used as an overall guide for land use and transportation decisions. In addition, the Plan needs to be reviewed periodically and, if necessary, updated to reflect changing trends.

GOAL: Update municipal development regulations to carry out this Plan, and periodically update this Plan and regulations as needed.

Recommendation: Prepare a new Township Zoning Ordinance and update the Borough Zoning Ordinance.

Zoning Ordinances are the primary legal tool to regulate the uses of land and buildings. Each Zoning Ordinance includes a Zoning Map that divides the municipality into different zoning districts. Each district permits a set of activities and establishes a maximum density of development.

Each Zoning Ordinance and Map should be updated as needed to be generally consistent with this Comprehensive Plan, to modernize standards and to address local concerns. This will likely involve Mount Pleasant Township adopting its own Zoning Ordinance, thereby relieving the County of administrative responsibilities.

In addition to regulating land uses and densities, zoning also controls the following:

- the heights of buildings,
- the percentage of a lot that may be covered by buildings and paving,
- the minimum distances that buildings may be placed from streets and property lines,
- the minimum size of lots,
- the maximum sizes and heights of signs, and
- the protection of important natural features.

Based upon the Land Use, Housing and Agricultural Conservation Plan, the following three major methods should be used in the Zoning Ordinance to help manage and direct growth:

- Agricultural Preservation Zoning,
- Conservation Development (or "Open Space Development"), and
- Transfer of Development Rights (TDRs).

# Recommendation: Continue to use agricultural preservation zoning in key areas of the Township.

In Agricultural Preservation zoning areas, the number of new houses should be limited based upon the size of the tract. The remainder of a tract would need to remain in large tracts. The intent is to maintain farmland in tracts of land (preferably over 50 acres) that can be efficiently farmed. New homes should be carefully located so that conflicts with agricultural activities are minimized.

One of the goals of this approach is to avoid the subdivision of farmland into 3 to 10 acre lots that waste land and are too small to farm. To minimize the consumption of land, each new home lots should have the smallest lot area that still meets septic requirements (which will typically be one to two acres).

The major benefits of agricultural preservation zoning are described in the Agricultural Conservation Plan section.

Agricultural preservation zoning is in place in large areas of York and Lancaster counties and a few townships in Adams County. This type of zoning has also been upheld in several major court cases in Pennsylvania.

As described below, through Transfer of Development Rights, developers would be encouraged to pay property owners in these areas to preserve their land. In return, the developer could achieve a higher density in the residential areas. Owners of land in the Agricultural Preservation area should be given a bonus if they sell their development rights. Therefore, for instance, for every housing unit that is not built in the Agricultural Preservation area, a developer should be allowed to build 5 housing units in another location. This incentive would help to compensate landowners for preserving their land.

The homes would not need to be developed at one time. Therefore, if 3 new homes would be allowed on a tract, one home could be subdivided this year, and two homes could be subdivided sometime in the future. If a farm is subdivided into two large tracts, the subdivision plan would state which lot retain the right to develop the number of homes that are allowed.

As discussed further in the Community Facilities and Services Plan section, great care is needed to make sure that any proposed new central water or sewage system is workable over the long-term. At best, new central systems would be inspected during construction, built to municipal specifications and operated by a municipal authority. This would be the best method of ensuring proper long-term operations and maintenance. Where this is not possible, then a professional plant operator needs to receive a long-term contract, with proper measures to make sure the system is properly funded.

- As part of any proposed new private system, the developer should be required to submit a long-term business plan for the system to show that the system will be financially feasible over time. Small systems (such as less than 40 housing units) should be discouraged because they are unlikely to have sufficient revenues to be able to properly fund any major repairs that may be needed in the future.

A wide range of livestock and poultry uses should be encouraged throughout the Township. However, the most intensive types of livestock uses, especially large swine farms, need to be carefully controlled to prevent severe water pollution hazards and extreme nuisances. These very intense livestock uses should be limited to the Agricultural Preservation areas. These very large intense livestock uses should need very large lot sizes and large setbacks from residential zoning districts and creeks. At the same time, smaller setbacks may be appropriate between farms within the Agricultural Preservation areas.

On larger tracts, farmers should be allowed a wider range of small non-agricultural businesses than is currently allowed. These are called "Farm-Related Businesses." These businesses are important to offer opportunities for supplemental sources of income. Furthermore, retail sales of agricultural products should be allowed by right throughout the Township, to help farmers capture a higher percentage of the retail value of their products.

For any new home, a notice would be required on the deed informing a purchaser that they are buying a home in an agricultural zoning district, and should expect some nuisances from routine farming operations.

## Recommendation: Promote use of Transfer of Development Rights (TDRs) to direct growth.

TDR should be an option in the Zoning Ordinance that would provide incentives for private developers to pay to preserve farmland or woodland. If a developer would pay a private owner of farmland or an important natural area to permanently preserve their land, then the developer could receive approval to build at a higher density in an area of the municipality that is suitable for a higher density. The developer and the owner of the farmland/natural area would negotiate a price on their own to preserve the land.

The municipality would then approve the development at a higher density at the same time as a conservation easement went into effect to preserve the other land. The densities are discussed in the "Land Use and Housing Plan" section. The preserved land would remain privately owned and could be re-sold, as long as it was never developed.

- For example, this process might allow preservation of land in the Agricultural Preservation or Land Conservation areas, in return for allowing a higher density in one of the Residential or Village Center areas. The municipality could also allow density to be transferred from one Land Conservation area to another Land Conservation area, particularly if the area being developed would be near higher density residential areas.
- TDR can also be used in combination with commercial development. For example, for every housing unit that is transferred from one area of the municipality, an additional amount of building coverage or impervious coverage could be allowed in a business district.
- The applicant would need to submit a sketch plan to serve as a "Yield Plan." This Yield Plan would show how many homes are possible on the tract that is to be preserved, assuming conventional zoning with on-lot well and septic systems. Percolation tests or probes could be required by the Township to show that a lot is in fact buildable. A developer might be able to avoid the costs of percolation tests if they assume that a very low density would be possible on the tract that is being preserved. This Yield Plan would then be used to determine how many housing units could be transferred from the site that is being preserved. The goal is to make sure that TDR will not result in a substantial increase in the number of homes in the municipality beyond what is possible under conventional development.
- The State Planning Code allows transfers of density from one municipality to another municipality, provided there is a written agreement between the municipalities that authorizes transfers.

Recommendation: Promote use of Conservation Development to permanently preserve substantial open spaces in new development.

In areas that are not categorized as "Agricultural Preservation," this Plan recommends an increased emphasis upon permanently preserving important open spaces as part of new development. This involves clustering homes on the most suitable portions of a tract, while permanently preserving important features of the tract in some form of permanent open space. The intent is to design development in a manner that conserves the important natural, scenic and historic features of a site. This concept is known as "Conservation Development" or "Open Space Development."

Attractive incentives are needed so that any development of the large open tracts of land in the Township would be developed with substantial areas of preserved open space (such as 35 to 80 percent), as opposed to standard "cookie-cutter" type lots with little or no open space. With standard cookie-cutter subdivisions every lot is the same size and shape - regardless of the features of the land.

The applicant would need to submit a sketch plan to serve as a "Yield Plan." This Yield Plan would show how many homes are possible on the tract under conventional zoning with on-lot well and septic systems. Perc tests could be required by the Township to show that a lot is in fact buildable. Through the Conservation Development option, a significant density incentive would be allowed beyond the density that was possible for Conventional Development. However, the Yield Plan would make sure that an excessive density bonus was not allowed.

Open space would need to be preserved through one of a variety of methods. On a larger tract, the open space would likely be preserved as part of an agricultural use, a public park or by a homeowner association. On smaller tracts, the open space could be made part of one large lot. A conservation easement would make sure that larger lots are not re-subdivided in the future. This would allow every acre of land could be privately-owned and privately-maintained. In some cases, a public trail easement would be appropriate, even if the open space is part of a private lot.

This concept has been promoted by the Natural Lands Trust and the State Department of Conservation and Natural Resources.

<u>Advantages of Conservation Development</u> - Based upon the work of the Natural Lands Trust, the following are some of the major advantages of Conservation Development:

- Important natural features can be preserved. Conservation Development should include standards that direct buildings away from steep slopes, wetlands, waterways and other important natural features. As a result, homes are placed on portions of the tract that are most environmentally suitable for development as opposed to being evenly spread across the land. Large contiguous areas can remain in woods and other natural vegetation which are important as wildlife corridors. Thick natural vegetation can be preserved along creeks which is essential to filter out eroded soil and other pollutants from runoff before it enters the creek. This vegetation along creeks is also important to maintain high quality fishing habitats.
  - In comparison, if an entire tract is divided into lots, it is likely to mostly be in mowed grass which is a "mono-culture" that does not have the same environmental benefits.
  - With open space preservation, stormwater runoff can be managed in a more natural manner that encourages recharge into the groundwater.
- Scenic features can be preserved. Conservation Development can involve placing homes on less visible portions of a tract, while maintaining scenic views. For example, many conservation developments involve keeping homes a significant distance from main through-roads and limiting the placement of homes on major ridgelines. As a result, the main angle of vision along major roads involves green space.
  - Mature woods can be preserved in locations that hide views of development. The preservation of open space also provides visual relief from seeing continuous development.

- Stormwater runoff can also be managed in a more attractive manner as opposed to within deep man-made channels and detention basins.
- Recreational opportunities can be increased. Conservation Development typically includes attractive areas for walking, jogging, cross-country skiing and nature study. In some cases, active recreation facilities can be included. These open spaces can also increase interaction among neighbors.
- Developers can achieve lower costs for grading, lengths of roads, lengths of utilities and other improvements.
  - Developers may also be able to save time and money by avoiding wetland alterations and waterway crossings.
  - Conservation Developments can provide the flexibility in layout to move homes off of steep slopes, which are more expensive to build upon. Avoiding steep slopes can also reduce the need for blasting.
  - By allowing flexibility in placement of buildings, it is easier to find suitable sites for septic systems.
- Municipalities can save on maintenance costs. Shorter lengths of roads, utilities and other improvements mean there is less to maintain. It is expensive to maintain and plow snow from steeply sloped roads. Conservation Development can result in roads being placed at more modest slopes.
- Developers can often achieve higher sales prices. More and more developments are stressing in their advertising that homes are adjacent to preserved open spaces. Developers can often receive a premium price for lots that are adjacent to or overlook preserved open space. The presence of trails and other open space amenities can also spur sales.
  - Studies have also shown that homes near preserved open space are likely to increase in value faster than other homes.
- Reliable central water and sewage services can be extended. It is usually uneconomical to provide central water and sewage services with lot sizes of 2 acres or larger. However, if homes are clustered on a tract, then it is often possible and/or necessary to provide central water and sewage services. Public water and sewage services typically are more reliable than individual wells and septic systems.
  - Central sewage service avoids the threat of groundwater contamination from failing malfunctioning septic systems. Central water service avoids the risks of well water contamination from various sources.

Conservation Development can also occur with a design that allows homes to be "hidden in the woods" and in clusters that resemble a rural village, while allowing most of the farmland to be preserved.

The following major policies will be emphasized to encourage Conservation Development:

1. Strong incentives and disincentives are needed to encourage open space preservation in new development. It typically is not sufficient to allow the same density for a Conservation

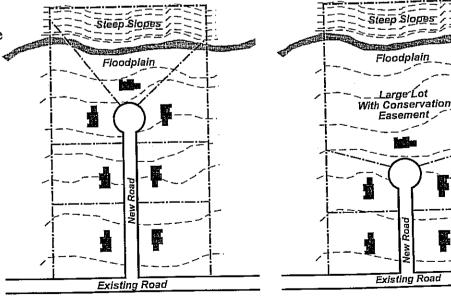
Development as for a conventional subdivision. This is because developers prefer to build what has been successful in the past, as opposed to trying new concepts. Also, developers may feel (often inaccurately) that the homes on larger lots may have a higher market value that homes on smaller lots with open space. Therefore, density bonuses are needed for open space preservation. A community needs to trade-off a modestly increased number of dwelling units in return for substantial open space preservation.

- 2. The process for approval of a Conservation Development will not be any more burdensome or time-consuming than the process for a Conventional Subdivision. Where practical, the process to gain approval for a desirable type of development will be easier than the process for a Conventional Subdivision. Discipline is needed in writing Conservation Development standards to make sure that they are not overly restrictive. If Conservation Development standards are too detailed or too extensive, they may not allow enough flexibility for a good design. If the standards get in the way of a developer's marketing plans or cause excessive costs, a developer may choose to do a Conventional Subdivision.
- 3. Proper standards are needed to make sure that the preserved open space is well-located and improved so that it serves important public functions. In many cases, mature woods, steep slopes and creek valleys should simply be preserved in their natural state. In other cases, the open spaces may be intended for active recreation. In still other cases, trees should be planted in the open spaces and trails should be installed. The key is to avoid a process in which the "open space" is simply the land that is left over after the most economical set of lots and roads are laid out. Narrow strips of open space will be avoided, unless they would preserve a scenic tree line or provide an important trail link.

In the next section, a four-step process is discussed to result in conservation-oriented site design in new development. It is essential to make sure that conservation development results in open space that serves a valuable public purpose, as opposed to simply being "leftover" land after the least expensive

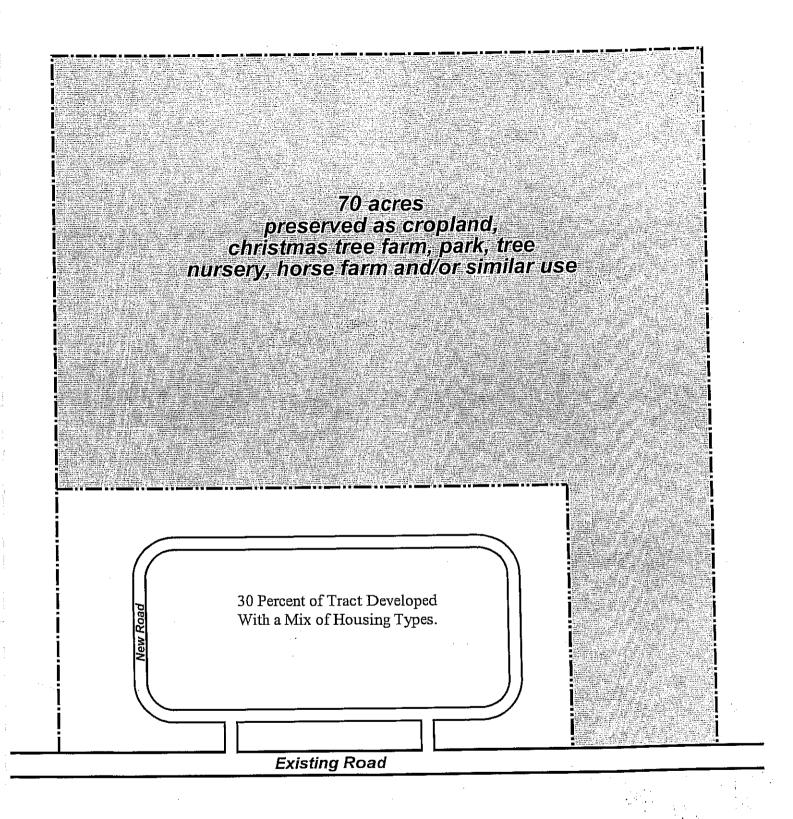
development is laid out.

These sketches illustrate some of the concepts of Conservation Development.



Example of Conventional Development -Lots are of Similar Size -Regardless of the Natural Features. The entire tract is subdivided and regraded, with no open space

Example of Open Space Development Homes are Clustered on the
More Suitable Portions of a Tract.
Important Natural Features are Permanently Preserved
by a Conservation Easement in Private,
Homeowner Association or Public Open Space.



If Central Sewer and Water is Provided, it is possible to Preserve Most of Tract, because smaller lots or attached housing are possible.

## Recommendation: Use a four-step site design process to result in conservation-oriented design

The Natural Lands Trust promotes the following four-step process in the design of new development in order to emphasize land conservation principles. The Township's development regulations and procedures will require that this process be followed. These steps must be accomplished at the sketch plan stage - before any detailed engineering is completed.

## 1. Identifying Lands that Should Be Preserved.

First, the areas that are most worthy of preservation will be mapped, including wetlands, flood-prone areas, creek valleys, and very steeply sloped lands. These are known as the Primary Conservation Areas.

Then, other features that are important for conservation will be mapped, such as woodlands, tree lines, scenic views, historic buildings, and prime farmland. These are known as the Secondary Conservation Areas.

The areas with the fewest important natural, scenic and historic features will be considered the "Potential Development Area."

#### 2. Locate Home Sites.

Next, the most appropriate locations for homes will be chosen. The zoning ordinance should establish a maximum overall density for the site, but should not include overly strict lot requirements that would prevent reasonable flexibility in the site layout. Home sites will be chosen to avoid the important features mapped in the first step. Home sites should also work to take advantage of scenic views within the tract.

### 3. Locate Roads and Trails.

After the home sites are selected, then a road system will be designed that serves those homes. A trail system should also provide links between homes and to destinations outside of the tract.

### 4. Draw in the Lot Lines.

The last sketch plan step is to draw in lot lines. In conventional development, with strict "cookie-cutter" lot requirements, this is often the first step - before any consideration of natural features of the site.

Recommendation: Use great care in the design and location of preserved open space areas within development.

In addition to preserving agriculture, a priority of this Plansis to have substantial amounts of permanently preserved open spaces that create a true feeling of open space. The goal is to have open space that truly serves a public purpose, as opposed to areas that are simply "leftover" after a developer's preferred pattern of roads and lots are laid out.

The idea of having open space serve "public purposes" does not necessarily mean that there needs to be any access by the public. If important farmland is permanently preserved, that is serving a public benefit, even though the public is not allowed to use the land.

Valid public purposes for open space include:

- To preserve land for agriculture, hayfields, orchards and tree farms.
- To preserve environmental sensitive areas, particularly creek valleys and concentrations of mature woods.
- To manage stormwater in a more attractive and naturalistic manner that protects water quality, as opposed to engineered channels and traditional fenced-in detention basins.
- To provide usable recreation areas and important links in a trail system.
- To preserve large contiguous swaths of open space in visible locations that maintain a feeling of open space and that provide a visual relief between developments. At best, some open space would be preserved along exterior roads.

In most cases, at least half of the required open space should be in one contiguous area. Isolated areas (such as less than one acre) and narrow areas of land (such as less than 75 feet wide) should not be counted as open space. However, more narrow stretches may be suitable as open space if they truly serve as part of a regional trail system. Detention basins will not be considered open space unless they are designed as a major scenic asset (such as a natural appearing pond) or are clearly suitable for recreation. Roads and parking will not count as open space, even if the parking is intended to serve recreation uses. Narrow buffers will not count towards open space, but wider buffers may be appropriate. It may be appropriate to establish a maximum percentage of open space that can be covered by impervious surfaces.

To count towards the required common open space, land should need to:

- be landscaped in trees, shrubs and other attractive vegetation,
- be maintained in agricultural uses, which may include a tree farm,
- be preserved in woods or natural wetlands vegetation,
- not be used for commercial recreation, other than a golf course, and/or
- be developed as recreational facilities, but not including buildings (other than pavilions).

Open Space should be interconnected with common open space areas on abutting parcels where possible, including provisions for public trails to link trail systems within the municipalities.

## Recommendation: Update the municipal Subdivision and Land Development Ordinances.

Each municipality is regulated by a Subdivision and Land Development Ordinance. These Ordinances mainly regulate the creation of new lots, the construction of new streets by developers, and the site engineering of new commercial, industrial and institutional buildings. These ordinances should be updated to carry out this Plan, such as requiring new residential development to provide recreation land or to pay fees for the municipality to provide a park in another location.

## Recommendation: Use a full set of additional tools to implement this plan.

This Comprehensive Plan establishes overall policies for guiding the future development and conservation of the region. However, this Plan is not a regulation. In addition to the municipal Zoning and Subdivision and Land Development Ordinances, the following major additional tools are available to help implement this Plan:

- the Construction Codes,
- an Official Map,
- computerized mapping,
- · Capital Improvements Planning,
- · the municipalities' annual spending, and
- seeking Federal, State and County grant funds to accomplish important projects.

## Construction Codes

A new State law is establishing a process in which modern construction codes will apply within all municipalities. The State is using a model code prepared by a national organization. These codes are particularly important to minimize fire hazards. The Historic Preservation Plan section discusses the need at times for appeals boards to adjust some of these codes to spur renovation of older buildings.

A municipal Existing Property Maintenance Code should be considered to avoid blights and control nuisances. This type of code provides a municipality with the authority to make sure that there is basic maintenance of existing buildings, and that hazardous buildings are removed. The municipalities should consider adopting parts or all of the model International Property Maintenance Code, or create their own code to address high-priority concerns. However, in this region, it may not make sense to adopt all of the same requirements as are typically required in more urban areas, such as limits upon heights of weeds.

## Official Map

The State Municipalities Planning Code grants municipalities the authority to adopt an "Official Map." An Official Map can designate proposed locations of new streets, street widenings, intersection improvements, municipal uses and parks. The Map may cover an entire municipality, or only certain areas. This process may be particularly useful, for example, to reserve right-of-way for a future street widening.

Once an Official Map is officially adopted by the governing body, then the municipality is provided with a limited amount of authority to reserve land for the projects on the map. If the land affected by the proposed project is proposed for development, then the municipality would have one year to either purchase the land for its fair market value or decide not to go forward with the project. This one year period is intended to provide time to raise funds to acquire the land, and avoid lost opportunities. If this one year period is not in effect, a person could obtain a building permit almost immediately in many cases and construct a building that could obstruct an important project. An Official Map also serves to provide notice to property-owners about the municipality's future plans.

## Computerized Mapping

The County operates a modern computerized mapping/"Geographic Information System ("GIS"). This system has been used for the maps in the Plan. Increased efforts are needed to fully integrate this system with operations of municipalities. For example, regular mapping of traffic accident locations can be helpful to identify hazardous conditions that need to be resolved. Through cooperation with the County, computerized property map and ownership information could be made available in each municipal office in the County.

## Capital Improvements Planning

It is desirable to have a system in place to plan and budget for major capital expenditures. "Capital" improvements are projects involving a substantial expense for the construction or improvement of major public facilities that have a long life span and that are not annual operating expenses. Examples of capital projects include major street improvements, acquisition of parkland, major storm sewer construction projects and new bridges.

A municipal Capital Improvements Program (CIP) can help identify projects that will be needed, prioritize the projects, identify possible funding sources and then budget for their completion. A typical CIP looks five years in the future. A CIP should identify major street reconstruction projects that will be needed over the next few years, which can help coordinate the reconstruction with underground construction projects by various utilities. This avoids the need to cut into a street after it has been recently repaved. Through a CIP, many different projects can be combined into a single bond issue, which avoids the high administrative costs of multiple bond issues. A CIP also can allow a municipality to carefully time any bond issues to take advantage of the lowest interest rates.

#### Other Implementation Tools

Many other tools are available to carry out the Comprehensive Plan, including the following:

- priorities decided as part of each municipality's annual budget, and
- aggressively seeking Federal, State and County grants to reduce the burden upon local taxpayers. One source of grant funds is the Community Development Block Grant (CDBG) program, which is administered by the County. Each municipality can apply for funding each year from the program. This Federally fund program is generally limited to projects that primarily serve low and moderate income persons, persons with disabilities, or projects that remove blight. A list of grant programs is included in the Appendix.

GOAL: Maximize communications, coordination and cooperative efforts between the municipalities, the school districts, adjacent municipalities, the County and other agencies and organizations.

This Plan helps to establish a framework for further cooperative ventures among the municipalities, and between municipalities and the County. Intergovernmental cooperation can not only decrease the costs of many services, it can also improve the quality of services. The Pennsylvania Intergovernmental Cooperation Act provides broad and flexible authority to organize joint efforts as municipalities deem appropriate. In most cases, the Act promotes the use of ordinances that are adopted by each municipality to formalize an agreement. One option involves one municipality providing a service to a second municipality through a contract.

These same concepts can also apply between a municipality and a school district. For example, a municipality may agree to plow snow from school parking lots and driveways in return for free municipal use of some school facilities.

A State law also provides that State agencies must treat a Council of Governments in the same manner as a municipality in any funding program.

The following types of alternatives should be considered to promote inter-governmental cooperation:

- Shared Services and Shared Staff-persons Shared staff-persons can be particular beneficial for specialized staff, such as different types of construction inspectors or zoning officers. Two or more municipalities could hire the same person to do the same job, with the costs distributed by the number of hours worked in each municipality. This allows each municipality to hire a highly qualified person who is working full-time, as opposed to each trying to find a part-time person. This approach can reduce turnover, which reduces training costs and reduces the potential for mistakes being made by inexperienced staff. In addition, sharing staff makes staff-persons available during more hours of the day, which is beneficial to residents and business-persons. It also provides greater coverage during periods of illness or vacation.
  - Shared Consulting Staff There are also great efficiencies when adjacent municipalities choose the same consultants, such as municipal engineers, sewage engineers or solicitors. This promotes good communications between municipal governments. It also reduces the costs of having different professionals having to become educated about complex issues and having to spend time meeting with consultants of other municipalities to share information.
  - Shared Recreation Programs When municipalities share and coordinate recreation programs, it greatly increases the types of programs that can be offered. For example, one municipality may offer a gymnastics program, while another municipality offers basketball programs, with residents of each municipality being allowed to participate in each at the same cost per person. There has been great success in parts of Pennsylvania with multi-municipal recreation programs, where each municipality contributes funds towards one set of programs. These programs are often organized in partnership with a school district.

- Joint Yard Waste Collection and Composting This is a very cost-effective way of handling the disposal of yard waste, which requires significant land and expensive equipment.
- The toughest issue in joint municipal services is determining a fair allocation of costs. The State Department of Community and Economic Development has several publications that can assist in these issues.
- <u>Snowplowing</u> There may be cases where two municipalities must each send out a snowplow to clear different segments of the same street. It may be beneficial to trade responsibility for different street segments, so that a single snowplow can be used to clear the entire length of a street.
- Joint Purchasing Joint purchasing can reduce the costs to each municipality of preparing bid documents and legal ads. It also can result in lower costs because larger volumes are being purchased. This process is particularly useful for annual purchases of standardized materials, such as road salt. The State also has arrangements that allow municipalities to "piggyback" upon State purchases. State law allows a similar process of "piggyback" bids between municipalities and a County. The State Intergovernmental Cooperation Act includes rules for joint municipal purchasing. Under State law, one municipality can be the lead municipality in purchases, without requiring multiple municipalities to seek bids. Municipalities can also join together to jointly purchase insurance, to hire traffic signal maintenance services, or to jointly contract for solid waste collection. Joint auctions can also be used to sell surplus vehicles and equipment.
- Sharing of Equipment This sharing is most beneficial for expensive equipment that is needed by each municipality for only portions of the year, such as paving, rolling or grading equipment. The equipment could be jointly owned, or be owned by one municipality and leased other municipalities. An arrangement could also allow trading of equipment.
- <u>Joint Tax Collection</u> The Local Tax Enabling Act allows municipalities and school districts to contract with each other to have one office jointly collect local taxes.
- <u>Councils of Governments (COGs)</u> A COG can provide municipal services if authorized by municipalities. For example, some COGs take care of code enforcement. Other COGs primarily serve to promote good communications between municipal officials, to study issues, and to lobby for State or Federal funding for projects.
- <u>Joint Authorities</u> Municipalities can create formal joint municipal authorities to address many types of matters.
- <u>Joint Planning Commissions</u> Municipalities can appoint joint planning commissions. These joint commissions could serve in place of municipal planning commissions, or in addition to them.
- Cooperation Between or Merger of Fire Companies Consideration should be given to
  promoting additional cooperation between or merger of fire companies, including one or
  more fire companies in neighboring municipalities. Merger or cooperation are particularly

beneficial to make the best use of extremely expensive fire apparatus, such as rescue trucks, hazardous materials equipment, tanker trucks and aerial ladder trucks. Merger or cooperation are also important to make the best use of the limited number of volunteers.

- <u>Joint Police Forces</u> This is discussed in the community facilities section.
- <u>Incentives for Intergovernmental Cooperation in Grants</u> Many competitive State grant programs provide preference to projects that involve cooperation between more than one municipality. Therefore, if two similar projects are in competition for a grant, and one involves cooperation between two municipalities, the two municipality project is most likely to be funded.

## Role of the Planning Commissions

Some of the greatest responsibilities of each Planning Commission are to oversee the preparation and implementation of the Comprehensive Plan and the preparation of Zoning and Subdivision Ordinance revisions. The Planning Commission also reviews proposed developments, and has a role in reviewing proposals of other government agencies.

## Role of the Board of Supervisors and Borough Council

The final decision on nearly all matters affecting the growth and preservation rests with the Borough Council or Board of Supervisors. Therefore, close communications and cooperation between the Planning Commissions, the municipal staff, and the elected officials will be essential in continuing to improve quality of life in the region.

## **ACTION PROGRAM**

The following table summarizes the major recommendations of this Plan. Certain items are recommended as high priorities. The timing of each recommendation is listed, as well which agencies should have the primary responsibility to carry out the recommendation.

## NATURAL FEATURES CONSERVATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
<ul> <li>Protect creek valleys.</li> <li>Seek to maintain natural vegetation along creeks to protect water quality and fish habitats.</li> <li>Require buildings and paving setbacks from creeks to protect water quality.</li> <li>Encourage the Adams County Watershed Association and the County Conservation District to work with landowners to reduce erosion and plant thick vegetation to protect water quality.</li> <li>Continue to limit development in flood-prone areas.</li> </ul>	✓	Conti- nuous	Super., Borough Council, PCs, Property- owners, Adj. Mun., Watershed Association.
Work with property-owners and conservancies to encourage preservation of key open tracts, including publicizing possible tax deductions for conservation easements.  - Place special emphasis on proper management of the Irishtown Woods property along the South Branch of the Conewago Creek.		Conti- nuous	Super., Property- owners, Land Conser- vancy of Adams Co.
Limit the intensity of development on steeply sloped lands, especially on very steep sloped areas (over 25 percent slopes).		Short- term	Super., PCs
<ul> <li>Make sure that stormwater is properly managed, including promoting recharge of stormwater into the groundwater supplies.</li> <li>Use "Best Management Practices" to filter pollutants from stormwater runoff before the runoff enters creeks.</li> <li>Work to minimize the amount of surfaces covered with materials impervious to infiltration.</li> <li>Make sure erosion control measures are carried out as designed.</li> <li>Encourage farmers to use proper measures in manure and pesticide management.</li> </ul>			Super., Borough Council, PCs, Municipal Engineers, CPC, Co. Conserva- tion District

## AGRICULTURAL CONSERVATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
Continue to use agricultural preservation zoning in key areas of the Township. Direct intensive residential development away from agricultural areas and towards areas planned for growth.	1	Conti- nuous	Super., PC, CPC.
Encourage farmers to sell development rights to the County.	V .	Conti- nuous	Super, PC, CPC, Land- owners, Co. Conserva- tion District, Co. Ag. Preservation Board
Promote use of transfer of development rights to preserve farmland.	S	Conti- nuous	Super, PC, CPC
Provide opportunities for farm-related businesses to provide supplemental income to farmers, to help them continue to maintain their farms.	1	Short- term	Super, PC, CPC

## LAND USE AND HOUSING PLAN

Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations at end of this table)
Provide compatible land use patterns that avoid nuisances between uses and traffic conflicts, particularly across municipal borders.  - Update the Borough's and Township's Zoning and Subdivision Ordinances to carry out the Comprehensive Plan.  - Emphasize major landscaped buffers, earth berms and large setback between incompatible development, including across municipal borders.	✓	Short- range	Super., Borough Council, PCs, CPC, Adj. Mun.
Promote use of Conservation Development to cluster homes on the most suitable portions of a tract, while permanently preserve the most important natural areas. Place particular emphasis upon this concept within the Land Conservation zoning district.	1	Conti- nuous	Super., PC, CPC

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Recommended Action	High Priority?	Timing	Prime Responsibilities (see abbreviations at end of this table)
Promote use of Transfer of Development Rights to help preserve land at no cost to the public. TDR allows a developer to pay an owner of outlying farmland or woods to permanently preserve their land. IN return, the developer can transfer the number of homes that would have been allowed on that farmland or woodland to an area of land in a designated growth area.	✓	Conti- nuous	Super., PC, CPC.
Direct most new growth to designated growth areas that can be efficiently served by central water and sewage services, to minimize the total amount of land that is developed and to minimize conflicts between new homes and farming operations.	1	Conti- nuous	Super., Borough Council, PCs, CPC, Adj. Mun.
Provide mainly for lighter types of business uses in commercial areas that are close to residential neighborhoods, particularly within Bonneauville. Avoid heavy commercial uses in these areas, such as gas stations, 24 hour convenience stores and vehicle repair.	1	Conti- nuous	Super., Borough Council, PCs, CPC
Promote the extension of the best features of older development into new areas, such as an ability to walk to a park and promoting front porches in new homes. Promote a pedestrian-friendly environment in new and older development.		Conti- nuous	Super., Borough Council, PCs, CPC
Build a stronger sense of place within the center of Bonneauville, including investigating future sidewalks, installing historic style street lights, promoting pedestrian safety, and promoting new development that fits in within the character of the town (such as placing parking for business uses to the rear or side of buildings).	1	Short- range	Borough Council, Borough PC, CPC
Carefully plan for new development along the Route 30 corridor, while avoiding a long congested "commercial strip" with uncontrolled traffic access. Concentrate new commercial areas to selected areas.	1	Contin- uous	Super., PC, CPC, property- owners
Manage and coordinate traffic access from new development in to avoid traffic congestion and safety problems. Promote greater use of interior roads, versus road frontage development with individual driveways onto major roads.	1	Conti- nuous	Super., PC, PennDOT, CPC
Improve the attractiveness of major entranceways to Bonneauville and the Township.		Short- term	Super., Council, PCs, Adj. Mun., Business owners

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#### HISTORIC PRESERVATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
Consider zoning provisions in the Township to avoid demolition of the most important historic buildings. This could require zoning approval by the Supervisors of a proposed demolition of a historic building, or a 90 day delay until a historic building could be demolished.		Conti- nous	Super., PC, Historic organi- zations
Promote increased public awareness of historic buildings and connections to information sources.		Conti- nous	Historic organi- zations, such as Co. Historical Society.
Offer zoning incentives to encourage the rehabilitation of historic buildings.	·	Short- range	Super., PC
Assist in carrying out the Lincoln Highway Study along Route 30, to improve the appearance of the corridor and promote tourism.		Short- range	Co. Commissioners, Lincoln Highway Board, CPC, Super.

#### COMMUNITY FACILITIES AND SERVICES PLAN

Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
Improve existing parks and playgrounds to meet a wide variety of recreational needs. Consider providing a new Township Park, such as next to the Township Building. Consider opportunities for additional parks, such as a passive park along the South Branch of the Conewago Creek.		Conti- nous	Super., Borough Council, recreation organi- zations

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Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
<ul> <li>Emphasize high-quality police, emergency medical and fire protection services.</li> <li>Work to attract additional volunteers for fire, fire police and ambulance services.</li> <li>Promote continued cooperation between providers, including those in adjacent municipalities.</li> <li>Continue to investigate alternatives for a joint regional police force or contracting for police services from another municipality.</li> </ul>	1	Conti- nous	Emergency service providers, Borough Council, Super., Adj. Mun.
<ul> <li>Make sure that adequate sewage services are available.</li> <li>Over the long-run, seek that developers fund an extension of sewage service from Oxford Township to adjacent parts of the Route 30 corridor.</li> <li>Make sure that any new central sewage system will be viable and well-maintained over the long-run.</li> <li>Require two tested sites if an on-lot septic system will be used.</li> </ul>	1	Conti- nuous	Super., Borough Council, Borough Authority
Make sure that adequate water services are available, including continually making improvements to the Bonneauville system as development continues.  - Consider Township regulations on well construction.  - Make sure that any new private water system will be viable over the long-run.  - Seek central water service in Centennial.  - Seek to avoid very large water withdrawals for off-site use.	<b>√</b>	Conti- nous	Borough Council, Borough Authority, Super., developers

### TRANSPORTATION PLAN

Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
<ul> <li>Work with PennDOT to make cost-effective improvements to improve safety. Seek funding through the 12 Year Plan to resolve traffic problems in the region.</li> <li>Over the long-run, seek improvements to Route 116, including wider shoulders, construction of turn lanes and improved geometry.</li> <li>Over the long-run, seek improvements to Route 30, including turn-lanes at major intersections.</li> </ul>	<b>√</b>	Conti- nous	PennDOT, CPC, Borough Council, Super., Adj. Mun.

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Recommended Action	High Priority?	Timing	Prime Responsi- bilities (see abbreviations)
Seek to minimize speeds in Bonneauville. Consider flashing warning lights at the approach to the S turns. Over the long-run, consider a traffic signal in the center of town.	1	Conti- nous	PennDOT, CPC, Borough Council
Promote the construction of new road links in the Township that will provide alternative routes around parts of the Borough. These road links should be built as part of private developments.		Conti- nous	Super., PCs.
Improve pedestrian and bicycle access and encourage greater use of carpooling, including providing additional park and ride lots.		Conti- nous	PennDOT, Borough Council, Super., Adj. Mun., CPC

### Abbreviations of Responsible Agencies/Groups:

Bor. Council = Bonneauville Borough Council
Super. = Mount Pleasant Board of Supervisors
PC = Municipal Planning Commissions
ZHB = Zoning Hearing Boards
Adj. Mun. = Adjacent Municipalities
Co. Ec. Dev. = County Economic Development Officials
CPC = County Planning Commission
PennDOT = Pennsylvania Department of Transportation
Watershed Assoc. = Adams County Watershed Association

#### **APPENDIX**

#### MAJOR FUNDING SOURCES FOR COMMUNITY DEVELOPMENT

There are hundreds of funding sources available from federal government, state government, private organizations and foundations, for a variety of activities. The following list summarizes the most commonly used funding sources, including grants and loans, that can help fund community development, economic development, recreation, housing, water and sewer, and stormwater management and other activities.

**FUNDING SOURCES** 

Name of Program	General Description of Program	Administer- ing Agency
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. For example, 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.	Adams County
Conservation Corps, PA.	Provides funding for work crews for community projects, such as trail improvements.	PA DCNR
Community Development Bank, PA.	Provides capital and capacity building grants to "Community Development Financial Institutions" (CDFIs). The CDFIs are then allowed to assist with small scale business expansions, new business starts, non-profit facilities and very small businesses.	PA DCED
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. Dept. of Ag. Rural Housing Service
Community Revitalization Program	Very broad grant program. Officially intended to promote community stability, increase tax bases and improve quality of life. Applications may be made by municipalities, authorities, economic development organizations and non-profit corporations. Public/non-profit/profit partnerships are encouraged. Generally can be used for infrastructure, community revitalization, building rehabilitation, demolition of blighted structures, public safety, and crime prevention.	PA DCED & Governor's Office
Customized Job Training	Provides grants to businesses (other than retail) to train new employees, and retrain and upgrade existing employees. Up to 100% of eligible costs may be paid for new job creations, and up to 70% for other eligible training.	PA DCED Businesses apply through a State- licensed Educ. Agency.
Downtown Pennsylvania Program	Offers full-time management to organize and implement a Business District Authority, that provides financing for additional services in a commercial area. The Commercial Revitalization program funds physical improvement projects that are consistent with an action plan. Projects may include site improvements, facade renovations and adaptive reuse of downtown buildings. See also "Main Street Program" in this table.	PA DCED

Name of Program	General Description of Program	Administer- ing Agency
Economic Development Administration Loan Guarantees	Guarantees business loans made through private lenders. Available for up to 80% of project cost. Primarily intended for manufacturers, but commercial businesses may qualify. A equity contribution is required by business. Must show job creation.	U.S. EDA Philadelphia Office
Economic Development Administration Public Works Grants	Offers grants to distressed municipalities to assist in attracting new industries and encourage business expansion. Projects typically involve water and sewage improvements primarily serving industries, industrial access roads, and business incubators. A 50% local match is typically required.	U.S. EDA Philadelphia Office
Environmental Protection Agency Brown- fields Program	Grants for a very limited number of pilot demonstration projects for cleanup of contaminated underused industrial sites.	U.S. EPA Philadelphia Office
Emergency Services Loan Program	Provides low-interest loans to fire and ambulance companies to acquire vehicles, or to renovate or acquire buildings to house vehicles.	PA Emergency Management Agency
Keystone Opportunity Zone	State program provides a range of benefits to locally-nominated, State- designated areas that are financially distressed. One major benefit involves greatly reduced local real estate taxes for an initial set of years.	PA DCED
Enterprise Zone Program, PA	Encourages investment in "enterprise zones" that are distressed areas designated by the State. The main benefits include: low-interest loan pools (mainly for building acquisition, construction, renovation and machinery), local technical assistance in connecting with financing and technical resources, and preferences in certain State grant and loan programs. A priority is placed upon assistance to industrial businesses. Grants are also available for the initial planning of proposed enterprise zones, and for program administration. See also "E.Z. Tax Credits" below.	PA DCED
Enterprise Zone Tax Credits	Provides State tax credits to businesses located within State-designated Enterprise Zones for new building construction and rehabilitation of existing buildings.	PA DCED
Flood Control - Army Corps and NRCS Watershed Programs	Various types of projects to manage flooding. Typically, the Army Corps is involved in larger watersheds, while NRCS has primary responsibility for smaller watersheds.	U.S. Army Corps of Engineers, U.S. Natural Resources Conservation Service
Flood Hazard Mitigation Grant Program	Provides 75% funding to relieve imminent hazards from flooding, such as voluntary buy-outs and demolitions of highly flood-prone properties.	Federal Emergency Management Agency

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Name of Program	General Description of Program	Administer- ing Agency
Flood Protection Program, PA	Offers design and construction of flood protection projects. The project must be deemed economically justifiable under the state capital budget process.	PA DEP Bureau of Waterways Engineering
Historic Preservation Tax Credits	Offers Federal income tax credits for a percentage of the qualified capital costs to rehabilitate a certified historic buildings, provided the exterior is restored.  The program is generally limited to income-producing properties.	National Park Service
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, administered by PA Historical and Museum Commission
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.	Federal, administered by PA Historical and Museum Commission
Heritage Parks Program	Provides grants up to 75% of costs for projects within State-designated "Heritage Parks" to preserve and interpret the significant contribution that certain areas made upon the industrial heritage of the state and nation. Funds may be used for four types of projects: Feasibility studies, a Management Action Plan, Special purpose studies, and Implementation projects. Projects are intended to conserve natural, historic and recreational resources relating to industrial heritage to stimulate regional tourism.	PA DCNR
Housing Programs - mainly including Federal HOME Program (Home Investment Partnerships Program)	Provides grants, low-interest loans and loan guarantees to for-profits and non-profits for the construction or rehabilitation of housing for low and/or moderate income persons. Most cities receive HOME funds that they then allocate among eligible applicants. Funds are also 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. The HOPE Homeownership Program subsidizes home ownership of public housing, multifamily units and single family units. Funding can be used for rehab of owner-occupied and rental housing.  Other Federally funded housing programs include: Emergency Shelter Grants, Supportive Housing for the Elderly (Section 202), Single Room Occupancy Housing Program, Supportive Housing for Persons with Disabilities, and Housing Opportunities for Persons With AIDS.  See also HOME Partnerships below.	PA Housing Finance Agency and PA DCED

Name of Program	General Description of Program	Administer- ing Agency
HOME Investment Partnership	Provides grants for expanding the supply of housing for low-income persons, including new construction, acquisition and rehabilitation. Local governments may apply, which may be on behalf of public agencies or for-profit or non-profit developers. PHFA administers Federal HOME funds for financing 5 or more units. These projects are usually coordinated with Federal Low Income Housing Tax Credits.	Federal HOME funds, administered by PA DCED and PA Housing Finance Agency
PA Industrial Development Authority Financing (PIDA)	Provides low interest loans for construction, renovation and site preparation of buildings for new employers. Primarily funds industrial projects.	PIDA and PA DCED
Industrial Sites Reuse Pro- gram, PA ("Brownfields")	Provides grants of up to 75% and low interest loans for assessment of environmental contamination and remediation work at former industrial sites. Available to private companies, non-profit economic development agencies or authorities that own the land. Mainly targeted towards cities. Financing is not available to the company that caused the contamination.	PA DCED in cooperation with PA DEP
Infrastructure Development Program, PA.	Provides grants and low interest loans for public and private infrastructure improvements needed for a business to locate or expand at a specific site. Financing is also available for infrastructure to redevelop industrial sites that have been idle more than 6 months, such as acquisition and demolition. Primarily available for industries, research facilities, company headquarters and business park developments. A 2:1 private to public match is typically required. A commitment is required to create jobs as a condition of funding. Generally applicants must be municipalities or economic development organizations.	PA DCED
TEA 21 Transportation Enhancements Program (Part of Federal Transportation Efficiency Act)	Provides grants of up to 80% for: facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sites, development of scenic or historic route programs, landscaping and other 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.	U.S. DOT funds administered by PennDOT
Intermunicipal Cooperation Grants	Promotes cooperation between neighboring municipalities so as to foster increased efficiency and effectiveness in the delivery of municipal services at the local level.	PA DCED
Job Creation Tax Credits, PA	Provides State tax credits to businesses that commit to create new jobs in PA within the next 3 years. Must create 25 new jobs or 20% of the existing work force. The jobs must pay over a certain minimum income. The business must explain how it exhibits leadership in technological applications.	PA DCED
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.	PA Historical and Museum Commission

Name of Program	General Description of Program	Administer- ing Agency
Keystone Rec., Park & Cons. Program - Land Trust Grants	Grants to well-established non-profit land trusts and conservancies to plan for and acquire critical natural areas. Land that is acquired must be open to the public.	PA DCNR
Keystone Rec., Park & Cons. 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.	PA DCNR Regional Offices
Local Government Capital Projects Loan Program	Provides low interest loans to municipalities with populations of 12,000 or less for the purchase of equipment and the purchase, construction, renovation or rehabilitation of municipal facilities. Priorities are given to projects that are necessary for public health and safety or involve intergovernmental cooperation.	PA DCED
Low Income Housing Tax Credit, Federal	Offers Federal income tax credits to non-profit and for-profit developers of housing for low-income persons. Non-profits can then sell their credits to investors.	PA Housing Finance Agency
Main Street Program	In the downtowns of designated "Main Street Communities," provides initial planning grants and administrative grants over a 3 year period to pay a large share of the costs of a professional manager to coordinate downtown revitalization efforts. May receive matching grants for facade restoration and other design improvements. Usually limited to municipalities of 5,000 to 50,000 persons.	PA DCED
Machinery and Equipment Loan Fund	Provides low-interest loans to acquire or upgrade machinery and equipment and related engineering and installation for industrial, agricultural, processing and mining businesses. The business must agree to create or preserve jobs as a condition of the financing.	PA DCED
Minority Business Development Authority, PA	Provides low-interest loans for businesses owned and operated by minorities. Can generally be used for industrial, international trade, franchise, retail and commercial uses. Can be used for site acquisition, building construction and renovation, machinery and working capital.	PA Minority Business Development Authority & PA DCED
Neighborhood Assistance Tax Credit Program	Authorizes State corporate income tax credits to private companies to donate funds for services to low-income persons or impoverished neighborhoods. The services typically include neighborhood revitalization, job training, education, social programs to reduce welfare dependency or crime prevention. The tax credit usually equals 50 to 70% of the eligible donation. Partnerships are required between the business and a neighborhood organization.	PA DCED
National Recreational Trails Funding (Symms NRTA)	Provides grants for the acquisition and development of recreation trails (which may include trails for motorized vehicles). A 50% local match is required.  Applications may be made by Federal, State or local government agencies or organizations.	Federal, administered by PA DCNR
On-Lot Septic System Program	Offers low-interest loans to limited income households to repair failing on-lot septic systems.	PennVest and PA Housing Finance Agency

Name of Program	General Description of Program	Administer- ing Agency
Opportunity Grant Program	Offers grants to create or preserve very substantial numbers of jobs. May be used for job training, infrastructure, land and building improvements, machinery and equipment, working capital, or environmental assessment and cleanup.	PA. DCED
PEDFA Financing	Provides low-interest rate financing of business growth. Projects that can be funded with bonds that are exempt from Federal income tax have a lower interest rate than other types of projects. The lower rate financing is limited to activities such as site acquisition, building construction and rehabilitation and new equipment - for manufacturing and certain transportation and utility uses. The higher rate is available to a broader range of businesses and a much wider variety of expenditures.	PA Economic Financing Authority Applications are made through a local Industrial Development Corp. or Authority
PennCAP	Provides a guarantee of loans to businesses made by participating banks.	DCED Apply through a participating bank
PENNVEST	Offers low interest loans for construction and improvement of drinking water and wastewater systems. Outright grants may be available for highly distressed communities. Mainly intended for public systems, but some private systems may be approved. Water projects are funded through the Drinking Water Revolving Loan Fund. Sewage projects are funded through the Clean Water Revolving Fund. In addition, PennVest is authorized to provide loans for projects to control existing stormwater problems, such as separating stormwater from sanitary sewage. The "Advance Funding Program" provides low-interest loans for feasibility studies and engineering of systems if the utility cannot fund such work itself.	PA Infra- structure Investment Authority and PA DEP Bureau of Water Supply Management Involves both U.S. EPA and State funds
PIDA - PA Industrial Development Authority (PIDA) Programs	Makes available low-interest financing to businesses and industrial development agencies to create or retain business jobs. Can be used for industrial, research, agricultural processing and major office uses. Can be used for site acquisition, building construction or renovation, multi-tenant spec buildings and industrial park development. A lower interest rate is available for advanced technology projects and in enterprise zones and areas of high unemployment.	PIDA and PA DCED Applications are typically made through a local Industrial Development Corp. or Authority
Nutrient Management Plan Development Incentive Program	Grants of \$4 per acre are available to farmers to cover up to 75% of the cost of preparing nutrient management plans. Low interest loans are also available through the State to assist in implementing nutrient management-related best management practices.	County Conservation District

Name of Program	General Description of Program	Administer- ing Agency
Rails to Trails, PA	Provides grants 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.	PA DCNR Field Offices
Rural Economic and Community Development Programs, U.S.	Federal programs available in rural areas: Business & Industrial Guaranteed Loan Program - Provides partial guarantees of loans by lenders for working capital, machinery, buildings, land and certain types of debt refinancing. Loans can be made to businesses, municipalities or non-profit organizations.  Intermediary Re-lending Loans - provides very low-interest loans to non-profit organizations to reloan for businesses and community development projects.  Rural Business Enterprise Grants (former Ind. Dev. Grants) - provides grants for acquisition of land and construction of buildings and utilities to facilitate development of small businesses.  Home Ownership Loans - aid low- and moderate-income rural residents or buy, build or repair their dwelling.  Rural Rental Housing Loans - assist individuals or organizations to build or rehab rental units for low-income and moderate-income residents in rural areas. Home Improvement and Repair Loans and Grants - assist very low-income rural homeowners to remove health and safety hazards in their homes or to improve handicap accessibility.  Rural Housing Site Loans - assist in purchasing sites for housing development by private, public or non-profit organizations.  Housing Preservation Grants - assist non-profits and public agencies with grant funds to assist low-income owner-occupants and owners of low-income apartments with repairing homes in rural areas.	U.S. Dept. of Agriculture Rural Development Administratio n (former Farmers Home Admin.)
Recycling Market Development Loan Fund	Provides low-interest loans to businesses to purchase recycling source-separating equipment.	PA DEP Bureau of Land Recycling and Waste Manage- ment
Recycling Grants (under Act 101 of 1988)	Grants for up to 90% of municipal costs to develop and implement recycling programs, such as the purchase of recycling bins and composting equipment. Grants are also available to counties for a recycling coordinator, waste management plans and pollution prevention education.	PA DEP Bureau of Land Recycling and Waste Manage- ment
Rivers Conservation Program, PA	Offers 50% grants to conserve and enhance river resources. Typically, funding is first provided for a conservation plan for a waterway. Then after the plan is approved, grants are possible to carry out the plan. Available to municipalities, authorities and non-profits.	PA DCNR

Name of Program	General Description of Program	Administer- ing Agency
Rural Utilities Service Financing	Offers low-interest loans for drinking water and sewage projects for rural areas and small towns. The "Water and Water Disposal Loan Program" provides loans for water supply, wastewater disposal, solid waste disposal and stormwater management systems for rural areas and towns with a population less than 10,000 persons. Available to municipalities, authorities and non-profit corps. Grants up to 75% of project costs may be available for highly distressed areas. Also guarantee loans by private lenders.  Also provides grants to non-profit organs, to provide technical assistance to rural communities or for a circuit rider to serve several rural water systems. Also offers emergency grants to communities that have experienced a significant decline in quantity or quality of drinking water.	U.S. Dept. of Agriculture Rural Utilities Service
Shared Municipal Services	Provides modest-sized 50/50 matching grants to promote cooperation among municipalities, in order to increase the efficiency of public services. Two or more municipalities may apply, or a council of governments.	PA DCED
Small Business First	Provides low-interest loans for projects by businesses that generally have less than 100 employees. Generally, the funding can be used for site acquisition, building construction, machinery, working capital, environmental compliance, defense-cutback impacts, recycling, technology, export and computer activities. This is also one of the few sources of funding that can be used for restaurants, hotels and motels. The recipient must agree to create or preserve jobs.	PA DCED An application can be made through an "Area Loan Organization"
Small Business Incubator Program	Provides loans and grants for facilities in which a number of new businesses operate under one roof with affordable rents, sharing services and equipment and having equal access to a wide range of professional, technical, and financial programs.	PA DCED
SBA Financing	Offers low-interest financing for smaller businesses, including: - microloans and microenterprise grants - Section 7(a) Guaranteed Business Loans - Section 504 Loans to allow certified development organizations to make long-term loans for real estate and other fixed assets	U.S. Small Business Admini- stration
Sewage Facility Planning Grants	Grants to pay up to 50% of the costs to prepare a new sewage facilities plan or update an existing plan, under State Act 537 of 1966.	PA DEP
Small Communities Planning Assistance Program (SCPAP)	Provides grants up to 100% of the costs to eligible municipalities to prepare comprehensive plans, development regulations and special strategies for development. Generally, 51% of the municipality's residents must be low or moderate income, according to the census or a survey. Limited to municipalities under 10,000 population.	Federal CDBG administered by PA DCED
Small Water System Regionalization Grants	Provides grants for feasibility studies concerning the merger of small drinking water systems.	PA DEP Bureau of Water Supply

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Name of Program	General Description of Program	Administer- ing Agency
Solid Waste Facility Programs	Programs provide grants for municipalities to review proposed solid waste facilities within their borders. Programs also provide funding for municipal inspectors of facilities and for host fees from operators.	PA DEP Bureau Land Recycling and Waste Manage- ment
Land Use Technical Assistance Program	Assists local governments and counties to prepare comprehensive plans, downtown plans, special community development studies and development regulations. Typically provides 50% of the eligible costs. This program is mainly intended to fund comprehensive plans involving two or more municipalities.	PA DCED
Stormwater Management Grants (Under State Act 167 of 1978)	Grants for cooperative efforts at the watershed level among municipalities for stormwater planning and ordinances. Grants are typically made to counties, but may be made to municipalities.	PA DEP Bureau of Watershed Conservation
Stream Improvement Program	Provides design and construction assistance to eliminate imminent threats to flooding and streambank erosion.	PA DEP Bureau of Waterways Engineering
Tire Pile Cleanup Grant	Grants to municipalities to provide reimbursement for costs of cleaning up large piles of used tires.	PA DEP Bureau of Land Recycling & Waste Manage- ment
Urban Forestry Grants	Provides grants for tree planting projects. Is also a Federal "America the Beautiful" grant program for tree planting.	PA DCNR
Water Supply Plan & Well- Head Protection Grants	Provides grants to counties to plan for water supplies at the county level and to implement programs to protect the wellheads of public wells.	PA DEP Bureau of Water Supply

Sources:

Publications and internet sites of various agencies, in addition to Pennsylvanian magazine.

Abbreviations: DCED = PA. Dept. of Community and Economic Development HUD = U.S. Dept. of Housing and Urban Development

HUD = U.S. Dept. of Housing and Urban Development
NRCS = U.S. Natural Resource Conservation Service
DCNR = PA. Dept. of Conservation and Natural Resources

DEP = PA. Dept. of Environmental Protection
PIDA = PA. Industrial Development Authority

PHFA = PA. Housing Finance Agency